STRATEGIC TOURISM ZONE
EASTERN PROVINCE
SRI LANKA

STAGE 4: DETAIL MASTERPLAN REPORT

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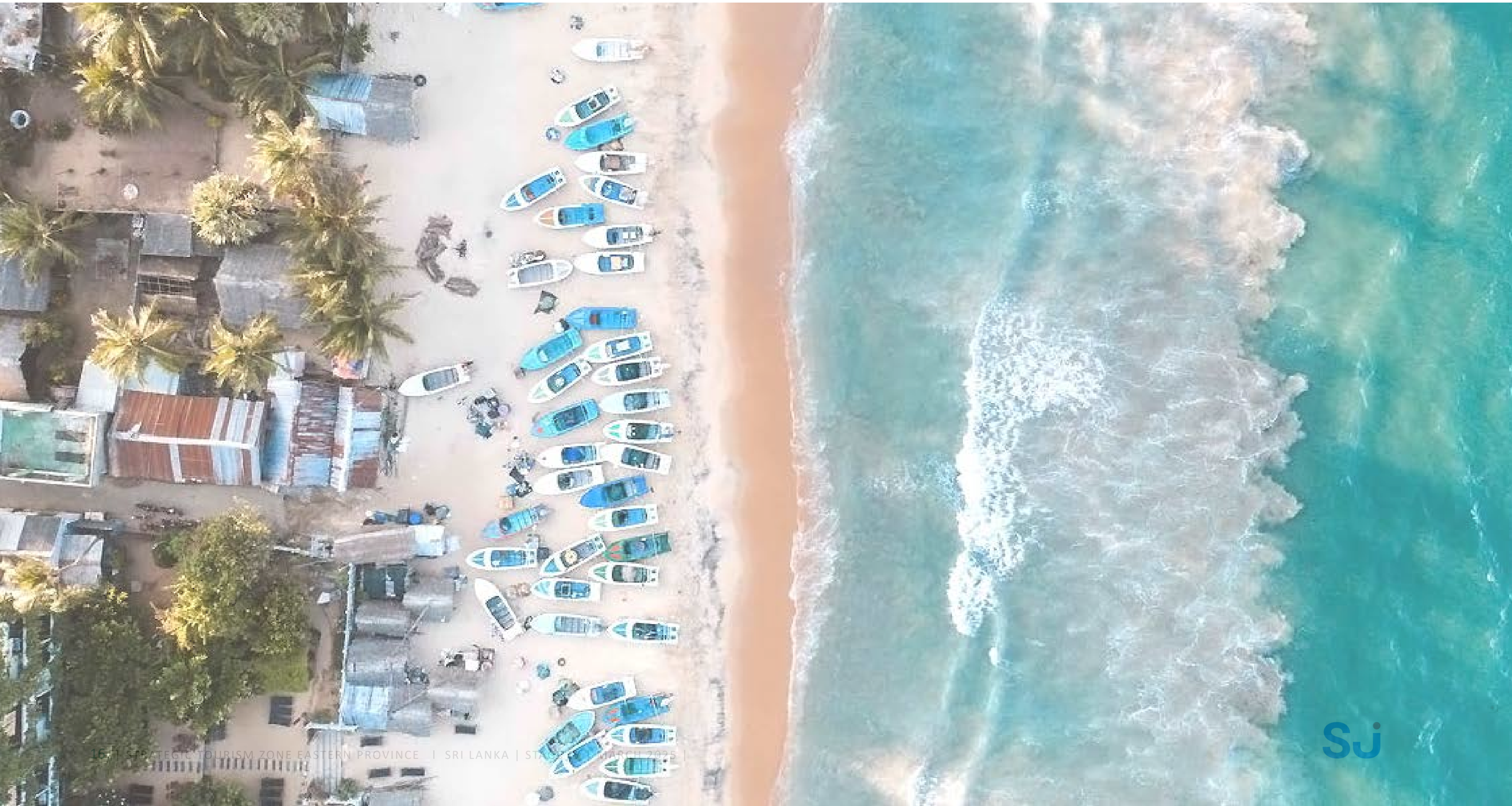
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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY
SRI LANKA TOURISM OVERVIEW

BACKGROUND

Sri Lanka, an island nation situated in the Indian Ocean, is renowned for its rich history, diverse culture, and stunning natural beauty. With a population of over 21 million people, it boasts a tapestry of ethicists, languages, and religions, contributing to its vibrant and dynamic society. The country's lush landscapes are a testament to its biodiversity, with verdant tea plantations carpeting the central highlands, pristine beaches lining the coastline, and dense rainforests teeming with wildlife. Sri Lanka has emerged as a resilient and thriving nation, welcoming tourists from around the world to experience its nature wonders.

Following its recovery from the impact of Covid-19, Sri Lanka's tourism industry has experienced a remarkable resurgence in recent years. Tourist arrivals have nearly doubled, soaring from 0.7 million in 2022 to 1.4 million in 2023, signalling a robust rebound. As the tourism sector continues to regain momentum, Sri Lanka is positioned to capitalise the potential of the tourism industry to drive economic growth and prosperity.

TOURISM POTENTIALS OF EASTERN PROVINCE

Located along Sri Lanka's Eastern coast, the Eastern Province boasts extensive beaches and abundant marine life, making it a promising destination for tourism. With stunning spots like Pasikudah and Arugam Bay, it is a paradise for beach lovers and water sports enthusiasts. The region's coral reefs and diverse marine ecosystems provide ample opportunities for snorkeling and diving adventures. As tourism evolves, the Eastern Province has the potential to become a top destination, attracting visitors with its natural and coastal richness.

Considering the potential of the Eastern Province's pristine beaches, cultural attractions, and opportunities for adventure, various tourism arrival scenarios have been studied. Projections indicate that under an optimistic scenario, the region could attract up to 5 million visitors. In a more conservative scenario, projections indicate 1.5 million visitors. Eastern Province is poised to capitalize on its opportunities, aiming to become the coastal paradise of Sri Lanka – a year-round world-class destination for marine adventure, leisure, and surfing.

KEY ACTIONS TO REALIZE THE VISION

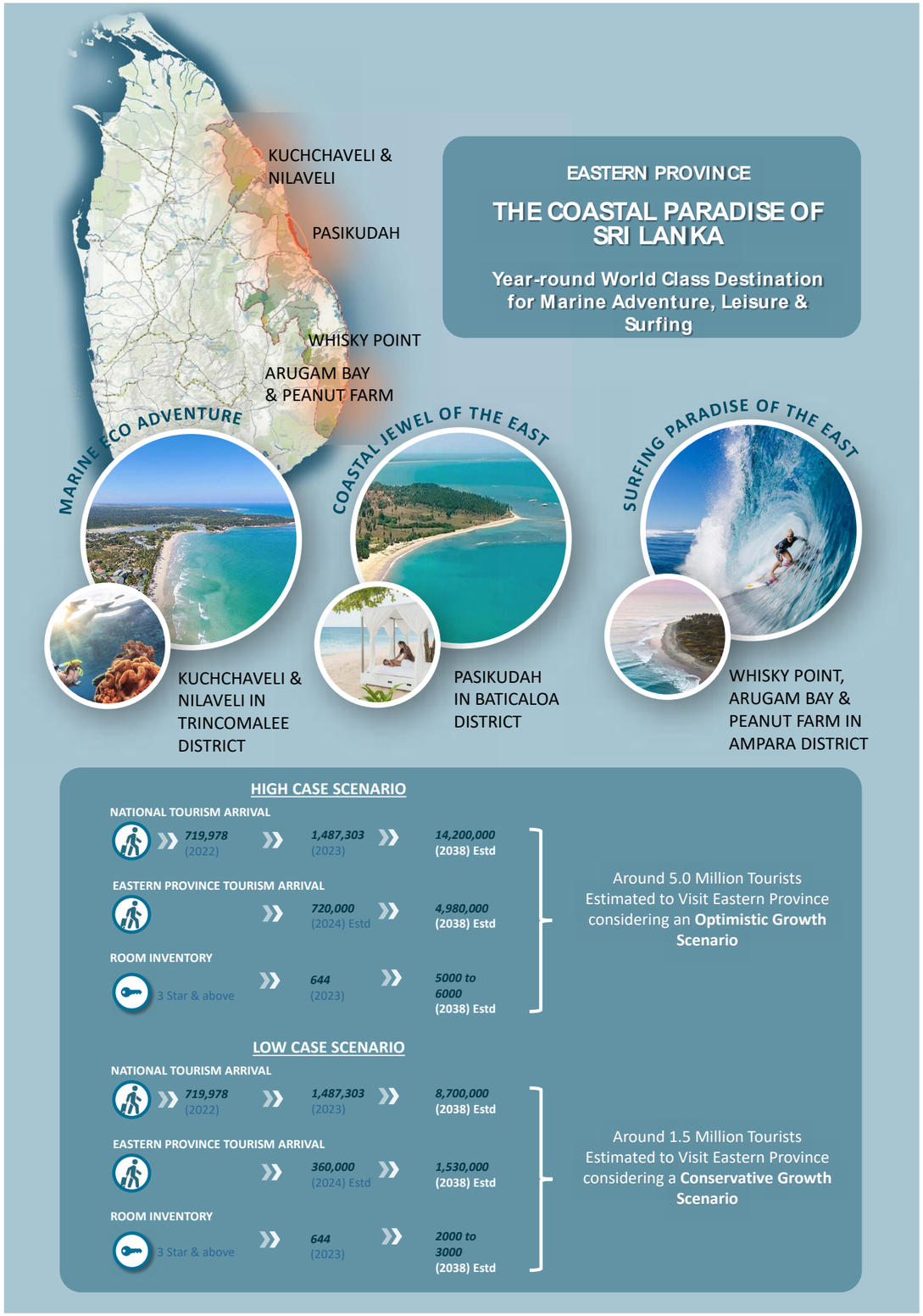
1 Boost Connectivity
- *Expansion of Airport Runways*
- *Development of Expressways & Highways*

2 Enhance Attractions
- *Diverse Tourism Theme*
- *Marketing & Collaboration*
- *Mega Tourist Attraction*

3 Increase Average Spending
- *Development of Infrastructure*
- *Invite Strategic Investments*

4 Enhance Quality of Tourism Services
- *Tourist Support Amenities*
- *Registration & Licensing*
- *Skill Training Schemes*

5 Policy Level Interventions
- *Real Estate Investment Opportunity*
- *Enhance Tourist Footfall*
- *Skilled Workforce*



POSITIONING OF PLANNING AREAS

KUCHCHAVELI-NILAVELI

Kuchchaveli-Nilaveli planning area, located within Trincomalee District, spans 578 hectares. Positioned near Trincomalee city and Pigeon Island Marine National Park, it aims to become an international destination for marine adventure. Key development programs includes:

- Hotels, Resorts & Eco Lodges (Offering diverse accommodation options)
- Beach front development with infrastructure and amenities
- Retail + Tourist amenities
- Marine Museum
- Divers' paradise capitalizing on the area's rich underwater biodiversity

These range of initiatives enhance the area's appeal as a hub for marine enthusiasts. With its strategic location and diverse offerings, Kuchchaveli-Nilaveli aims to establish itself as a premier destination for marine exploration and leisure activities drawing visitors both domestically and internationally.

PASIKUDAH

Pasikudah planning area, nestled within the enchanting Batticaloa District, sprawls across 480 hectares of coastal magnificence. Its proximity to Batticaloa city and envelopment by mangroves, lagoons, and vibrant coral reefs sets the stage for its ascent as the Coastal Jewel of the East. Key development programs includes:

- Hotels, Resorts & Eco Lodges (Offering diverse accommodation options)
- Beach front development with infrastructure and amenities
- Retail + Tourist amenities
- Wellness Centre (ancient healing traditions and modern spa therapies)
- Yacht Berth + Marina (luxury adventure on the high seas)
- Eco & Lagoon safari embracing the rich coral reefs, lush mangrove forests

With its strategic location and diverse offerings, Pasikudah sets the stage to establish itself as the luxury beach destination, seamlessly blending wellness retreats with exhilarating beach experience.

WHISKY POINT

Whisky Point planning area, situated within the Ampara District, spans across 366 hectares and is poised to evolve into the quintessential international surfing paradise of the East. Key development programs includes:

- Hotels, Resorts & Eco Lodges (Offering diverse accommodation options)
- Beach front development + Surfing Facilities
- Lagoon front development
- Retail + Tourist amenities
- Water based Theme Park + Entertainment Zone

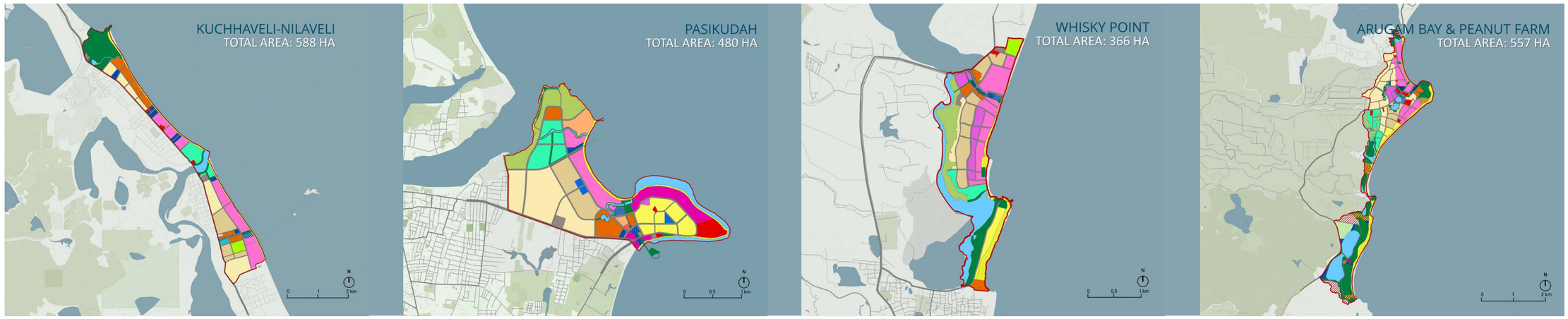
Additionally, residential developments are planned to attract second-home buyers and luxury holiday home real estate investments, catering to both local and international. These range of initiatives enhance the area's appeal as a hub for marine enthusiasts. With its strategic location and diverse offerings, Whisky Point aims to establish itself as a premier destination for surfing and marine adventure centre drawing visitors both domestically and internationally.

ARUGAM BAY AND PEANUT FARM

Situated near Pottuvil and Whisky Point within the Ampara District, spans across 557 hectares and is poised to evolve into the renowned international surfing paradise of the East. Key development programs includes:

- Hotels, Resorts & Eco Lodges (Offering diverse accommodation options)
- Beach front development + Surfing Facilities
- Lagoon front development
- Retail + Tourist amenities
- Entertainment Zone
- Eco & Agro Tourism
- Camping area, Eco Park

With its strategic location and diverse offerings, Arugam Bay & Peanut Farm planning area aims to establish itself as a premier destination for surfing, marine adventure and eco-agro tourism.



CRITICAL TRANSPORT AND INFRASTRUCTURE

TRANSPORT AND CONNECTIVITY

In the context of urban development and planning, an effective transportation network is pivotal. The proposed schematic transport plan is designed to enhance connectivity, facilitate efficient movement, and support the dynamic land uses of the study area.

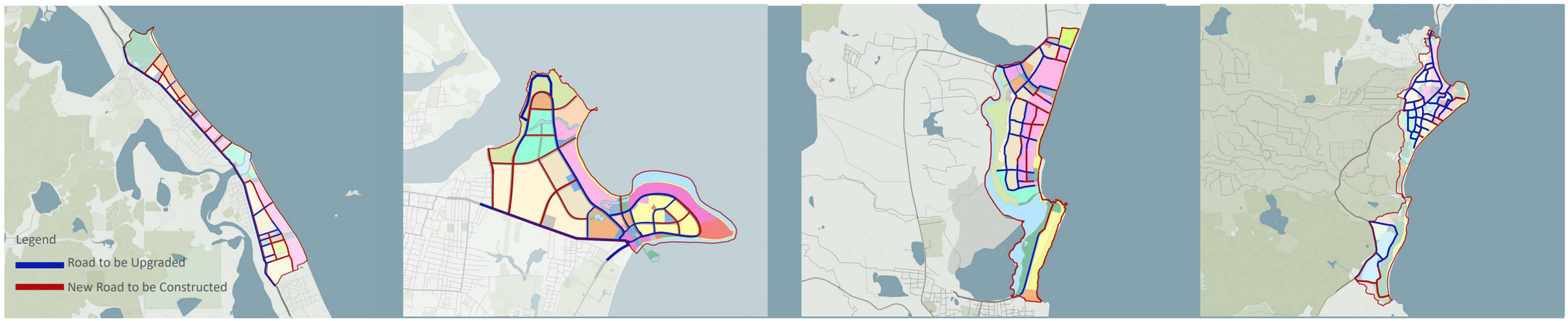
To accommodate the projected increase in traffic volumes, it is imperative to upgrade and expand existing road networks within the intervention area. This expansion should include widening roads, constructing additional lanes, and developing new bridges. Special consideration should be given to creating pedestrian spaces and integrating greenery as part of a long-term plan to ensure safety and accessibility for all road users. Expanding the road to the proposed right-of-way (ROW) will facilitate a balanced approach to vehicle traffic and pedestrian movement, enhancing the overall urban environment.

PROPOSED PROJECTS

The following projects are proposed to enhance connectivity and handle increased traffic demand effectively:

1. **Upgrading of Existing Primary Arterial Road**
   - Focus on widening and adding lanes to the primary arterial road to manage high traffic volumes.
   - Improve road surface quality and signage for better traffic flow and safety.
   - Expand the road to the proposed ROW, incorporating pedestrian pathways and green spaces to create a more pleasant urban environment.
2. **Upgrading of Existing Secondary Arterial Road**
   - Enhance the secondary arterial road by adding lanes and improving intersections to reduce bottlenecks.
   - Implement traffic management systems to ensure smooth traffic flow during peak hours.
   - Integrate pedestrian spaces and greenery along the expanded ROW.
3. **Upgrading of Existing Collector Road**
   - Expand the collector road network to improve connectivity between residential areas and major highways.
   - Include pedestrian walkways and bicycle lanes to promote sustainable transport modes.
   - Develop green corridors along the collector roads to enhance the aesthetic appeal and provide environmental benefits.
4. **Construction of Integrated Mobility Hub (Long-term)**
   - Although a future plan, an integrated mobility hub will centralize bus operations, facilitating streamlined services and connectivity to major highways and local roads.
   - This will play a crucial role in connecting air travelers with the local road network, especially promoting tourism in the region.

Each of these aspects are elaborated in the main content.



INFRASTRUCTURE

Infrastructure and utilities planning for tourism areas are also highlighted considering tourism demand and proposed programmes. The elements of infrastructure services included are storm water drainage, water supply, sewerage, solid waste disposal and power supply. Each of these aspects are elaborated in the main content. The total area allocated for infrastructure provision at each development node is presented below.

KUCHCHAVELI-NILAVELI

SUBSTATION – 2.0 HA
STP- 1.8 HA
WATER STORAGE- 0.9 HA

The proposed infrastructure for the Kuchchaveli-Nilaveli beach area in Sri Lanka includes a 2.0-hectare substation to ensure stable electricity supply, a 1.8-hectare sewage treatment plant (STP) to treat wastewater and protect the environment, and a 0.9-hectare distributed water storage system, which will be allocated across multiple areas based on demand and ground level to manage water needs effectively. A water treatment plant in Wanela will provide clean drinking water, while a solid waste treatment facility with a landfill and waste segregation plant will manage and recycle waste. These developments aim to support sustainable tourism growth, improve local livelihoods, and protect natural resources, creating a resilient, eco-friendly tourist destination.

PASIKUDAH

SUBSTATION – 2.0 HA
STP- 1.0 HA
WATER STORAGE- 0.4 HA

The proposed infrastructure development for Pasikudah includes a 2.0-hectare substation to provide a reliable power supply, a 1.0-hectare sewage treatment plant (STP) to manage wastewater, and a 0.4-hectare distributed water storage system, with storage distributed across multiple areas based on demand and ground level. Potable water will be tapped from the Valaichchenai water supply project, ensuring a sustainable water source for the area. Additionally, the existing sewage treatment plant will be augmented to meet growing demands, and power supply will be secured by tapping into the substation. These improvements aim to support tourism growth while maintaining environmental sustainability.

WHISKY POINT

SUBSTATION – 0.3 HA
STP- 1.0 HA
WATER STORAGE- 0.4 HA

The proposed infrastructure for Whisky Point includes a 0.3-hectare substation to supply reliable electricity, a 1.0-hectare sewage treatment plant (STP) for managing wastewater, and a 0.4-hectare distributed water storage system, allocated across multiple areas based on demand and ground level.

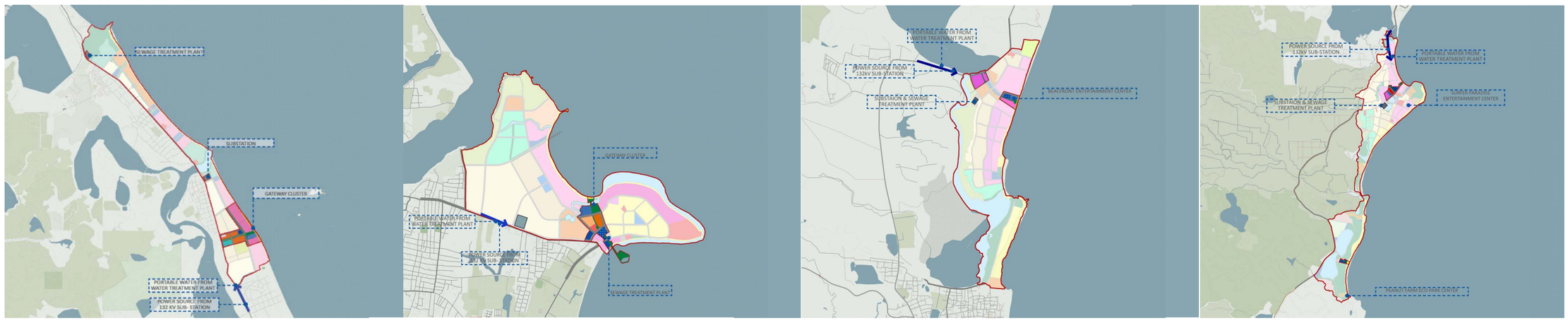
Potable water will be tapped from nearby sources to ensure sufficient supply for the new development. The construction of the STP and tapping into the substation for power will support the area's growth, ensuring sustainable resource management and infrastructure to accommodate tourism and local needs.

ARUGAM BAY AND PEANUT FARM

SUBSTATION – 0.3 HA
STP- 1.0 HA
WATER STORAGE- 0.4 HA

The proposed infrastructure for Arugam Bay and Peanut Farm includes a 0.3-hectare substation to ensure a stable electricity supply, a 1.0-hectare sewage treatment plant (STP) to manage wastewater, and a 0.4-hectare distributed water storage system, with storage allocated across multiple areas based on demand and ground level.

Potable water will be tapped from nearby sources to meet the water needs of the area, while the construction of the STP and tapping into the substation for power will support new tourism and community developments, promoting sustainable growth and resource management.

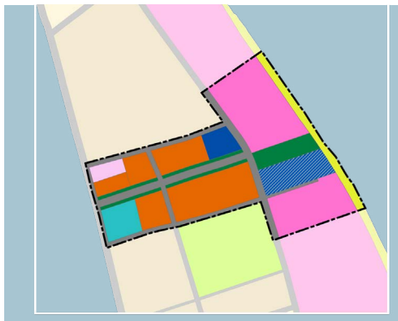


FIVE INTERVENTION AREAS

Kick-start intervention areas have been proposed within each node for preparation of urban design proposals guiding the immediate implementation.

- Kuchchaveli-Nilaveli Eco-Adventure Gateway
- Pasikudah Wellness Gem
- Whisky Point Rainbow Coast
- Arugam Bay Surfers Haven
- Peanut Farm Eco-Park

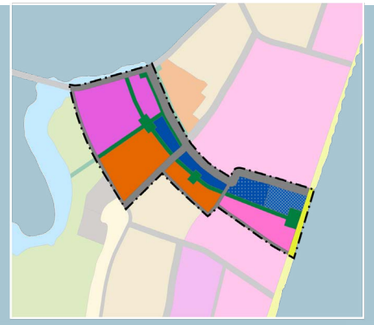
These strategically chosen nodes serve as focal points for targeted development efforts, each poised to catalyse transformative change within each study area.



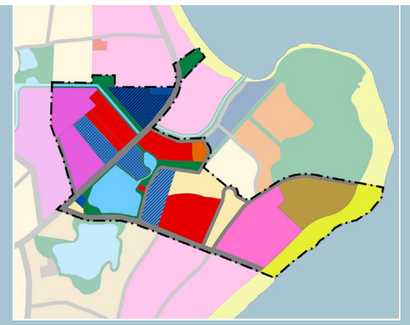
KUCHHAVELI-NILAVELI
55 Ha



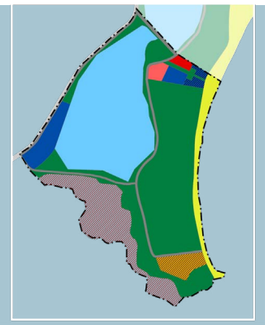
PASSIKUDAH–VERUGAL
36 Ha



WHISKY POINT
25 Ha



ARUGAM BAY
41 Ha



PEANUT FARM
90 Ha

ECO-ADVENTURE GATEWAY @ NILAVELI

The selected intervention area covers 55 hectares of land along Nilaveli Beach. Several factors guided the selection of this site, including its proximity to the existing jetty leading to Pigeon Island, its adjacency to established resorts, the lively atmosphere of the beach front, its proximity to a newly planned government township area, and its convenient location near Trincomalee city.

The vision for this intervention site is to transform it into a vibrant Eco-Adventure Gateway to Pigeon Island, offering unparalleled experiences in sustainable tourism and marine exploration.

WELLNESS GEM @ PASIKUDAH

The targeted intervention area spans 36 hectares of land nestled in Pasikudah. The selection of this site was driven by several key factors, including its calm atmosphere perfect for wellness activities, its prime location next to beautiful beaches, its easy access to nearby resorts, its closeness to essential amenities, and its potential to become a central hub for wellness activities. The vision for this intervention site is to cultivate it into a radiant Wellness Gem, offering a sanctuary for rejuvenation and holistic well-being amidst Pasikudah's stunning natural setting.

RAINBOW COAST@ WHISKY POINT

Situated on a 25 hectares expanse at Whisky Point, Rainbow Coast is destined to become a bustling coastal destination. Its prime location offers stunning ocean views and easy access to Whisky Point, making it an ideal spot for surfers and beach enthusiasts. The vision for Rainbow Coast is to create a vibrant hub where visitors can enjoy a diverse range of coastal activities while immersing themselves in the natural beauty of the area.

SURFER'S HAVEN @ ARUGAM BAY

Spanning 41 hectares along the shores of Arugam Bay, Surfer's Haven is poised to be a paradise for surfers and beachgoers. This site, known for its world-class surf breaks, lively beach culture, and established tourist infrastructure, offers a unique coastal experience that combines adventure and relaxation. It presents a great opportunity for sustainable tourism development, benefiting both international visitors and the local community.

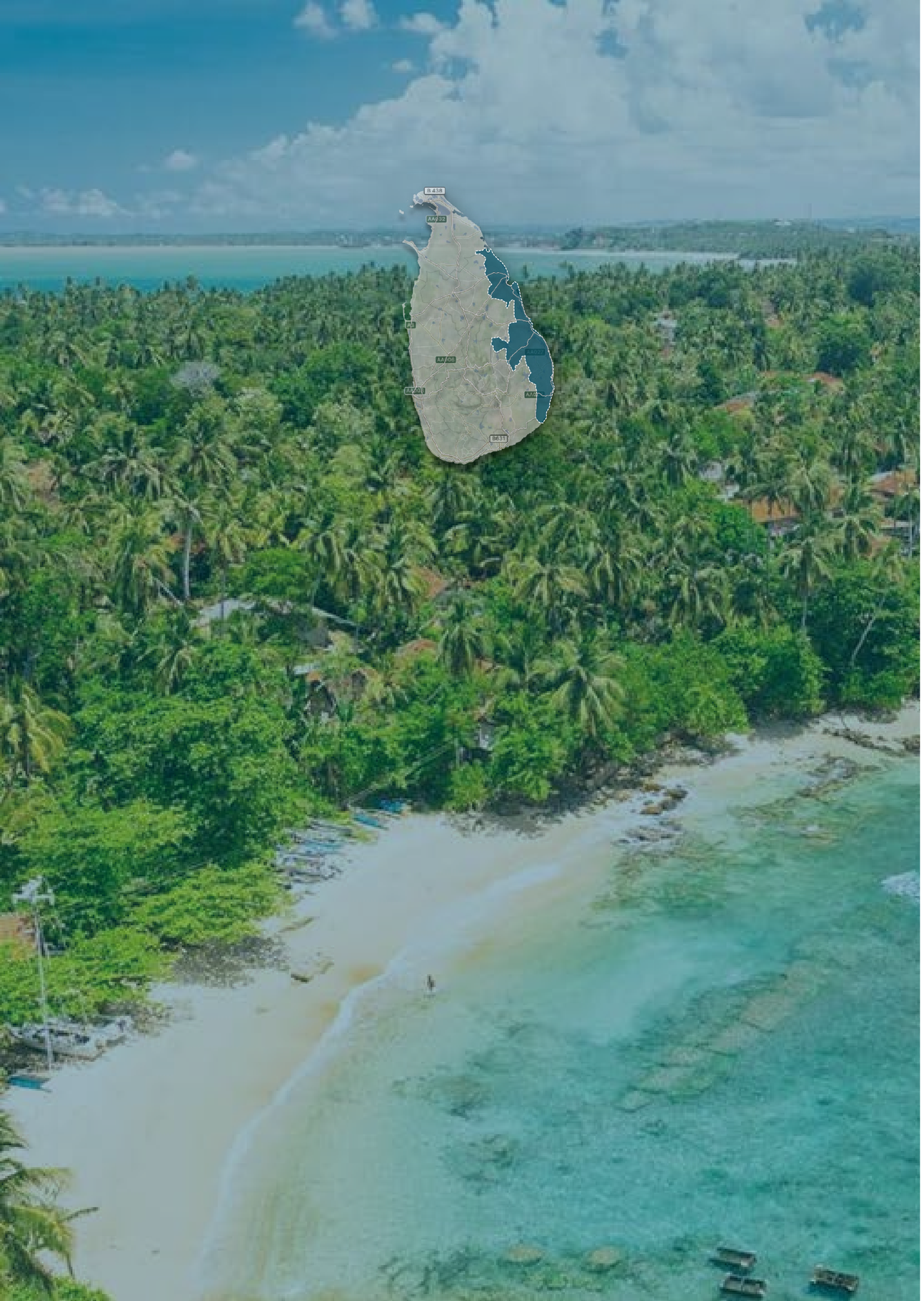
ECO PARK @ PEANUT FARM

Covering 90 hectares of land at Peanut Farm, Eco Park is envisioned as a green sanctuary promoting sustainability and outdoor recreation. Its expansive grounds provide ample space for eco-friendly initiatives, while its proximity to Peanut Farm offers a tranquil escape from urban life. The vision for Eco Park is to create a harmonious environment where visitors can reconnect with nature, participate in eco-conscious activities, and learn about environmental conservation.

1 INTRODUCTION

1.1 Project Background
1.2 Project Objective
1.3 Project Approach
1.4 Project Scope
1.5 Report Organisation





1.1 PROJECT BACKGROUND

In 2018, SJ had delivered Trincomalee District plan and detailed master plan of the urban area. In extension to the Trincomalee development in the Eastern province, the government of Sri Lanka intends to promote contiguous and sustainable development of the eastern region coastal belt between Panama and Kuchchaveli and attract investments into "High-end Tourism" sector. These three districts are blessed with serene beaches, rich cultural heritage and unique natural biodiversity along the lagoons.

Prior to the engagement with SJ, UDA has already identified lands for tourism development along the said coastline. The central government has also identified coastal lands that belong to the government and private sector from Verugal-aru to Batticaloa in the Batticaloa District. UDA and SJ analysed the data and finalised the study area boundaries for 4 nodes in three districts. In order to promote tourism, a broad development strategy is proposed along with precise project identification for implementation.

1.2 PROJECT OBJECTIVE

The overall objective of this study is to formulate a comprehensive vision for tourism development in Sri Lanka's Eastern Province, capitalizing on its inherent strengths and untapped potential. The aim is to position the region as a leading tourist destination within the country. To achieve this, the government plans to implement an approved strategy that will attract private investments for the creation of high-end tourism facilities at strategic locations.

Infrastructure development initiatives are proposed to support the burgeoning tourism sector, which is experiencing growth despite the challenges posed by the pandemic and economic downturn. The study focuses on identifying four key nodes, in collaboration with relevant authorities, for targeted tourism development. Detailed Master Plans for priority projects within these nodes are proposed, encompassing both the development of the nodes themselves and the enhancement of surrounding tourism sites to create a cohesive tourism catchment area.

1.3 PROJECT APPROACH

The main output of this report is to develop Detailed Master Plan for priority projects for identified four nodes along the eastern coast with necessary infrastructure for implementation. These four nodes comprise 588 ha of study area in Kuchchaveli-Nilaveli site within Trincomalee district; 480 ha of study area in Pasikudah site within Batticaloa District; 366 ha of study area in Whisky Point site and 557 ha of study area in Arugam Bay and Peanut Farm site within Ampara district. For this purpose the following approaches are adopted.

- Identify environmentally sensitive areas for protection and conservation.
- Identify sites with contiguous land availability for sizeable recreational node development.
- Identify potential development program based on high level economic and tourism study for eco, heritage and adventure tourism that will help promote and preserve the district's unique cultural heritage and scenic landscapes.

- Propose projects in the identified nodes and simulate 3D images for marketing purposes. Propose necessary infrastructure to support the tourism development and to improve the overall visitor experience.
- Identify priority projects within the nodal development and conduct pre-feasibility studies for one project within each node including objective, programme, infrastructure requirement, pre environment analysis and financial feasibility.
- Implementation framework with cost estimates for the capital improvement of the identified priority projects in the short term.
- Get common consensus of government, the private sector, and local community representatives on the proposed development.

1.4 PROJECT SCOPE

The project scope focuses to create a marketable tourism brand for the region that will catalyze economic development, enhance infrastructure, and improve the livelihood of local communities. This will be achieved through a comprehensive and integrated planning process that identifies key nodes for development, formulates strategic action plans, and implements sustainable and resilient development practices. To guide the future growth of the Eastern Province, with a focus on tourism and economic optimization, SJ has adopted an integrated planning process that includes the following tasks:

Task 1: Inception and Mobilization

The initial phase sets the groundwork for the entire planning process.

- Site Visit: Conduct thorough site visits to understand the current conditions, challenges, and opportunities in the Eastern Province and the selected nodes.
- Data Collection: Gather detailed data on demographics, land use, infrastructure, environment, tourism potential, and socio-economic factors to inform the planning process.
- Inception Report: Prepare an inception report that outlines the objectives, scope, methodology, and time line for the planning process. This report serves as a road map for the subsequent tasks.

Task 2: Site Analysis, Identification of Nodes & Development Program

This phase focuses on analyzing the current state and identifying strategic locations for tourism and economic development.

- Site Analysis: Perform a comprehensive analysis of the selected sites, assessing their physical, environmental, social, economic, and tourism potential characteristics.
- Node identification: Identify key nodes or strategic locations within the Eastern Province that have the potential for tourism development and can drive regional economic growth.
- Base Map Preparation: Develop detailed base maps that accurately represent the existing conditions and spatial data of the selected nodes.
- Development Program: Formulate a development program that outlines specific projects, initiatives, and interventions needed to achieve sustainable growth in the identified nodes, with a strong emphasis on tourism.

STAGE-1: INCEPTION AND MOBILISATION
- Site Visit
- Data Collection
- Inception Workshop

Deliverable
- Inception Report

STAGE-2: SITE ANALYSIS, IDENTIFICATION OF NODES & DEVELOPMENT PROGRAM
- Site Analysis
- Node Identification
- Base map preparation
- Development Program

Deliverable
- Presentation, Site analysis, base mapping and development program

STAGE-3: CONCEPT MASTER PLAN FOR 4 NODES
- Concept Plan Alternatives (Up to 2)
- Vision and Planning Framework
- Concept Master Plan

Deliverable
- Presentation for Concept Master Plan
- Concept Master Plan Report

STAGE-4: URBAN AREA DETAILED MASTER PLAN
- Action Projects
- Design & Regulations for Priority Projects
- Urban Design Proposal & Guidelines

Deliverable
- Detailed Masterplan Report
- Perspective views

Task 3: Concept Master Plan for 4 Nodes

In this phase, the focus shifts to developing a conceptual framework for the growth and development of the selected nodes, particularly in tourism.

- Action Projects: Identify and prioritize specific action projects that can be implemented in the short to medium term to catalyze tourism and economic development. These projects should address critical needs and leverage available resources effectively.
- Design and Regulations for Priority Projects: Develop detailed design guidelines and regulatory frameworks for priority projects to ensure they are implemented consistently and to high standards, particularly in the context of tourism infrastructure and services.
- Urban Design Proposal and Guidelines: Create comprehensive urban design proposals and guidelines that cover aspects such as building design, public spaces, transportation, and environmental sustainability. These guidelines should promote cohesive and attractive urban and tourism development.

Task 4: Urban Area Detailed Master Plan

This final phase involves creating detailed plans and guidelines for the urban areas within the selected nodes.

- Action Projects: Identify and prioritize specific action projects that can be implemented in the short to medium term to catalyze tourism and economic development. These projects should address critical needs and leverage available resources effectively.
- Design and Regulations for Priority Projects: Develop detailed design guidelines and regulatory frameworks for priority projects to ensure they are implemented consistently and to high standards, particularly in the context of tourism infrastructure and services.
- Urban Design Proposal and Guidelines: Create comprehensive urban design proposals and guidelines that cover aspects such as building design, public spaces, transportation, and environmental sustainability. These guidelines should promote cohesive and attractive urban and tourism development.

Throughout the planning process, actively engage with local communities, businesses, government agencies, and other stakeholders. These stakeholders input and collaboration are essential for ensuring that the plans are relevant, inclusive, and widely supported. By following this integrated planning process, the SJ aims to foster sustainable and balanced growth in the Eastern Province, leveraging the potential of the selected nodes to drive regional development, improve the livelihood of locals, and position the region as a premier tourism destination.



Figure 1.1 Steering Committee Meeting



Figure 1.2 Stakeholders' Meeting and Workshop



Figure 1.3 Stakeholders' Meeting and Site Visit

1.5 PROJECT ORGANISATION

The report consists of the following key chapters.

Chapter 1: Introduction
This chapter serves as a foundational overview, providing insights into the project's background, scopes, tasks, and how the report is organized for clarity and coherence.

Chapter 2: Regional Analysis & Positioning
Within this section, the narrative deepens into Sri Lanka's socio-economic fabric, exploring key cities, transport networks, infrastructure, and offering a panoramic view of the national tourism landscape. It also explores the socio-economic and tourism overview of the Eastern Province, assessing its existing context, connectivity, tourism facilities, and identifying gaps and opportunities for tourism development. Additionally, the chapter reviews the existing transport network and infrastructure facilities, detailing the methodology, approach, and planning assumptions used to estimate transport and infrastructure provisions.

Chapter 3: Demand Projections and Development Product Mix
This chapter focus on provision of tourism arrival projections, scenarios, room inventory, estimation of land area requirements , development programs and product mix.

Chapter 4: nilaveli-kuchchaveli
The key objective of this section is to provide an elaborate assessment of the existing context and potentials of Nilaveli-Kuchchaveli within the broader area of Trincomalee and its surroundings. It outlines existing conditions, identifies development opportunities, and proposes a strategic framework with goals, development plans, and priority projects to boost tourism and economic growth in Sri Lanka's Eastern Province.

Chapter 5: Pasikudah-Verugal
Similarly, this chapter provides a detailed assessment of Pasikudah-Verugal and surrounding area. It covers the existing context, site conditions, tourism facilities, and identifies development opportunities. Goals, strategies, development programs, proposed concept plans, transport, and infrastructure ideas are discussed. Additionally, key projects and interventions aimed at boosting tourism and economic growth in Sri Lanka's Eastern Province are outlined.

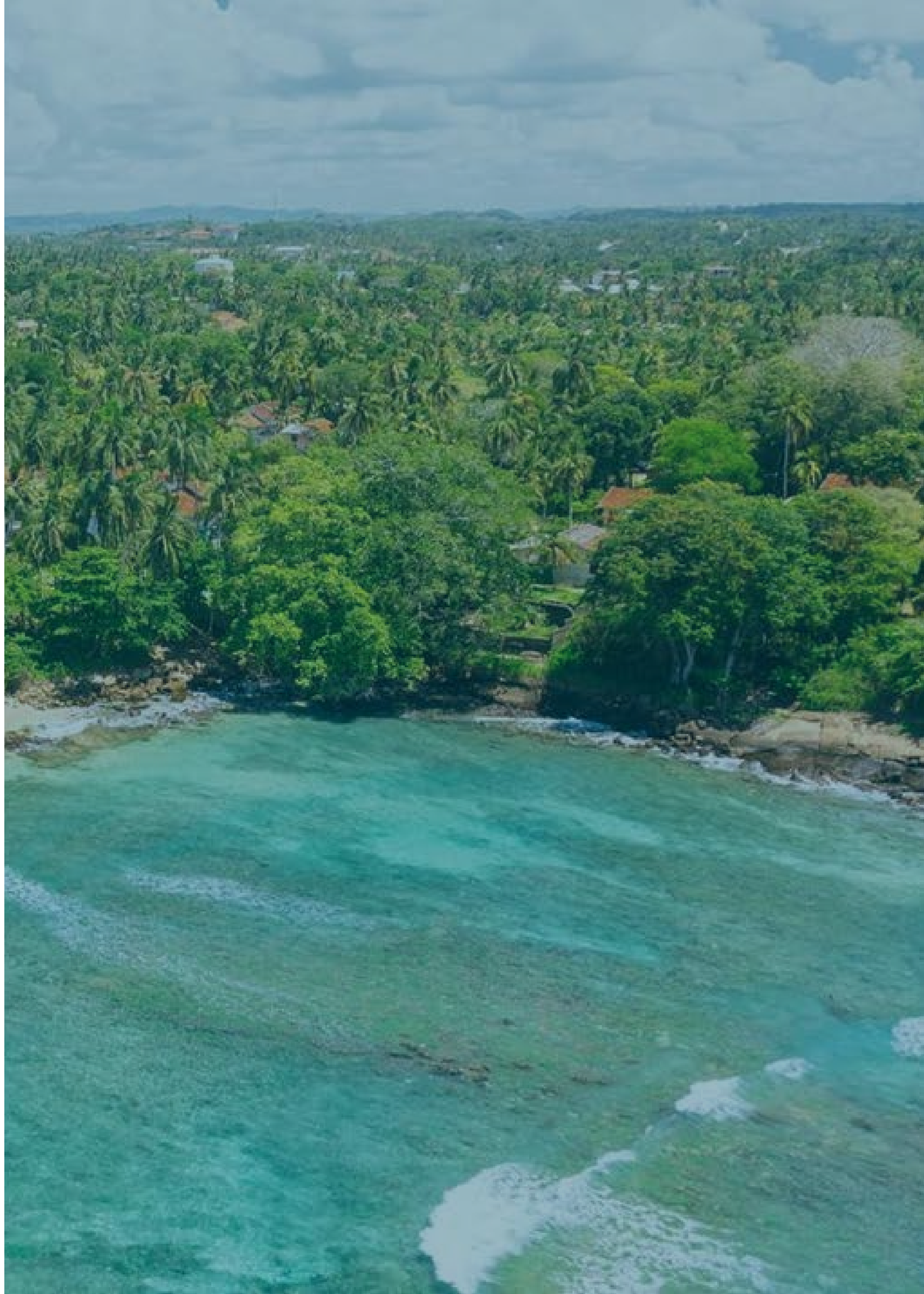
Chapter 6: whisky point, arugam bay & peanut farm
This chapter provides a comprehensive assessment of Whisky Point, Arugam Bay, and Peanut Farm, renowned surfing destinations in Sri Lanka's Eastern Province. Situated along the captivating coastline, these locales are celebrated for their world-class waves and vibrant surfing culture. The assessment encompasses an analysis of the current context, site conditions, existing tourism amenities, and identifies avenues for development. Discussions include goals, strategies, conceptual layouts, transportation, infrastructure, and key projects aimed at boosting tourism and economic growth in the region.

Chapter 7: zoning classification and guidelines

This chapter outlines a comprehensive zoning classification for the Eastern Province, dividing land into residential, commercial, industrial, agricultural, and tourism zones. It provides general guidelines to align land use with regional development goals, focusing on sustainable growth, infrastructure planning, and environmental protection. The chapter also offers specific recommendations for selected priority projects, ensuring balanced development and support for the region’s socio-economic objectives.

Way forward
This chapter recommends next steps for implementations.

Appendix
This section provides supplementary materials, including additional assessments, case studies, and further recommendations to enrich the reader's understanding and provide a comprehensive resource.

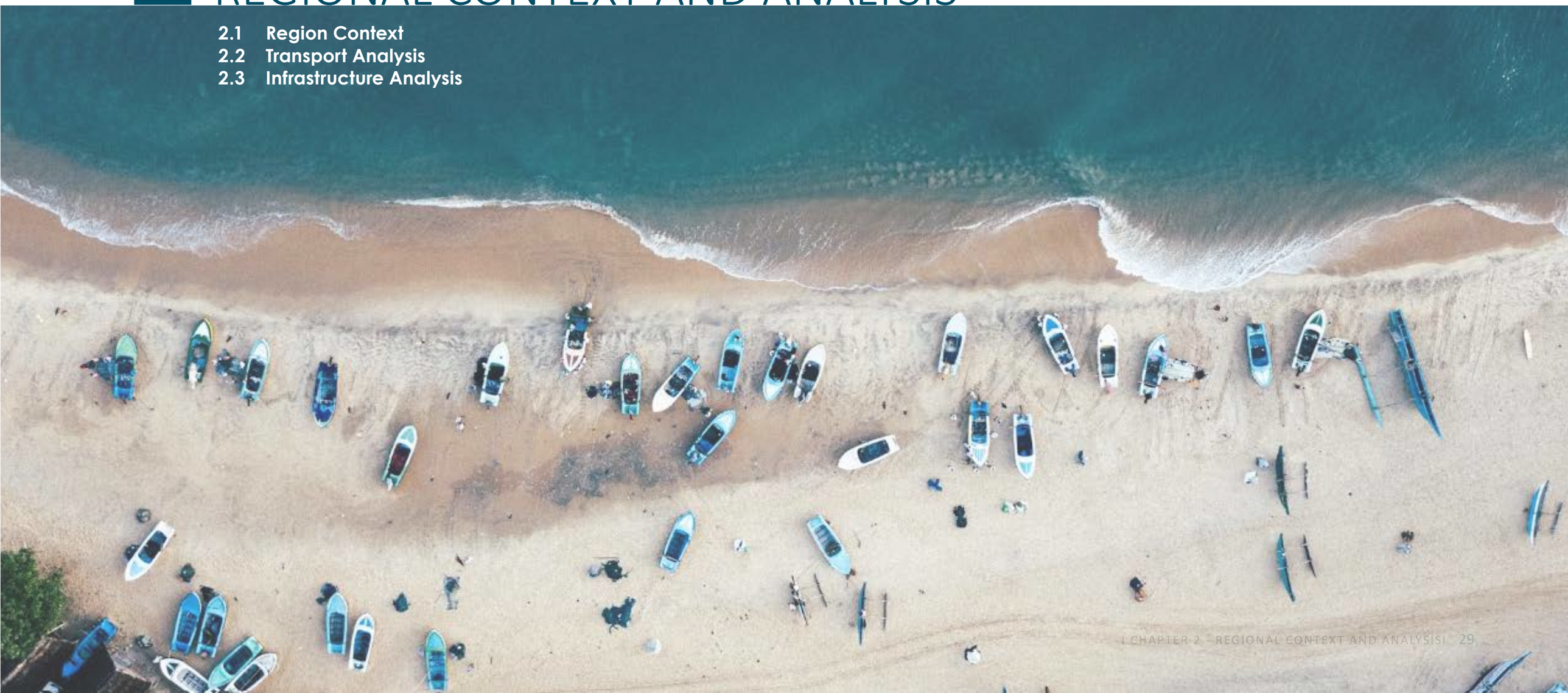


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2 REGIONAL CONTEXT AND ANALYSIS

2.1 Region Context
2.2 Transport Analysis
2.3 Infrastructure Analysis



2.1 REGIONAL CONTEXT

2.1.1 SRI LANKA OVERVIEW

Sri Lanka, an island nation situated in the Indian Ocean, is renowned for its rich history, diverse culture, and stunning natural beauty. With a population of over 21 million people, it boasts a tapestry of ethnicities, languages, and religions, contributing to its vibrant and dynamic society.

Colombo, the commercial capital, is a bustling metropolis that showcases the country's modernity while retaining its historical charm. Sri Lanka's ancient cities, including Anuradhapura, Polonnaruwa, and Sigiriya, bear witness to its storied past, with magnificent ruins and architectural marvels dating back thousands of years.

The country's lush landscapes are a testament to its biodiversity, with verdant tea plantations carpeting the central highlands, pristine beaches lining the coastline, and dense rainforests teeming with wildlife. Sri Lanka's wildlife reserves, such as Yala National Park and Wilpattu National Park, offer unparalleled opportunities for safari adventures and wildlife sightings. Sri Lanka has emerged as a resilient and thriving nation, welcoming tourists from around the globe to experience its warmth, hospitality, and the myriad wonders it has to offer.

AREA
65,610 sq.km

POPULATION
22.2 mil

SEA PORTS
4

GDP
US 74.4 Bn (2022)

TOURISM GDP
11.6 %

INTERNATIONAL AIRPORT
4

SRI LANKA TOURISM ARRIVAL

719,978 (2022)

1,487,303 (2023)

SRI LANKA TOURISM PROFILE

TOURISM REVENUE
1.1 billion
2022 provisional

ROOM INVENTORY 2023
16,700+
30.4% Occupancy

AVERAGE DURATION OF STAY
8.4 Days

AVERAGE EXPENDITURE PER DAY
164.4 USD
2022 provisional

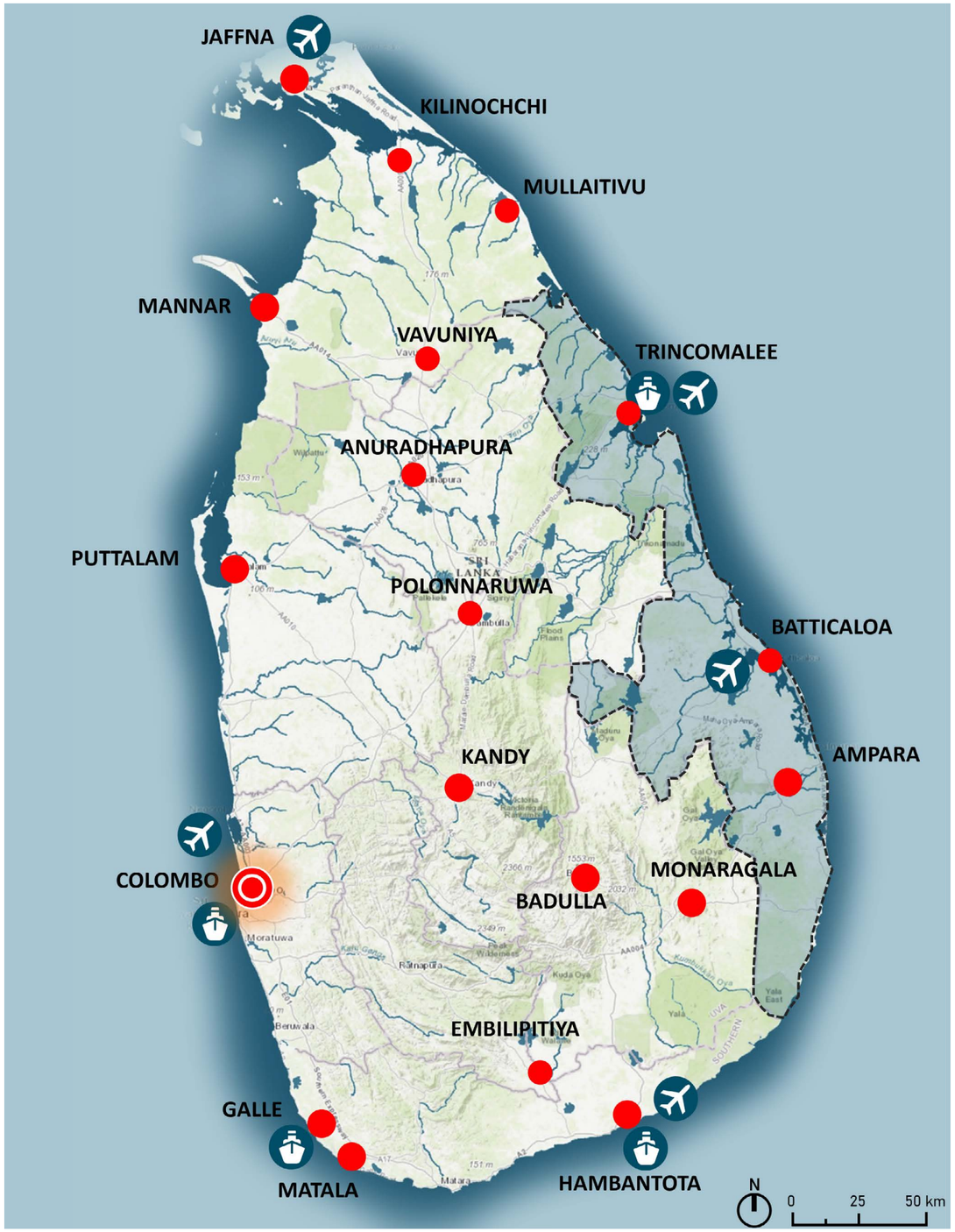


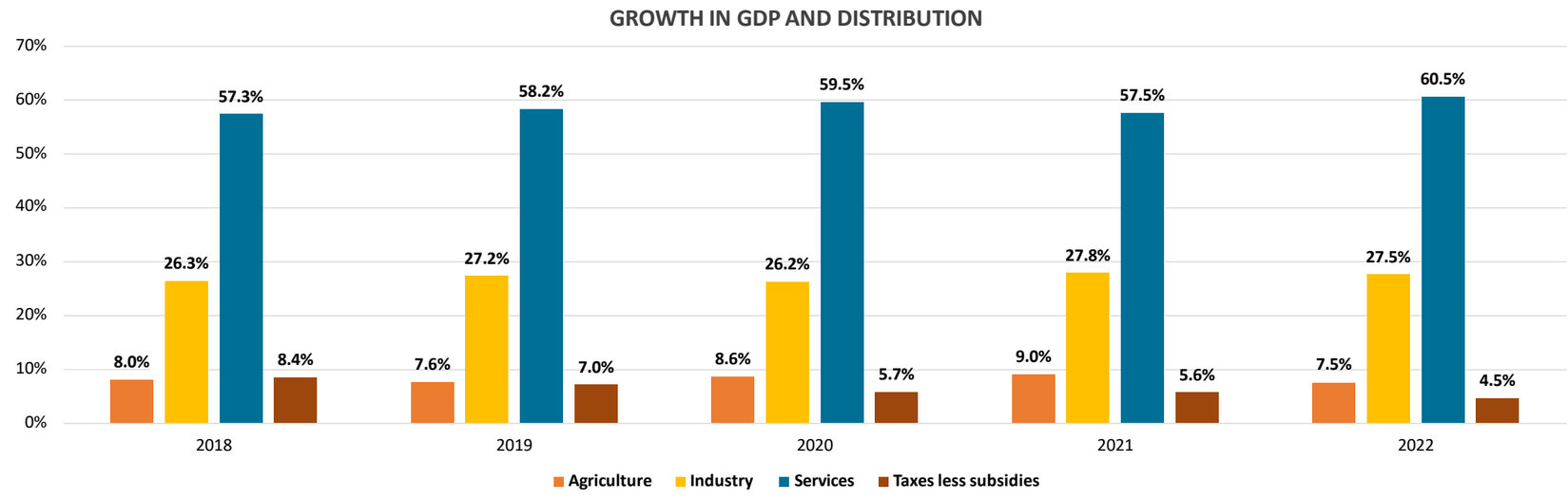
Figure 2.1 Map of Sri Lanka and Eastern Province

2.1.2 SRI LANKA ECONOMIC OVERVIEW

Sri Lanka's economy is predominantly driven by the service sector, which contributed over 60% to the country's GDP in 2022 and employs nearly 47% of the workforce. This sector has become the largest source of economic output and employment, with future growth expected due to increasing internet penetration and significant infrastructure projects like the Colombo Port City and Western Region Megapolis.

The agriculture sector, once the dominant contributor to Sri Lanka's economy, now accounts for around 7-8% of GDP and employs 26.5% of the workforce. The sector has seen a steady decline in its contribution over the past decade, reflecting a shift away from the traditional plantation industry that the country historically relied upon.

The industrial or manufacturing sector contributes approximately 27-28% to GDP and employs an equal percentage of the workforce (26.5%). This sector has been growing consistently over the last five years, reinforcing its importance in Sri Lanka's economic landscape as a key pillar alongside services and agriculture.



07 - 08%	**AGRICULTURE SECTOR** Agriculture **used to be the dominant contributor** to economy. And the country has been relying upon plantation industry for economic Input. However, the sector is **witnessing a gradual decline** of its total **share of contribution over the past 10 years**	26.5%
27 - 28%	**MANUFACTURING SECTOR** **Contributing to approx. 28%** of Sri Lanka's economic output is the industrial sector, which has seen **growth for the past five years**.	26.5%
59 – 61%	**SERVICE SECTOR** Contributing to **more than 60% of Sri Lanka's GDP** as of 2022, the **services sector is by far the largest generating source** of the country's production. These **sectors are expected to grow** further due to **the increasing internet penetration** as well as the **on-going investments**	47%

Figure 2.2 GDP Distribution

2.1.3 SRI LANKA GEOGRAPHIC OVERVIEW

Sri Lanka, located in the Indian Ocean off the south-eastern coast of India, is an island nation with a diverse landscape and rich biodiversity. Covering an area of approximately 65,610 square kilometers, it is the 25th largest island in the world. The country can be broadly divided into three main geographic regions: the central highlands, the plains, and the coastal belt. The central highlands, which include the Knuckles Mountain Range and Adam's Peak, are characterised by rugged terrain, misty mountains, and lush tea plantations. To the north and east of the central highlands lie the plains, comprising fertile agricultural land and extensive river basins. The Mahaweli River, the longest river in Sri Lanka, flows through this region, providing vital water resources for irrigation and hydroelectric power generation. The coastal belt surrounds the island, offering diverse landscapes ranging from sandy beaches and mangrove swamps to rocky cliffs and coral reefs. Sri Lanka's coastline stretches for approximately 1,340 kilometers and is dotted with picturesque fishing villages, bustling port cities, and popular tourist destinations such as Galle, Hikkaduwa, and Trincomalee.

Northern, Central & Eastern Provinces have the least population about 140-190 ppsk indicating less economic opportunities in the region.

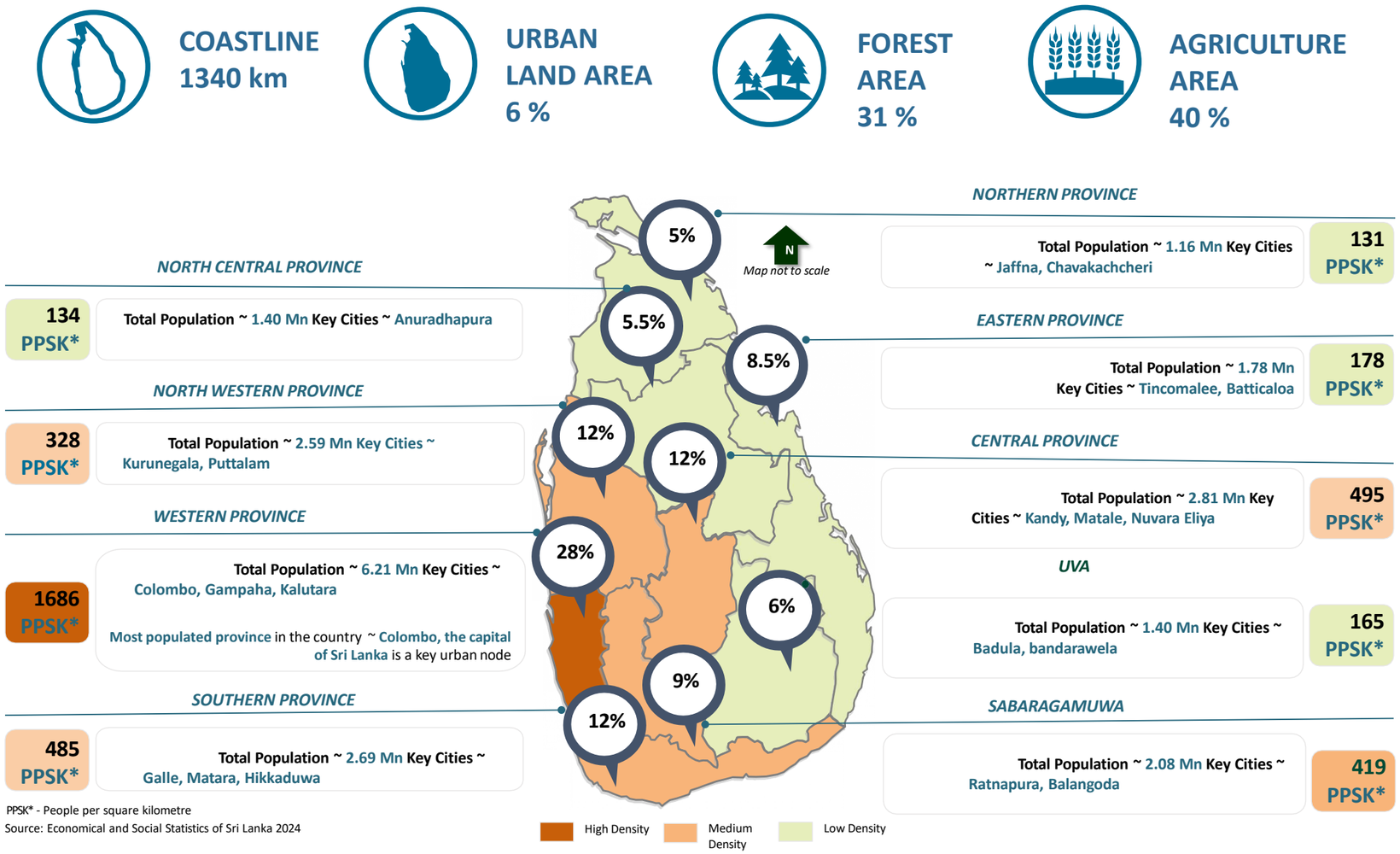


Figure 2.3 Population Distribution Map of Sri Lanka

Source: Sector Strategic Plan

2.1.4 SRI LANKA DEMOGRAPHIC OVERVIEW

22.2 Mn
Population(2021)

18.5%
Urban Population

81.5%
Rural population

~75%
Sinhalese Population

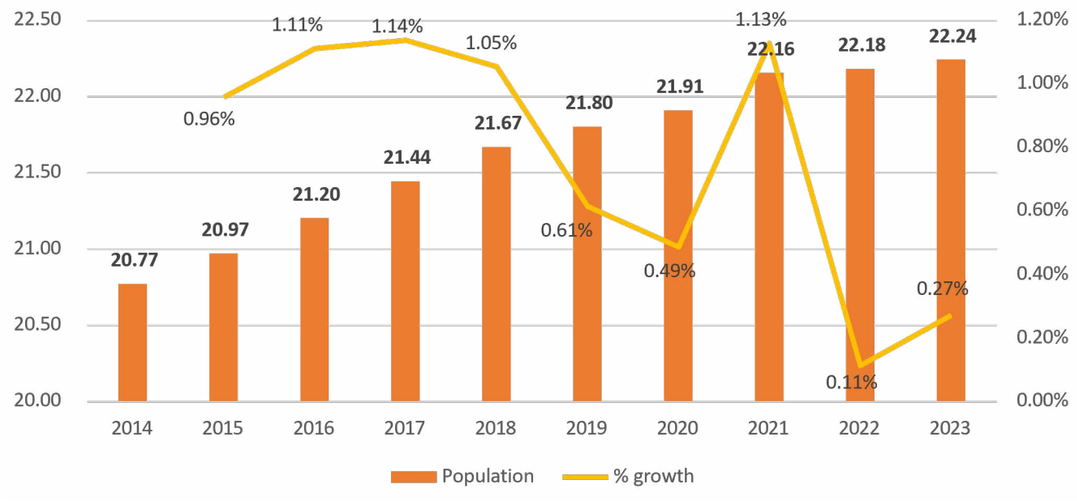
48%
Female Population

52%
Male Population

1.5 Mn
Tourist Arrivals (2023)

57.52%
Workforce rate

USD $3,465
Per capita income



There is a steady growth in population (1.01%) through all these years. No exponential growth is felt in last 20 years. No major development or investment has influenced the growth pattern



Figure 2.4 Sri Lanka Demographic Composition

Sri Lanka, with a population of 22.2 million as of 2021, is predominantly rural, with 81.5% living in rural areas and only 18.5% in urban centres. The Sinhalese make up about 75% of the population, with a fairly balanced gender distribution of 48% female and 52% male. The country's workforce participation rate is 57.52%, and the per capita income is USD $3,465.

Tourism is a key economic driver, with 1.5 million tourist arrivals in 2023. Sri Lanka's demographic structure, shaped by its rural majority, ethnic diversity, and growing urbanisation influence its economic and social landscape.

2.1.5 SRI LANKA ENVIRONMENTAL OVERVIEW

Sri Lanka has over 100 environmental legislation which address the environmental impact of human settlements/ urban development. National Environmental Act No.47 of 1980 is the umbrella act that covers the overall environmental impacts. Some of the most important and applicable once are listed below.

National Physical Planning Department, Sri Lanka has formulated. National physical plan and policy 2050 as the guiding document of the urban and regional development of the country. Accordingly, the entire coastal belt of the country has been declared as an environmentally sensitive area.

Coastal Conservation Act No.57 of 1981, and its amendment act No.64 of 1988 regulate the development along the coastal belt of the country. Coastal Zone Management Plan 2018 provides the guidelines applicable for development. All beaches in Sri Lanka are public and cannot restrict the access.

Fauna and Flora Protection Ordinance No 02 of 1937 and Its Amendment Act No 1 of 1970 provide for the protection and conservation of the fauna and flora of Sri Lanka and their habitats. Forests Ordinance No 16 of 1907 and its Amendment Act No 65 of 2009 provide regulations for forest conservation. National Heritage Wilderness Area Act in 1988 conserves the declared environmental sensitive areas. The Department of Wildlife Conservation manages Strict Nature Reserves, Nature Reserves, National Parks, Marine National Parks, Jungle Corridors, and Sanctuaries, while the Forest Conservation Department oversees Conservation Forests, Reserved Forests, and Village Forests. Urban Development cannot be undertaken in protected areas and one mile buffer zone regulations are applicable for the most.

The Fisheries and Aquatic Resources Act No. 2 of 1996 governs the management, regulation, conservation, and development of fisheries and aquatic resources in Sri Lanka. It also ensures compliance with international and regional fisheries agreements and repeals several previous fisheries-related ordinances. The Fisheries Department is responsible for enforcing this Act.

The Marine Pollution Prevention Act No. 35 of 2008, which replaced the 1981 Act, focuses on controlling pollution from ships and offshore projects. Its goal is to prevent, control, and reduce pollution in Sri Lanka's territorial waters, maritime zones, and coastal areas. The Marine Environmental Protection Authority (MEPA) is charged with its implementation, and all coastal developments must adhere to relevant guidelines through coordinated actions between agencies like the CCD, MEPA, UDA, and LA.

The Paddy Lands Act of 1958 regulates the leasing of paddy lands to secure tenant rights, restrict rent, and authorise authorities to cultivate neglected lands. The Agrarian Services Department oversees this Act, and any development on paddy lands requires clearance from this department before land-use conversion can occur.

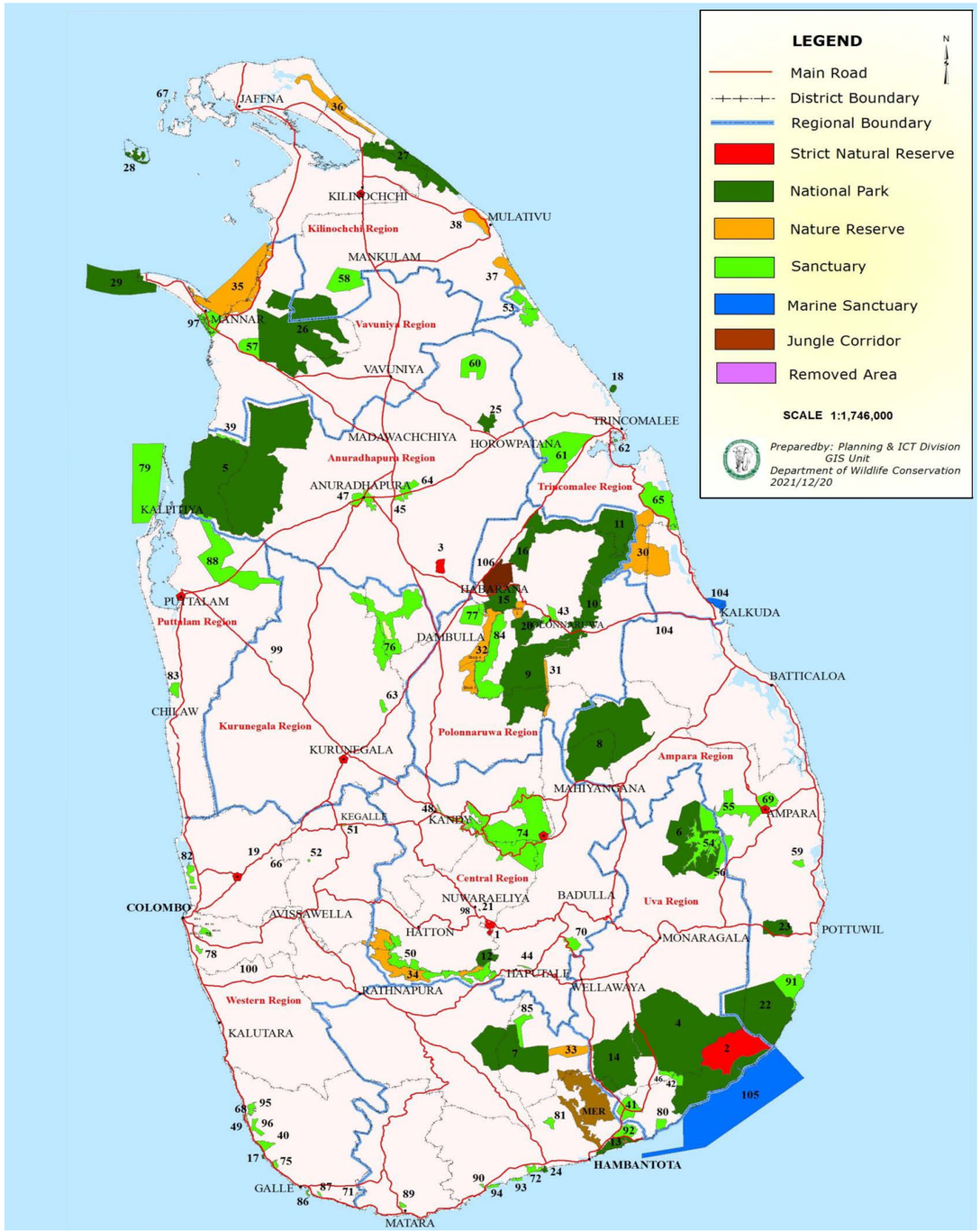


Figure 2.5 Protected Area under Department of Wildlife Conservation Map of Sri Lanka (Source: NPPD 2017-2050)

2.1.6 SRI LANKA SOCIAL OVERVIEW

Being an Asian country and due to the influence of cultures of the neighbouring countries within the Indian sub-continent, Sri Lanka has been exposed to diverse social and cultural mix and therefore has developed into a nation with rich social and cultural diversity.

Alongside the path-dependent socio-cultural values that have been developing over the last 2,500 years, the socio-cultural development of Sri Lanka is guided by several policies, laws, and plans, focusing on enriching the current socio-cultural diversity and harnessing associated potentials for future development. Some of the important and applicable ones are as below.

National Physical Planning Department, Sri Lanka has formulated the National Physical Plan and Policy - 2050 as the guiding document of the urban and regional development of the entire country. This policy and plan identifies the national-level importance of diverse regions of Sri Lanka and envisions the future physical development to achieve economic, social, and cultural development targets of the country.

In addition, the physical, social, and cultural development has been guided and regularised by different plans prepared for specific areas of the country by the National Physical Planning Department and the Urban Development Authority. To manage rich cultural diversity and heritage of the country, several important laws, led by the Antiquities Ordinance, have been introduced by the government of Sri Lanka time to time. Antiquities Ordinance No. 9 of 1940, and its amendment acts No. 2 of 1955, 22 of 1955, 24 of 1998, and 12 of 2005 provides regulatory guidance for the better preservation of the antiquities of Sri Lanka, and of sites and buildings of the historical or archaeological importance in Sri Lanka. Archaeological and National Importance Act No. 16 of 1990 has specific provisions to declare certain Archaeological activities, sites, and remains, antiquities, ancient and Historical monuments and records as being of national importance.

Central Cultural Fund Act No. 57 of 1980 provides provisions for the establishment of a fund to support the development of cultural and religious monuments, promotion of cultural and religious activities, and to provide financial assistance for artists and craftsmen, and so forth.

Moreover, Cultural Property Act No. 73 of 1988 regulates and control the export of cultural property.

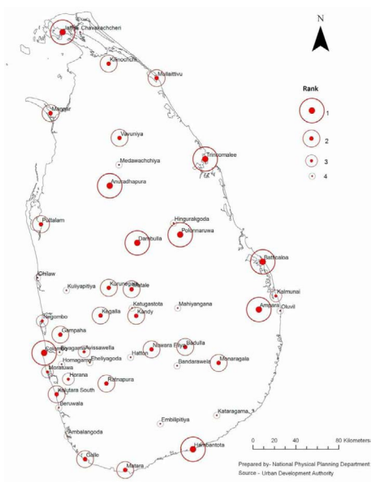


Figure 2.6 Existing Hierarchy of Nodes (2017) as per NPP 2050

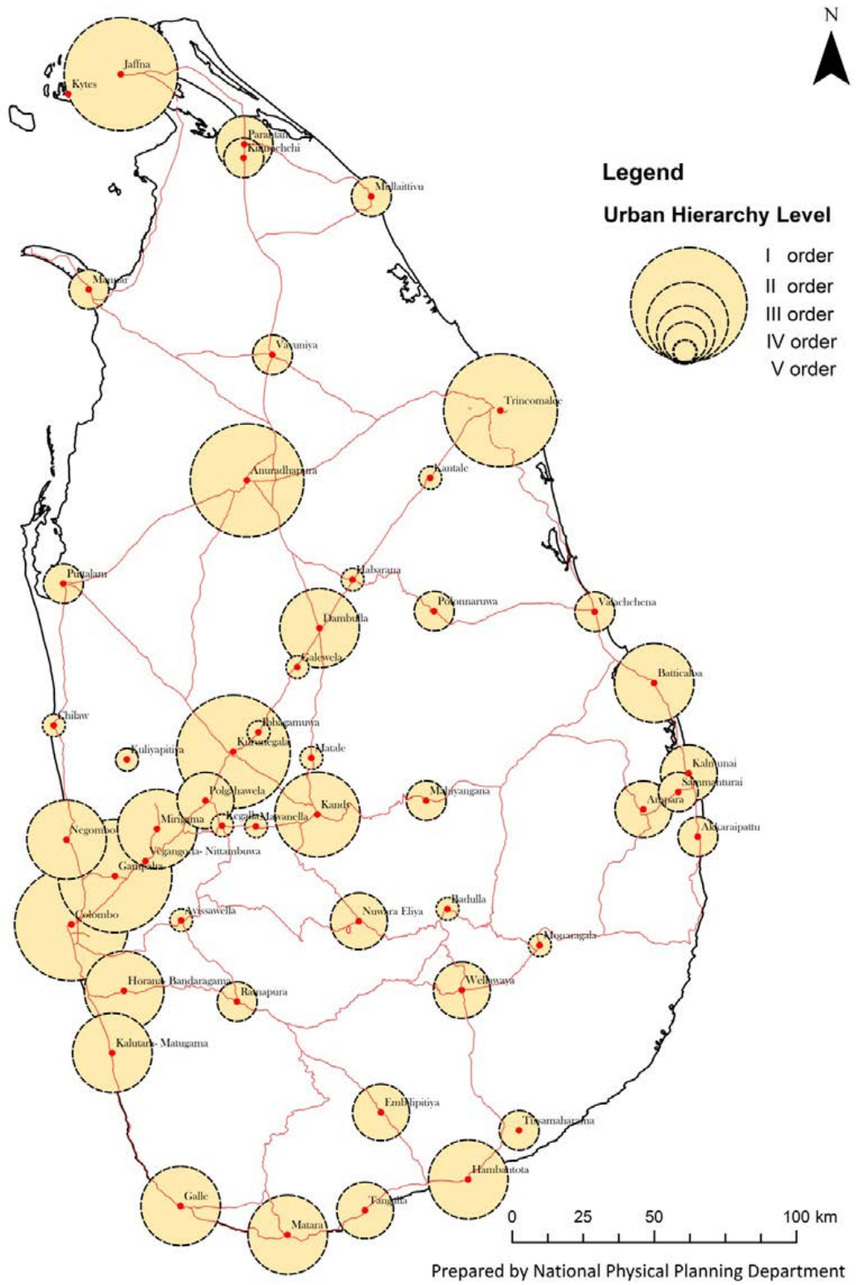


Figure 2.7 Proposed Hierarchy of Nodes (2017) as per NPP 2050

2.1.7 SRI LANKA TOURISM OVERVIEW

TOURISM ASSETS

Sri Lanka's tourism assets is ranging from pristine beaches to ancient cultural sites, lush tea plantations, wildlife sanctuaries, and vibrant cities.

NATURE & ADVENTURE

Sri Lanka is renowned for its biodiversity. Visitors can explore national parks like Yala, Udawalawe, and Wilpattu to spot elephants, leopards, sloth bears, and a variety of bird species. From hiking through lush rainforests to white-water rafting in the hill country, Sri Lanka offers plenty of adventurous activities for thrill-seekers. The island is surrounded by beautiful beaches, offering opportunities for sunbathing, surfing, snorkeling, and diving. Popular beach destinations include Unawatuna, Bentota, Mirissa, and Arugam Bay.

HERITAGE & CULTURE

Sri Lanka is home to numerous UNESCO World Heritage Sites, including the ancient city of Sigiriya, the sacred city of Anuradhapura, and the old town of Galle with its colonial architecture. Sri Lanka is dotted with ancient temples, ruins, and religious monuments that offer insights into its rich history and cultural heritage.

Sri Lanka celebrates a multitude of festivals throughout the year, such as the Esala Perahera in Kandy, which showcases traditional dance, music, and adorned elephants.

LONGEST COASTLINE

The Eastern Province of Sri Lanka is blessed with a stunning coastline that stretches for approximately 450 kilometers along the eastern side of the island. Trincomalee is one of the largest natural harbours in the world and is famed for its picturesque beaches. Some popular beaches in Trincomalee include Nilaveli Beach, Uppuveli Beach, and Marble Beach. Batticaloa is a coastal city in the Eastern Province with beautiful beaches such as Pasikudah Beach and Kalkudah Beach. Arugam Bay is a world-renowned surfing destination located on the southeast coast of Sri Lanka. It attracts surfers from around the globe due to its consistent waves and laid-back atmosphere. Pottuvil is located near Arugam Bay and offers its own pristine beaches, including Whiskey Point Beach and Pottuvil Point Beach. These beaches are quieter than Arugam Bay and are perfect for relaxation and beachcombing.

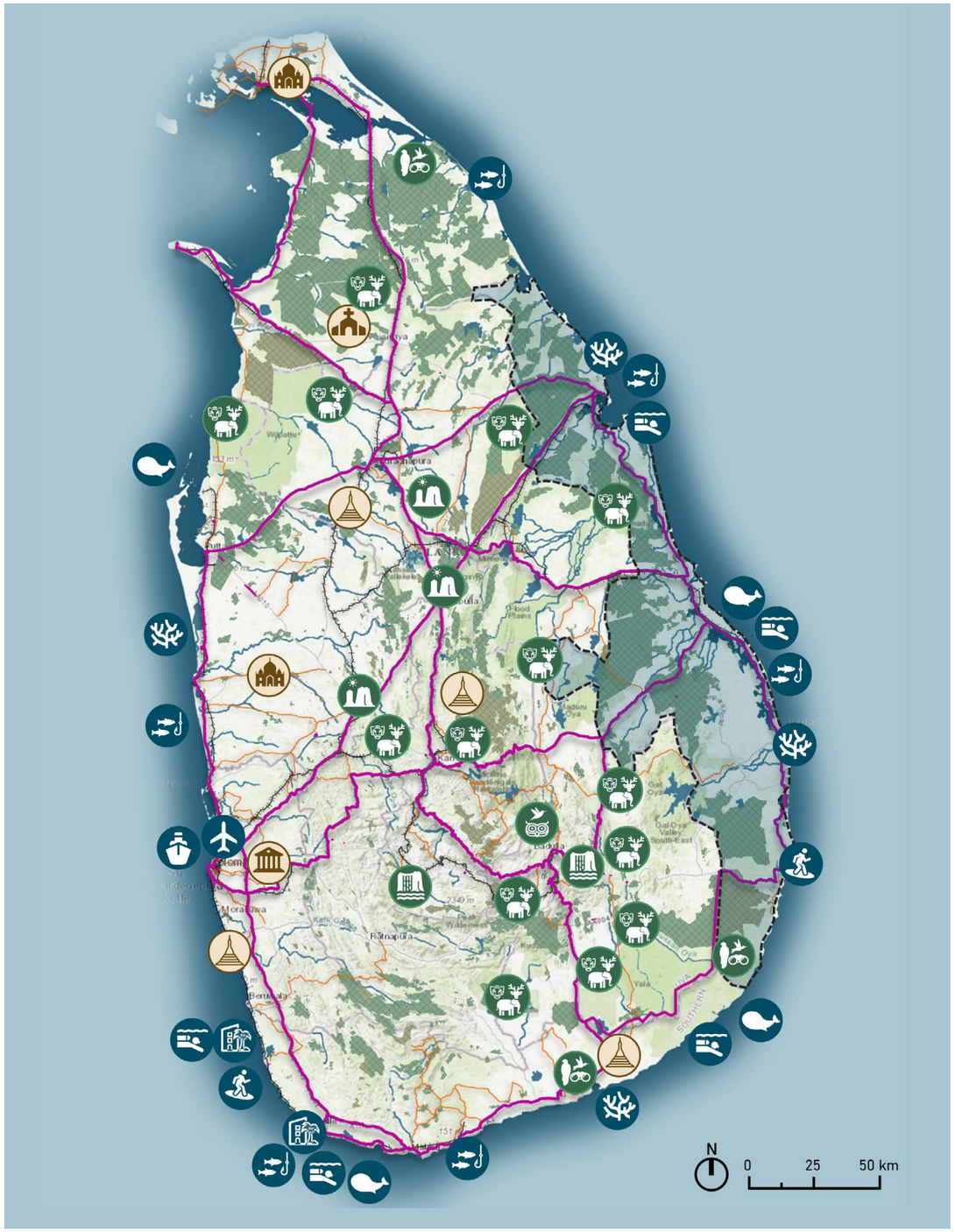


Figure 2.8 Tourism Assets Map of Sri Lanka

2.1.8 REGIONAL TOURISM COMPARISON



TOURISM ARRIVAL
27.25 million
2023

TOURISM REVENUE
$ 31 billion
2023

AVERAGE DURATION OF STAY
9 Days
2023

THAILAND

Thailand's tourism industry is renowned for its captivating cultural heritage, bustling cities, lush landscapes, and stunning beaches. From the vibrant street life of Bangkok to the tranquil shores of Phuket and Krabi, Thailand offers a diverse array of coastal destinations. Visitors can unwind on powdery white sands, swim in crystal-clear waters, and explore picturesque islands dotted along the Andaman Sea and the Gulf of Thailand.



TOURISM ARRIVAL
11.68 million
2023

TOURISM REVENUE
$ 3.5 billion
2022 provisional

AVERAGE DURATION OF STAY
15.05 Days
2023

INDONESIA

Indonesia's tourism industry is a colourful mosaic of diverse cultures, breath-taking landscapes, and unparalleled natural beauty. From Jakarta's bustling streets to Bali's serene beaches, the country offers a wealth of experiences. Visitors can explore ancient temples, dive into vibrant coral reefs, and trek through lush rainforests. With its warm hospitality and adventurous spirit, Indonesia is a captivating destination in Southeast Asia.



TOURISM ARRIVAL
5.45 million
2023

TOURISM REVENUE
$ 8.67 billion
2022 provisional

AVERAGE DURATION OF STAY
7.87 Days
2023

PHILIPPINES

Tourism in the Philippines offers a captivating blend of natural wonders, vibrant culture, and warm hospitality. From the pristine beaches of Boracay to the lush rice terraces of Banaue, visitors can immerse themselves in diverse attractions like snorkeling, diving, and island-hopping, explore Spanish colonial architecture, and indulge in mouth watering cuisine influenced by Malay, Spanish, and Chinese flavors. Water activities, colonial architecture, and delicious cuisine await exploration across the country's 7,000 islands.



TOURISM ARRIVAL
1.48 million
2023

TOURISM REVENUE
$ 1.1 billion
2022 provisional

AVERAGE DURATION OF STAY
8.4 Days
2023

SRI LANKA

Sri Lanka's tourism is a captivating blend of rich heritage, diverse landscapes, and warm hospitality. From the ancient ruins of Anuradhapura to the picturesque tea plantations of Nuwara Eliya, the country offers a wealth of experiences. Visitors can explore pristine beaches, spot wildlife in national parks, and indulge in flavorful cuisine influenced by its multicultural heritage. With its welcoming locals and array of attractions, Sri Lanka invites travelers to discover its beauty and charm across the island.

2.1.9 EASTERN PROVINCE OVERVIEW

Eastern Province has the longest coastline in the country with pristine beaches, lagoons with flora & fauna, Coral reefs and marine animals, however, capture less than 5% of the total visitors. Prosperity Index of Sri Lanka implies that Eastern province is economically behind in comparison to other provinces.

1.86 Mn
Population
8.5% share to Sri Lanka

1.5% CAGR
Population Growth

9,996 sqkm
Land area
15% share to Sri Lanka

300 km
Coastal line
22% share to Sri Lanka

Sectorwise split of Working population

5.74%	28.6%	22.9%	48.5%
GDP Contribution (2019)	Agriculture	Industries	Service

Prosperity Indices	Rank in 2018	Rank in 2019
Economy and Business Climate	9/9	9/9
Well- being of the people	9/9	9/9
Socio economic infrastructure	7/9	7/9
Overall Rank	**8/9**	**8/9**

TOURISM ARRIVAL: **69,000 (2023),** >5% of total tourism arrival

DURATION OF STAY: **3 to 4 days average**

ROOM INVENTORY : **~2,400** (70+% occupancy pre-covid)

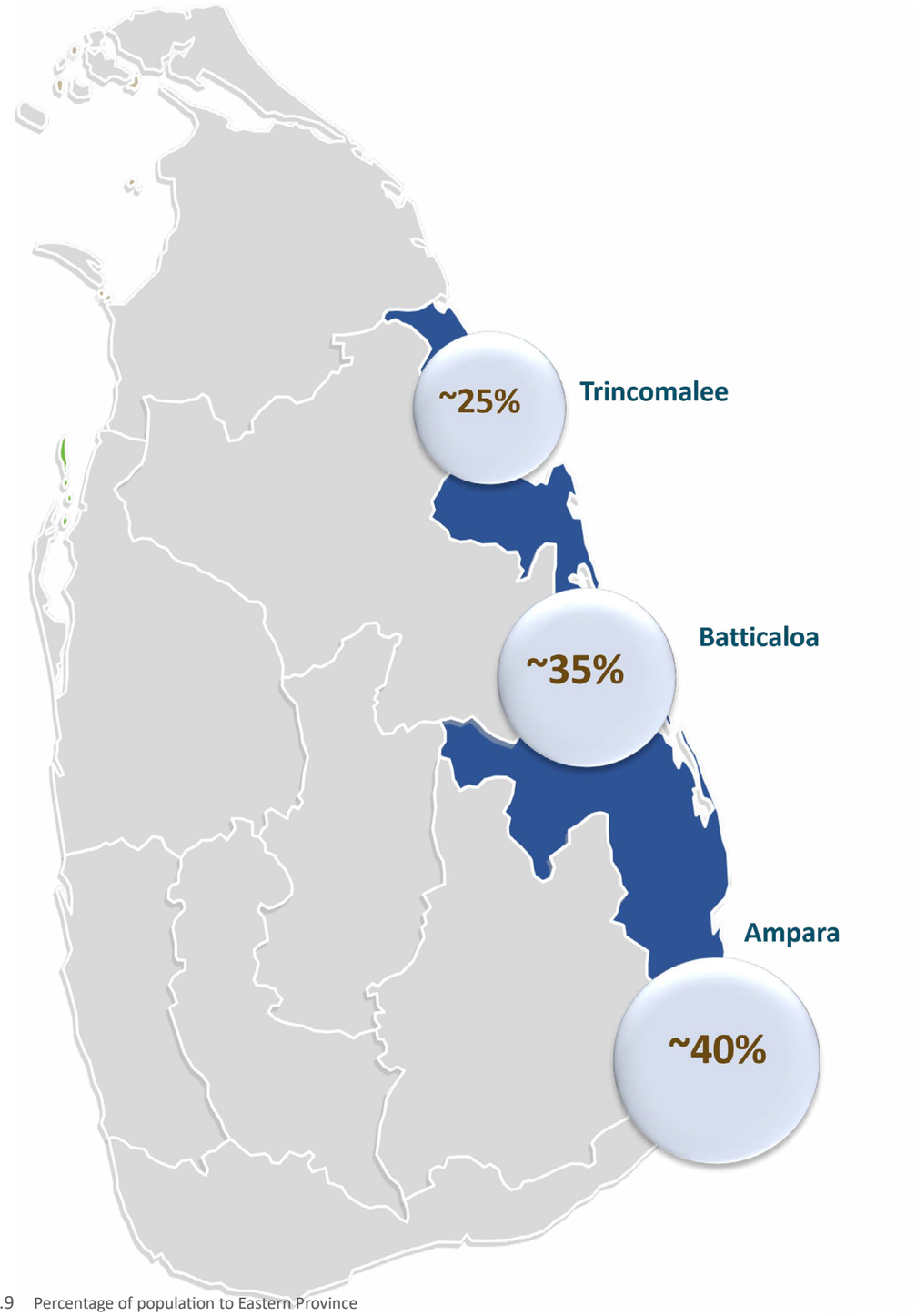


Figure 2.9 Percentage of population to Eastern Province

2.1.10 EASTERN PROVINCE TOURISM OVERVIEW

Eastern Province has the longest coastal line in the country with pristine beaches, lagoons with flora & fauna, Coral reefs and marine animals but contributes only 5% of room inventory ~ potential to capitalize on the nature & wildlife in the region and increase the stay duration.

Apr - Sept
Season

~2,400
Room Inventory (2021)
5% share to Sri Lanka

~70 – 75%
Avg. Occupancy
(Pre-covid 2014-19)

3 – 4 days
Avg. duration of stay

Key Tourist Attractions

30%
TRINCOMALEE
(Tourism Share)

Temples | Ancient sites | Snorkelling | Dolphin & Whale watching | Coral reefs

40%
BATICALOA
(Tourism Share)

Pristine beaches | SPA & Wellness | Coral Reefs

30%
AMPARA
(Tourism Share)

Surfing Parks | Lagoons | Night Parties | National Parks

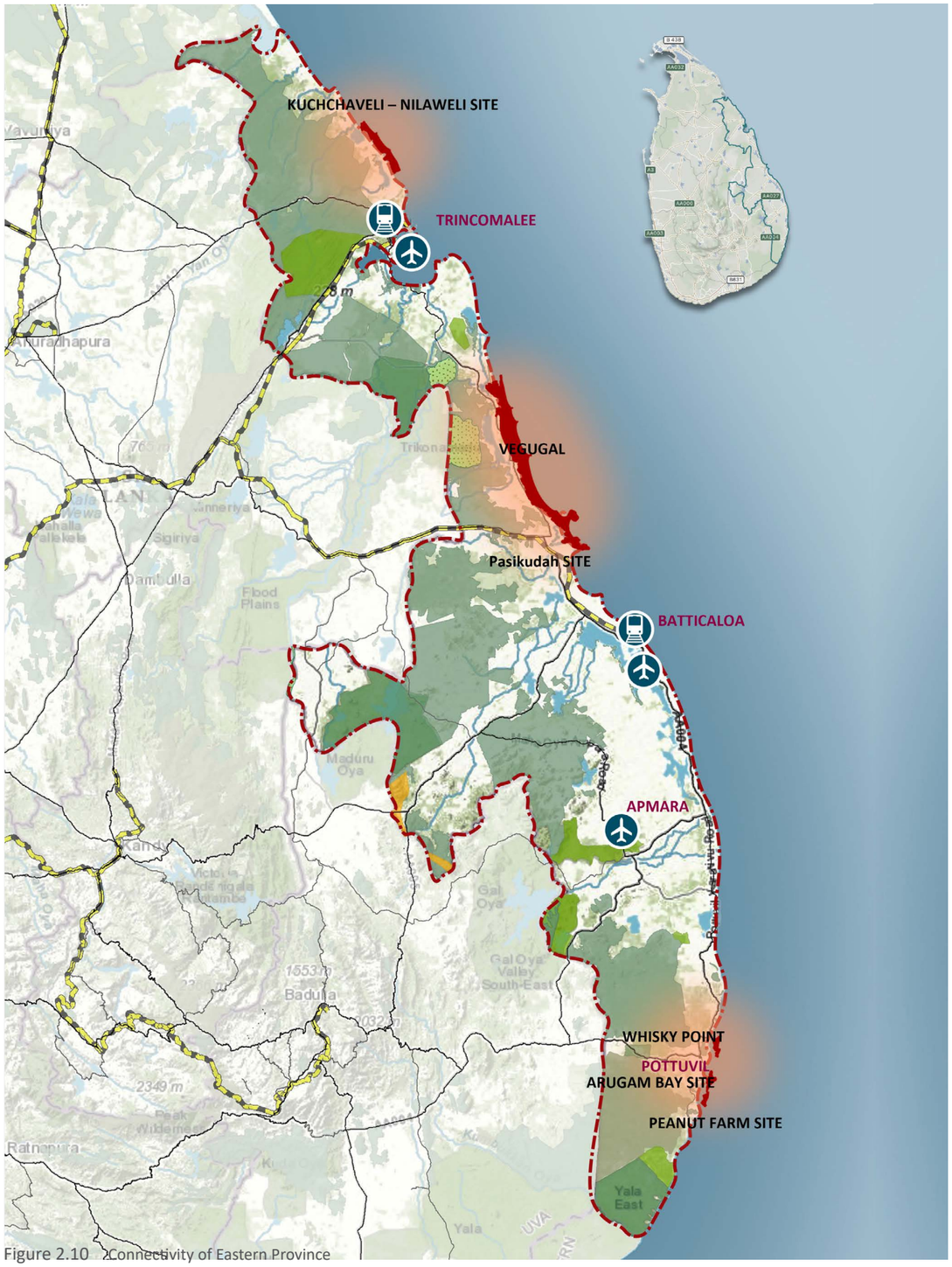
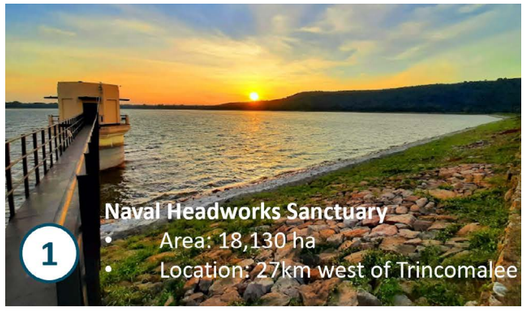


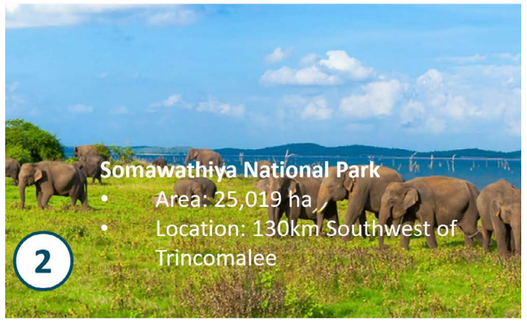
Figure 2.10 Connectivity of Eastern Province

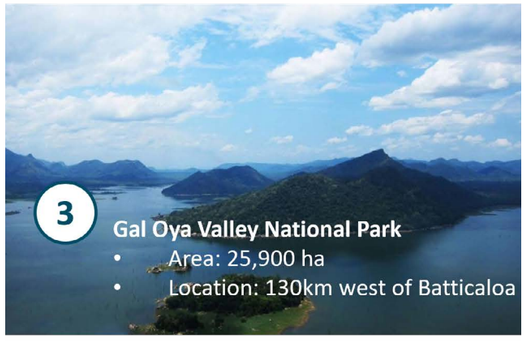
2.1.11 NATURE ASSETS AND COASTAL CHARACTER

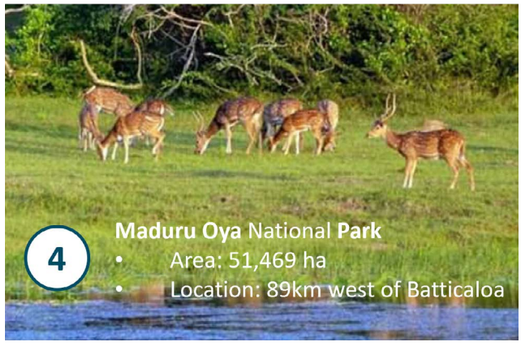
The 300km coastline with diverse character is the key asset of Eastern Province. Several coral zones with marine bio-diversity is observed along mostly the central and northern belts providing opportunities for snorkeling and diving activities for marine experiences. The southern areas around Arugam Bay are also blessed with suitable waves for variety of surfing activities. Southern most areas along Peanut farm are noted as environmentally sensitive areas providing opportunities for passive recreation.

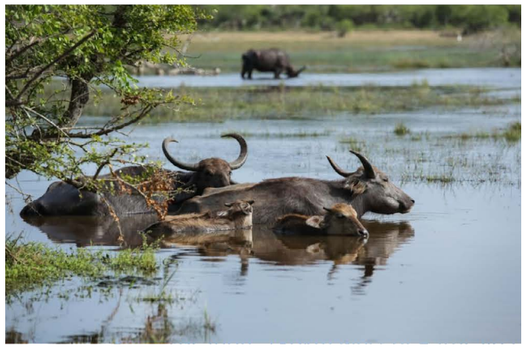
Besides this, Eastern Coastal Zone is surrounded by several; forests, nature reserves and sanctuaries as shown in the Figs. This creates a unique setting for the coast with opportunities to diversify tourism potential beyond marine tourism.











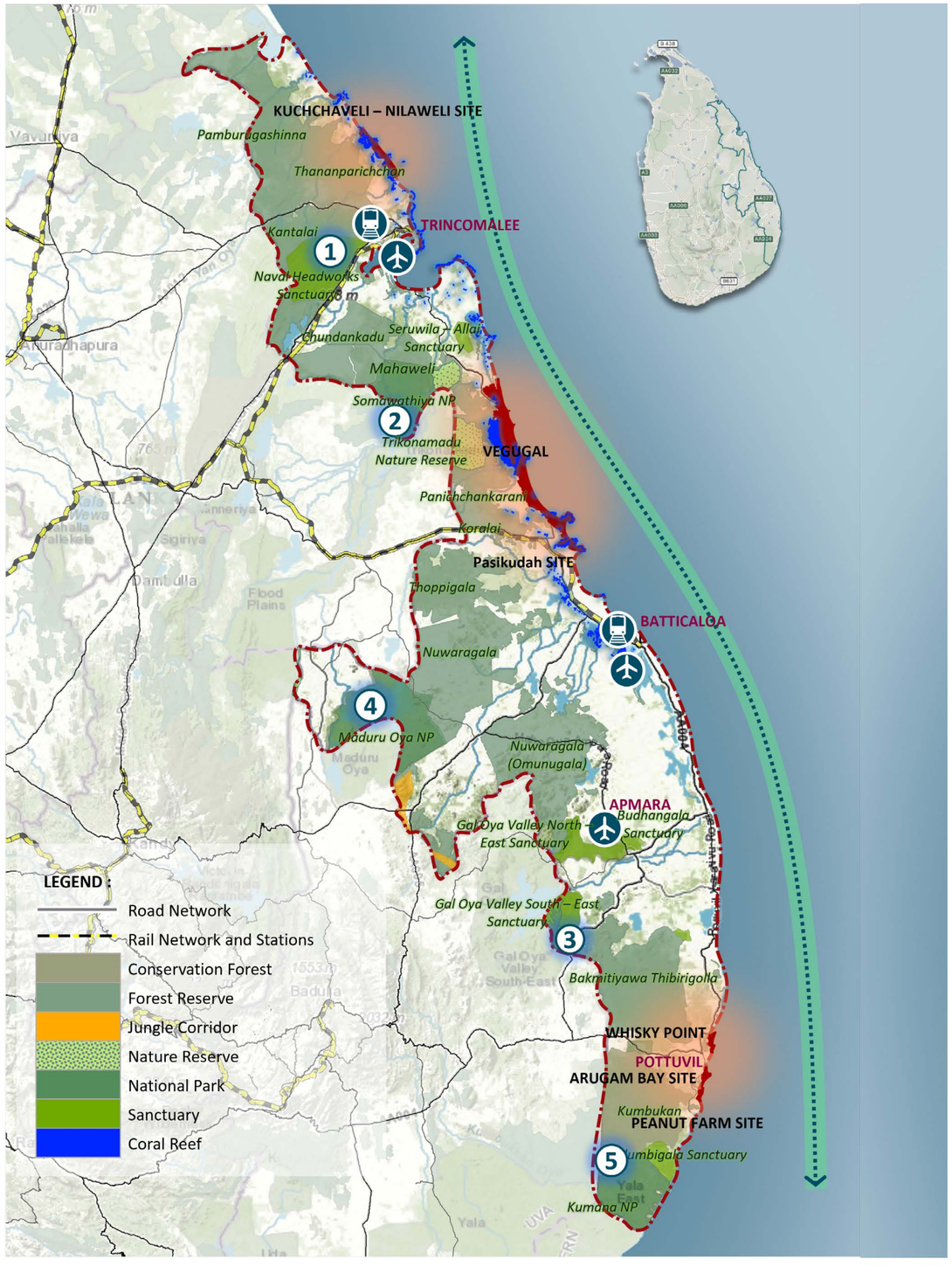


Figure 2.11 Nature Assets And Coastal Character

2.1.12 TOURISM CHARACTERISTIC

The eastern coastline of Sri Lanka showcases a diverse range of tourism characteristics, reflecting the unique attractions and natural beauty of each destination.

The Kuchchaveli-Nilaveli area is known for its eco-tourism appeal, offering heritage and ecological sites such as wildlife reserves, dolphin and whale watching opportunities, and coral reefs ideal for snorkeling. This region stands out for its emphasis on nature and sustainability.

Pasikudah, on the other hand, is characterized by its pristine beaches and vibrant coral reefs, offering a luxurious and tranquil getaway. The area is often associated with high-end tourism, catering to visitors seeking relaxation in an upscale environment.

Arugam Bay and Whisky Point are renowned for their focus on water sports and activities, particularly surfing, which attracts enthusiasts from around the world. Additionally, lagoon tours and other nature-based adventures make these locations a haven for those seeking active and adventurous experiences along the coast.

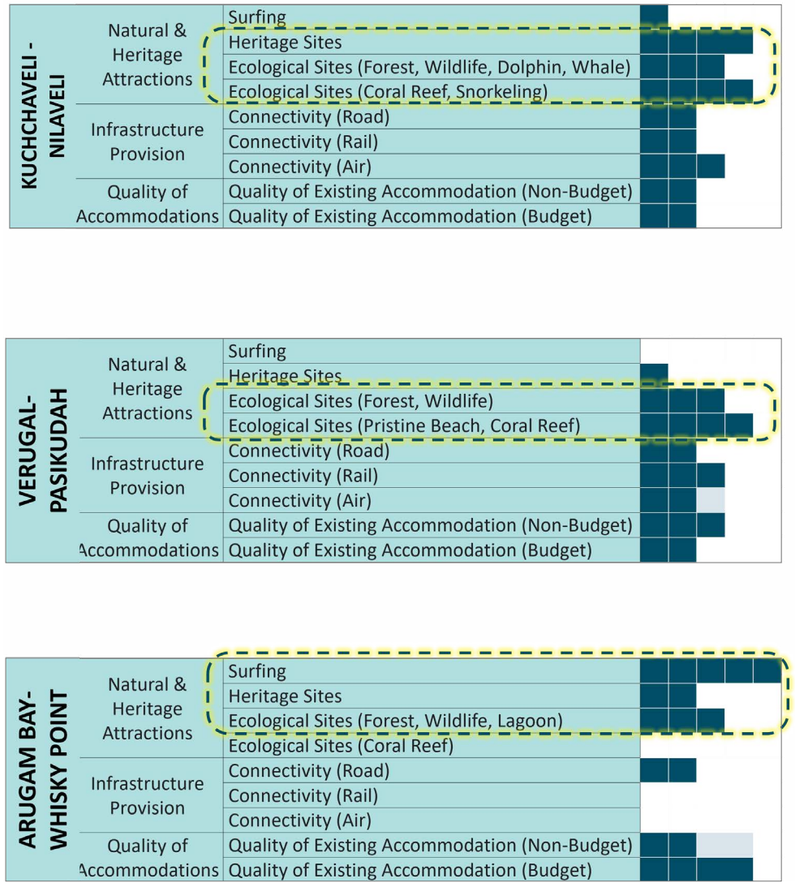
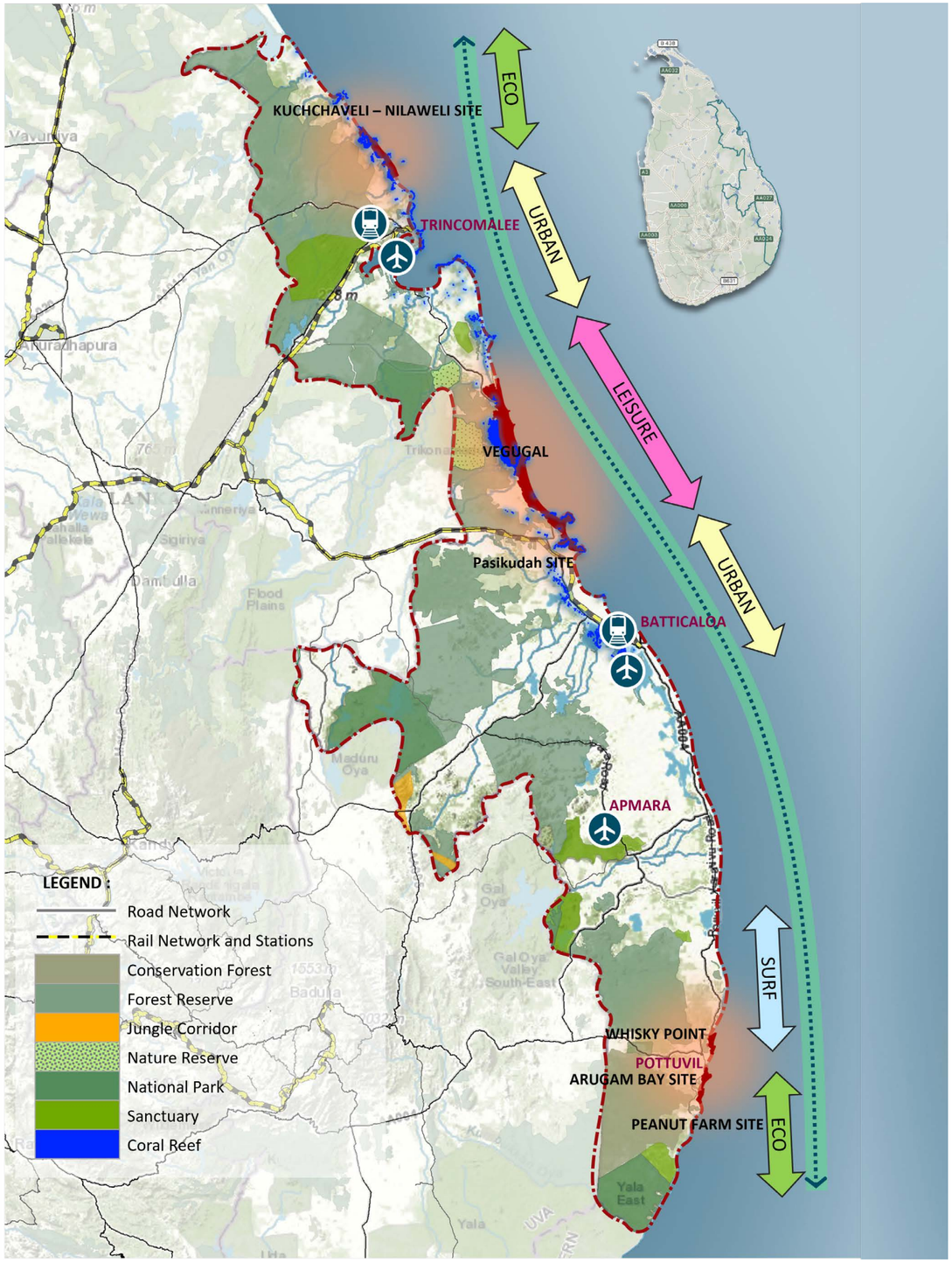


Figure 2.12 Tourism Characteristic Of Eastern Province



2.1.13 SUMMARY OF TOURISM ACTIVITIES

DISTRICTS OF EASTERN PROVINCE OFFER DIFFERENT ACTIVITIES AT DIFFERENT REGION WITH DIFFERENCE IN AVG. SPENDING TO TYPE OF TOURISTS MAKING IT ONE OF A KIND IN THE COUNTRY.

PARAMETERS	TRINCOMALEE	BATTICALOA	AMPARA
Key Tourist activities	Cultural Tourism, Marine tourism	2.47	2.47
Type of Tourists	Family, Business, Friends	4,000	4,000
Previous location	Sigriya / Anuradhapura		
Stay Duration	**1.5 – 2 days**	**4 - 5 days**	**3 – 4 days or 2 – 3 months**
Avg. Spending (peak season)	**USD 350 - 400**	**USD 700 - 800**	**USD 150 - 200**
International Airport	No	No	No
Domestic flights from Colombo	Yes – Not frequent	Yes – Not frequent	No
Railway connectivity	Yes	Yes	No
Developable land area	**Total: 820 hectares** Kuchchweli- ~490 hectares Nilaveli- ~330 hectares	**Total: ~4,720 hectares** Verugal ~4,360 hectares Pasikudah - ~360 hectares	**Total: ~ 395 hectares** Peanut farm - ~192 hectares Whisky Point - ~203 hectares
Proximity of SP to nearest city	Trincomalee ~ 30 km	Batticaloa ~ 80 km	Pottuvil ~ 20 km

Table 2.1 Summary of Tourism Activities

2.1.14 CHALLENGES AND OPPORTUNITIES

NEED FOR A MARKETING STRATEGY	STATIC TOURIST LAND-MARKS	UNORGANISED TOURISM ACTIVITY	LOW SPENDING	LIMITED CONNECTIVITY OPTIONS	INADEQUATE TOURIST AMENITIES
3 districts in Eastern Province have different things to offer making it **one of a kind destination** • Trincomalee – Religious/ Cultural Tourism & Marine activities • Batticaloa – Pristine beaches & Coral reefs • Ampara – Surfing, Lagoons & Night life	• The attractions in the region do not attractively bring out the **history/ storyline of the region** • **Limited tourism support infrastructure** in proximity to attractions like restaurants, retail, entertainment restricts footfall	• Lack of streamlining the tourist activity – tourists are **unaware of the places to visit** in the region and have limited exposure to all the activities in the region • **No tourism management** – no ticketing facility, locker rooms, cloak rooms, changing rooms in tourist sites • Decreases the stay duration as they can • **Visit only limited** locations	• Limited presence of **all year round activities** like retail, restaurants, entertainment etc restricts the tourist spending • **Lack of Tourism Ecosystem** – activities/ businesses which support each other	• Major challenge is the **limited connectivity options** for international travellers to the region • **Lack of international airport** in the region – only fully operational airport in Colombo • Limited to no options **for domestic transfers** from Colombo • **Limited rail** transport option	• **Less/ low hassle free tourism experience** due to limited presence of tourism infrastructure • Restricts the tourism flow to limited no. Of tourists
Opportunity: Eastern province can be marketed as region with **all kinds of activities** including eco tourism, Marine / beach tourism, adventure tourism, Night life, Cultural tourism, Heritage tourism etc.	**Opportunity:** Eastern province holds **rich history about war on land and sea** which can be depicted through the buildings & monuments present creating a heritage circuit	**Opportunity: Tourism Management** through Information centers, Guides, creating tourism circuits etc, to enhance the tourism experience and stay duration	**Opportunity:** Providing supporting activities like **retail, restaurants etc** can increase the spending of the tourists Exploring tourist activities which are **non- seasonal and happens all year round**	**Opportunity: Upgrading the existing airports** and providing domestic connectivity to the region. Enhancing the road connectivity through **expressways & highways**	**Opportunity:** Introducing **Upscale & Luxury hospitality developments, entertainment zones, Retail, Restaurants and themed dining, Waiting lounges, Resting area in tourism sites etc.**

Table 2.2 Challenges and Opportunities

2.1.15 TOURISM SOURCE MARKET

TOP 10 SOURCE MARKETS

Sri Lanka's top tourism markets are as follow:

India: Proximity, cultural ties, and easy travel access make India one of the largest tourism markets for Sri Lanka.

Russia: Russia has been a notable market for Sri Lanka's tourism, especially for its beach destinations.

United Kingdom: Historical ties and direct flights contribute to the UK being a key source market for Sri Lanka's tourism industry.

Germany: German travellers are attracted to Sri Lanka's natural beauty, cultural heritage, and adventure activities.

China: With a growing middle class and increasing outbound tourism, China has become a significant market for Sri Lanka in recent years.

Australia: With increasing awareness and direct flight connections, Australia has emerged as a growing market for Sri Lanka.

France: French tourists often visit Sri Lanka for its beaches, wildlife, and cultural experiences.

United States: American travellers, particularly adventure seekers and nature enthusiasts, contribute to Sri Lanka's tourism market.

Canada: Canadian travellers, seeking diverse cultural experiences and natural beauty, have also become an important market for Sri Lanka.

Maldives: Sri Lanka offers a diverse range of experiences including cultural heritage sites, lush landscapes, and adventure activities. Many travellers from Maldives choose to combine visits to both destinations for a comprehensive Indian Ocean experience.

Top 10 source markets contribute ~70% of the tourist inflow in Sri Lanka.

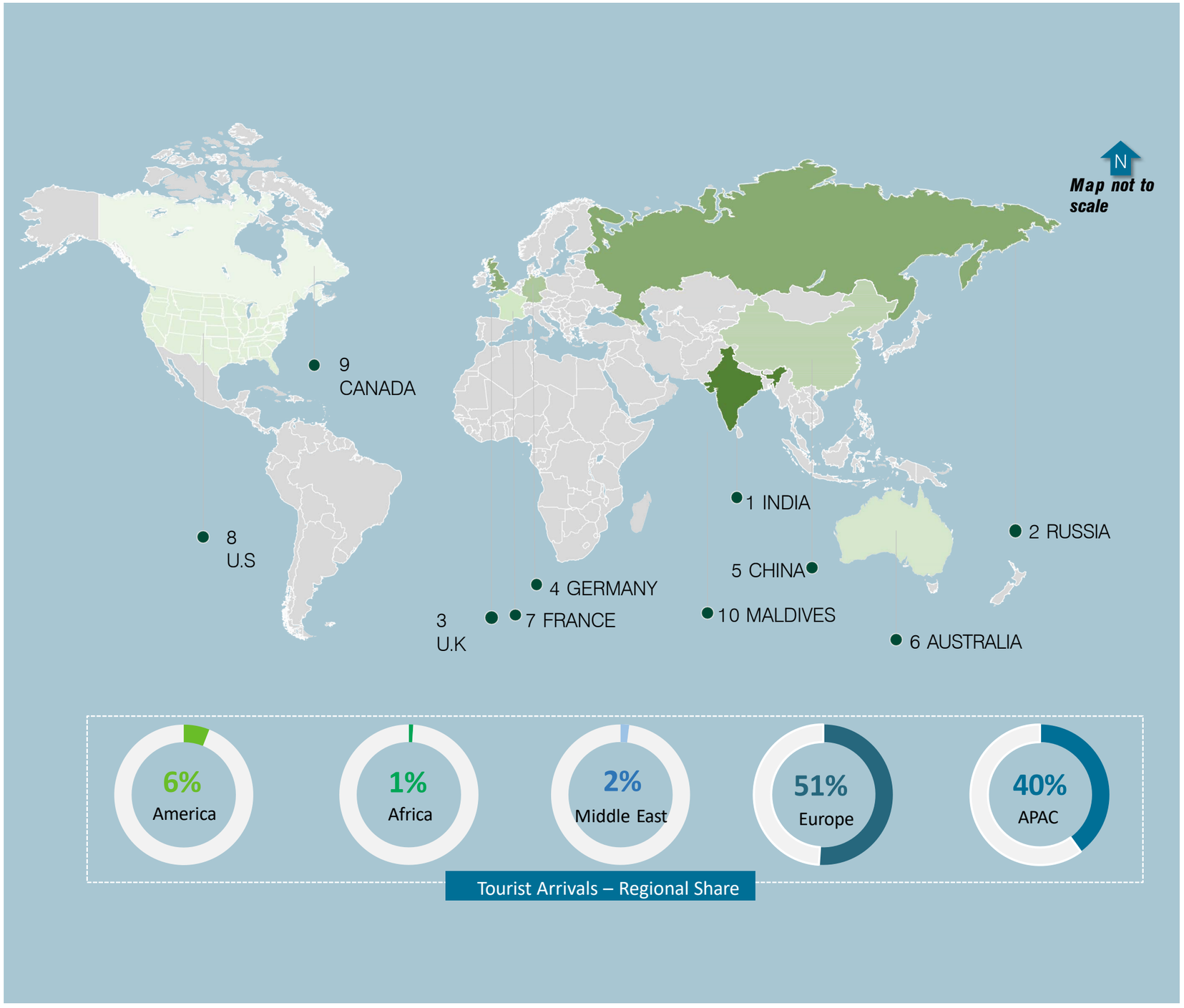
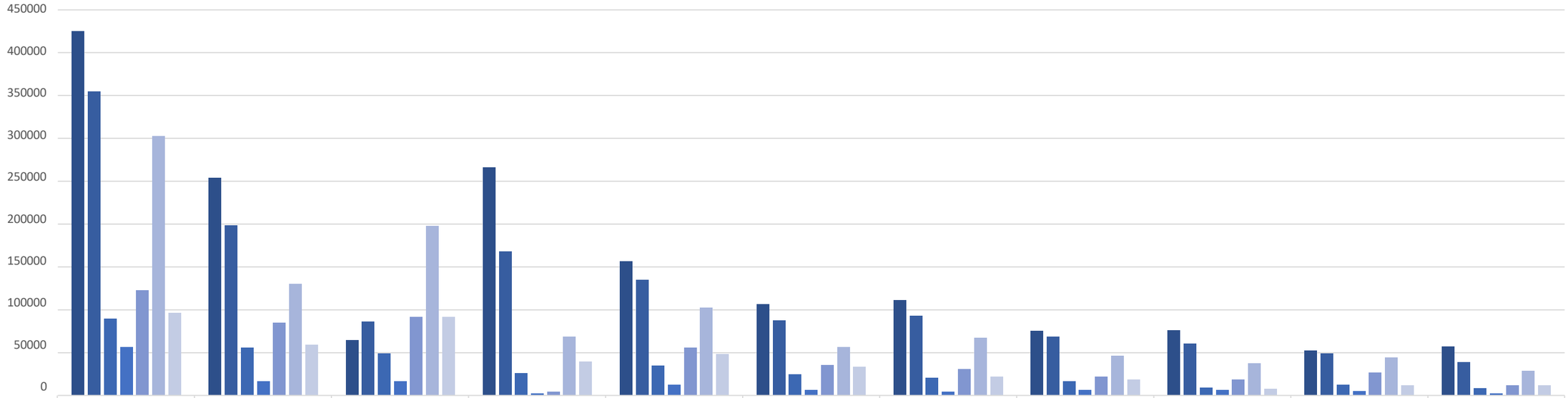


Figure 2.13 Tourism Source Markets of Sri Lanka

Post-COVID the footfall from Russian tourist has seen steep increase as compared to other source markets



	India	United Kingdom	Russia	China	Germany	France	Australia	United States	Maldives	Canada	Netherlands
2018	424887	254176	64497	265965	156888	106449	110928	75308	76108	52681	57160
2019	355002	198776	86549	167863	134899	87623	92674	68832	60278	48729	38993
2020	89357	55455	49397	26147	34507	24838	20283	16842	9407	12436	8656
2021	56268	16646	16894	2417	12442	6549	4421	6124	6272	5079	2422
2022	123004	85187	91272	4715	55542	35482	30924	22230	18880	26845	11987
2023	302844	130088	197498	68789	102539	56251	67436	46344	37328	43944	29056
2024	96279	58819	91205	39212	48176	33382	21762	19038	7716	12072	12249

CAGR 2018-23	- 6.55 %	- 12.54 %	25.08 %	- 23.7 %	- 8.15 %	- 11.98 %	- 9.47 %	- 9.25 %	- 13.28 %	- 2.56 %	- 12.66 %
Share % (2018-23)	18.9%	10.3 %	7.7 %	7.5 %	6.95%	4.43%	4.46 %	3.29 %	2.91 %	2.65 %	2.07 %

Top % market contribute to 50 % of Tourist Arrivals

Figure 2.14 Tourist Footfall from Source Markets

2.1.16 CONNECTIVITY AND STAY DURATION

Western countries viz. Canada, USA, Germany, France, etc are major dependent on connecting flights ~ have longer length of stay than the countries with direct flight connectivity to Sri Lanka.

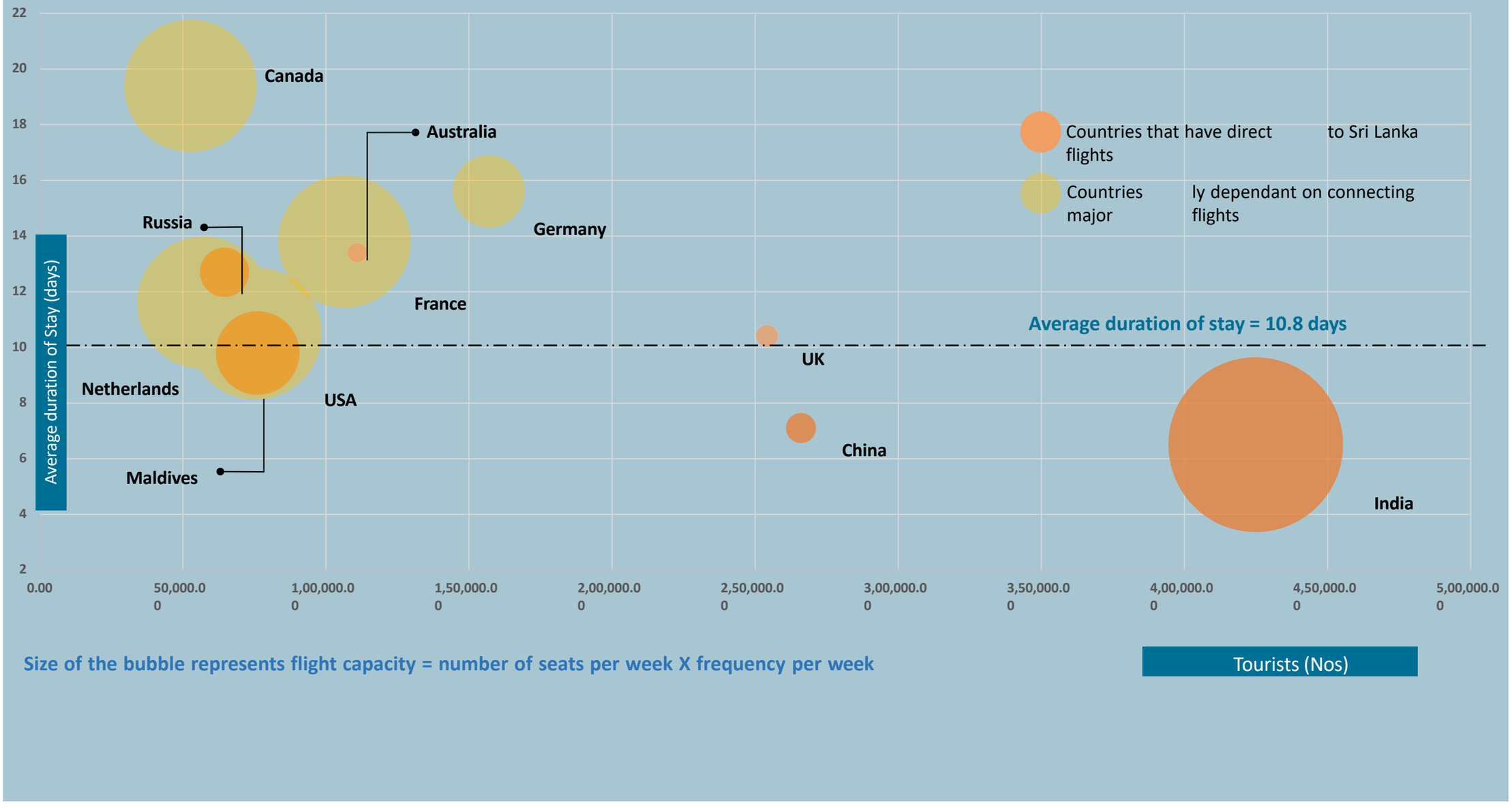
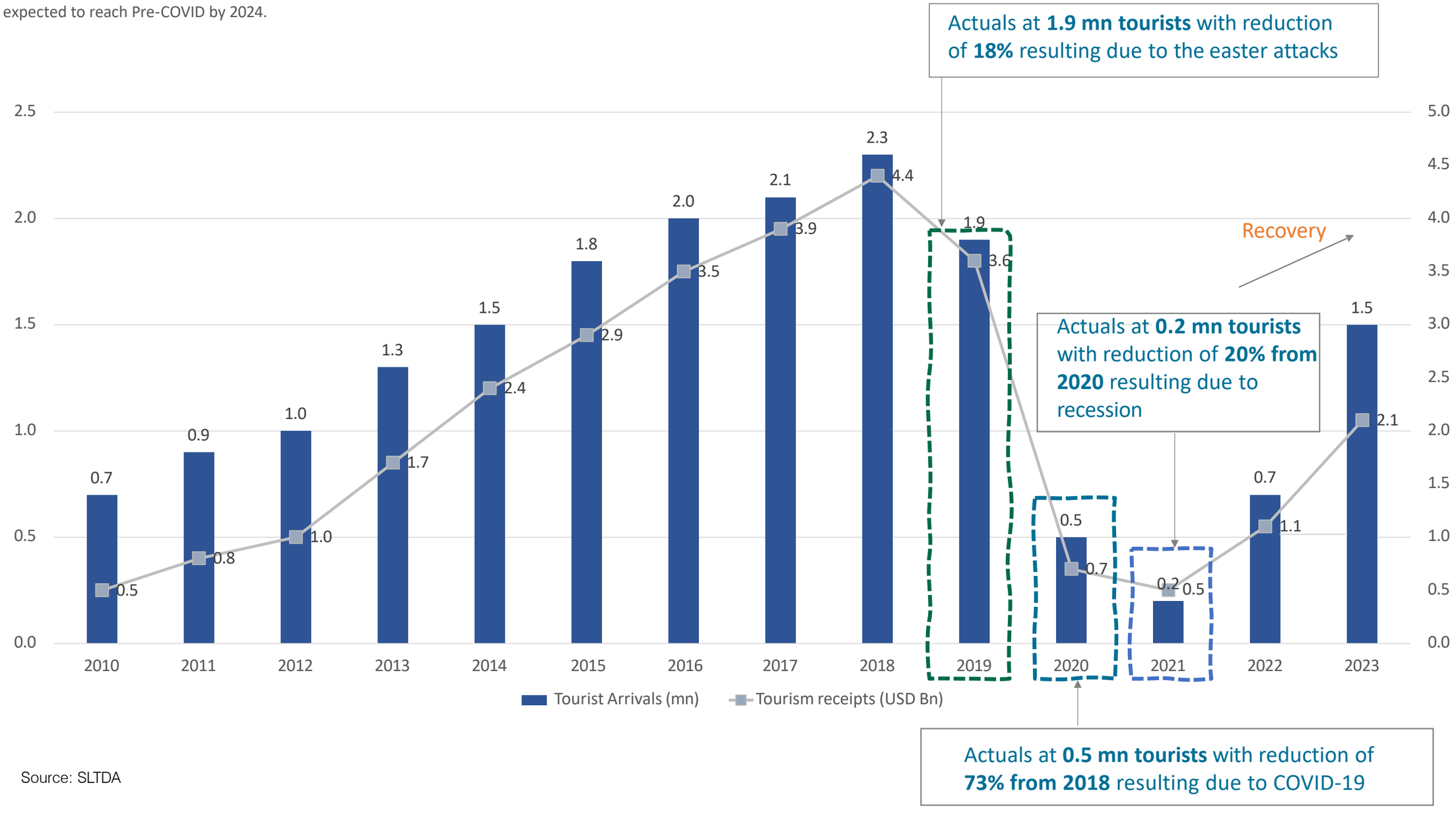


Figure 2.15 Duration of Tourist Stay in Sri Lanka

2.1.17 TOURISM ARRIVAL TREND

The tourist arrivals in Sri Lanka has been reduced significantly due to COVID and Easter attacks and is expected to reach Pre-COVID by 2024.



Source: SLTDA

Figure 2.16 Tourism Arrival Trend in Sri Lanka

2.1.18 TOURISM CIRCUIT

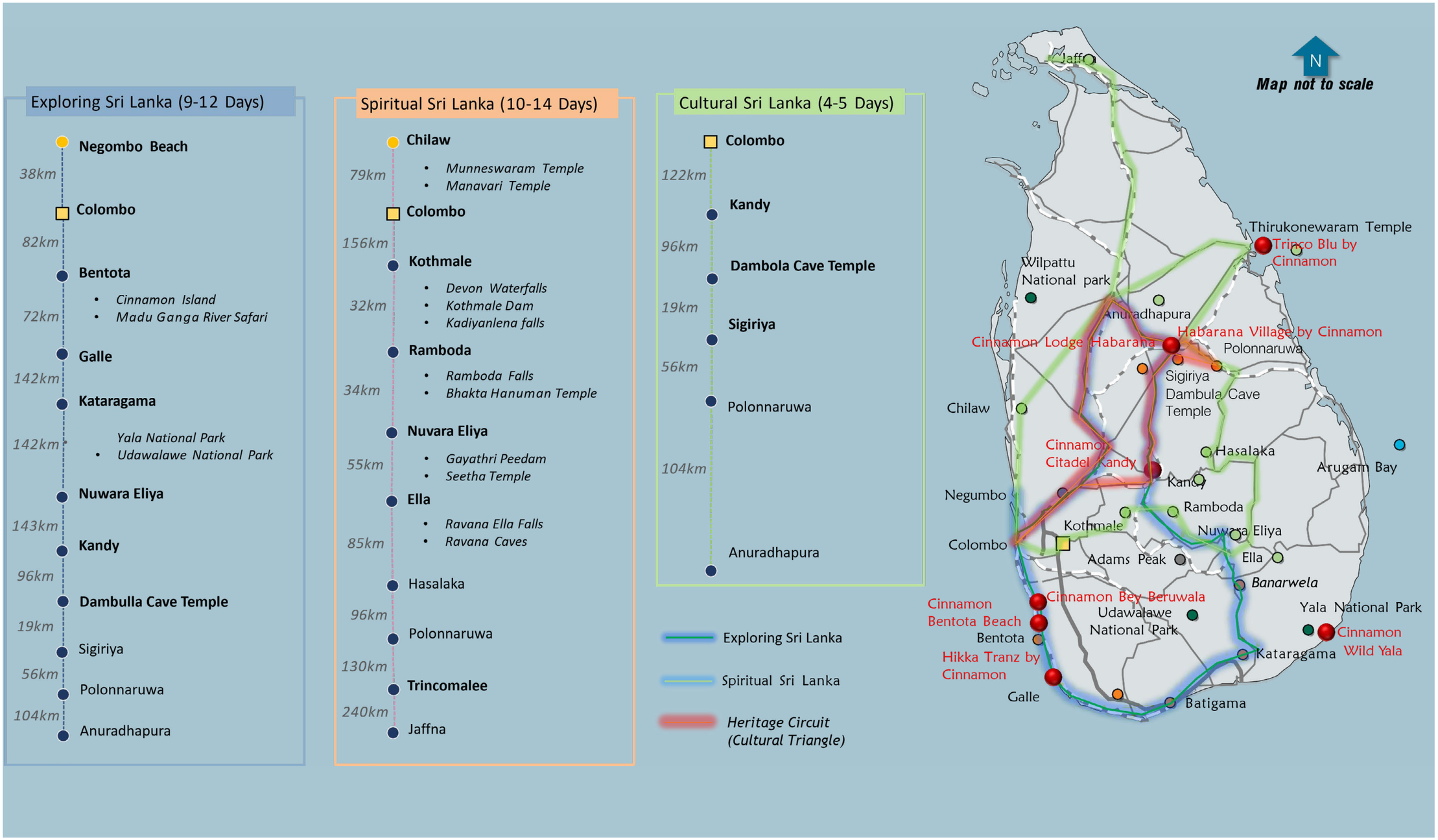


Figure 2.17 Tourism Circuit Map of Sri Lanka

2.1.19 HOSPITALITY OVERVIEW

Tourist arrivals	Hotel Establishments	Room inventory 2023	CAGR growth rate of inventory (last 5 yrs)	Seasonality of Tourists	Average duration of stay
1.5 million	**~170**	**16,700+**	**4 - 5%**	**Nov - March**	**8.4 nights**

KEY FACTORS DRIVING DEMAND

5%

ROOM DEMAND FROM MICE (LUXURY / UPPER UPSCALE) ~

Destination/Theme

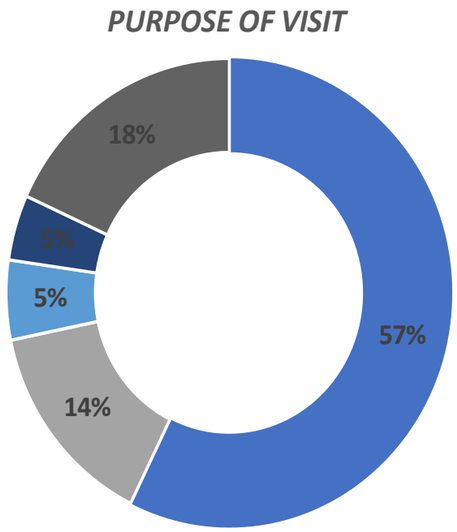
Weddings and large-scale conferences / corporate events

~ Increasing ex-pat population in the country

5%

BUSINESS TRAVELLERS (UPPER UPSCALE / UPSCALE) ~

Majorly to Colombo considering the growing infrastructure and economic activity



18%

OTHERS ~

Demand from Aircrew, Sports / Tournaments, Festivals, etc

57%

LEISURE - DEMAND ACROSS VARIOUS ARR CATEGORIES

Unique Tourism Proposition ~ comprising of beaches, Culture & Ancient Monuments, Wildlife, Hilly regions, etc

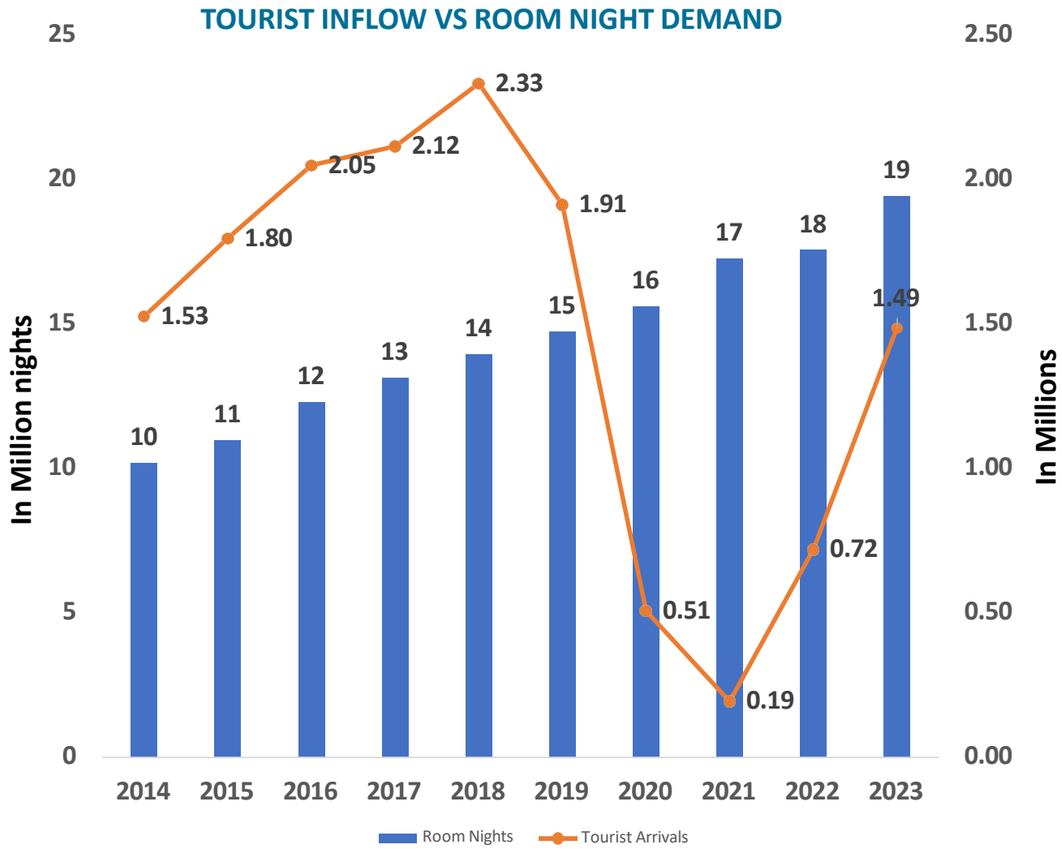
ARR: Average Room Rate

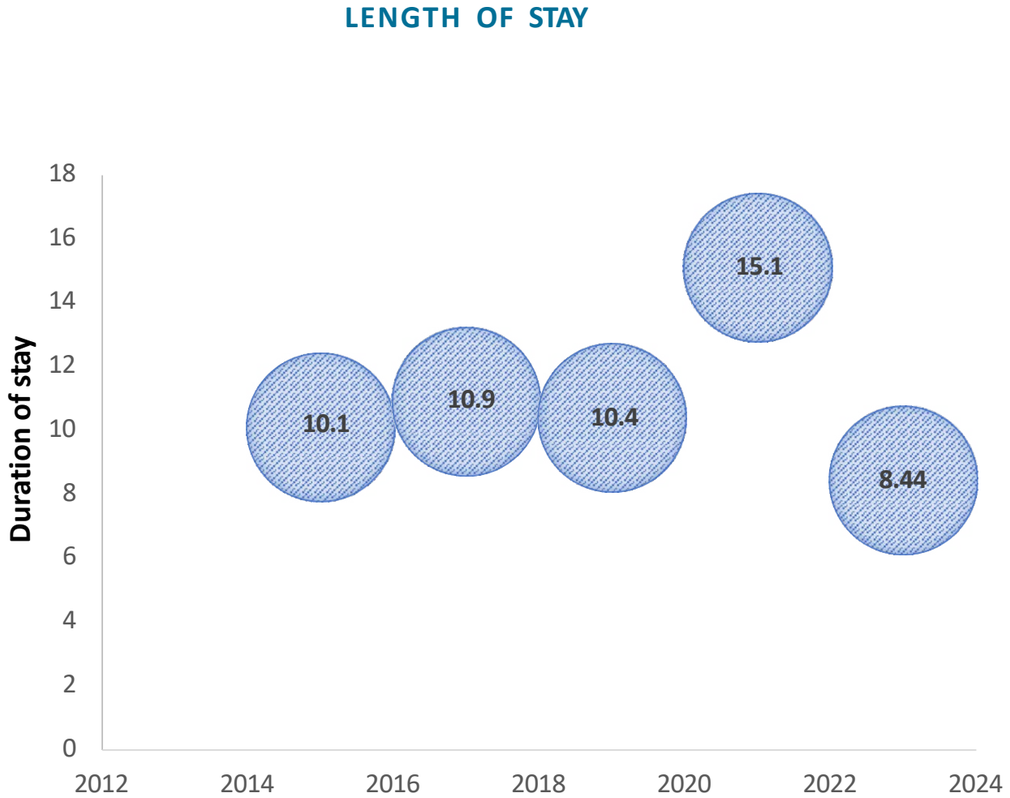
Source: Annual report 2019 – SLTDA, CBRE Research

Figure 2.18 Hospitality Overview of Sri Lanka

2.1.20 ROOM NIGHT DEMAND

Foreign leisure travellers are the major contributors to the room nights demand ~ with growth rate of ~5 – 7% per annum





Source: SLTDA

Figure 2.19 Room Night Demands of Sri Lanka Tourism Sector

2.1.21 DRAFT TOURISM POLICY

KEY POLICY INITIATIVES



People-centric economic development

The policy aims to utilise tourism as a driver for economic development that benefits the local population by creating employment opportunities and fostering economic growth within communities.



Sustainable environmental management

The policy emphasise the importance of sustainable environmental practices within the tourism sector, aiming to minimize negative impacts on the environment and promote eco-friendly initiatives to preserve natural resources for future generations.



Development of Physical Infrastructure

This objective focuses on the sustainable development and enhancement of physical resources related to tourism, such as infrastructure, cultural sites, and natural attractions, to ensure their preservation and effective utilisation for tourism purposes.



Productive Citizenry and vibrant human resources

This objective highlights the significance of human capital development in the tourism industry, including skill training, capacity building, and creating a skilled workforce to support the growth and sustainability of the sector.

OUTCOMES



Revenue generation

The policy targets revenue generation of over USD 10 billion from the tourism sector by 2025. This ambitious goal reflects the government's commitment to leveraging tourism as a key economic driver, attracting investment, boosting foreign exchange earnings, and stimulating economic growth across various related industries.



Employment generation

The policy aims to generate employment opportunities for over 1 million people in the tourism sector by 2025. This significant increase in employment is intended to create livelihoods and economic opportunities for a large segment of the population, contributing to inclusive growth and poverty reduction.

2.1.22 STRATEGIC PLAN FOR TOURISM BY SLTDA

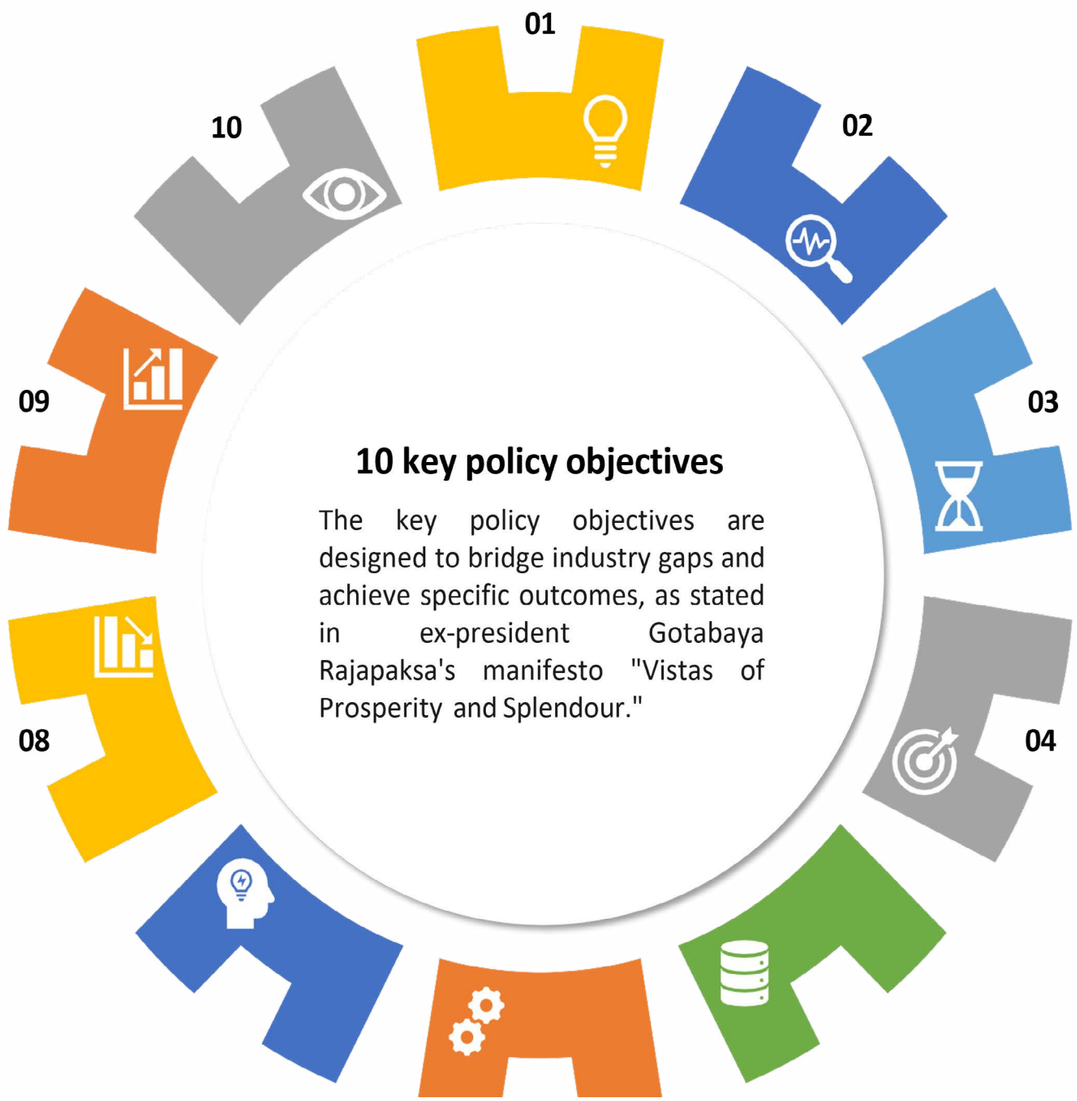
Partnership
Driving sustainable growth and maximizing potential through collaboration with government agencies, private sector, and local communities.

Infrastructure and services
Improving infrastructure and services through airport modernisation, establishing training schools, and increasing workforce.

Position and market of Sri Lanka
Enhancing visibility through strategic marketing, partnerships, and increased accommodation availability.

New product development and promotion
Diversifying offerings with innovative products, strategic marketing, and incentives for high-quality accommodations.

Sustainable and environment-friendly tourism
Promoting sustainable practices and environmentally friendly tourism through community-based tourism, registration and certification, and promoting household-related initiatives.



Source: Strategic Plan for Sri Lanka Tourism 2022 - 2025

Figure 2.20 Key Policies and Objectives for Tourism

People centric tourism industry
Prioritising the well-being and satisfaction of tourists and locals through training programs, establishing tourist service centres, and ensuring a safe and welcoming environment.

Efficient public service & uplift industry standards
Improving public services and raising industry standards with streamlined approval processes, modernising airports, and skills development courses.

Technology-based tourism sector
Leveraging technology for a modern tourism sector with e-based facilities, single booking software system, and electronic gate systems.

A safe & secure country for tourist
Building trust through tourist police services, certifying guides and drivers, and revising labour laws.

Legal and regulatory framework
Establishing a robust legal framework to ensure compliance, protect rights, and promote sustainable tourism.

2.2 TRANSPORT ANALYSIS

2.2.1 LAND, SEA AND AIR TRANSPORT OVERVIEW

Efficient transport planning is a cornerstone of successful tourism development. Effective, reliable, and comprehensive transportation systems are fundamental in enhancing the tourist experience by ensuring safe, quick, and convenient access to various destinations. These systems facilitate the easy movement of tourists within the country and significantly influence their decision to visit based on perceived travel ease. Moreover, well-developed transport networks contribute to broader economic benefits by boosting local businesses, increasing employment in the tourism sector, and promoting sustainable tourism practices that respect environmental limits.

The National Physical Planning Policy & Plan (2017-2050) underscores the importance of developing Sri Lanka's transportation infrastructure to support its economic, regional, and environmental goals. This integrated strategy encompasses land, sea, and air transport to create a dynamic and resilient network, crucial for sustaining long-term tourism growth and economic development.

Land Transportation	The plan outlines a vision for a robust land transportation network, focusing on the **optimisation of existing road and rail infrastructure** and the development of new corridors to improve connectivity across urban and rural areas.
	Prioritising the strategic **expansion of road networks and modernising the rail system (electrification)**, the plan aims to enhance accessibility, reduce travel times, and support the economic integration of different regions.
	Investments in land transportation are seen as crucial for facilitating the mobility of people and goods, stimulating trade and investment, and promoting balanced regional development.
Sea Transportation	Given Sri Lanka's strategic geographical location in the Indian Ocean, the development of sea transport infrastructure is identified as a key area of focus.
	The plan emphasises the importance of **upgrading and expanding port facilities to bolster maritime trade and tourism**. Efforts to develop ports in Colombo, Trincomalee, and other strategic locations are geared towards enhancing Sri Lanka's position as a regional maritime hub.
	This includes improving port efficiency, expanding logistics and ancillary services, and ensuring sustainable coastal zone management to support economic activities while preserving marine and coastal ecosystems.
Air Transportation	The plan recognises the critical role of air transport in connecting Sri Lanka with global markets and supporting the country's tourism industry.
	Strategies for the **expansion and modernisation of airport infrastructure** aim to improve international connectivity, increase passenger and cargo capacities, and elevate service standards.
	Enhancing the operational efficiency of airports and promoting Sri Lanka as an attractive destination for international airlines are key objectives, with a view to boosting tourism, fostering economic ties, and facilitating people-to-people exchanges.

Table 2.3 Transport Overview

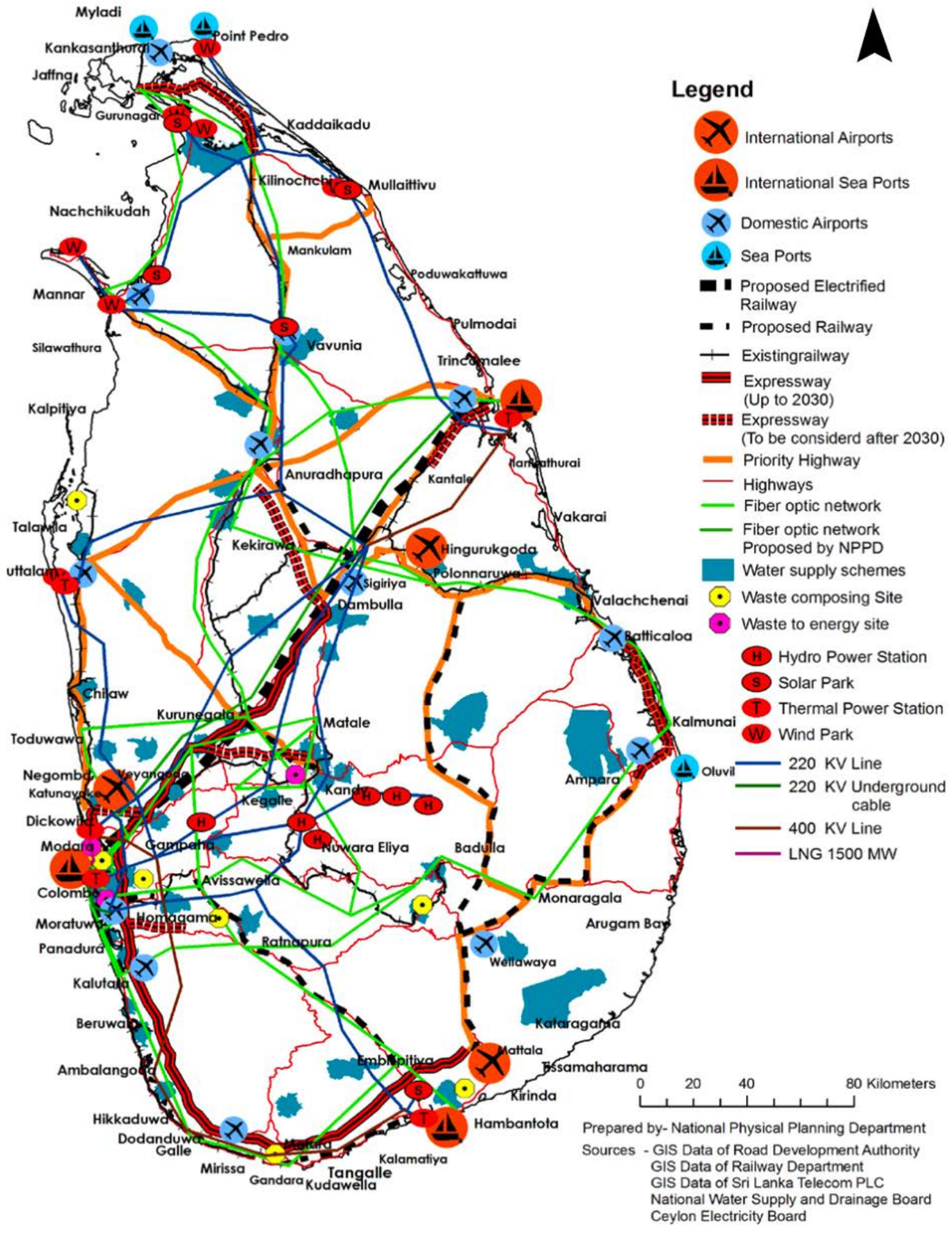


Figure 2.21 Proposed Integrated Transport Network - 2050

2.2.2 LAND TRANSPORT: EXISTING ROAD NETWORK

This section focuses on the existing road network in the Eastern Province of Sri Lanka, highlighting the crucial transport links that facilitate connectivity within the region and support its development as a strategic tourism zone. Emphasising key routes and their significance, the analysis aims to provide a comprehensive understanding of the current transport infrastructure and identify opportunities for improvement to enhance access and mobility.

TRINCOMALEE

Road Access to Trincomalee

- The road network in the Eastern Province, particularly around Trincomalee, is crucial for regional connectivity and development as a strategic tourism zone. Key highways like the A6, A15, and A12 serve as primary routes to Trincomalee, enhancing access from different parts of Sri Lanka.
- The **A6 highway** connects Ambepussa through Kurunegala and Habarana, serving as a major arterial road leading directly into Trincomalee. This road is part of Sri Lanka's broader highway network, facilitating easy access from the interior of the country to the eastern coast. The route is known for its scenic beauty as well as its strategic importance in linking central Sri Lanka with the northeastern coast.
- The **A15 highway** connects Batticaloa to Trincomalee through major towns, serving as another vital link, especially for those traveling from the southern parts of the eastern coast or directly from the central regions. This highway enhances the city's connectivity with the eastern provinces, making it an essential route for both economic activities and tourism.
- The **A12 highway** plays a crucial role in connecting Trincomalee with the western and north-central parts of Sri Lanka, stretching from Puttalam through Anuradhapura and directly into Trincomalee. This route not only serves as a key conduit for goods and passengers but also connects historical and cultural sites, contributing to the city's accessibility and its appeal as a tourist destination.

The main highways and arterial roads leading into Trincomalee are generally well-maintained, supporting a mix of light and heavy vehicles. However, travellers might occasionally experience congestion, particularly during peak travel times and tourist seasons, as the city's attractions draw both domestic and international visitors.

Road Access to Nilaveli

Nilaveli is located approximately 16 kilometers north of Trincomalee city. The primary route connecting Trincomalee to Nilaveli is the Trincomalee-Pulmoddai Road (A6), which is in good condition and provides a smooth journey for travelers. This road is well-maintained, with clear signage, making it accessible for private vehicles, taxis, and buses. Bus services operate between Trincomalee and Nilaveli, facilitating access for tourists without private transportation. The journey offers scenic views, with the road flanked by lagoons, palm trees, and patches of forest, enhancing the travel experience to Nilaveli.

Road Access to Kuchchaveli

Kuchchaveli lies further north, about 34 kilometers from Trincomalee, along the same Trincomalee-Pulmoddai Road (A6). The road

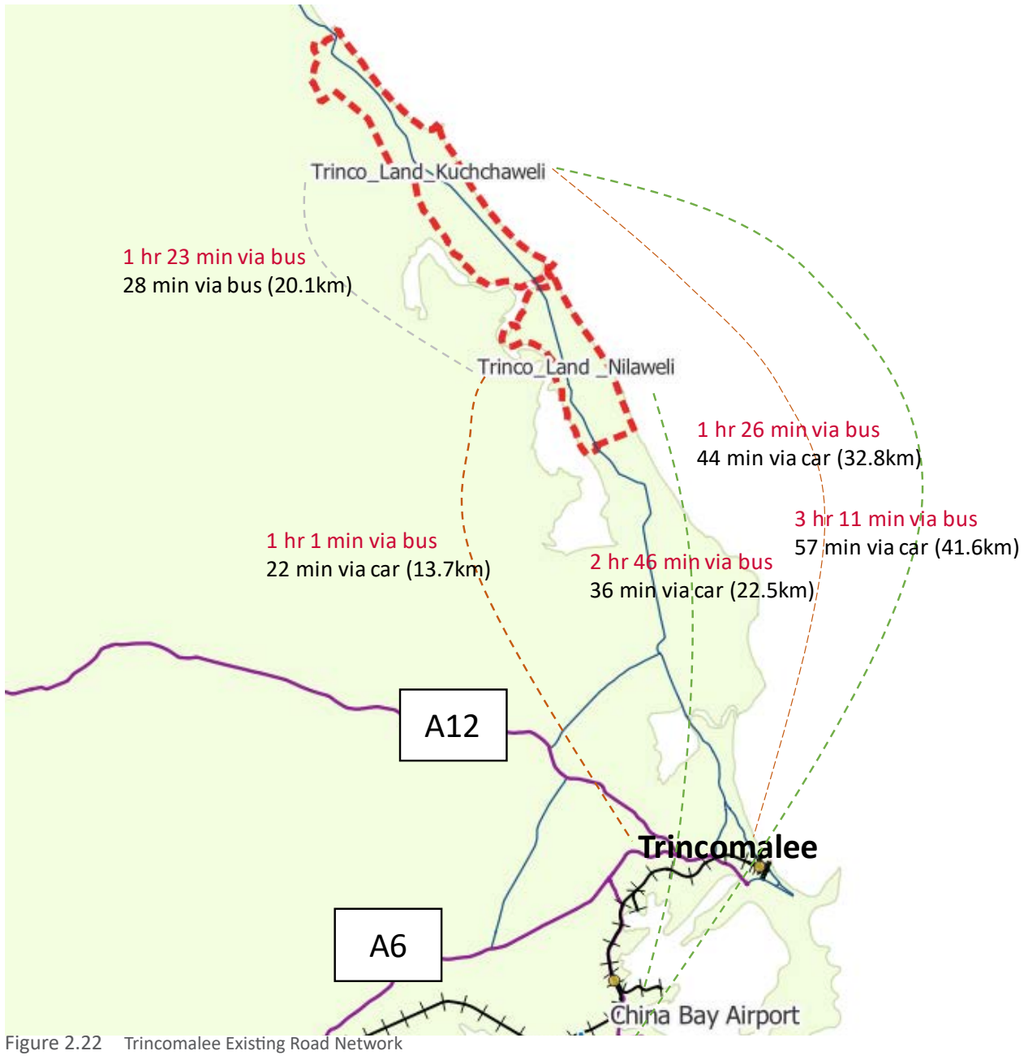


Figure 2.22 Trincomalee Existing Road Network

towards Kuchchaveli extends beyond Nilaveli, with the stretch leading to Kuchchaveli being relatively less developed but still navigable. While this segment of the road may have areas that are narrower and less maintained, the drive remains picturesque, offering a glimpse into the rural and natural landscapes of the region. Like Nilaveli, Kuchchaveli can be accessed by private vehicles and taxis, with limited bus services extending to this further destination.

Challenges and Opportunities

- **Challenges**: Seasonal weather conditions, such as the monsoon, can impact road conditions, potentially making travel difficult. Also, limited public transport options to Kuchchaveli may deter some visitors.
- **Opportunities**: Upgrading road infrastructure and increasing public transport services could significantly enhance access. Promoting eco-friendly transportation options and improving road safety measures are potential areas for development, aligning with sustainable tourism goals.

PASIKUDAH

Road access to Pasikudah is primarily through national highways connecting major cities and nearby towns. Pasikudah is known for its golden beach and calm, shallow waters, making it a popular destination for tourists seeking relaxation and water activities.

Main Access Routes to Pasikudah:

- **From Colombo**: Travellers coming from Colombo or Bandaranaike International Airport can take the A6 highway to reach Habarana and then the A15 highway towards Batticaloa. From Valaichchenai, which is on the A15, a turn onto the smaller local roads leads directly to Pasikudah.

- **From Batticaloa**: From Batticaloa, Pasikudah is accessed via the Batticaloa-Valaichchenai Road. This route is shorter and more direct for those already in the Eastern Province.

- **From Polonnaruwa or Trincomalee**: Visitors can use the A11 highway connecting Polonnaruwa and Trincomalee to the A15 highway, then proceed towards Valaichchenai, and take the local roads to Pasikudah.

Road Conditions:

- **Highway Conditions**: The highways leading to Pasikudah, particularly the A6 and A15, are generally in good condition and provide a smooth driving experience. They are regularly maintained and are suitable for all types of vehicles.

- **Local Roads**: The local roads branching off the main highways to Pasikudah may be narrower and less maintained compared to the A-class roads. However, they are usually passable and connect to the resorts and hotels along the coast.

Traffic:

- **Highway Traffic**: Traffic on the A6 and A15 can vary, with occasional congestion around urban centres or during peak holiday seasons. The journey is otherwise comfortable with scenic views along the way.

- **Local Traffic**: Traffic is generally light on the local roads leading to Pasikudah, but it may increase during the tourist season when the hotels and resorts experience higher occupancy.



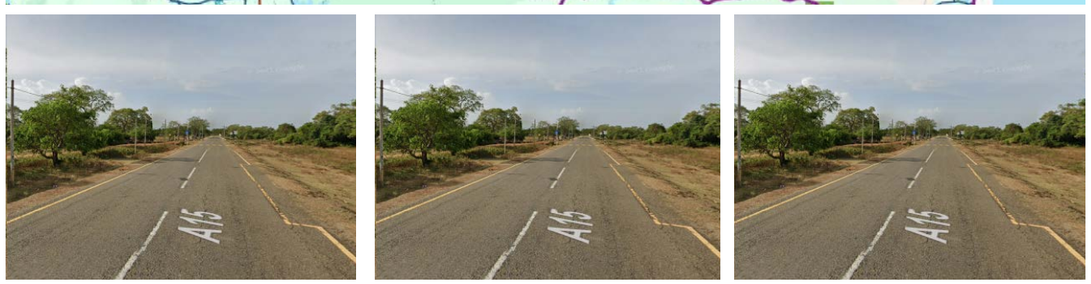


Figure 2.23 Pasikudah Existing Road Network

ARUGAM BAY AND WHISKY POINT

Arugam Bay and Whisky Point, nestled along the southeastern coast of Sri Lanka, serve as premier destinations for surfers and beach lovers alike.

Main Roads Leading to Arugam Bay and Whisky Point

- **A4 Highway**: This is the primary route connecting Colombo with the southeastern part of Sri Lanka. The A4 passes through major cities and towns, including Ratnapura, Pelmadulla, and Wellawaya, before reaching Whisky Point. It's also the main artery that most travelers use to reach Arugam Bay.

- **From Whisky Point to Arugam Bay**: A local road connects Whisky Point directly to Arugam Bay. This road is relatively short and usually takes about 10-15 minutes of driving time, depending on the traffic and conditions of the road.

Connectivity: The A4 Highway provides good connectivity from western and central parts of the country to Whisky Point and Arugam Bay. However, there are limited alternate routes available, which can be an issue during the peak tourist season or in the event of road closures.

Road Conditions: While the A4 Highway is generally well-maintained, some sections may suffer from wear and tear due to heavy rains and frequent use. Local roads in and around Whisky Point and Arugam Bay can vary in quality and may require careful driving.

Traffic: During the off-peak season, the roads are relatively quiet, providing a smooth driving experience. However, during the peak surfing season (May to September), traffic increases significantly, and the roads can become congested, particularly on weekends and holidays.



Figure 2.24 Arugam Bay and Whisky Point Existing Road Network







2.2.3 LAND TRANSPORT: EXISTING PUBLIC TRANSPORT NETWORK

This section focuses on the existing public transport network in the Eastern Province of Sri Lanka, particularly emphasising the critical role it plays in connecting major urban centres, facilitating tourism, and supporting the daily commutes of residents.

TRINCOMALEE

Main Railway Lines and Connections: Trincomalee is accessible via the Trincomalee railway line, which branches off from the main line at Gal Oya Junction. This line is an extension of the broader Sri Lankan railway network that connects the eastern coast of the country with the interior and western regions. The rail service to Trincomalee offers scenic views of the countryside, making the journey not just a mode of transportation but also an experience for travelers and tourists alike.

Historical Significance: The railway line to Trincomalee has historical roots dating back to the colonial era, originally developed to serve the strategic port city and its surrounding areas. Over the years, the line has been upgraded and maintained to support the growing needs of the region, serving as a vital link for transporting goods, especially agricultural produce from the hinterlands to the port for export, and facilitating tourism and local travel.

Current Services: Train services to Trincomalee are designed to cater to both local commuters and tourists, offering various classes of travel to accommodate different preferences and budgets. The schedule includes daily services that connect Trincomalee with the capital city, Colombo, as well as other major towns along the route. These services are crucial for providing an affordable and accessible travel option for residents and visitors.

Challenges and Opportunities: While the rail network to Trincomalee plays a significant role in the region's transportation infrastructure, it faces challenges such as the need for modernisation, the introduction of more efficient and faster trains, and improvements in reliability and comfort. Opportunities exist to enhance the rail service as part of broader efforts to promote sustainable transportation and tourism. Upgrading the rail infrastructure, including tracks, rolling stock, and station facilities, could significantly improve the overall travel experience and encourage more people to use rail services for inter-city travel.



Figure 2.25 Sri Lanka Land Transport Network and Railway Service in Trincomalee

INTEGRATION AND CHALLENGES

- **Efforts to integrate these modes of transport more efficiently is a challenge, along with investments in infrastructure and technology, could further elevate the public transportation system, making it more sustainable and user-friendly.**
- **The ongoing development and optimisation of Trincomalee's transportation network are essential for supporting the city's growth, improving the quality of life for its residents, and ensuring a memorable experience for tourists.**

BUS SERVICE

The bus network in Trincomalee stands as a pillar of public transportation, extending its reach from the heart of the city to the far-flung corners of the region and beyond. The central bus station in Trincomalee is a bustling hub from which a variety of services radiate:

Local Bus Services: These buses crisscross the city and its suburbs, providing an affordable and convenient option for daily commutes. They connect key residential areas, markets, schools, and workplaces, facilitating the daily lives of locals.

Intercity Bus Services: Operated by both the Sri Lanka Transport Board (SLTB) and private entities, these buses link Trincomalee with major cities across Sri Lanka, including Colombo, Kandy, and Batticaloa. These services are indispensable for longer-distance travel, offering a blend of comfort and efficiency.

TAXI SERVICE

Taxis in Trincomalee offer a more personalised mode of transportation, with services that can be customised to individual needs:

Traditional Taxis: These vehicles can be found throughout the city, ready to take passengers directly to their destinations. They are especially useful for travelers with specific travel requirements or those looking for a private journey.

Ride-hailing Services: The advent of ride-hailing apps has modernised the taxi landscape in Trincomalee. These platforms offer user-friendly interfaces for booking rides, providing clarity on pricing, route, and the identity of the driver, thereby enhancing safety and convenience.

TUK-TUK SERVICES

Tuk-tuks, or auto rickshaws, add a vibrant layer to the city's transportation network, embodying the spirit of Trincomalee's streets with their nimble form and colorful appearance:

Accessibility: Tuk-tuks are omnipresent in Trincomalee, offering easy access to quick and flexible transportation options. Their ability to navigate narrower streets and dense traffic makes them particularly effective in urban settings.

Cultural Icon: Beyond their practicality, tuk-tuks serve as a cultural icon, providing a unique and authentic experience for visitors. Many drivers personalise their vehicles with decorations and music, adding a personal touch to each ride.

Economic Option: For short to medium distances, tuk-tuks are an economical choice. Fares are usually negotiable, allowing passengers to bargain for the best rate.

PASIKUDAH

Bus Network

This transportation network within Batticaloa, comprising a city shuttle service and extensive bus routes, not only underpins the daily commute for locals but also serves as an essential framework for tourists navigating the city.

Shuttle Service:

- City Ride Shuttle Bus Service: Launched in partnership with the Batticaloa Municipal Council and a private partnership.

- Coverage: Focused on connecting schools, institutions, administrative offices, and hospitals—key areas that facilitate the movement of a significant number of residents and visitors within the city.

Railway Track and Connectivity:

- The railway track is situated approximately **1 kilometer from the town centre**, which indicates convenient access for residents and visitors while also maintaining a buffer from the noise and activity associated with rail transport.
- The rail network includes a **single track** that connects Batticaloa with Galoya, which then extends to Trincomalee and on to Colombo, showing that Batticaloa is a part of the broader railway system that traverses the island.
- The **average speed of travel on the railway is noted as 24 km/hr**, which is relatively slow and indicative of a leisurely pace of travel that might be due to the single-track system, conditions of the track, and the type of trains used.
- The **journey time to Colombo is quite significant at 8-10 hours**, emphasising the need for overnight or long-haul travel arrangements for passengers.
- **Passenger Volume**: The number of passengers using the rail service is about **550 per day**, suggesting a modest but steady usage of the service for intercity travel.

Implications for Travel and Tourism:

- **Accessibility**: The proximity of the railway station to the town is beneficial for tourism, providing easy access for visitors who wish to explore Batticaloa and its surroundings.
- **Travel Experience**: The slower train speeds could be appealing to tourists looking for a scenic journey, offering views of the countryside and a more relaxed way to travel.
- **Tourist Information**: Given the passenger volume and travel times, providing tourists with accurate timetables, comfortable waiting areas, and amenities at the station could improve the overall experience.

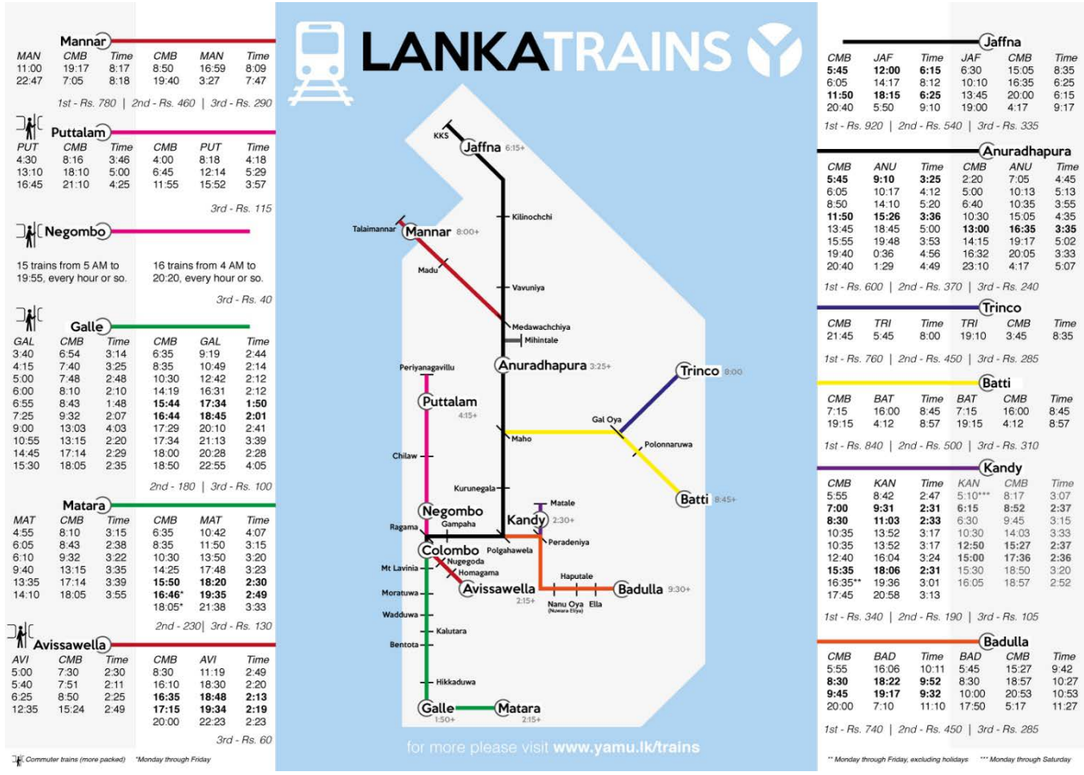




Figure 2.26 Sri Lanka Land Transport Network and Railway Service in Pasikudah

ARUGAM BAY AND WHISKY POINT

The public transport network in regions like Arugam Bay and Whisky Point typically consists of a combination of buses, and informal transport options such as tuk-tuks.

Accessibility and Coverage:

- The combination of long-distance and local buses ensures wide coverage, connecting major cities and rural areas. This network supports both intra-city and inter-city travel efficiently.
- Tuk-tuks enhance accessibility by offering last-mile connectivity, essential in areas where buses cannot operate.
- Bicycle rentals add a layer of convenience for short-distance travel and sightseeing.

Affordability and Flexibility:

- Bus services, both long-distance and local, are generally affordable, catering to a wide range of travelers.
- Tuk-tuks, while flexible, may have variable pricing, which can impact affordability. Negotiable fares, though flexible, can sometimes disadvantage travelers unfamiliar with local rates.
- Bicycle rentals are cost-effective for short trips and provide an alternative mode of transport for budget-conscious travelers.



Figure 2.27 Sri Lanka Land Transport and Tuk tuk Service in Arugam Bay



BUSES

Long-Distance Buses: There are regular and semi-luxury bus services that operate from major cities such as Colombo, Kandy, and Badulla to Whisky Point. These buses usually travel along the A4 highway and are the most commonly used form of public transport for reaching Arugam Bay and Whisky Point.

Local Buses: Smaller local buses or mini busses provide transport within Whiskey Point and to nearby towns. They may also offer connections to rural areas where larger buses cannot reach.

Tourist Shuttle Buses: During the tourist season, there may be shuttle services specifically catering to travelers heading to popular destinations like Arugam Bay.



TUK-TUKS

Last-Mile Connectivity: Tuk-tuks play a vital role in the public transport network, particularly for last-mile connectivity. They are widely available for hire in Whiskey Point and can take passengers directly to their destination in Arugam Bay.

Fixed or Metered Fares: While tuk-tuks do not have a fixed schedule, their fares are usually negotiable unless they are metered.



INFORMAL TRANSPORT SERVICES

Bicycle Rentals: Some visitors choose to rent bicycles for local travel, which provides flexibility and an eco-friendly mode of transportation.

2.2.4 SEA TRANSPORT

This section delves into the existing and potential sea transport infrastructure in the Eastern Province, particularly emphasising Trincomalee's strategic significance as a maritime hub.

TRINCOMALEE

Given Trincomalee's strategic location in the Indian Ocean and its status as one of the world's largest natural harbors, the port is well-positioned to become a major destination for marine tourism, including yachting, cruise tourism, and recreational boating. The natural beauty of the harbor, coupled with the historical and cultural significance of Trincomalee, further enhances its appeal as a tourist destination.



Figure 2.28 Sri Lanka Existing Sea Transport in Trincomalee

Recreational Boating and Sailing

Trincomalee's conditions are favorable for recreational boating and sailing, with its calm and sheltered waters offering an ideal setting for these activities. While there are facilities for recreational boats and small-scale sailing activities, there's potential for further development. Enhancing marina facilities, providing more services for yachts and leisure boats, and expanding water sports options could significantly boost Trincomalee's appeal as a marine recreational destination.

Cruise Tourism

Currently, the port's infrastructure supports the docking of smaller cruise ships and private yachts, contributing to the influx of tourists. However, the capacity to accommodate larger cruise liners and offer specialised services for cruise passengers remains an area ripe for development. Improving facilities to attract international cruise lines could transform Trincomalee into a key stopover on the Indian Ocean cruise route, significantly boosting local tourism and related businesses.

Eco-Tourism Activities

The waters around Trincomalee are rich in biodiversity, offering exceptional opportunities for snorkeling, diving, and whale watching. These activities are already popular among tourists, driven by the area's natural beauty and marine life. However, ensuring sustainable practices and protecting marine ecosystems are essential for maintaining the attractiveness and viability of these tourism offerings in the long term.

Infrastructure and Accessibility

Access to water transport services for tourism in Trincomalee is facilitated by road and, to a lesser extent, rail connections. Improvements in land transportation infrastructure and connectivity between tourist attractions and water transport facilities can enhance the overall tourist experience. There's a need for integrated transport solutions that seamlessly connect tourists from their arrival points to maritime activities in the harbor and beyond.

ARUGAM BAY AND WHISKY POINT

Water transport, especially in coastal regions like Arugam Bay and Whisky Point, primarily supports the fishing industry, tourism, and recreation. Here's an overview reflecting the current state and potential for water transport in these areas:

Fishing Vessels

The backbone of water transport in Whisky Point and Arugam Bay is the local fishing fleet. Small to medium-sized boats head out to sea and back daily, contributing significantly to the local economy.

Tourist Boats

For tourists, boat tours are available for exploring the lagoons and nearby attractions. These may include sightseeing tours, bird watching excursions, or visits to places like the Whisky Point Lagoon.

Water Sports

Arugam Bay, a world-renowned surfing destination, attracts enthusiasts who often use boats to reach the best surfing spots. Additionally, water sports like jet skiing, kite surfing, and windsurfing are growing in popularity.





Figure 2.29 Sri Lanka Existing Water Sports Activities in Arugam Bay and Whisky Point

2.2.5 AIR TRANSPORT

Air transport is an essential component of the transportation network, connecting remote and regional areas with national and international destinations. In the Eastern Province of Sri Lanka, air transport plays a vital role in supporting tourism, facilitating business travel, and ensuring the swift movement of people and goods. Recent developments in air transport infrastructure have focused on enhancing regional connectivity, improving airport facilities, and expanding air services to meet the growing demands of the tourism industry and local economy.

TRINCOMALEE

- **Gateway to the East**: China Bay Airport is positioned as an essential entry point to Eastern Sri Lanka, offering potential for regional flights and boosting tourism access to Trincomalee's pristine beaches, historical sites, and marine activities.

- **Seaplane Operations**: The unique geography of Trincomalee, with its adjacent water bodies, is ideal for developing seaplane services. This could revolutionise travel within Sri Lanka, providing scenic and efficient connections to remote tourist destinations, similar to the Maldives' model.

- **Regional Connectivity**: Enhancing China Bay Airport's facilities could fill a crucial connectivity gap, positioning Sri Lanka as a strategic link between major hubs like Dubai and Singapore, especially for travelers and cargo moving within the region.

Challenges and Opportunities

- **Upgrade and Expansion**: Addressing the need for infrastructure upgrades at China Bay Airport, including facilities to separate civilian air travel from military operations, is crucial for enhancing tourist and business travel comfort.

- **Enhanced Air Connectivity**: Improving direct air connections to Colombo and potentially international destinations would significantly reduce travel times and inconvenience, making the region more attractive to tourists and investors.

Non-stop Flights from Trincomalee (TRR)

- Trincomalee Airport (IATA: TRR, ICAO: VCCT), also known as China Bay Airport, is a small airport in Sri Lanka with domestic flights only.

- At present there are 3 domestic flights from Trincomalee.

- The longest flight from Trincomalee TRR stretches 80 mile (129km) non-stop route to Colombo CMB. This direct flight takes around 45 minutes and is operated by Cinnamon Air (13 flights/month).

International flights from Trincomalee

- Currently, there are no international flights departing from Trincomalee. To get from Trincomalee to another country, a stopover will be needed, for example through Colombo or Sigiriya.

Trincomalee to Colombo	45 min
Trincomalee to Batticaloa	30 min
Trincomalee to Sigiriya	30 min

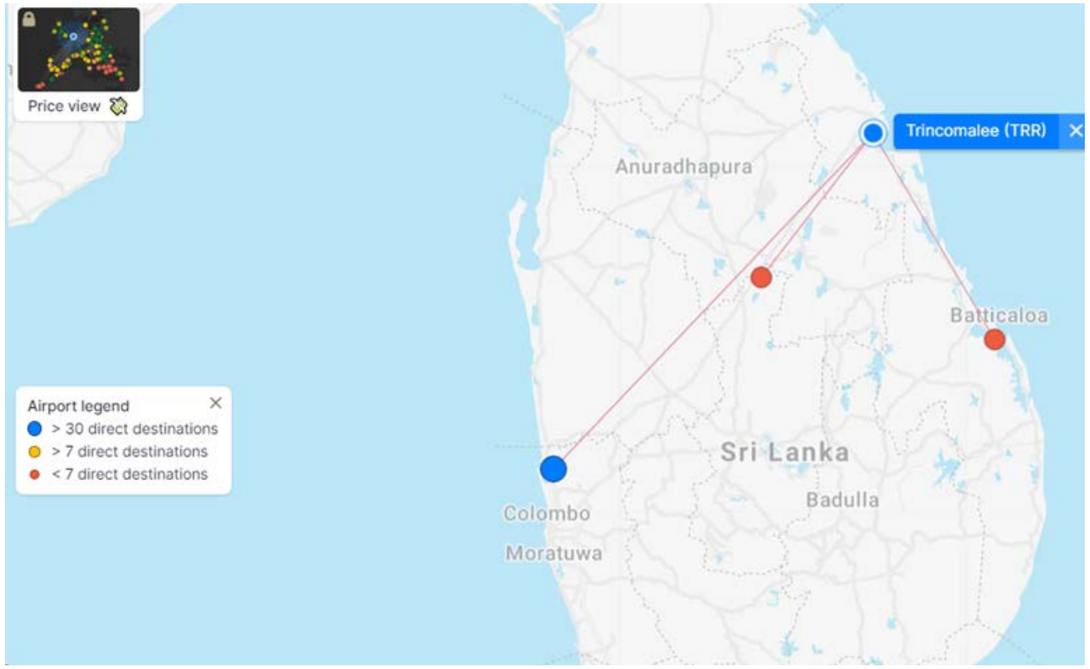




Figure 2.30 Sri Lanka Existing Air Transport Service and Network in Trincomalee

PASIKUDAH

- **Proximity to Town Centre**: The airport is situated relatively close to the town centre, approximately 2.4 kilometers southeast of Batticaloa city, which enhances its accessibility for both residents and visitors.

- **Geographical Advantage**: Its strategic location may serve as an asset for regional connectivity and tourism, potentially attracting both domestic passengers and international travelers.

- **Runway Specifications**: The airport features a runway that is 1,066 meters long and 46 meters wide, which is suitable for small to medium-sized aircraft typically used for domestic flights.

- **Connection to Domestic Airports**: The airport is connected to all domestic airports within Sri Lanka and is highlighted as the fourth airport under the purview of the Airport and Aviation Services (Sri Lanka) Limited, suggesting it is part of a broader national aviation network.

Non-stop Flights from Batticaloa (BTC)

- Batticaloa Airport (IATA: BTC, ICAO: VCCB), also known as Batticaloa Airport, is a small airport in Sri Lanka with domestic flights only.

- At present there are 3 domestic flights from Batticaloa.

- The longest flight from Batticaloa BTC stretches 79 mile (127km) non-stop route to Colombo CMB. This direct flight takes around 45 minutes and is operated by Cinnamon Air (31 flights/month).

International flights from Batticaloa

- Currently, there are no international flights departing from Batticaloa. To get from Batticaloa to another country, a stopover will be needed, for example through Colombo or Sigiriya.

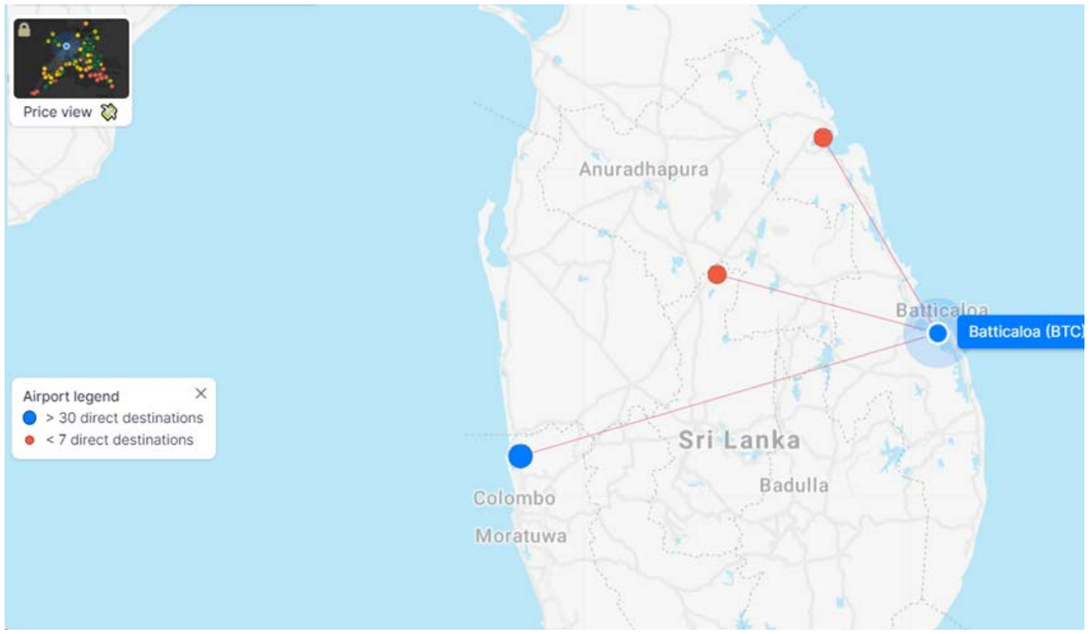






Figure 2.31 Sri Lanka Existing Air Transport Service and Network in Pasikudah

2.2.6 SCHEMATIC TRANSPORT

In the context of urban development and planning, an effective transportation network is pivotal. The proposed schematic transport plan is designed to enhance connectivity, facilitate efficient movement, and support the dynamic land uses of the study area. Emphasising the critical role of road hierarchy in urban planning, this scheme addresses the needs of tourism, commercial activities, residential areas, and future developments, ensuring a comprehensive and sustainable transportation infrastructure.

Road Hierarchy and Classification

The road network within the study area is strategically designed to cater to the diverse needs of the region, influenced heavily by the prominence of tourism, as well as existing and anticipated commercial and residential developments. To streamline traffic flow and optimise accessibility, the road system is categorised into three (3) primary classifications:

- **Primary Arterial Roads**: Function as key thoroughfares designed to facilitate high-speed and high-volume traffic flow across extensive distances. They play a crucial role in connecting major points of interest such as tourist attractions, large commercial hubs, and transit gateways. Access to these roads is strategically controlled to minimise disruptions, which helps to maintain uninterrupted traffic flow and ensures efficient transit for commuters and goods. This controlled access typically includes limited entry and exit points to reduce potential bottlenecks, thereby optimising traffic movement and enhancing overall transportation efficiency within the network.

Table 2.4 Proposed Schematic Transport

Parameter/Road Element		Primary Arterial	Secondary Arterial	Collector
Access Control		• Access control to maintain high service levels and safety. • Direct property access is generally prohibited to avoid traffic disruption. • Access is typically via service roads or local roads connecting at designated interchanges or intersections.	• More flexible than primary arterials, allowing some direct land access but still prioritizing through traffic. • Includes controlled access points like right-in/right-out configurations and median barriers to manage traffic flow.	• Balances land access and traffic mobility, providing substantial access to properties while managing through traffic. • Features include lower speeds, frequent intersections, and traffic calming measures to safely integrate local and through traffic.
Traffic Flow Characteristics		Uninterrupted flow except at intersections	Interrupted flow	Interrupted flow
Recommended Maximum Design Speed (kmph)		80	60	50
Recommended Posted Speed (kmph)		60	50	40
Linkage to		Highway Capacity Corridor (HCC) and Secondary Arterial	Primary Arterial and Collector	Secondary Arterial and Local Streets
Junction Types		Fully signalized with/without slip roads		Fully signalised junction
Road Gradient	Flat	≤ 5%	≤ 7%	≤ 9%
	Rolling	≤ 7%	≤ 9%	≤ 10%
Recommended Junction Spacing (m)		1.5-2.5	1.0-1.5	0.5-1.0
No. Lanes		6 Lane Divided	4 Lane Divided + Parking	2 Lane Undivided
Multifunction Zone (Utilities and Non-Motorised Transport Path) (m)		3.5	2.0	2.0
Footpath Width (m)		2.0-3.5	2.0-2.5	1.5-2.5
Median Width (m)		1.5	1.0	-
Right of Way (ROW) (m)		38.5	31.0	21.6

- **Secondary Arterial Roads**: These roads function as critical distributors, channeling traffic from primary arteries to collector roads. They effectively balance the dual requirements of providing access to local destinations and maintaining efficient through traffic. This is achieved by accommodating moderate traffic volumes and access demands in a manner that does not compromise safety or impede traffic flow.

- **Collector Roads**: Designed to collect traffic from local streets and channeled it into the arterial road network. Collectors are essential in residential and smaller commercial areas, providing direct access to properties while still facilitating smooth traffic movement towards major roads.

The optimal road gradient for the area's development is proposed to range between 6% and 10%. This gradient is considered ideal for maintaining efficient traffic flow while ensuring road safety and structural integrity within the urban and surrounding landscapes.



Road Cross Section

The proposed road cross-sections for each hierarchical category have been designed in accordance with the Geometric Design Standards of Roads by the Road Development Authority (1998). However, the original standards were found to be deficient in integrating pedestrian pathways and Non-Motorised Transport (NMT) facilities. To address this gap, it has been proposed to extend each road category by an additional space of 2.0-7.0 meters on both sides (depending on land availability).

This expansion is intended to facilitate pedestrian and NMT infrastructure, which will also include utility lines beneath the NMT tracks. Detailed proposed cross-sections are illustrated below.







Figure 2.32 Characteristics of Roads

Primary Arterial

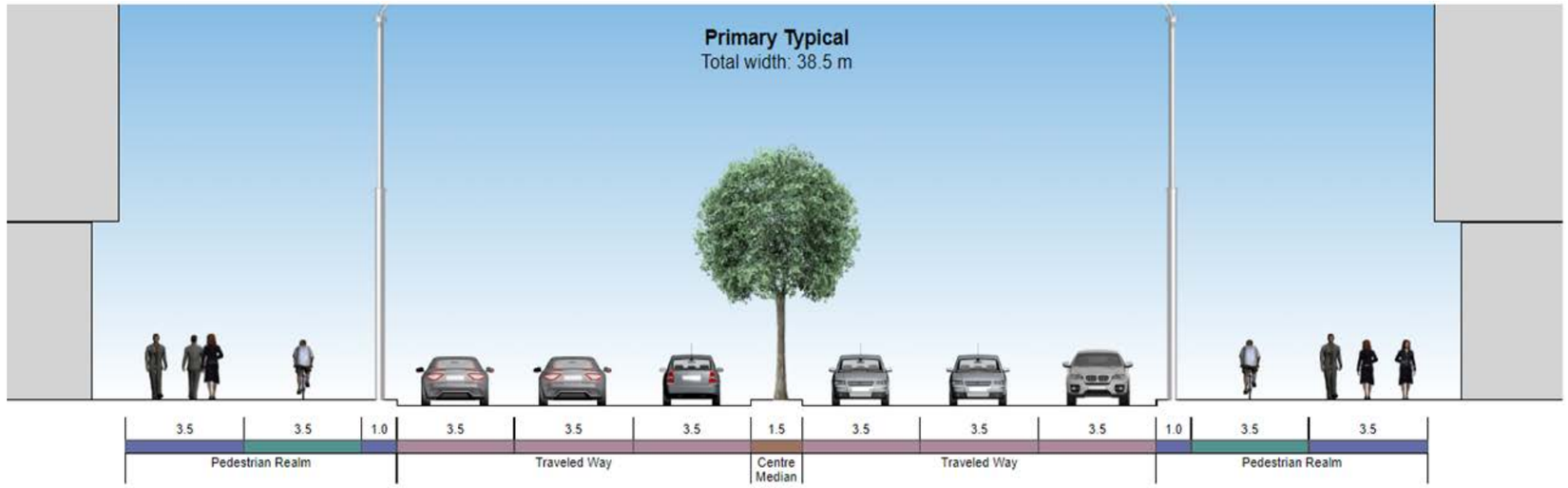
Primary arterials are designed to accommodate six-lane dual carriageway, incorporating dedicated lanes for pedestrian, NMT and utility lines as depicted in Figure 2.12. Within the designated study area, the prevalent road configuration is currently limited to 2-lane dual carriage ways. This existing infrastructure establishes the foundation for future developments. Proposed expansions and enhancements are aimed at accommodating increasing transport demands and enhancing overall traffic management. The transition from 2-lane to more comprehensive 6-lane arterials will significantly improve capacity and reduce congestion, aligning with long-term transportation planning goals.

Primary Arterial	
Typical	Limited ROW Availability
Dual-three (total width - 38.5m with 8m service corridor)	Dual-two (total width 21.5m with 3m service corridor)

In areas where the Right of Way (ROW) is constrained, a modified design is implemented to optimise the available space. This configuration ensures that the primary arterial roads can accommodate significant traffic volumes while maintaining pedestrian and NMT facilities.

Typical 38.5m (For core area)

8.0m service corridor



With Limited ROW 21.5m

3.0m service corridor

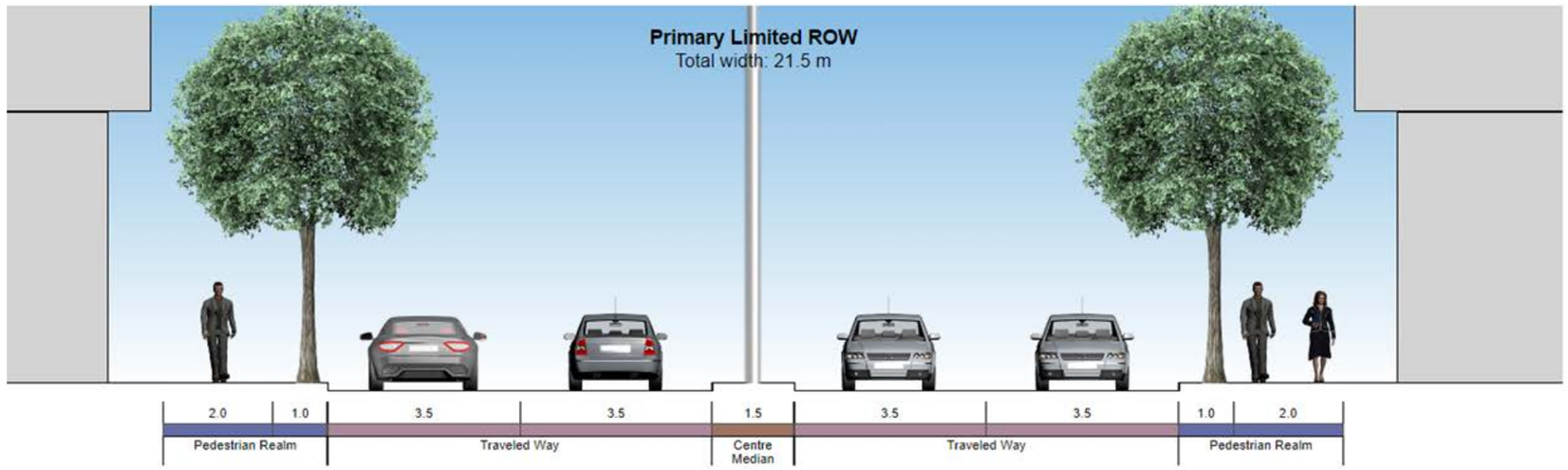


Figure 2.33 Overall Proposed ROW for Primary Arterial Road

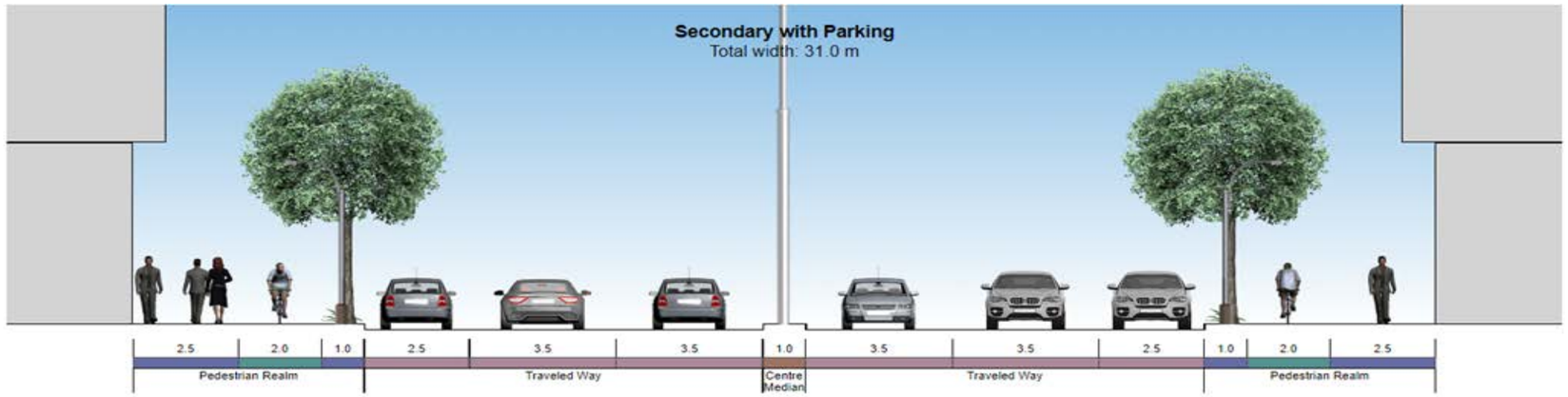
Secondary Arterials

Secondary arterials are engineered to support a four-lane divided configuration, which includes parking availability to enhance local accessibility. These roads are equipped with multifunctional zones for utilities and non-motorised transport, improving safety and connectivity for all users as outlined in the proposed cross-section.

In the designated study area, the current road infrastructure primarily features less complex road systems. The existing layout predominantly consists of narrower, undivided roadways. This foundational infrastructure sets the stage for significant enhancements. The proposed development of secondary arterials will expand these thoroughfares to accommodate dual-direction traffic with improved access control measures such as right-in/right-out configurations and median barriers. These changes are intended to streamline traffic flow, manage access more effectively, and meet the rising transport demands of the area. The upgrade from simpler configurations to more structured four-lane arterials is aimed at boosting traffic efficiency and safety, supporting the region's evolving transportation needs and urban development plans.

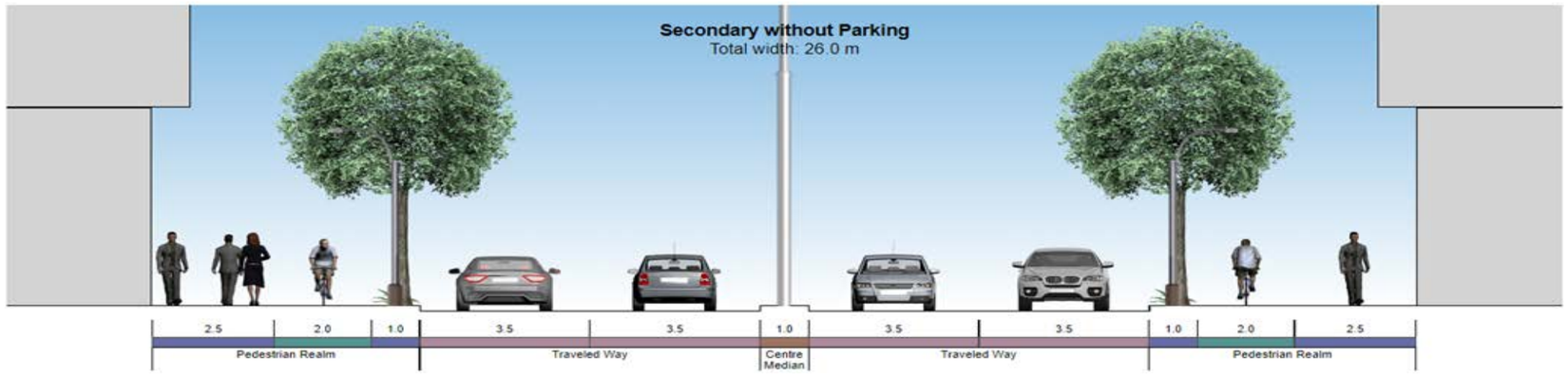
With Parking 31.0m (For core area)

5.5m service corridor



With Parking 26.0m

5.5m service corridor



With limited ROW 21.0m

3.0m service corridor

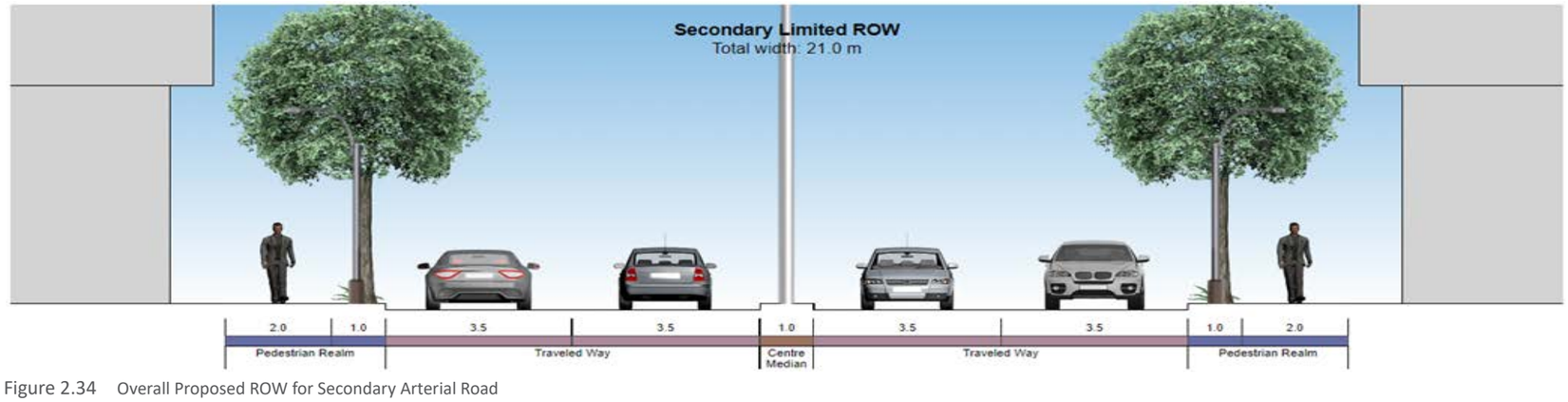


Figure 2.34 Overall Proposed ROW for Secondary Arterial Road

Collector

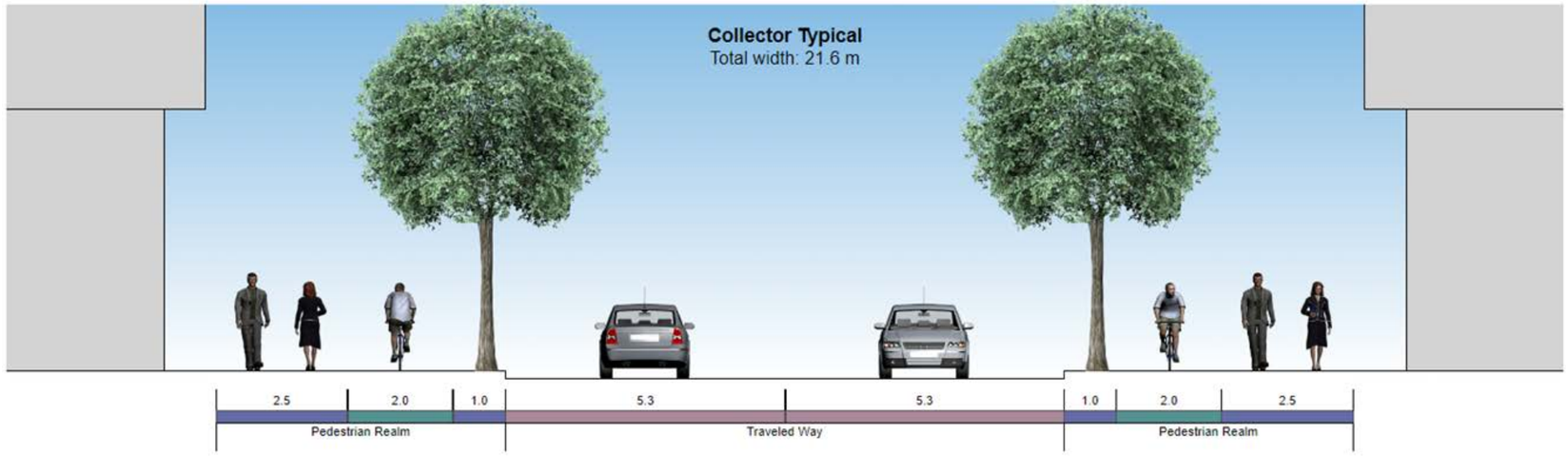
Collector roads are designed to facilitate efficient movement within urban areas, employing a two-lane undivided configuration. This setup is aimed at handling moderate traffic volumes efficiently while providing direct access to adjacent properties, essential for supporting local communities. The configuration is particularly suited for areas where space constraints prevent the implementation of divided roadways or where traffic volumes do not justify more complex infrastructures.

Within the designated study area, the existing road infrastructure typically includes basic, narrower roads that may not adequately meet the growing needs of the community. The current two-lane undivided format of collector roads, while functional for low to moderate traffic, often lacks the necessary features to safely manage both pedestrian and vehicular traffic. The planned enhancements for these collector roads involve not just maintaining the two-lane undivided setup but also integrating crucial safety improvements and traffic calming measures.

The proposed development plans include enhancing the road surface quality, clearly marking lanes, and adding pedestrian-friendly features such as wider sidewalks and designated bike lanes where possible. These improvements are designed to increase safety, reduce traffic congestion, and enhance the overall efficiency of the road network. Upgrading from the simpler configurations to a more structured and well-equipped two-lane undivided system aims to support the future increasing transportation demands and contribute positively to urban development goals, ensuring a balanced approach to mobility and accessibility.

Typical 21.6m

5.5m service corridor



With limited ROW 12.0m

2.5m service corridor

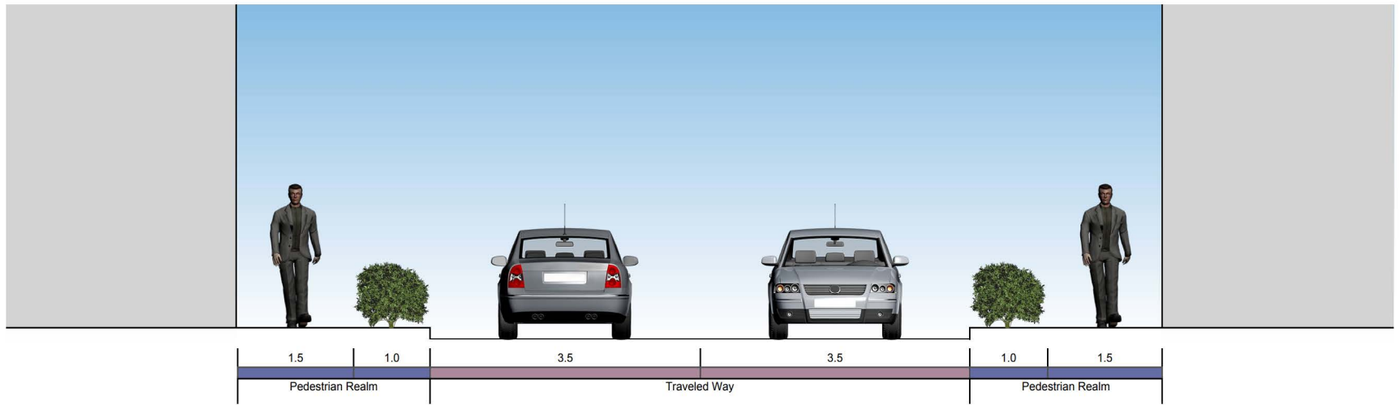


Figure 2.35 Overall Proposed ROW for Collector Road

2.2.7 TRAFFIC DEMAND FORECASTING

Travel Demand Overview:

Travel demand quantifies the expected number of persons or vehicles traveling between specific origins and destinations via a designated route and mode of transport within a given time frame. This measurement is essential for planning and managing roadway capacity and service levels.

Source of Data: The primary source for trip generation data is the Institute of Transportation Engineers (ITE), which compiles comprehensive metric in the Trip Generation Manual. The most current resource used is the 11th edition of this manual, which provides updated trip generation rates applicable to various land use types.

Land Use Types: Included in the analysis are diverse land use categories such as residential, lodging, recreational, institutional, medical, office, retail, and services. Each category has unique travel characteristics that influence the overall traffic pattern.

Trip Calculations for Peak and Off-Peak Hours: Trip generation calculations are performed for typical weekday peak (AM and PM) and off-peak hours to provide a detailed perspective on daily traffic fluctuations. Understanding these dynamics is crucial for effective traffic management and infrastructure planning.

Calculation of Trips:

For each land use type, the expected number of trips generated is calculated using the formula:

Trips = Trip Generation Rate x Land Use Intensity

Land Use Intensity was measured in terms of area (for commercial and recreational uses) and number of units (for residential).

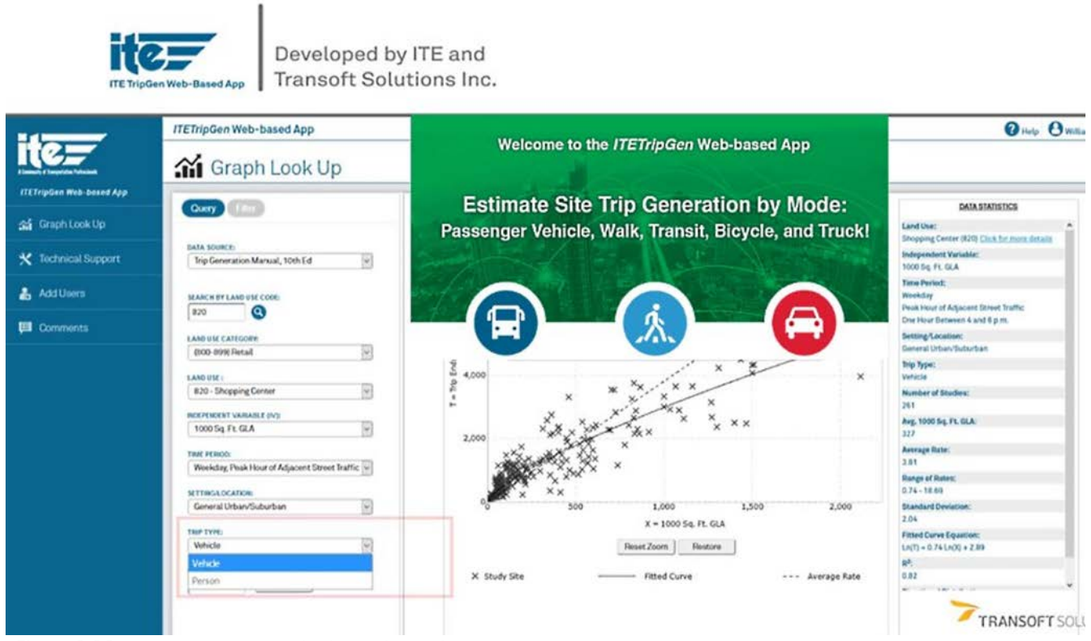


Figure 2.36 Trip Generation Tool (ITE) used for Traffic Demand Forecasting

Table 2.5 Trip Generation Rates Used

Land Use Type	unit	ITE Data ref rate AM (veh)	ref rate PM (veh)	AM IN %	AM OUT %	PM IN %	PM OUT %	Trip Rate (veh) AM IN	AM OUT	PM IN	PM OUT
Low-Rise Residential	DU	0.46	0.56	23%	77%	63%	37%	0.106	0.354	0.353	0.207
Mid-Rise Residential	DU	0.39	0.46	24%	77%	62%	38%	0.090	0.295	0.285	0.175
High-Rise Residential	DU	0.31	0.36	24%	76%	61%	39%	0.074	0.236	0.220	0.140
Resort Hotel	key	0.32	0.41	72%	28%	43%	57%	0.230	0.090	0.176	0.234
Office	100sqm	1.25	1.24	86%	14%	16%	84%	1.074	0.175	0.198	1.040
Retail	100 sqm	1.01	4.10	62%	38%	48%	52%	0.627	0.384	1.969	2.133
Recreational Community Centre	100 sqm	1.89	2.49	66%	34%	47%	53%	1.250	0.644	1.169	1.318
fitness Club	100sqm	1.41	3.71	51%	49%	57%	43%	0.719	0.691	2.117	1.597
Amusement Park	100sqm	0.01	0.10	88%	12%	61%	39%	0.005	0.001	0.060	0.038
Fire/Rescue Station	100sqm	0.52	0.52	71%	29%	29%	71%	0.367	0.150	0.150	0.367
Museum	100sqm	0.30	0.19	86%	14%	16%	84%	0.259	0.042	0.031	0.163
Marina	berth	0.07	0.21	33%	67%	60%	40%	0.023	0.047	0.126	0.084
Public Park	acre	0.02	0.11	59%	41%	55%	45%	0.012	0.008	0.061	0.050

2.3 INFRASTRUCTURE ANALYSIS

2.3.1 OVERVIEW

As a key pillar, the infrastructure development plays a paramount role in determining the success of the proposed tourism development. This section presents the Conceptual Infrastructure Plan for the proposed development; providing key focus on the basic planning parameters, critical assumptions, and demand estimations for the major infrastructure and utilities services.

Infrastructure and utilities planning for a tourism area involve understanding on economic parameters and consideration on the physical features such as location, topography and climate. These critical factors would influence in identifying the utility location, its size and level of services to be planned.

The elements of infrastructure services included are storm water drainage, water supply, sewerage, solid waste disposal and power supply. Each of these aspects will be elaborated further in the following sections.

Based on the land usages, the infrastructure schemes were then developed. The plans included recommendations on new infrastructure and the upgrading/augmentation of the existing infrastructure (if any).

Two broad approaches have been adopted for the infrastructure planning; one for the storm water drainage and site grading as shown in Figure and the other for the rest of the services including water, sewerage, solid waste and power services as shown in Figure.

2.3.2 PLANNING APPROACH & METHODOLOGY

The methodology used for the planning of the various infrastructure services:

- Meeting with client representatives and compilation and analysis of data gathered.
- Site visit
- Forecast of infrastructure requirement and recommendation on the infrastructure provision.

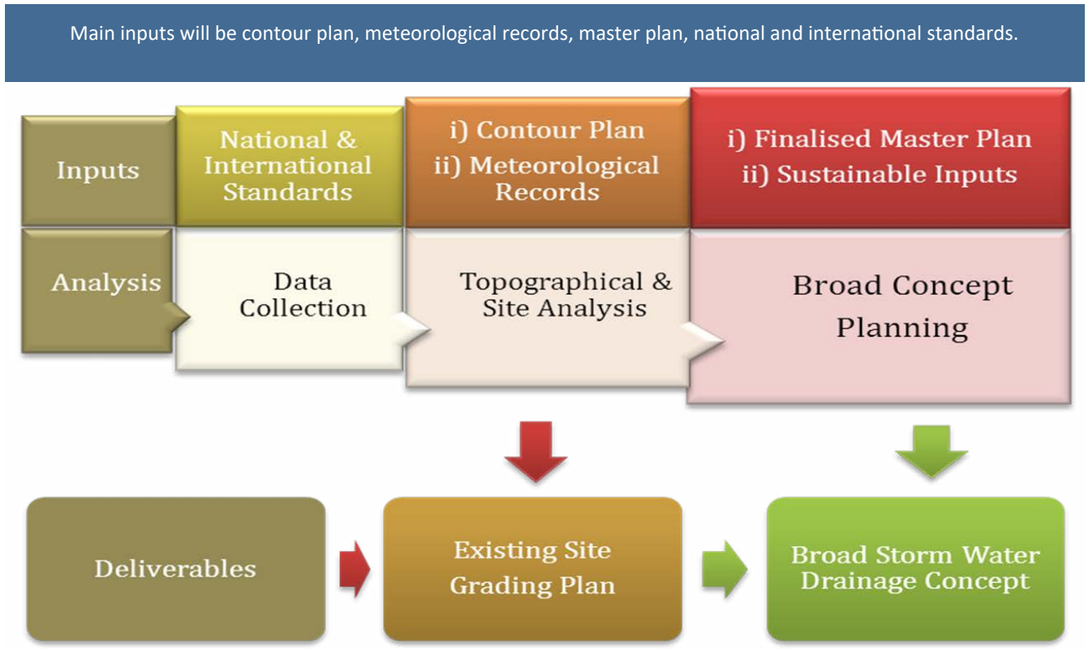


Figure 2.37 Approach for Site Grading & Storm Water Drainage Planning

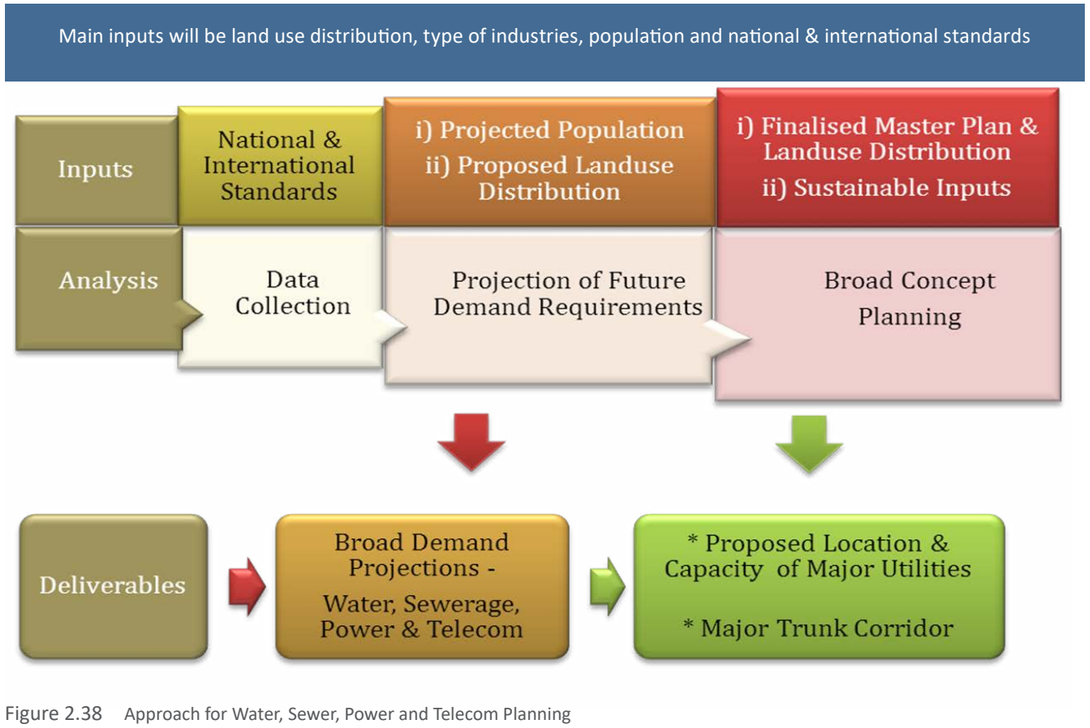


Figure 2.38 Approach for Water, Sewer, Power and Telecom Planning

2.3.3 PLANNING ASSUMPTIONS

The following assumptions have been adopted for the Conceptual Infrastructure Planning:

- The proposed infrastructure provisions are catered solely for the planned tourism development;

- The Conceptual Master Plan, Proposed Land Use Distribution and Population Projection shown in earlier chapter form the main basis for the conceptual infrastructure planning.

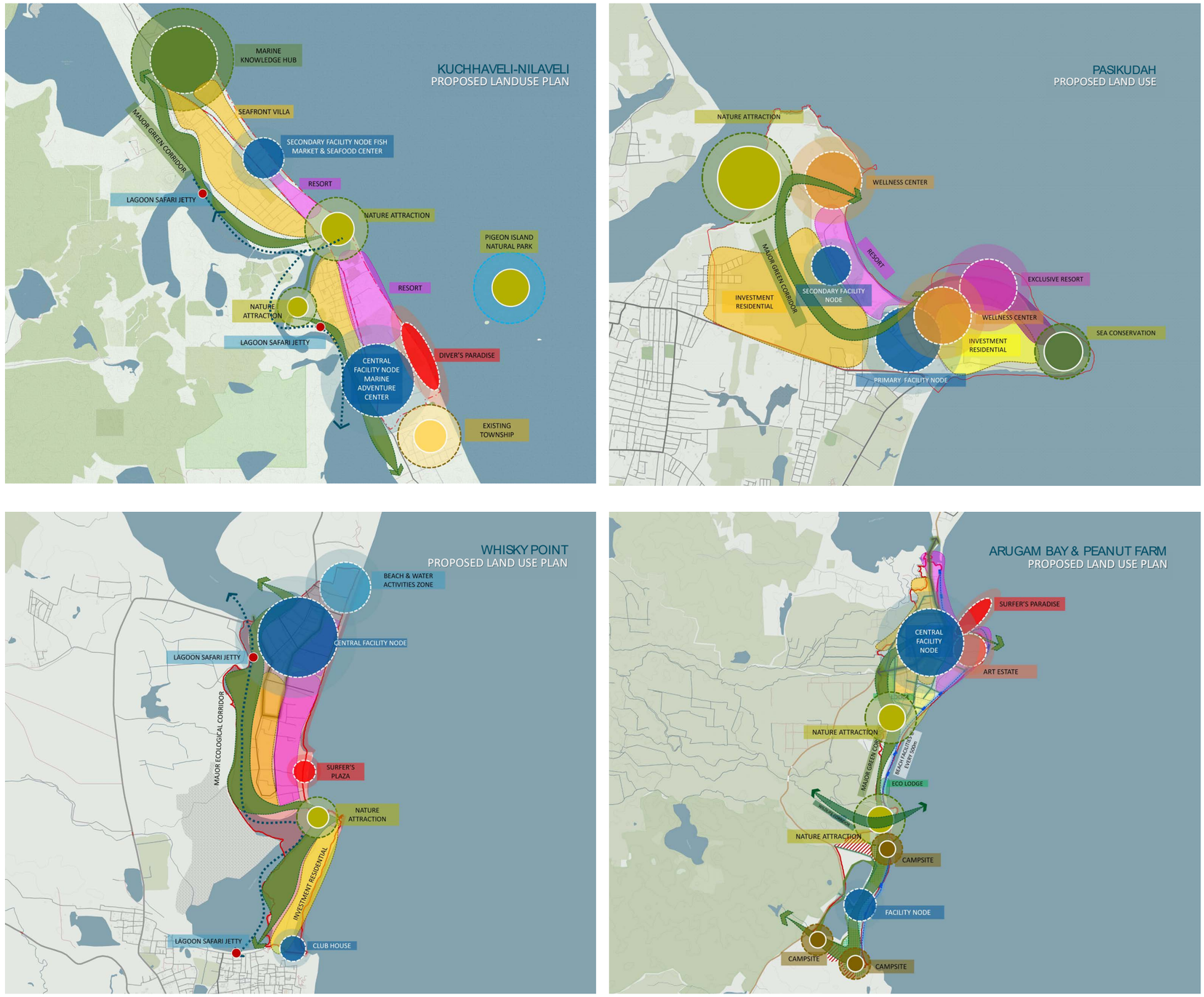
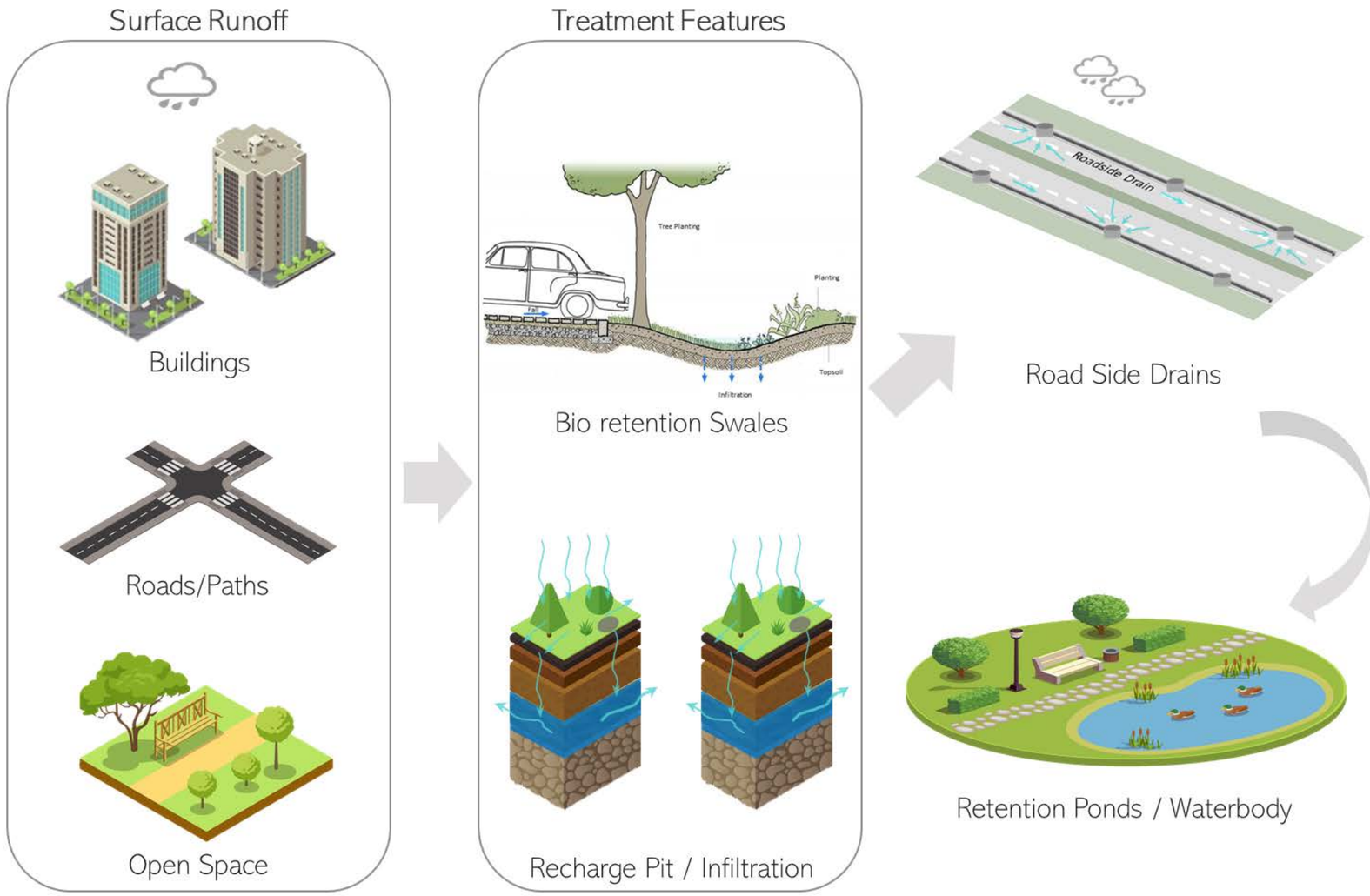


Figure 2.39 Master plans of four nodes

2.3.4 PLANNING STRATEGIES

STORM WATER DRAIN

- Storm water drainage system comprises the roadside drains and easement drain to collect and convey the surface runoff from the land plots and carriageway to the nearest water body.
- The flow direction with discharge outlets to either ponds or sea.
- The ponds shall have gate/pump facility to discharge excess run-off water collected.
- The rainwater collected in ponds can be used as raw water source during peak monsoon season.



Site Grading

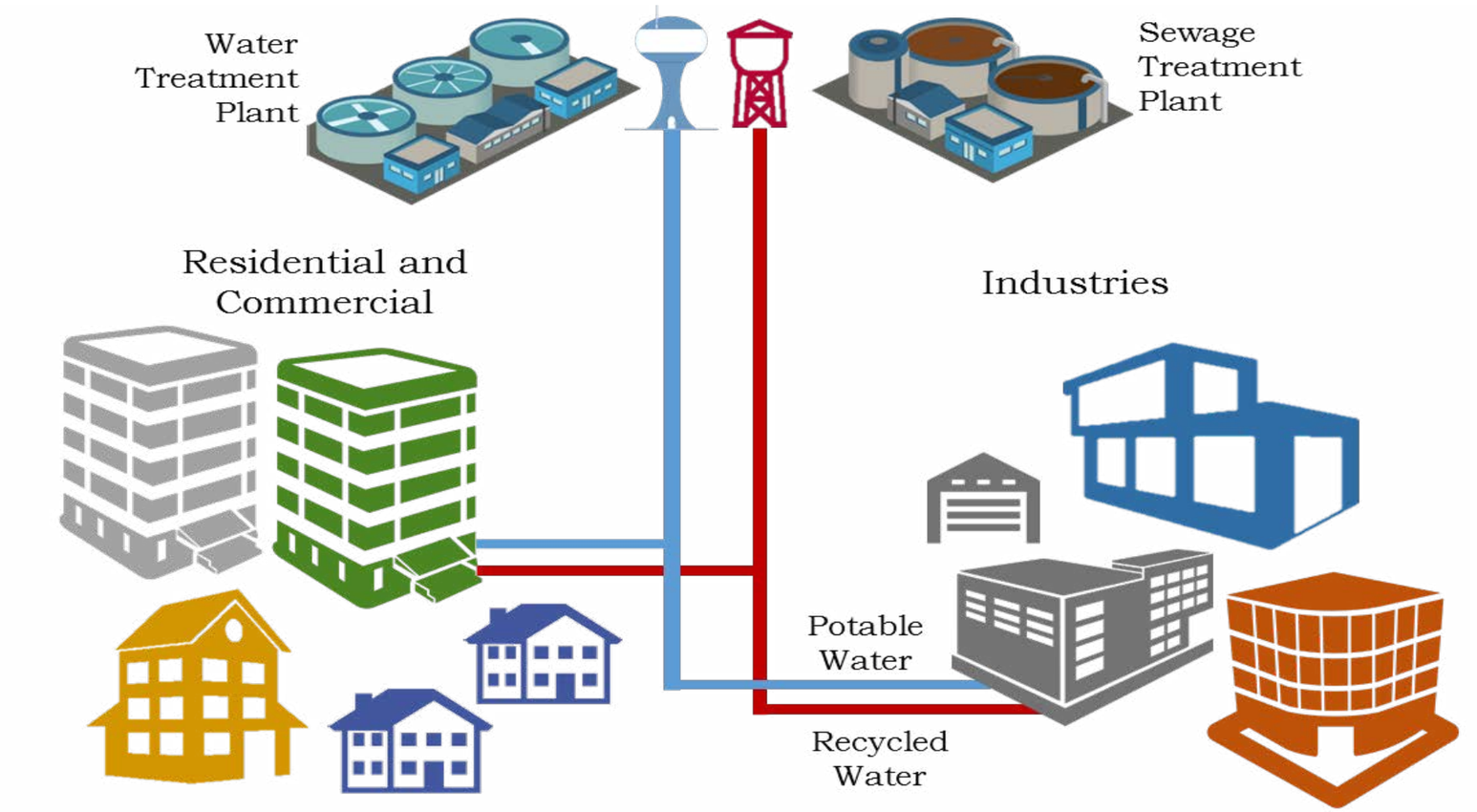
Alleviate flooding by localised topping up the existing ground level, especially low-lying area above the HFL (highest flood level)

Storm Water

Facilitating gravitational storm water flow and integrating the storm water drainage system with making use of the existing water bodies as discharge outlet.

WATER, SEWER & SOLID WASTE

- Potable water and recycle water shall serve the development.
- The potable water will initially be stored in the ground water tank and subsequently pumped to elevated water tank and later supplied to tenants by gravity force.
- The source for recycle water shall be from the Sewage Treatment Plant (STP) within/close to the development.
- Sewage generated from the commercial / residential activities shall be conveyed to Sewage Treatment Plant (STP) located within/ close to the development.
- The Municipal Solid Waste (MSW) generated from commercial / residential activities shall be conveyed to landfill site after segregating recyclables.





Potable Water

Municipal water supply network or deep tube well will be considered as source for potable water supply



Recycle Water

Recycle water shall be used for non-potable usages like gardening, cooling, and toilet flushing. Will have a separate pipe network.



Sewage Generation

Sewage generated within the site will be treated at centralised sewage treatment plant.



Solid Waste

Integrated approach embracing the waste segregation, source reduction, collection, recycle & reuse, treatment and disposal

POWER & TELECOM

- An underground cabling system is recommended for all circuits within the development for reliability and aesthetics reasons, for initial phase current system of power distribution can be adopted.

- Strategies for solar PV implementation within the development is to have a smaller scale project where the solar PV panels are installed on the roof of buildings, walkways or even floating PV farm on the sea.

- A combination of fixed and mobile network technologies will be required to meet demands for mobility and broadband services for the development.





Power
Stimulating economic growth through quality, performance and interactively of urban services and improve contact between citizens and stakeholders.

Telecom
Providing adequate, reliable, and quality power supply and to increase the use of renewable energy.

2.3.5 EXISTING CONDITIONS

TERRAIN

Generally, the existing terrain of the entire project site is undulating and gentle towards the coast. Ground level varies from 855m at Peak point to 0m at coastal line within Eastern Province Boundary. Figure shows the profile for the existing ground.

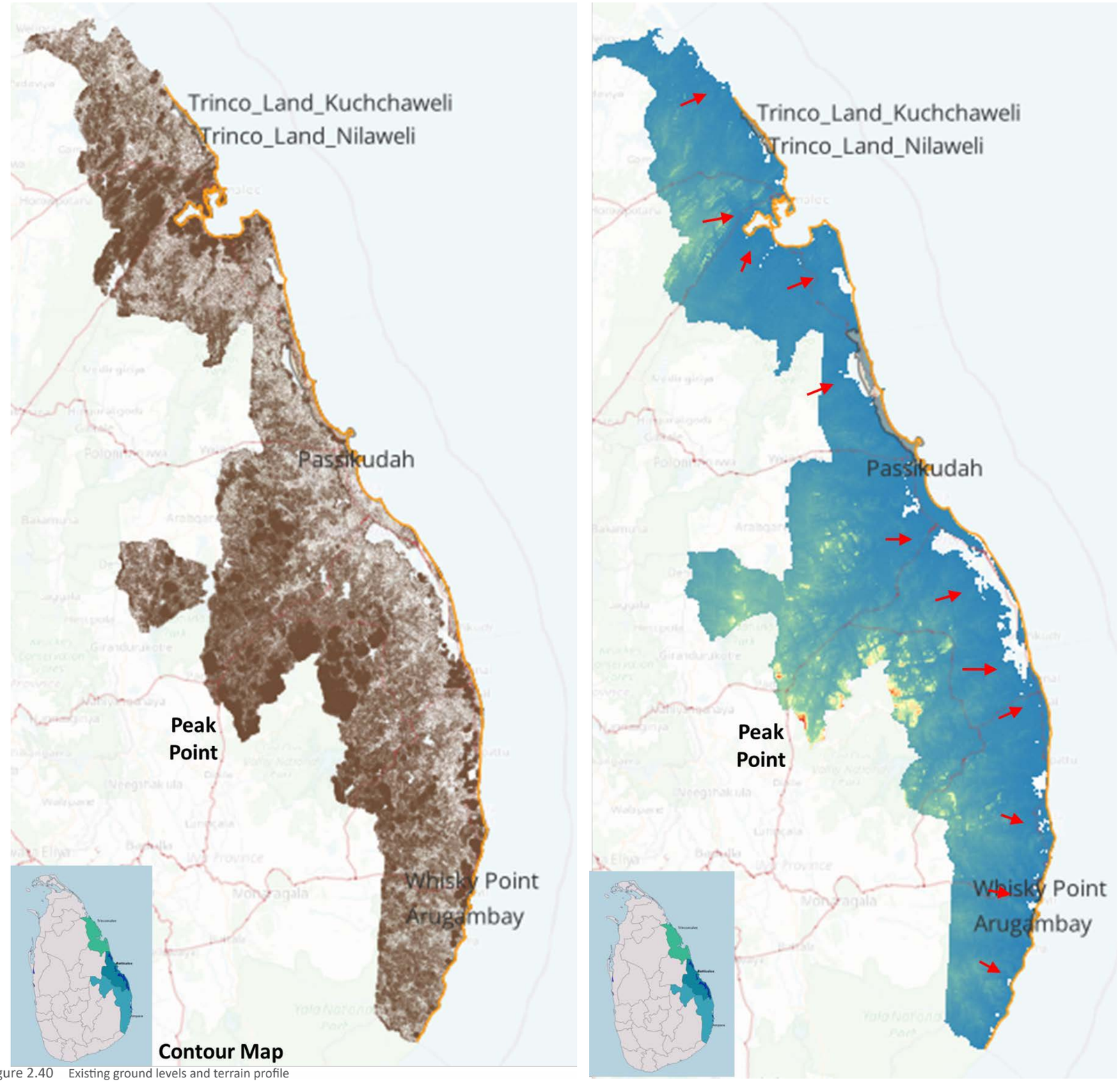


Figure 2.40 Existing ground levels and terrain profile

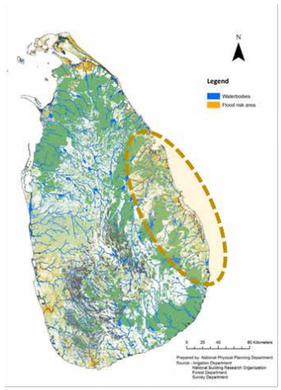
Source: Generated from DEM (https://search.asf.alaska.edu/ & https://www.earthdata.nasa.gov/sensors/srtm)

DRAINAGE

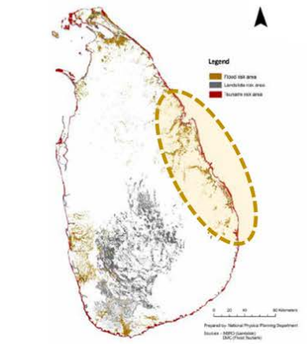
Based on National Physical Planning Policy & The Plan — 2017-2050, parts of eastern study area are vulnerable to floods and tsunami. It also mentions that frequent floods show a clear relationship with the human intervention in the natural settings, over and above its exposure to the effects of climate change.

Multiple strategies have been identified,

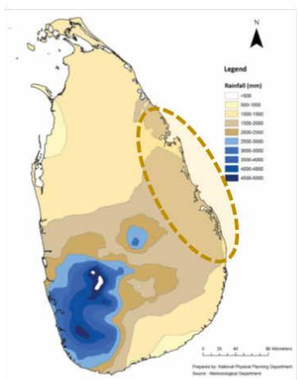
- Conserve and safeguard existing water bodies/ rivers / streams
- Installation of rainwater harvesting facilities; as this contributes to mitigate floods caused by reduced ground assimilation in built up areas.
- Construction of bunds at appropriate locations and forming small to medium scale cascading ponds.
- Sustainable urban drainage to be considered (like ABC concept in Singapore)
- Make use of the low-lying area as detention pond, open space, park, etc.



Waterbodies and Flood risk area



Areas vulnerable to floods & Tsunami



Annual Average Rainfall (2000-2012)

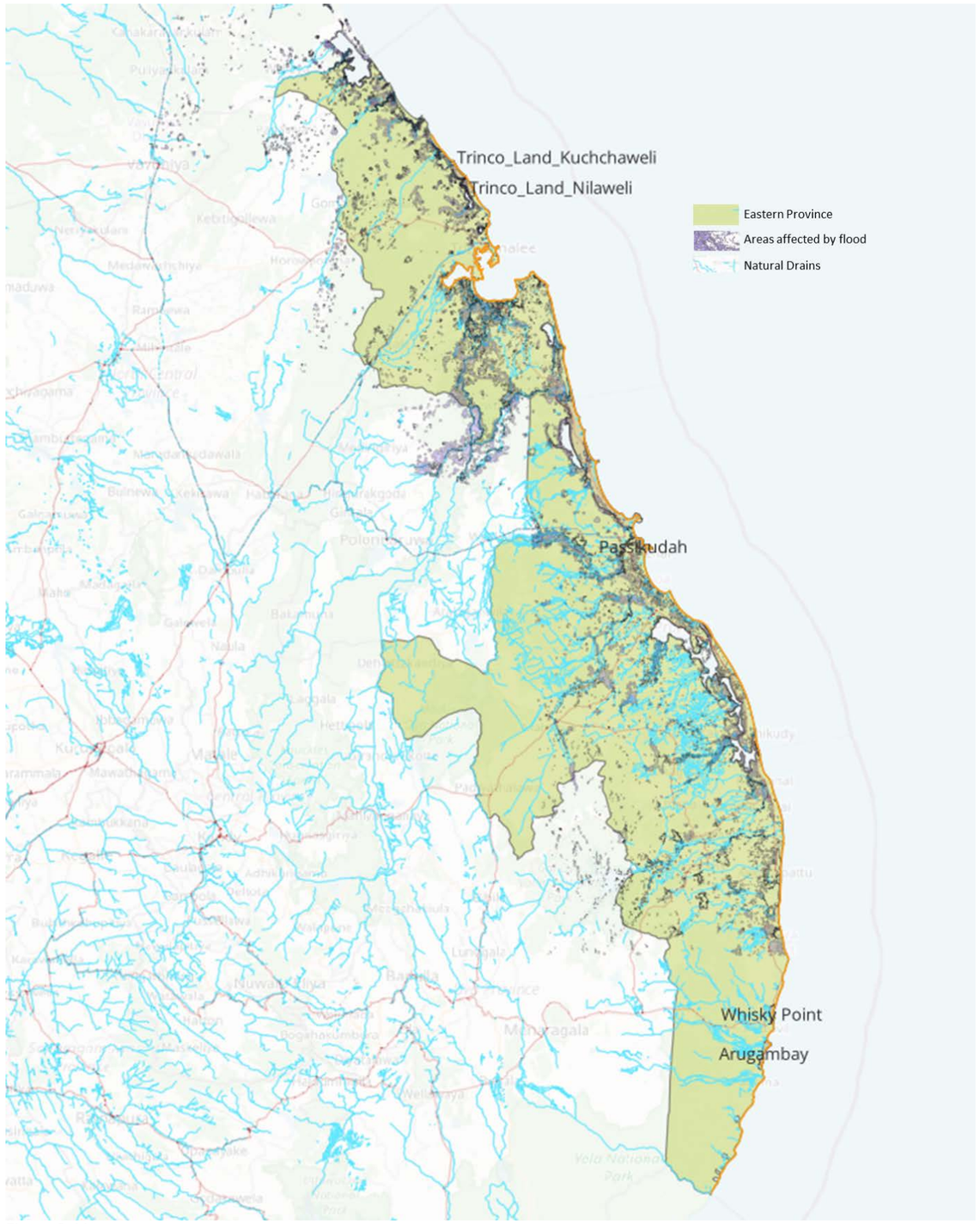


Figure 2.41 Natural drains

Source: Open street map data

WATER & SEWER

The domestic and industrial water demand in urban areas are presently catered by the National Water Supply and Drainage Board.

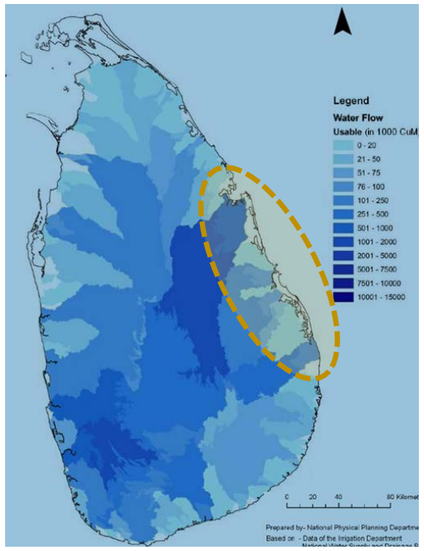
Based on National Physical Planning Policy & The Plan — 2017-2050, Eastern urban corridors have difficulty in providing water supply throughout, as the rivers in those areas may have scarcities to meet demands, therefore new water sources will have to be explored.

The strategy identified is for Optimum Supply and Environmental Sustainability

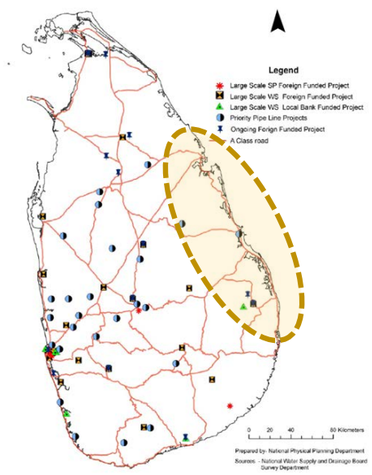
- Sustainable urban water drainage with rainwater harvesting facility both at local level and regional level will be required (provisions for more green and blue area within developments)
- Installation of rainwater harvesting facilities in individual developments shall be promoted.
- This strategy will compliment the water demand through ground water recharge and at the same time helps in as flood control measures.
- Interconnection of networks of water supply schemes.

Sewage disposal are mostly based on gravity system, it needs to be addressed on local basis.

The strategy is to have wastewater treatment plant up to tertiary treatment facility, which produces recycle water for non-potable usage, this will minimise potable water demand like maintaining green, cooling purpose and others.



Availability of Safe Drinking Water



Existing/ Proposed WS Projects

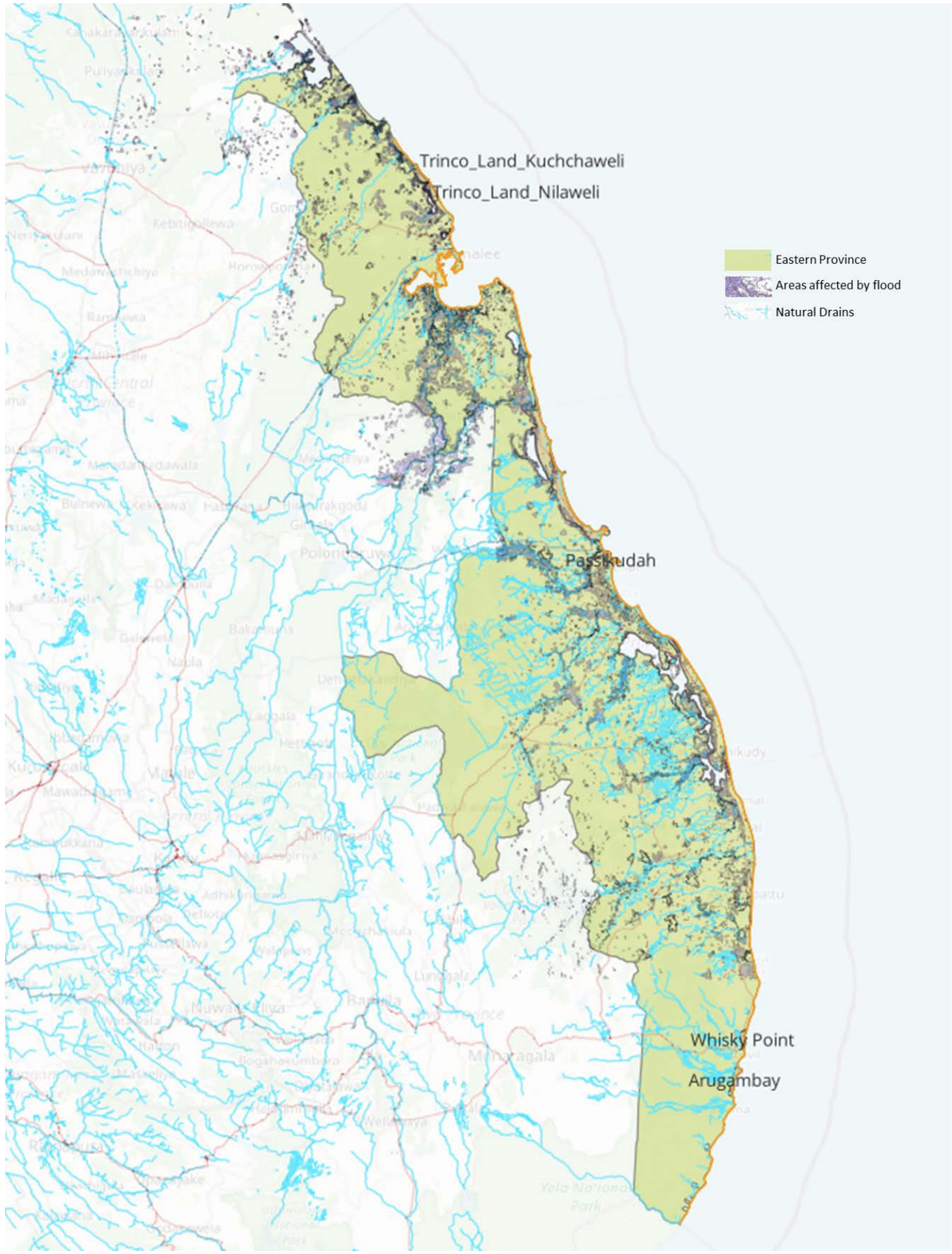


Figure 2.42 Natural drains

Source: Open street map data

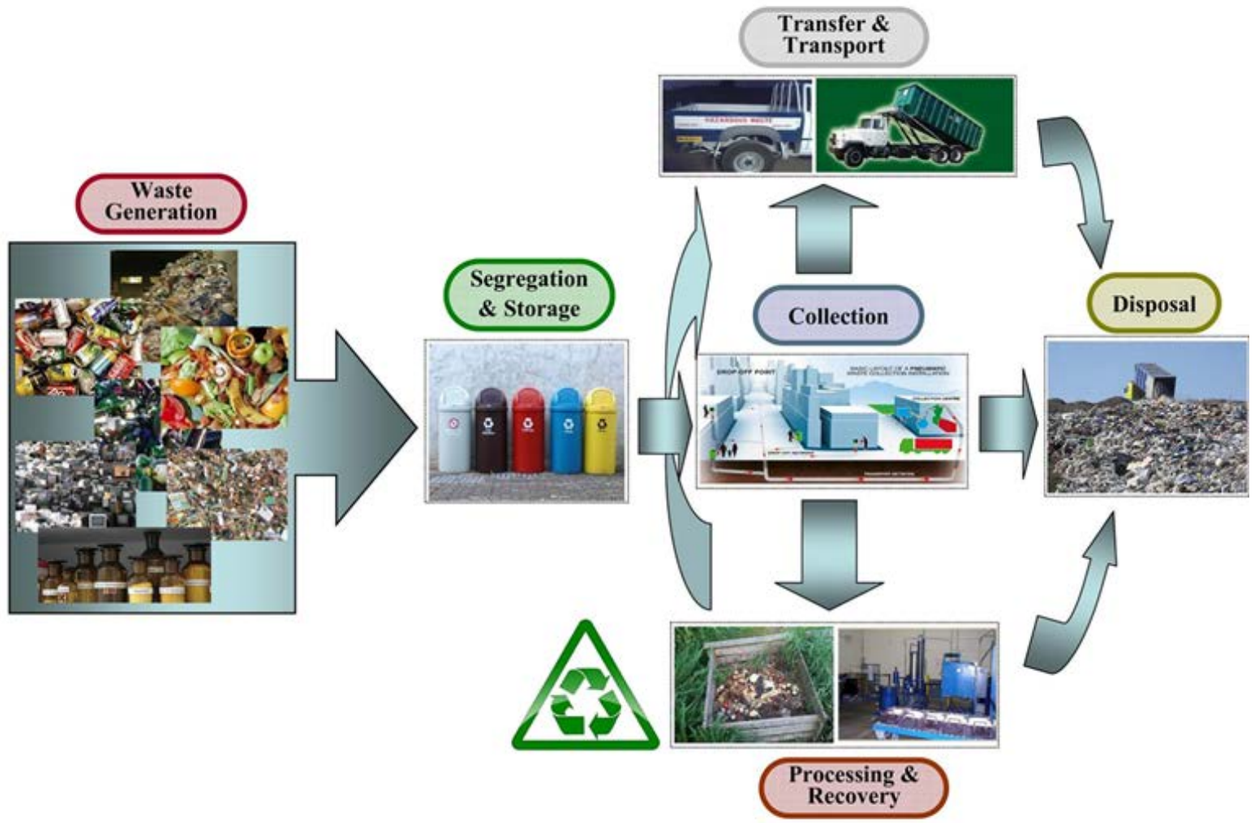
SOLID WASTE

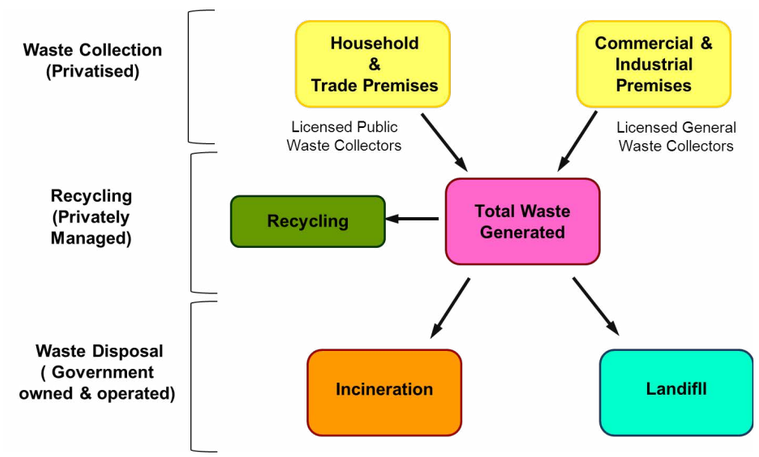
Based on National Physical Planning Policy & The Plan — 2017-2050, in relation to solid waste management, a centrally managed system that includes collection, transportation and disposal, supported by modern technological interventions, operated through a National Level Waste Management Authority is proposed to be established for main cities.

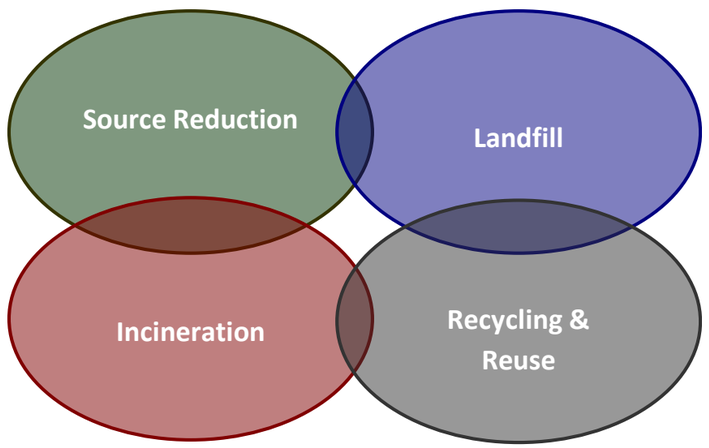
Some areas due to lower populations; solid waste can be managed with the conventional recycling, composting and sanitary landfilling system.

Multiple strategies have been identified;

- To adopt the Reduce-Reuse-Recycle (3Rs) concept to increase the life-span of the disposal sites and to promote environmental sustainability
- Disposal; Waste disposal to landfill site should be limited to non-biodegradable, inert waste and other waste that are not suitable either for recycling or for biological processing.
- Pathogenic waste and Hazardous industrial waste shall have its own dedicated treatment and disposal facility.







POWER & TELECOM

The local Transmission Power Network follows; 400kV, 220kV and 132kV/22kV

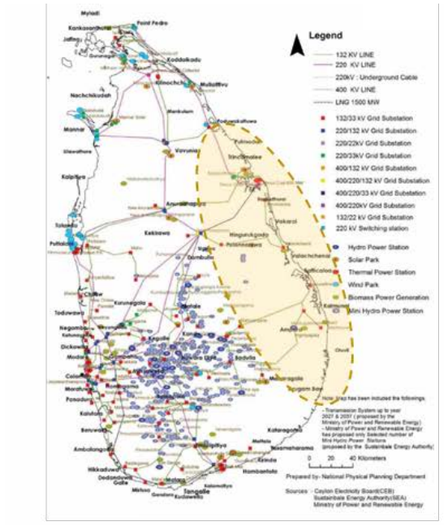
Sri Lanka Sustainable Energy Authority's (SLSEA) Energy Management Action Plan is to achieve about 30-40 % energy generation from renewable sources by 2050.

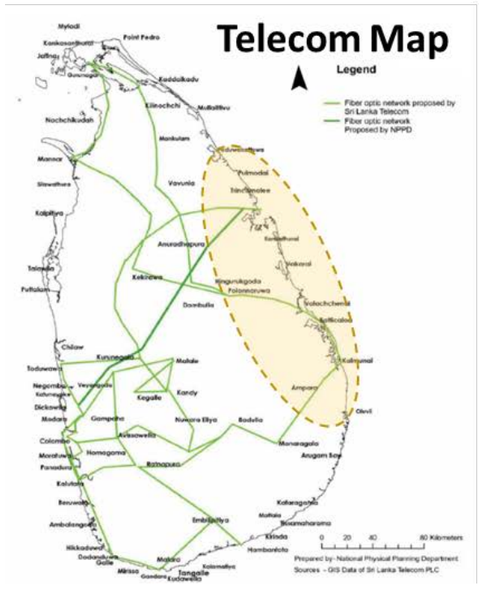
The focus will be more for clean energy like LNG, solar, biomass, mini hydro plants.

Based on National Physical Planning Policy & The Plan — 2017-2050, it has identified that its national, regional and local systems of planning, administration, public relations, communications, with state-of-the art digital infrastructure and have proposed fiber optic network to connect most of the places.

Strategies

- Roof top solar fields by urban development regulations in commercial and institutional developments.
- Wind Farm: The location is critical to the success of wind farm. The suitable wind speed for power generation is above 5m/s.
- The telecom requirement for each node shall be serviced from individual Telecom Station (Exchange).





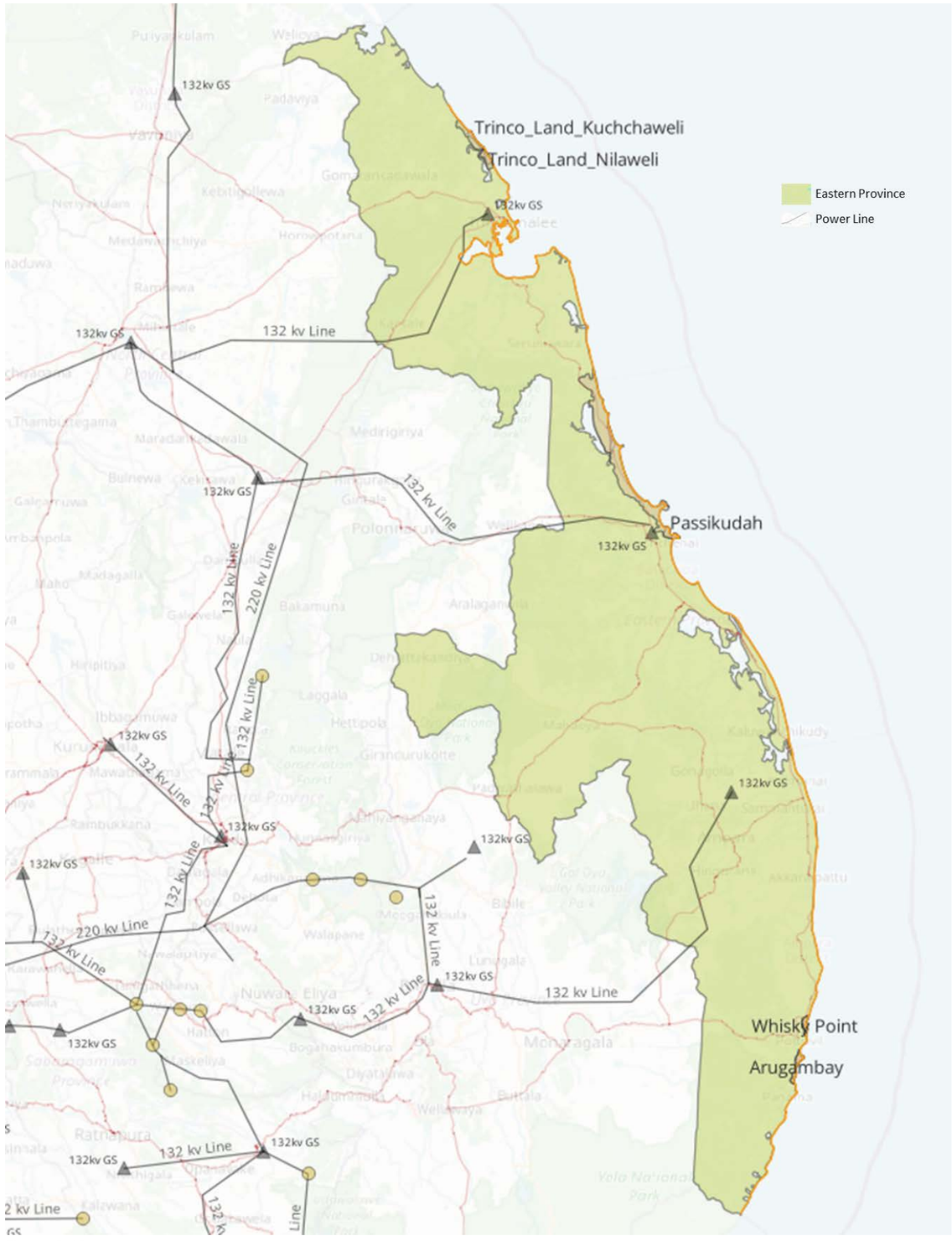


Figure 2.43 Existing power lines

Source: Ceylon Electricity Board

Eastern Province has the potential to become

THE COASTAL PARADISE OF SRI LANKA

Catalyzed by

4 Strategic Tourism Nodes

2.3.6 SUMMARY OF ANALYSIS & POSITIONING

Tremendous potential to capitalize on the coast, nature & wildlife in the region, and increase the tourism arrival & duration of stay.

OPPORTUNITY TO TAP ON DIVERSE TOURISM POTENTIAL THROUGH STRATEGIC TOURISM MANAGEMENT

Eastern Province have different things to offer making it one of a kind destination with long coastline of attractive destinations including Trincomalee – Religious/ Cultural Tourism & Marine activities; Batticaloa – Pristine beaches & Coral reefs; and Ampara – Surfing, Lagoons & Night life. Tourism Management through Information centers, guides, creating tourism circuits etc, shall enhance the tourism experience and stay duration.

OPPORTUNITY TO INCREASE FOOTFALL BY ENHANCING THE CONNECTIVITY

Upgrading the existing airports and providing domestic connectivity to the region enhancing the road connectivity through expressways & Highways including safe walking and biking facilities for tourists, and by modernizing the rail infrastructure and services.

OPPORTUNITY TO IMPROVE TOURISM ECOSYSTEM AND INCREASE THE REVENUE

Introducing Upscale & Luxury hospitality developments, entertainment zones, Retail, Restaurants and themed dining, Waiting lounges, Resting area in tourism sites etc and providing supporting retail, restaurants etc can increase the spending of the tourists exploring tourist activities which are nonseasonal and happens all year round.

Eastern Province is positioned to become **"THE COASTAL PARADISE OF SRI LANKA"** Catalyzed by 4 Strategic Tourism Nodes.

1. Kuchchaveli-Nilaveli as the International Destination for Marine Eco-Adventure.
2. Pasikudah as the Coastal Jewel of the East.
3. Whisky Point - Arugam Bay as the Surfing Paradise of the East complemented by Eco-Centric Beach Destination at the Peanut Farm.

300 KM GREAT EASTERN DRIVE OF SRI LANKA



Figure 2.44 Strategic Positioning of Eastern Province and Key Destinations

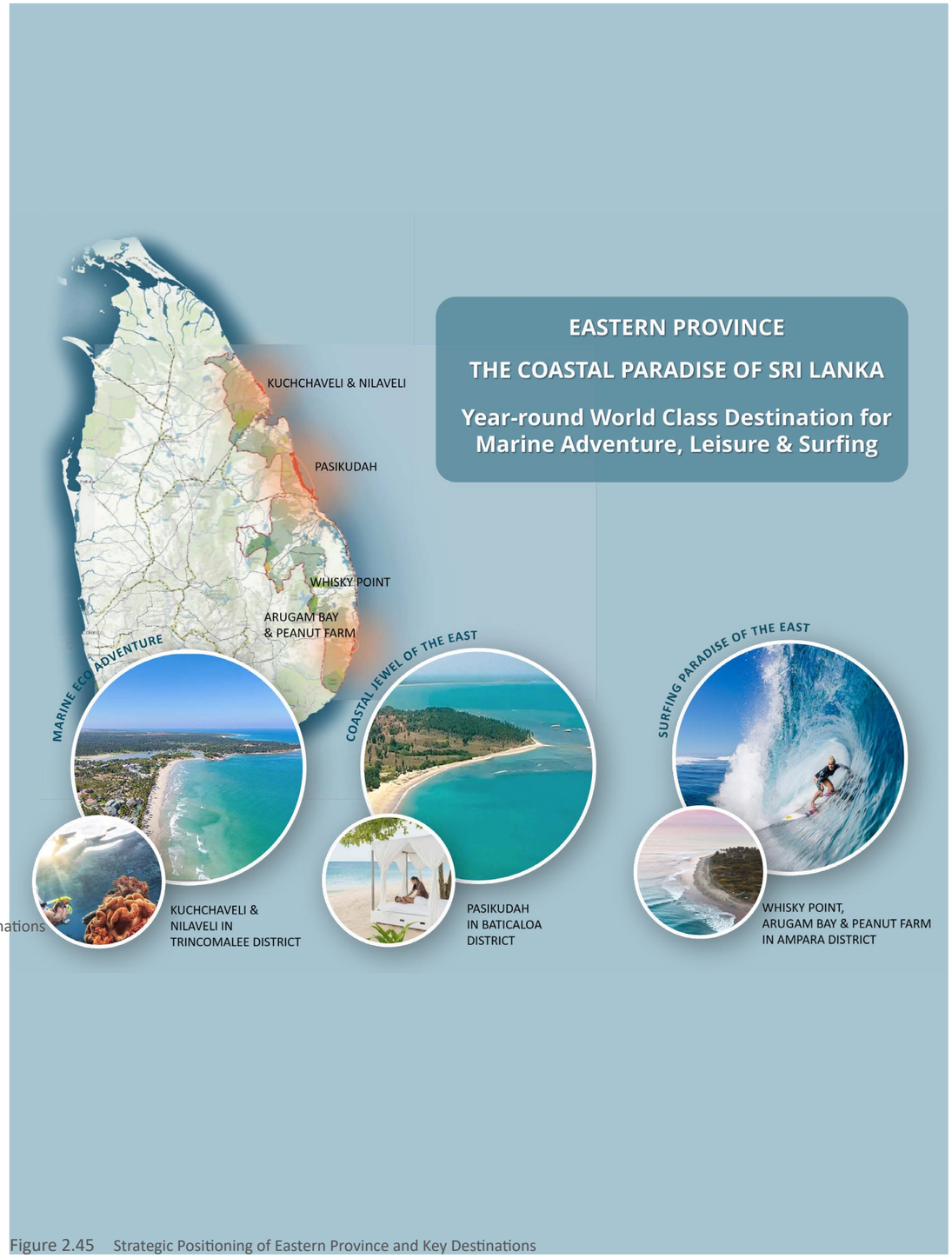


Figure 2.45 Strategic Positioning of Eastern Province and Key Destinations

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3 DEMAND PROJECTIONS & RECOMMENDATIONS

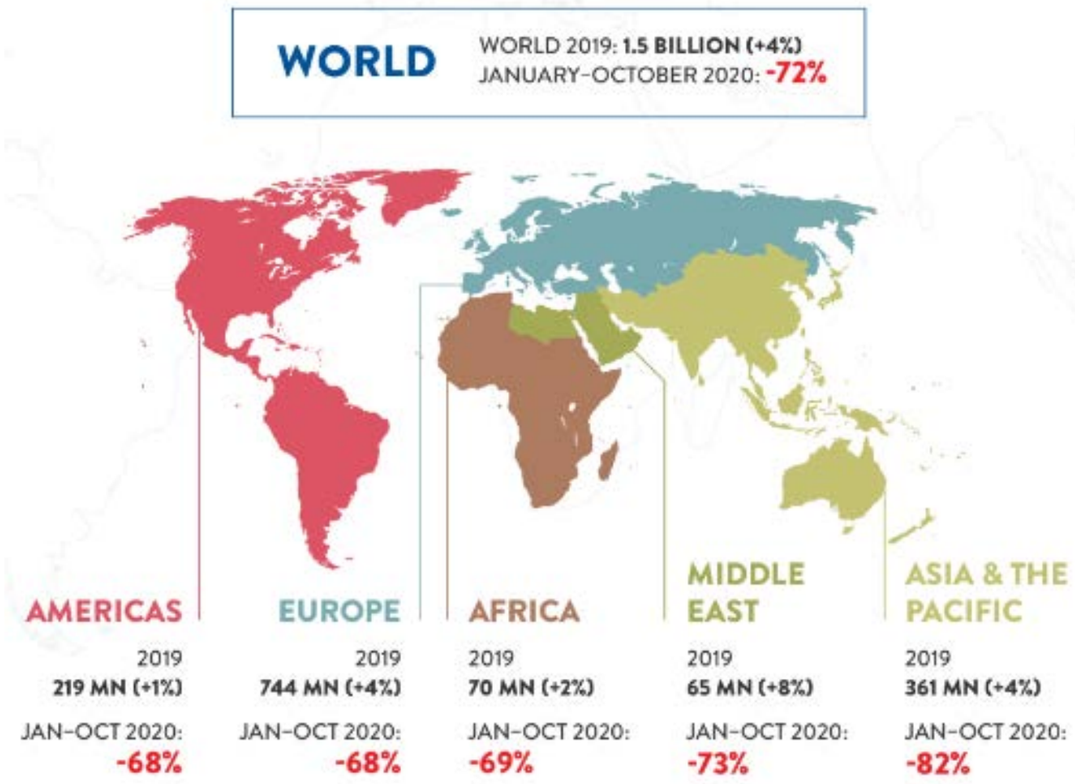
3.1. Sri Lanka Tourism Forecast
3.2. Eastern Province Tourism Projection Scenarios
3.3. Recommendations for Tourism Developments in Nilaveli and Kuchchaveli
3.4. Recommendations for Tourism Developments in Pasikudah
3.5. Recommendations for Tourism Developments in Whisky Point, Arugam Bay and Peanut Farm



3.1 SRI LANKA TOURISM FORECAST

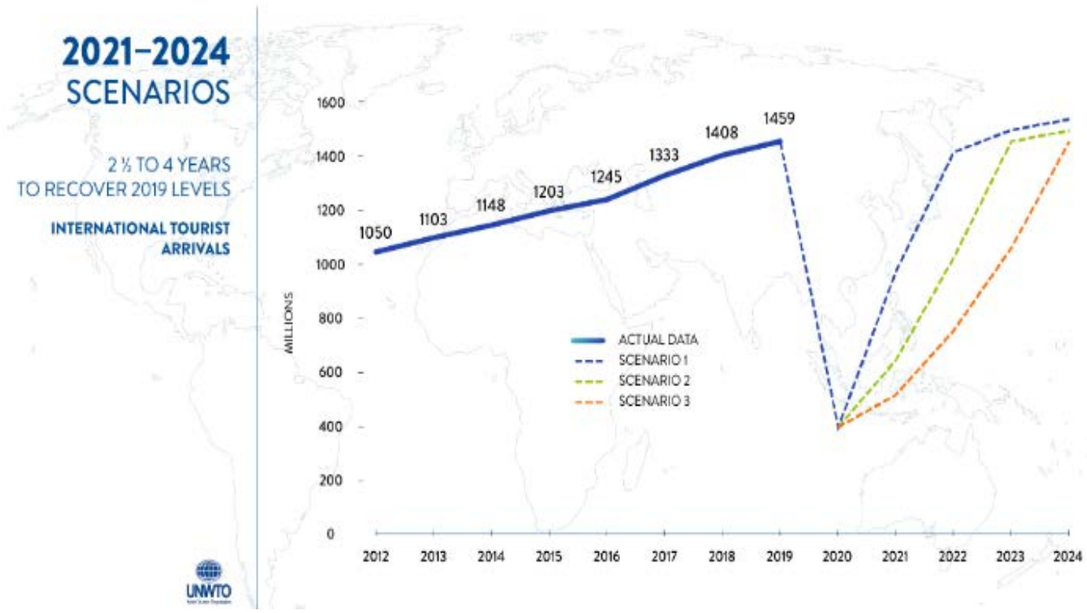
3.1.1 SRI LANKA TOURISM RECOVERY PROJECTION

ASIA & PACIFIC HAS REACHED 65% OF PRE-PANDEMIC LEVELS IN 2023 WITH SOUTH ASIA ALREADY RECOVERING AT 87% OF 2019 LEVELS



Other regions than APAC recorded ~ 25 – 30% recovery in tourist arrivals in comparison to pre -pandemic levels IN 2021

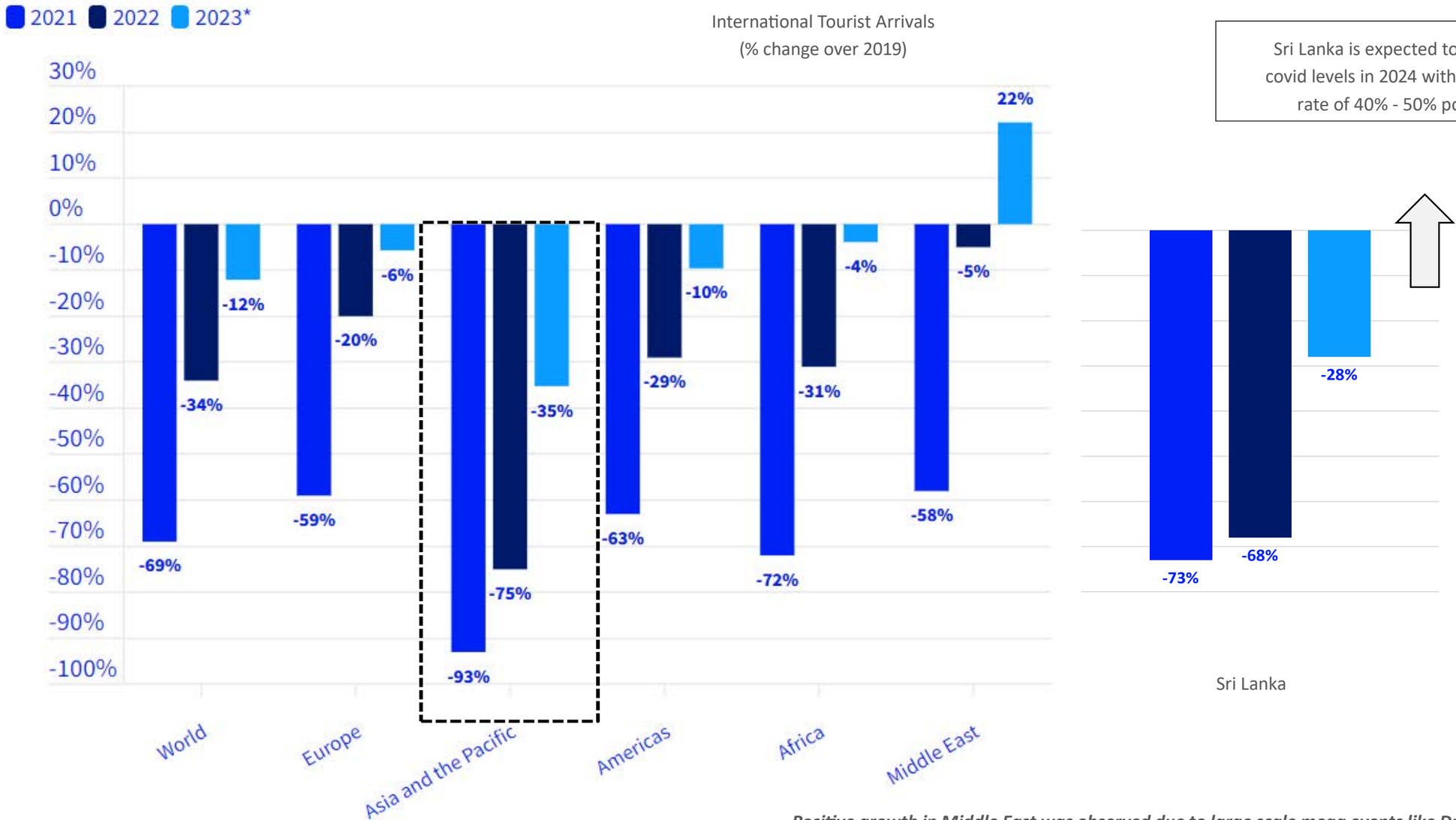
- Scenario 1: recovery in 2½ years (mid-2023)
- Scenario 2: recovery in 3 years (end of 2023)
- Scenario 3: recovery in 4 years (end of 2024)



APAC region is expected to bounce back to pre-covid levels by 2024 ~ faster recovery expected in other regions of Americas, Europe & Middle East by 2023

Figure 3.1 World's Tourism Forecast

RECOVERY OF APAC REGION SLOWER THAN THE AVERAGE GLOBAL RECOVERY, WHEREAS SRI LANKA HAS BEEN RECOVERING BETTER THAN THE APAC REGION IN ATTAINING PRE-COVID LEVELS

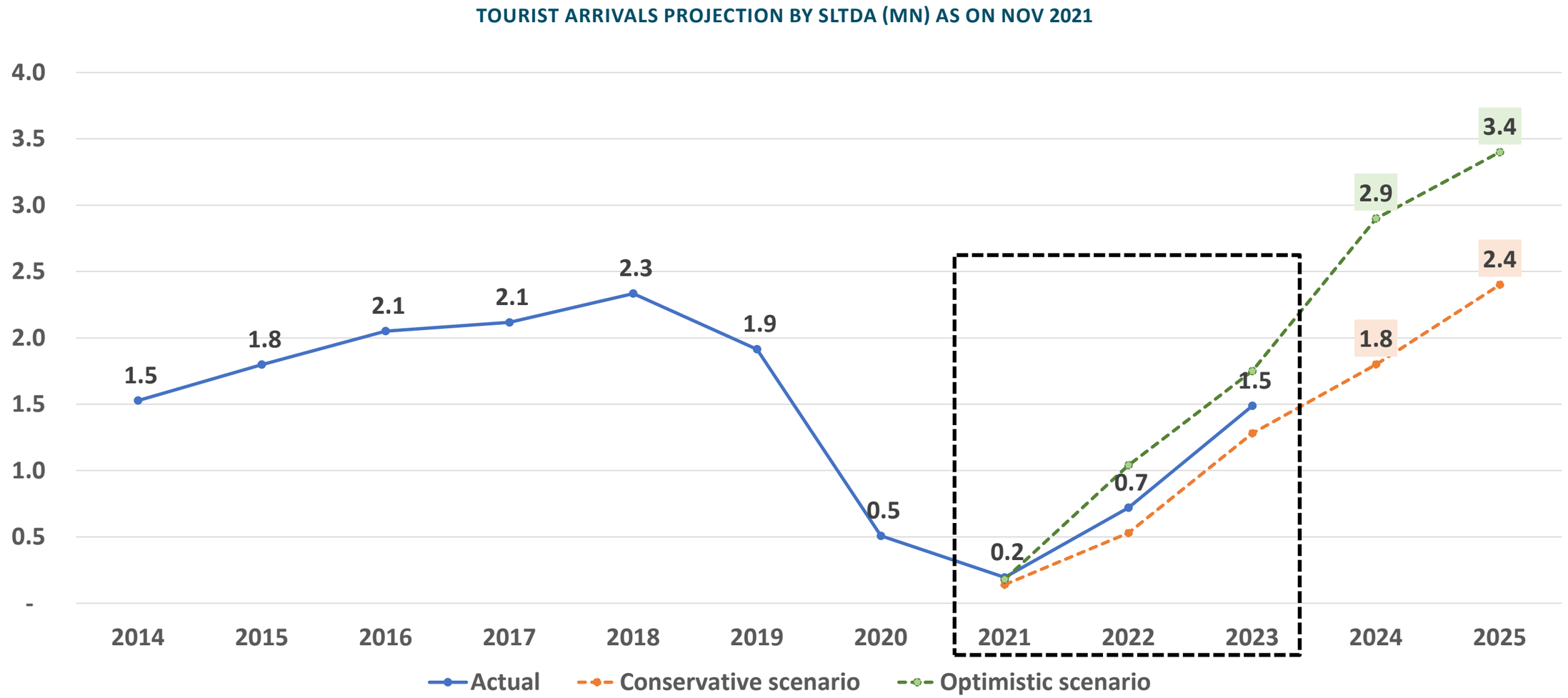


Sri Lanka is expected to touch pre-covid levels in 2024 with avg. growth rate of 40% - 50% post covid

Positive growth in Middle East was observed due to large scale mega events like Dubai Expo and Fifa world cup

Source: UNWTO, SLTDA

Figure 3.2 World's Tourist Arrivals after COVID



This speedy recovery is due to

- Pent up tourist demand from COVID restrictions
- Initiatives issue free tourist visas to visitors from seven countries, including China, India and Russia (from Oct 2023)
- MoU signed between Singapore Airlines and Sri Lanka Tourism Promotion Bureau (SLTPB) (2022)
- Promotional campaigns, Tourism Trade fairs and collaboration with Foreign missions (from 2021)

Figure 3.3 Tourism Arrival Projection by SLTDA

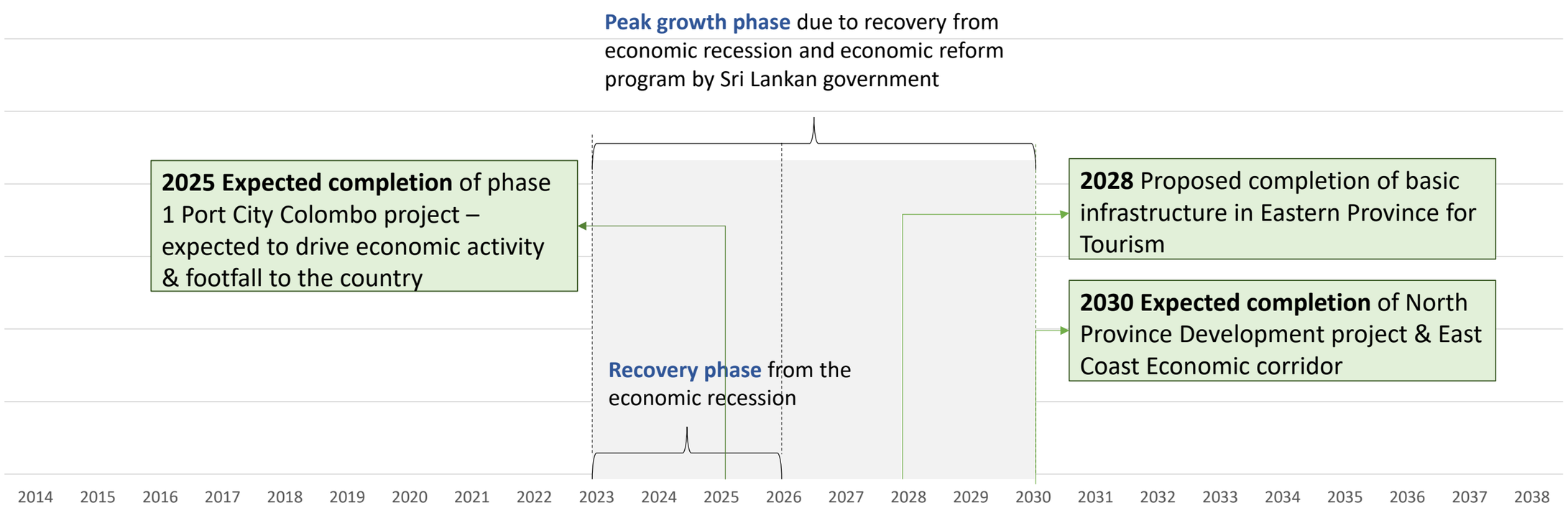
METHODOLOGY FOR TOURIST ARRIVAL PROJECTION

Table 3.1 Methodology and Approach for Tourism Projection

Steps	Region	Methodology	
1	Sri Lanka	**Projection of Foreign Arrivals**	Based on past growth trends, strategic initiatives, market recovery from covid
2		**Projection of organised room nights (3 star and above category)**	Based on SLTDA data and past growth trends
3		**Estimation on room inventory**	Based on the above data
4	Eastern Province	**Projection of Foreign Arrivals**	Based on past growth trends, strategic initiatives, market recovery from covid
5		**Projection of organised room nights (3 star and above category)**	Based on SLTDA data and past growth trends
6		**Estimation on room inventory**	Based on the above data
7	3 Districts	**Positioning split**	Based on activities, profile of tourists & market assessment
8		**Projection of Room inventory**	Based on share of hospitality supply and market assessment

3.1.2 SRI LANKA – TOURISM ARRIVAL PROJECTION SCENARIOS

Best case scenario	Low case scenario	Average
• Optimistic scenario with economic recovery at 2025 (7% y-o-y GDP growth by CBSL) • High economic growth with projects adhering to timelines and meeting expected demands • Strategic plan to boost tourism like free tourist visas for seven countries • Direct flight connectivity to Australia, Singapore, Japan, New Zealand, Korea, Indonesia, the Philippines and China becomes operational • E-visa system for tourists boosts arrivals into the country	• Scenario with economic recovery between 2027-28 (3% y-o-y GDP growth by CBSL) • On-going projects with extended timelines and delay of upcoming developments due to recovery from recession	• Average of Best case and Low case scenarios • Ongoing and upcoming development projects at medium pace while recovering from economic recession



TOURIST ARRIVALS (MN)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1.53	1.80	2.05	2.12	2.33	1.91	0.51	0.19	0.72	1.49

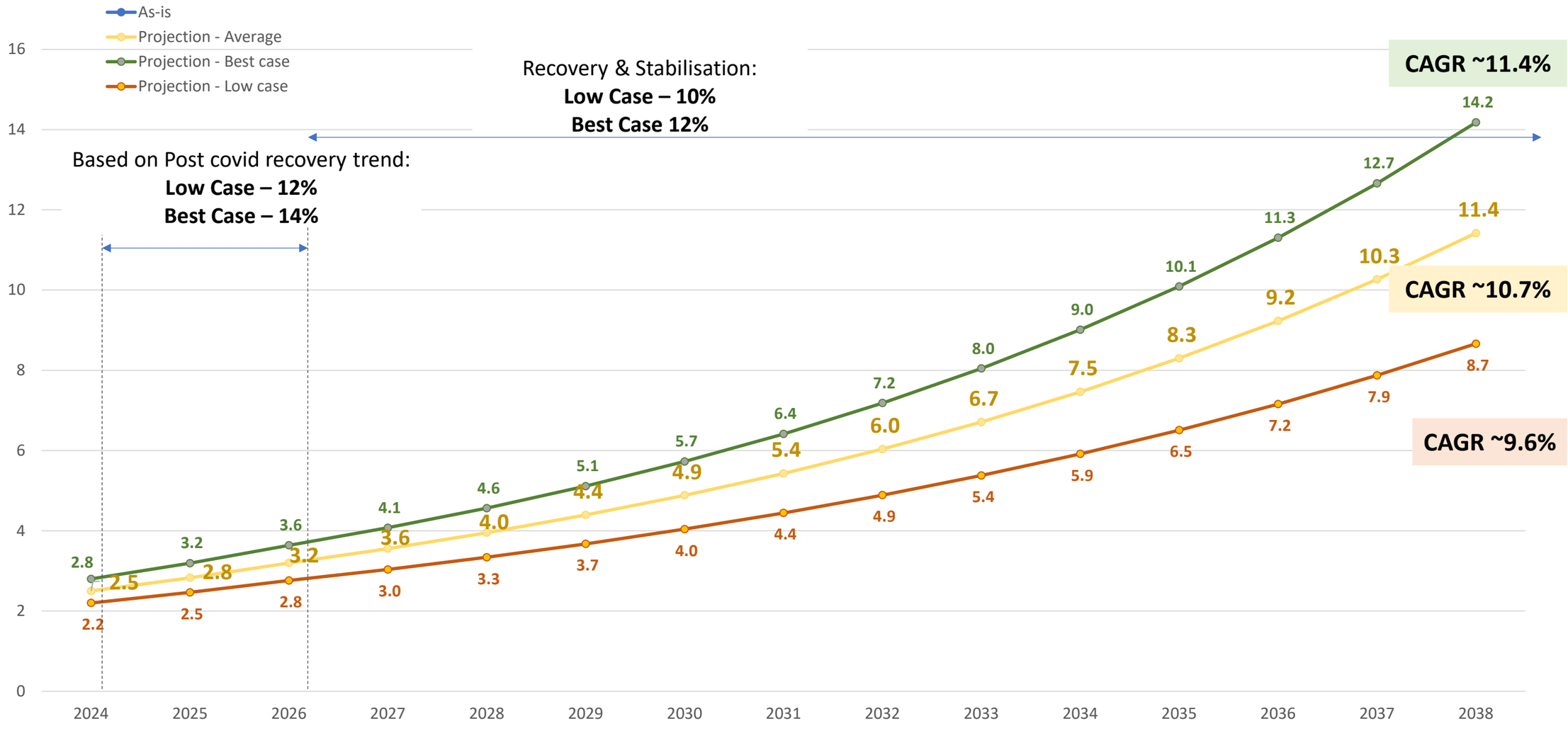


Figure 3.4 Sri Lanka Tourism Arrivals Projection Scenarios

3.1.3 SRI LANKA - ORGANISED ROOM NIGHTS

TOURIST ARRIVALS PROJECTION BY SLTDA (MN) AS ON NOV 2021

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
9.9	10.1	10.2	10.9	10.8	10.4	8.5	15.1	9.3	8.4

CALCULATION:

Overall room nights = Stay duration X Tourist arrivals

Organised room nights = 25%* X Overall room nights (3 star plus category)

*Organised room nights (3 star plus category) contributes to 25% of the total room nights

ORGANISED ROOM NIGHTS (MN)

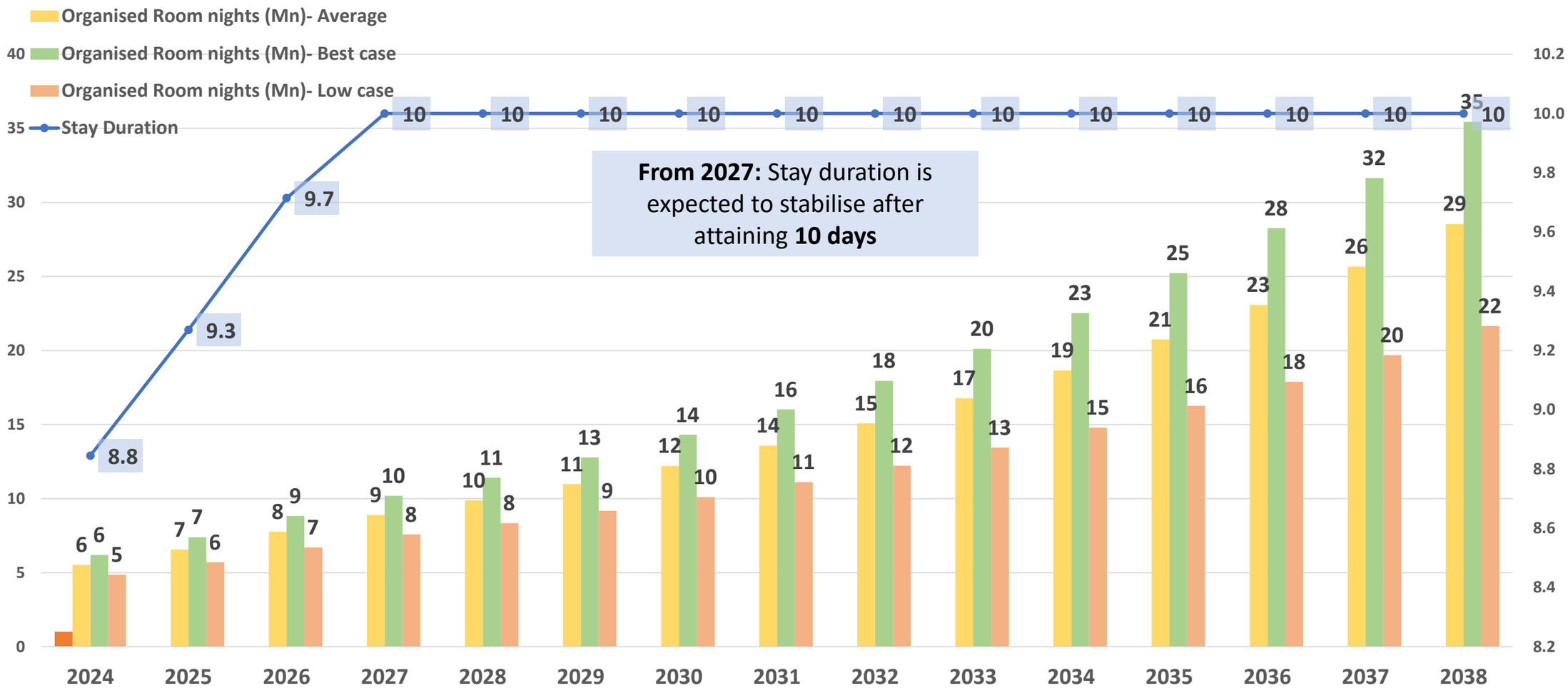


Figure 3.5 Sri Lanka Tourism Arrival Projection - Organized Room Nights by SLTDA

3.1.4 SRI LANKA – ADDITIONAL ROOMS

TOURIST ARRIVALS PROJECTION BY SLTDA (MN) AS ON NOV 2021

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
7,533	9,266	9,868	10,431	10,431	11,757	12,189	13,438	7,533	9,266

CALCULATION:

- YoY room addition = YoY additional room nights / 365 / 2.2*
- YoY additional room nights = Previous year delta room nights – current year delta room nights
- Delta room nights = Total no. of organised room nights – Occupied organised room nights
- *2.2 – Average no. of occupants in a room

ADDITIONAL Y-O-Y ROOMS (3 STAR AND ABOVE CATEGORY)

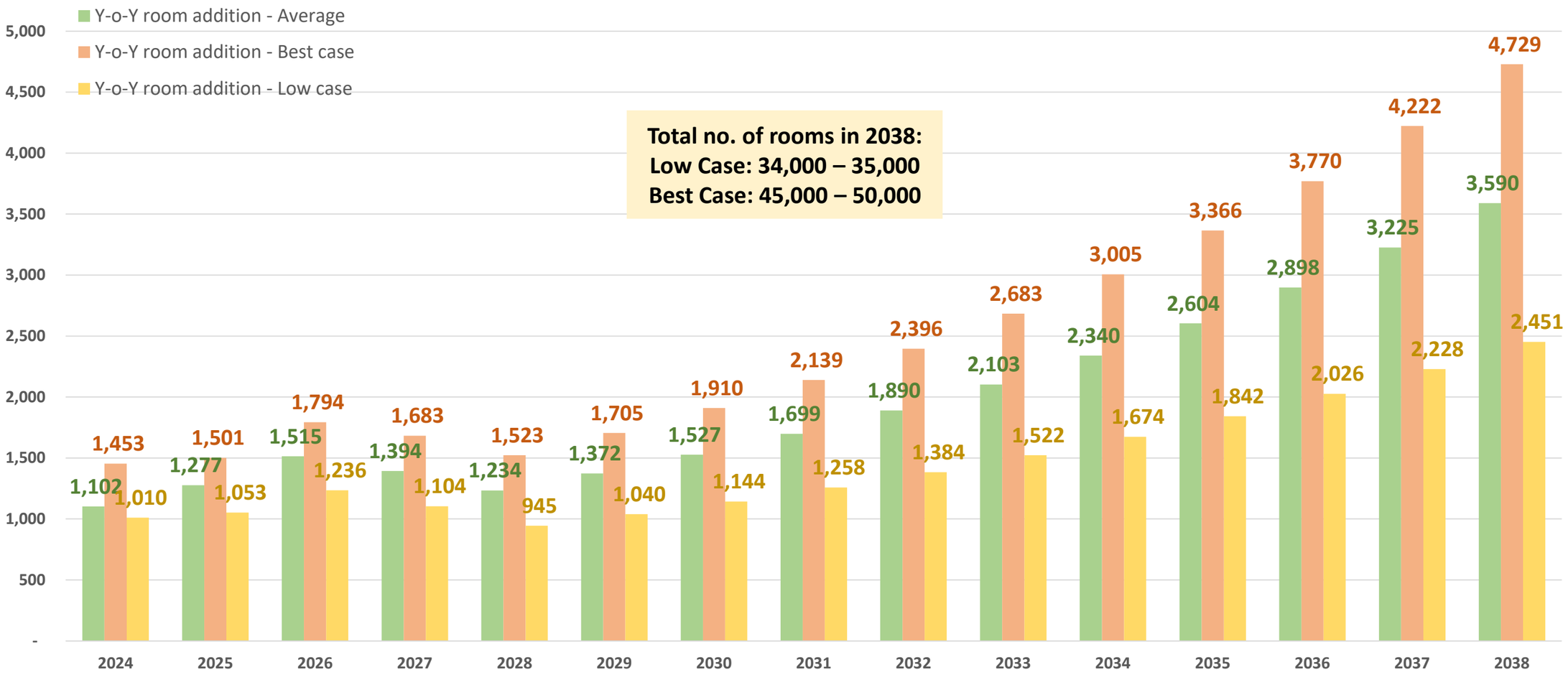


Figure 3.6 Sri Lanka Tourism Arrival Projection - Additional Rooms by SLTDA

3.2 EASTERN PROVINCE – TOURISM PROJECTION SCENARIOS

ASSUMPTIONS		
Implementation Phase (1-5 yrs)	**Growth Phase (6-10 yrs)**	**Established Phase (>10 yrs)**
• Implementation of Infrastructure development, new activities & Policy interventions in Eastern Province • % of SL tourist visiting EP remains same as 2017-19 levels	• Growth in arrivals due to infrastructure developments, new activities and policies driving investments • % of SL tourist visiting EP increases at 15-20% of pre-covid levels	• EP is established as a tourism destination in Sri Lanka with the region forming a circuit within itself • % of SL tourist visiting EP increases at 10 - 15% after 10 years

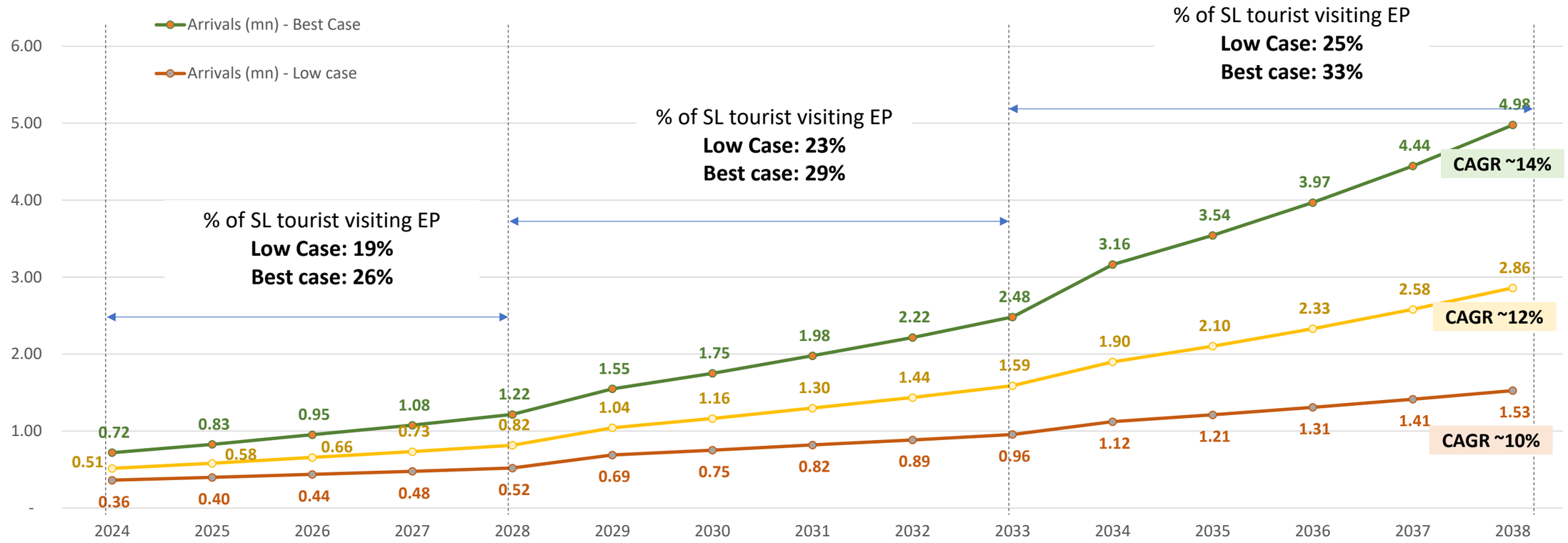


Figure 3.7 Eastern Province - Tourism Projection Scenarios

3.2.1 EASTERN PROVINCE – TOURISM PROJECTION (LOW CASE SCENARIO EXTENDED TO 2059)

TOURIST ARRIVALS IN EASTERN PROVINCE (IN MN)

2017	2018	2019
0.4	0.60	0.40

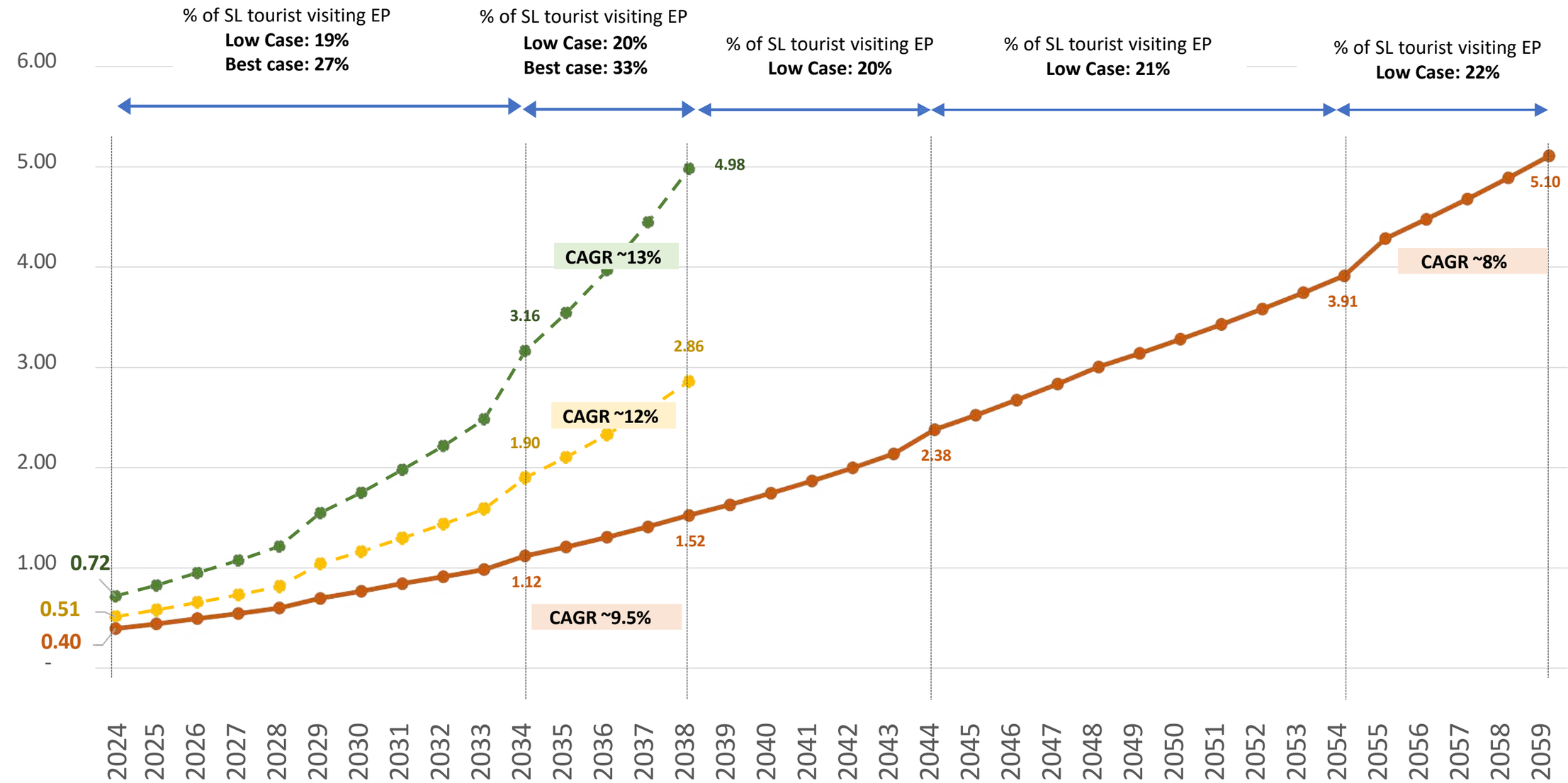


Figure 3.8 Eastern Province - Tourism Projection Scenarios (Low Case Scenario Extended to 2059)

3.2.2 EASTERN PROVINCE – ORGANISED ROOM NIGHTS

CALCULATION:

Overall room nights = Stay duration X Tourist arrivals

Organised room nights = 25%* X Overall room nights (3 star plus category)

*Organised room nights (3 star plus category) is expected to grow & stabilise at 36% of total room nights

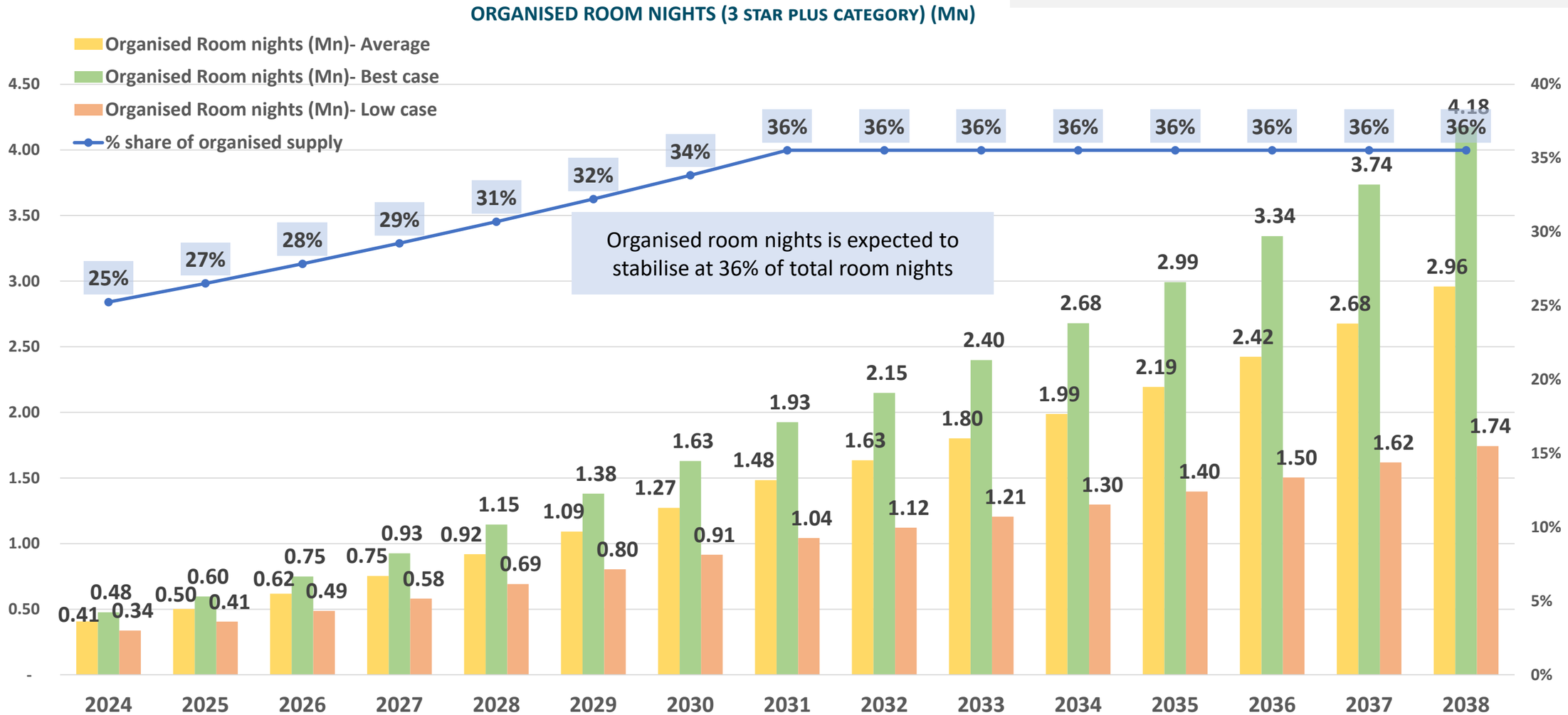


Figure 3.9 Eastern Province - Organized Room Nights

3.2.3 EASTERN PROVINCE – ADDITIONAL ROOMS

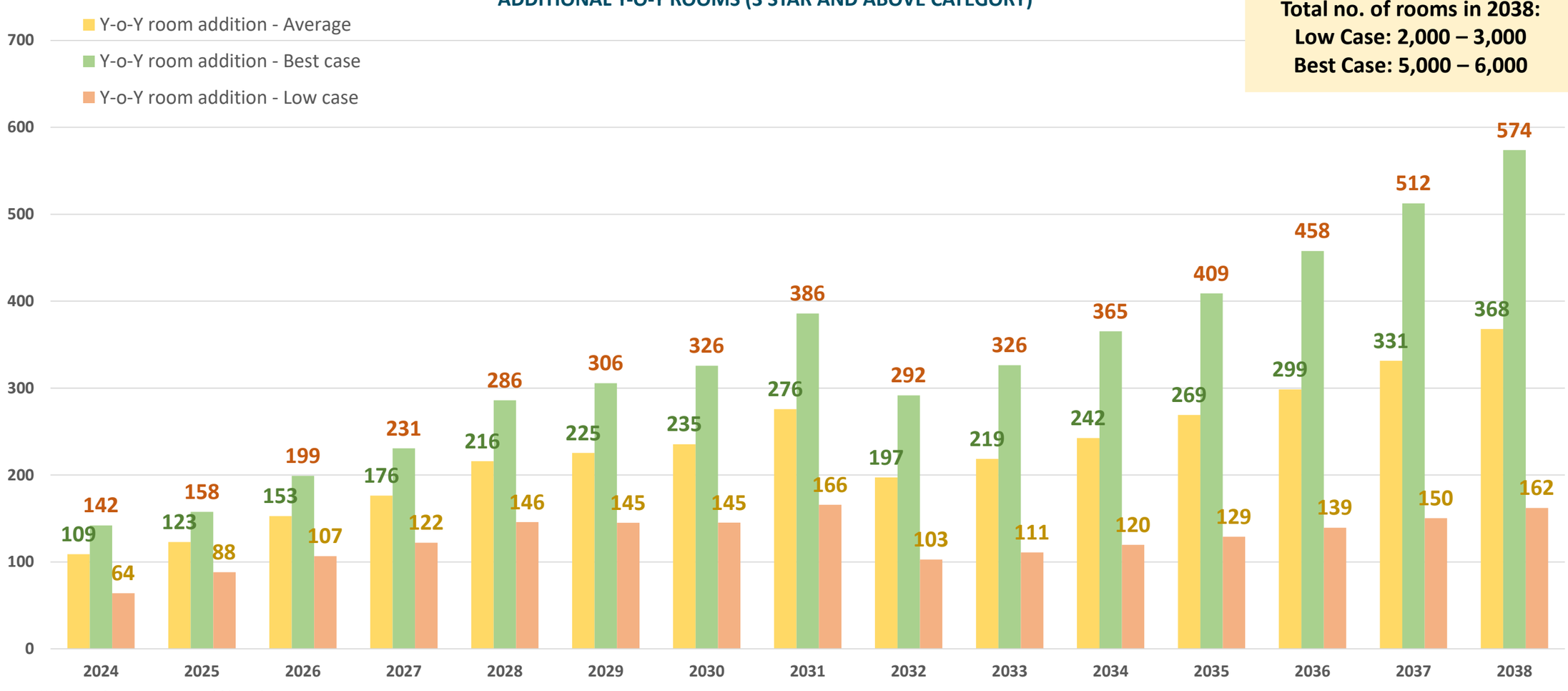
TOURIST ARRIVALS PROJECTION BY SLTDA (MN) AS ON NOV 2021

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
7,533	9,266	9,868	10,431	10,431	11,757	12,189	13,438	7,533	9,266

CALCULATION:

- YoY room addition = YoY additional room nights / 365 / 2.2*
- YoY additional room nights = Previous year delta room nights – current year delta room nights
- Delta room nights = Total no. of organised room nights – Occupied organised room nights
- *2.2 – Average no. of occupants in a room

ADDITIONAL Y-O-Y ROOMS (3 STAR AND ABOVE CATEGORY)



Total no. of rooms in 2038:
Low Case: 2,000 – 3,000
Best Case: 5,000 – 6,000

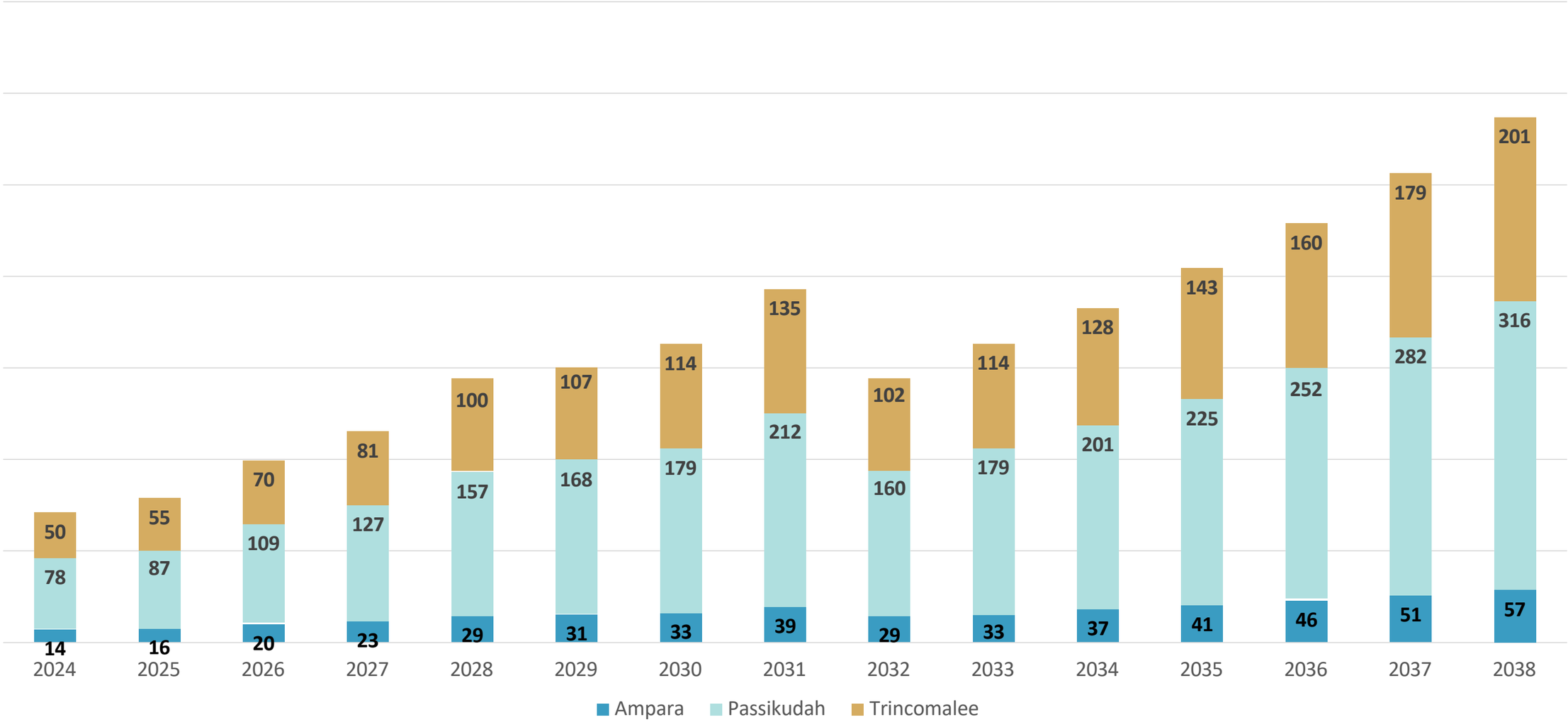
Figure 3.10 Eastern Province - Additional Rooms

3.2.4 EASTERN PROVINCE – ADDITIONAL ROOMS (NODAL SPLIT)

HIGH CASE SCENARIO

ADDITIONAL Y-O-Y ROOMS (3 STAR AND ABOVE CATEGORY)

Node	% of room split for 3,4,5 star rooms
Trincomalee	35%
Batticaloa	55%
Ampara	10%

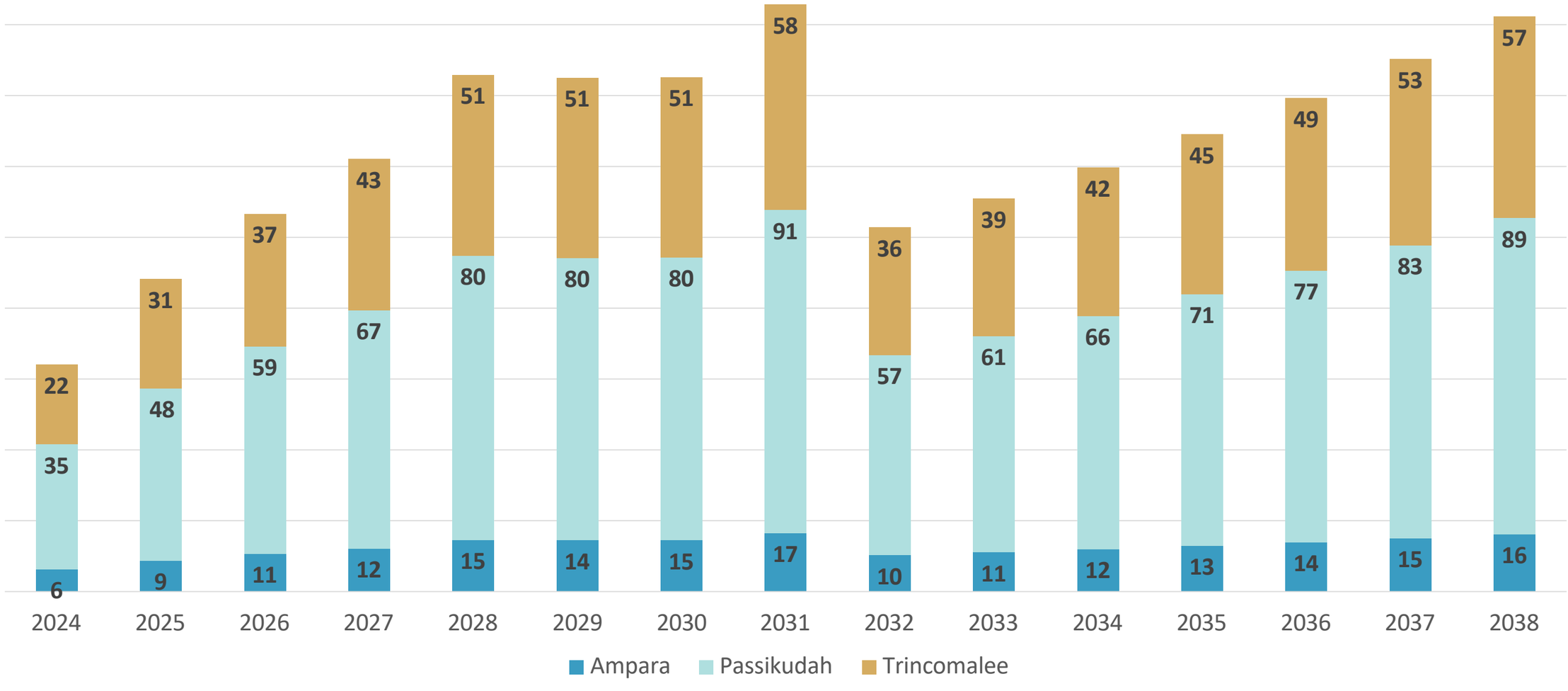


3.2.5 EASTERN PROVINCE – ADDITIONAL ROOMS (NODAL SPLIT)

LOW CASE SCENARIO

ADDITIONAL Y-O-Y ROOMS (3 STAR AND ABOVE CATEGORY)

Node	% of room split for 3,4,5 star rooms
Trincomalee	35%
Batticaloa	55%
Ampara	10%



3.2.6 EASTERN PROVINCE – ESTIMATION OF LAND AREA REQUIREMENT (HIGH CASE SCENARIO)

Eastern Province Hospitality market: Demand estimation for 5, 10 & 15 years

Table 3.2 Eastern Province - Hospitality Market: Demand Estimation (High Case Scenario)

Eastern Province Hospitality market: Demand estimation for 5, 10 & 15 years

Category of Hotels/Resorts	5-Star	4-Star	3-Star
Category split of room keys	40%	40%	20%
Total No. of room keys - based on Tourist arrivals demand estimates			
Total No. of room keys	**1,987**	**1,987**	**994**
5 years (2024 -28)	406	406	203
10 years (2029 -33)	654	654	327
15 years (2034 -38)	927	927	464
Total No. of Hotels - based on average sizing from benchmarks			
Total No. of hotels/ resorts	**20**	**33**	**13**
5 years (2024 -28)	4	7	3
10 years (2029 -33)	7	11	4
15 years (2034 -38)	9	15	6
Average land area required (hectares) - based on average sizing from benchmarks			
Total area	**137**	**137**	**13**
5 years (2024 -28)	28	28	3
10 years (2029 -33)	45	45	4
15 years (2034 -38)	64	64	6

3.2.7 EASTERN PROVINCE – ESTIMATION OF CATEGORY WISE LAND AREA REQUIREMENT (HIGH CASE SCENARIO)

Eastern Province Hospitality market: Demand estimation for 5, 10 & 15 years

Table 3.3 Eastern Province - Hospitality Market: Demand Estimation (High Case Scenario)

Category of Hotels/Resorts	5-Star	4-Star	3-Star
Category-wise % share of hotels/resorts			
Ampara	0%	10%	30%
Passikudah	65%	60%	25%
Trincomalee	35%	30%	45%
Land area requirement (in hectares)			
Ampara	0	24	8
Passikudah	79	64	3
Trincomalee	55	48	6
No. of rooms			
Ampara	0	199	298
Passikudah	1,292	1192	248
Trincomalee	696	596	447

3.2.8 EASTERN PROVINCE – ESTIMATION OF LAND AREA REQUIREMENT (LOW CASE SCENARIO)

Eastern Province Hospitality market: Demand estimation for 5, 10 & 15 years

Table 3.4 Eastern Province - Hospitality Market: Demand Estimation (Low Case Scenario)

Eastern Province Hospitality market: Demand estimation for 5, 10 & 15 years

Category of Hotels/Resorts	5-Star	4-Star	3-Star
Category split of room keys	40%	40%	20%
Total No. of room keys - based on Tourist arrivals demand estimates			
Total No. of room keys	**759**	**759**	**379**
5 years (2024 -28)	211	211	105
10 years (2029 -33)	268	268	134
15 years (2034 -38)	280	280	140
Total No. of Hotels - based on average sizing from benchmarks			
Total No. of hotels/ resorts	**8**	**13**	**5**
5 years (2024 -28)	2	4	1
10 years (2029 -33)	3	4	2
15 years (2034 -38)	3	5	2
Average land area required (hectares) - based on average sizing from benchmarks			
Total area	**61**	**61**	**6**
5 years (2024 -28)	17	17	2
10 years (2029 -33)	22	22	2
15 years (2034 -38)	23	23	2

3.2.9 EASTERN PROVINCE – ESTIMATION OF CATEGORY WISE LAND AREA REQUIREMENT (LOW CASE SCENARIO)

EASTERN PROVINCE HOSPITALITY MARKET: DEMAND ESTIMATION FOR 5, 10 & 15 YEARS

Table 3.5 Eastern Province - Hospitality Market: Demand Estimation (Low Case Scenario)

Category of Hotels/Resorts	5-Star	4-Star	3-Star
Category-wise % share of hotels/resorts			
Ampara	0%	10%	30%
Passikudah	65%	60%	25%
Trincomalee	35%	30%	45%
Land area requirement (in hectares)			
Ampara	0	15	3
Passikudah	40	37	1
Trincomalee	22	18	3
No. of rooms			
Ampara	0	76	114
Passikudah	493	455	95
Trincomalee	266	228	171

3.3 MARKETING RECOMMENDATIONS FOR EASTERN PROVINCE

PARAMETER	OPPORTUNITIES
Event Calendar	Organising the activities viz, surfing in Ampara, dolphin and whale watching in Nilaveli etc. as large-scale global events and marketed as seasonal events with events calendar
Attracting existing footfalls	Advertising through billboards, pamphlets and brochures Eastern Province as a tourism destination in airports of Germany, UK, Russia and China which have large tourists coming to Sri Lanka but not Eastern Province
Tourism Kiosks	Eastern Province Tourism kiosks in airports to promote and share details about the events and site seeing locations
Travel Operator & Consultant tie-ups	Tie-up with travel operators and consultants to advertise about the site seeing locations in Eastern Province in their websites, mobile applications and recommendation to tourists
Airlines tie-ups	Tie-up with airline operators to provide a marketing brochure to all passengers highlighting the people, culture, food, events, wildlife, nature and site seeing places
Promoting through films	Invite renowned firm directors and producers to shoot movies in Eastern Province highlighting the nature's beauty and pristine beaches
Marketing with celebrities and sponsorships	Sponsor trips to travel influencers, celebrities, athletes etc to collaborate on social media while highlighting the people, culture, food, events, wildlife, nature and site seeing places
Branding	Create a branding for Eastern province through tag lines, mascots and goodies and promote through airport advertising, road shows, promotion campaigns
Digital engagement	Provide live updates on tourism events, seasons and activities in Eastern Province through social media handles to keep it engaging
Connecting with tourists	Tie-up with prominent hospitality brands to place marketing brochure in all the rooms and designated person in the reception for enquiry about the site seeing locations, accommodation and travel facilities

Case in point

BERMUDA TOURISM SECTOR

Collaboration with celebrities and social media marketing - The strategy capitalized on content developed jointly with travel and fashion influencer Wendy Nguyen, who has a following exceeding 1.1 million on Instagram, and Meredith Andrews, a renowned local photographer and artist.

Tie-up with travel operator – Publishing advertisement and sponsorships through social posts in Travel & Leisure's website

Printed marketing & Brochures – printed editions of brochures with QR code directing readers to tourism sector website gotobermuda.com

*** Recommendations for marketing are based on assuming the basic tourist amenities are met, proposed project components and connectivity are established.

MINISTRY OF ENVIRONMENT	MINISTRY OF TRANSPORTATION AND HIGHWAYS	MINISTRY OF INVESTMENT PROMOTION	SLTDA	UDA	EASTERN PROVINCE COUNCIL	PARTNER (PRIVATE PLAYER)
Responsible to provide Environmental Clearance Approval for the projects All the nodes are environmentally sensitive due to the presence of pristine beaches with marine ecosystem like corals and aquatic animals. It is necessary to get approvals from the Ministry of Environment for projects within the Eastern Province by complying to the regulation norms.	Responsible to establish road infrastructure to provide access to tourism developments Road infrastructure in the Eastern Province needs to be developed to enhance the experience and accessibility of the tourists. Inter and Intra connectivity of road infrastructure is necessary to boost tourist inflow in EP	Responsible to promote private sector investments and FDI to Tourism projects of Eastern Province The proposed components in the Eastern Province require funding from private sector of Foreign institutions for development and operations.	Responsible to provide land for development on lease basis to the partner and collect Revenue share or Annual Concession Fee from the partner. The lands which belong to SLTDA will be provided on lease basis to the partner as the ownership belongs to SLTDA	Responsible to acquire the private land for development and facilitate approvals for the development by the private player Acts a SPOC for the private party to facilitate development and solve any issues between the private partner and the government Co-ordinates between departments and stakeholders and keep the land ready for development. UDA is the regulatory authority of Sri Lanka and is responsible for the overall development. Hence it is necessary to get approvals from UDA for development of tourist infrastructure	Responsible to provide land for development on lease basis to the partner and collect Revenue share or Annual Concession Fee from the partner The lands which belong to EPC will be provided on lease basis to the partner as the ownership belongs to EPC.	Design, build, fund and operate and generates revenue until the concession period Provides revenue share/ Annual Concession fee to the land owner Returns the land and building to UDA after concession period (30 years).

3.4 RECOMMENDATIONS FOR TOURISM DEVELOPMENTS IN NILAVELI & KUCHCHAVELI

3.4.1 NILAVELI & KUCHCHAVELI : TOURISM MARKET ANALYSIS OVERVIEW

Trincomalee is the port city for the Eastern Coast of Sri Lanka and is one of the key economic centre for the Eastern Province

Port, Industrial, Fishing, Farming, Small Businesses

Key Economic Activities

2,727

Land Area (Sq. Km)

4.2% share to Sri Lanka

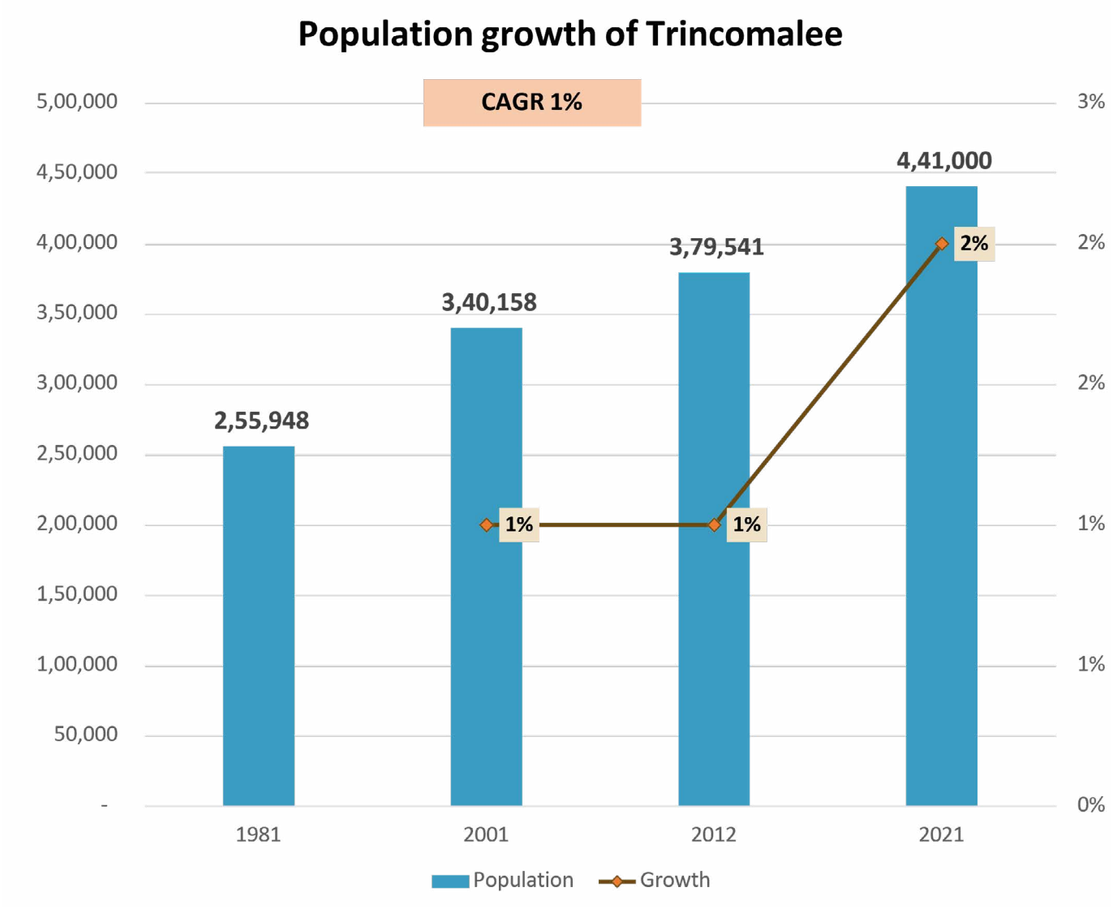
27% share to EP

0.44

Population in Mn (2021)

1.9% share to Sri Lanka

25% share to EP



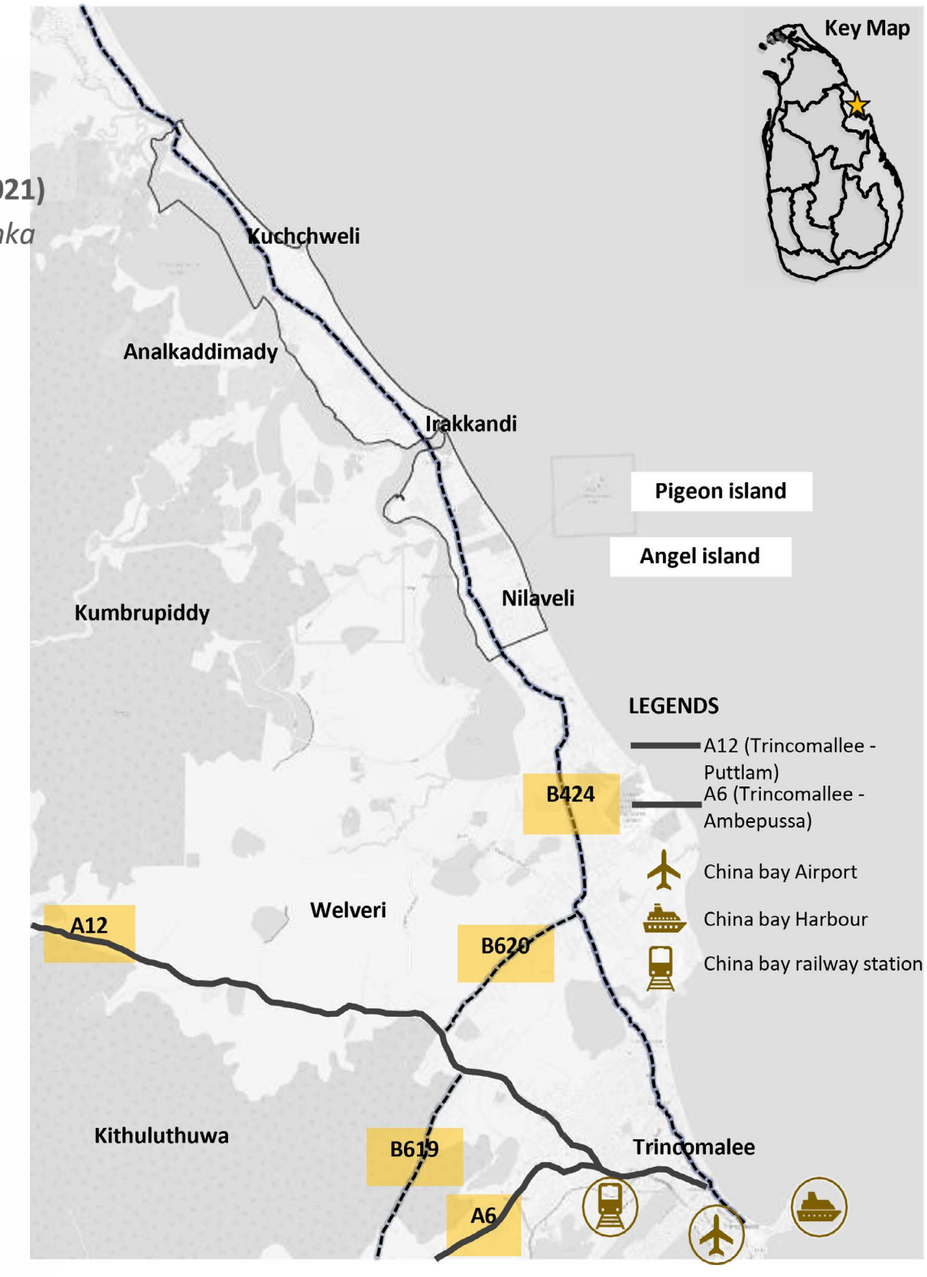


Figure 3.11 Nilaveli & Kuchchaveli: Key Infrastructure

3.4.2 NILAVELI & KUCHCHAVELI : TOURIST ACTIVITY

Trincomalee, as a part of the Cultural triangle, attracts significant number of religious and cultural tourist to the region

TOURIST PATTERN FOR RELIGIOUS TOURISM

Colombo — Entry point to SL

166 kms

Sigiriya / Habarana — World Heritage site

98 kms

Trincomalee — *Religious Tourism*

1.5 – 2 days
Average stay duration

USD 350 - 400
Average spending per person daily

RELIGIOUS / CULTURAL TOURISM		
Key location	Season/ Festival	Duration
Thiru Koneswaram Temple	March – April	2 – 3 hrs
Pathirakali Amman Temple	March - July	2 – 3 hrs
Sri Lakshmi Narayana Perumal Kovil	All year	1 – 2 hrs

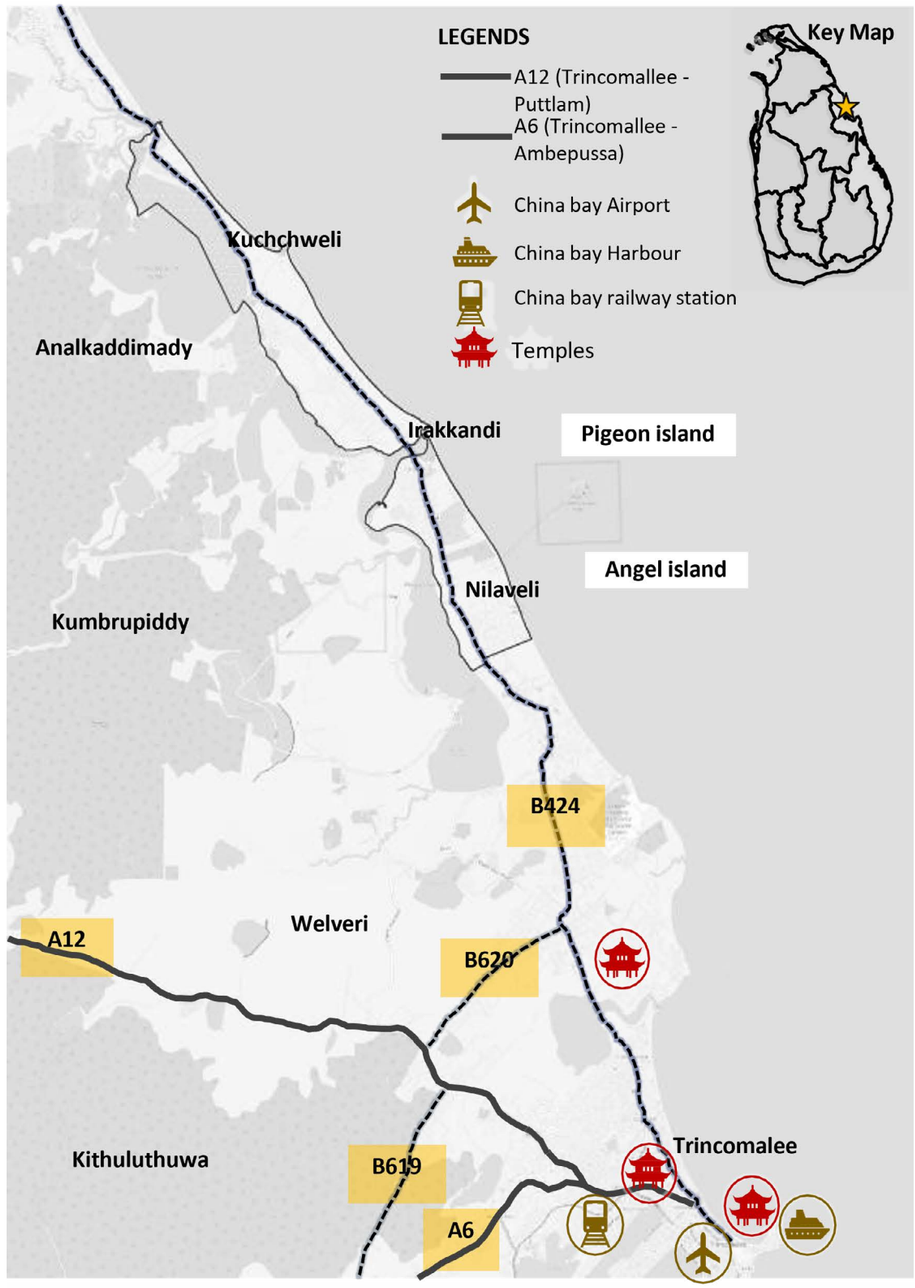


Figure 3.12 Nilaveli & Kuchchaveli: Cultural Tourism Nodes

Pigeon island is a marine conservation zone with the presence of coral reefs and marine animals attracting annual footfall of 100,000 annually

BEACH RELATED TOURISM			
Key location	Activities	Charges	Duration
Pigeon island	Snorkeling, beach activities	**USD 120 – 135 per person**	4 - 5 hrs
Angel island	Snorkeling, dolphin & Whale watching	**USD 100 – 120 per boat (6 pax)**	3 – 4 hrs
Nilaveli beach	Leisure	-	1 - 2 hr
Marble beach	Leisure	-	1 - 2 hr
Arisimale beach	Leisure	-	1 - 2 hr

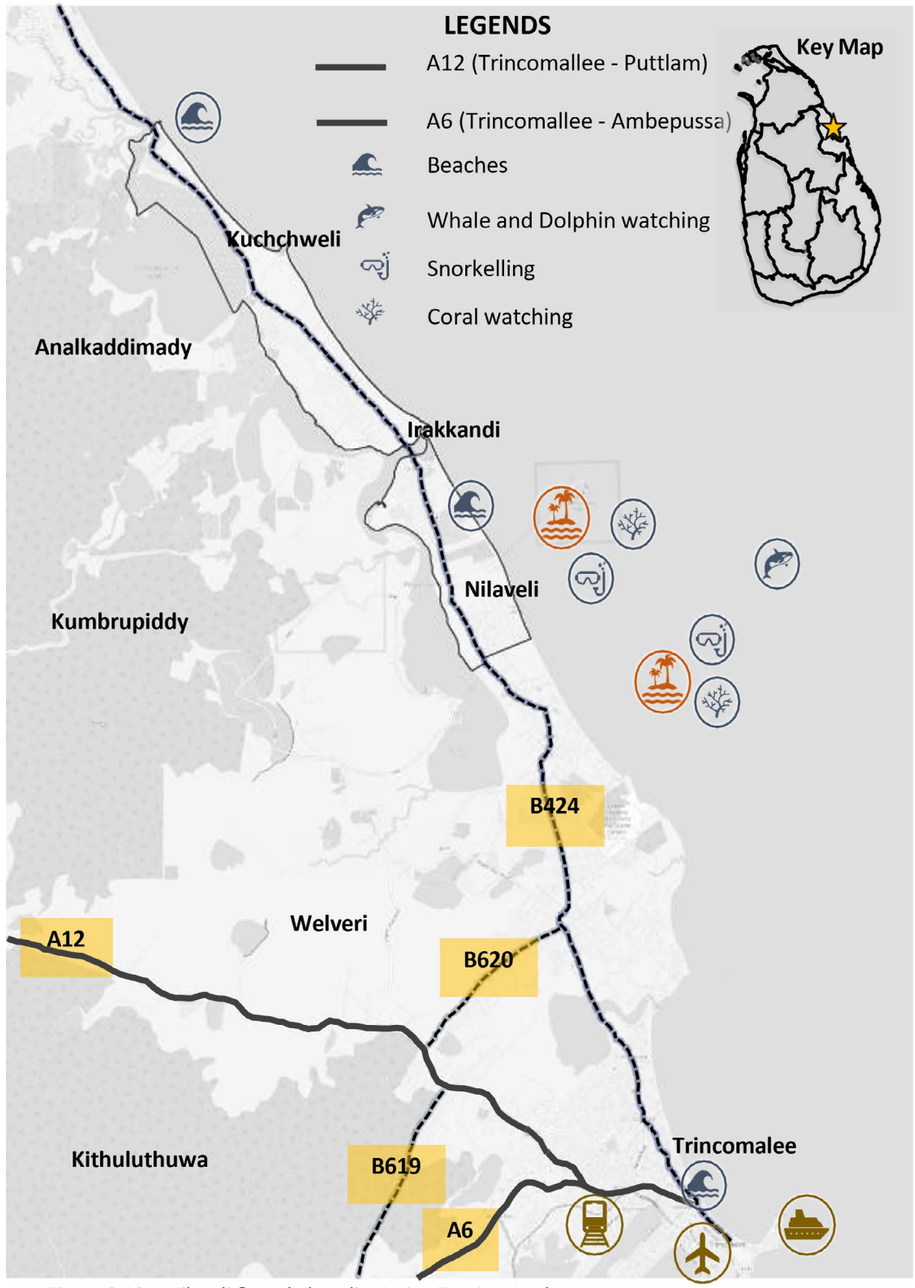


Figure 3.13 Nilaveli & Kuchchaveli: Marine Tourism Nodes

Trincomalee is also known for its rich heritage and history which are depicted through buildings and monuments and are located in proximity to the economic hub of the region

SITE SEEING		
Key location	Charges (USD per person)	Duration
Trincomalee War Cemetery	-	>1 hr
Fort Fredrick	-	2 – 3 hrs
Kanniya hot water spring	0.2	>1 hr
Velgam Vehera	-	1 – 2 hrs
Naval Museum & Maritime museum	-	1 – 2 hrs

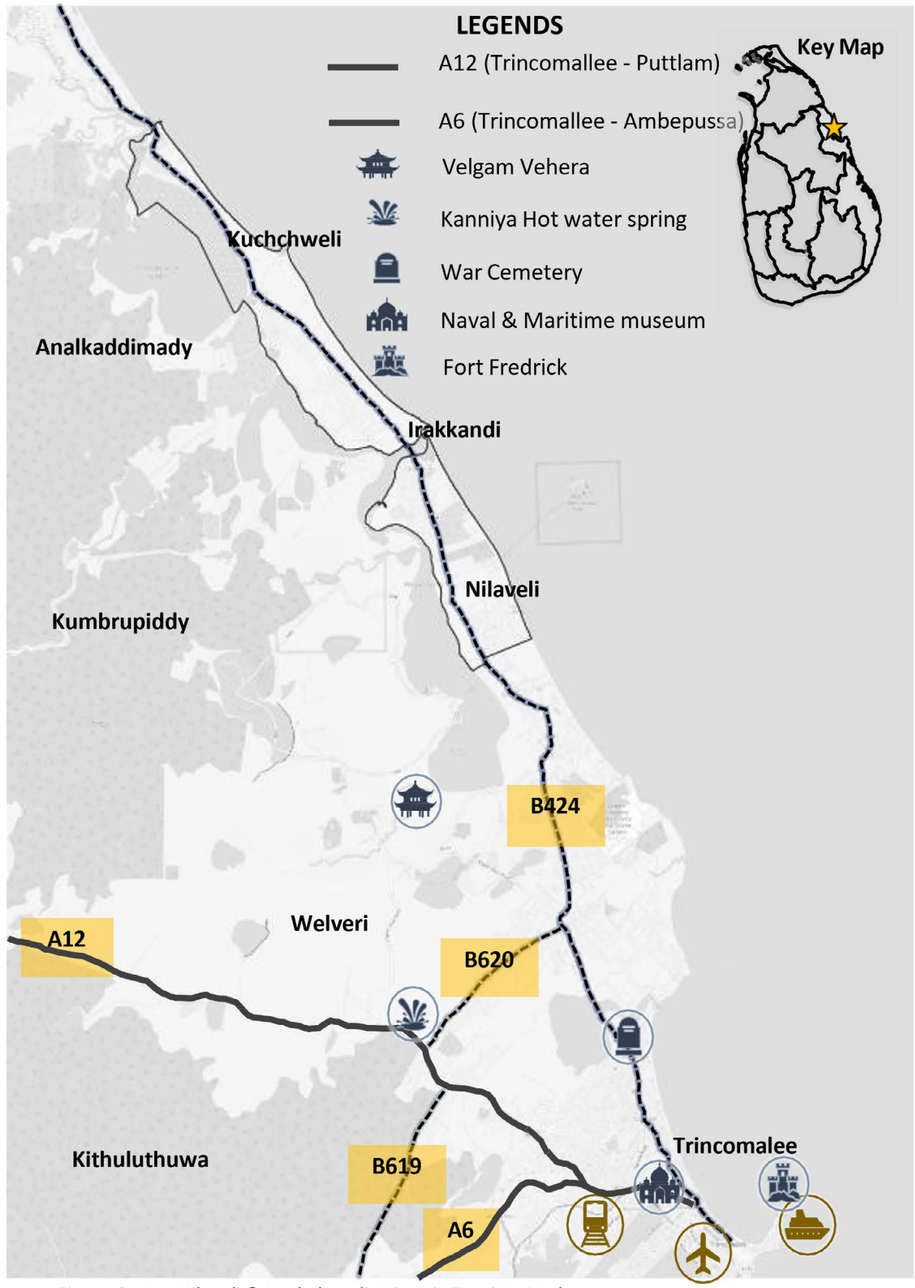
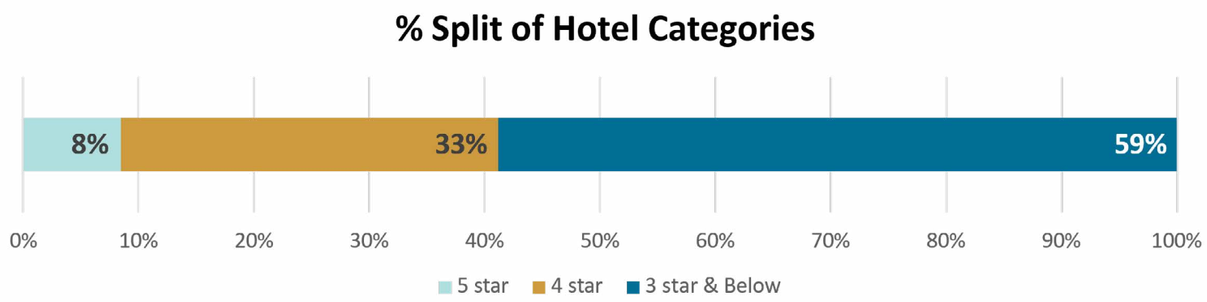


Figure 3.14 Nilaveli & Kuchchaveli: Historic Tourism Nodes

3.4.3 HOSPITALITY OVERVIEW

Mid scale to upscale hotel developments are located in the economic center of the district while mid scale to premium category of resort developments are spread across the Nilaveli & Kuchchweli region



Category	No. of rooms	Key players
5 star	63	• Uga Jungle beach Resort
4 star	250	• Trinco blue • Amaranthe Bay resort & spa • Cardamon hotel • Anilana nilaveli resort • Nilaveli Beach Hotel
3 star & Below	450 - 500	• Anantamaa • JKAB Park • Trincomallee Resort & Spa • Blue diamond resort • Margosa bay

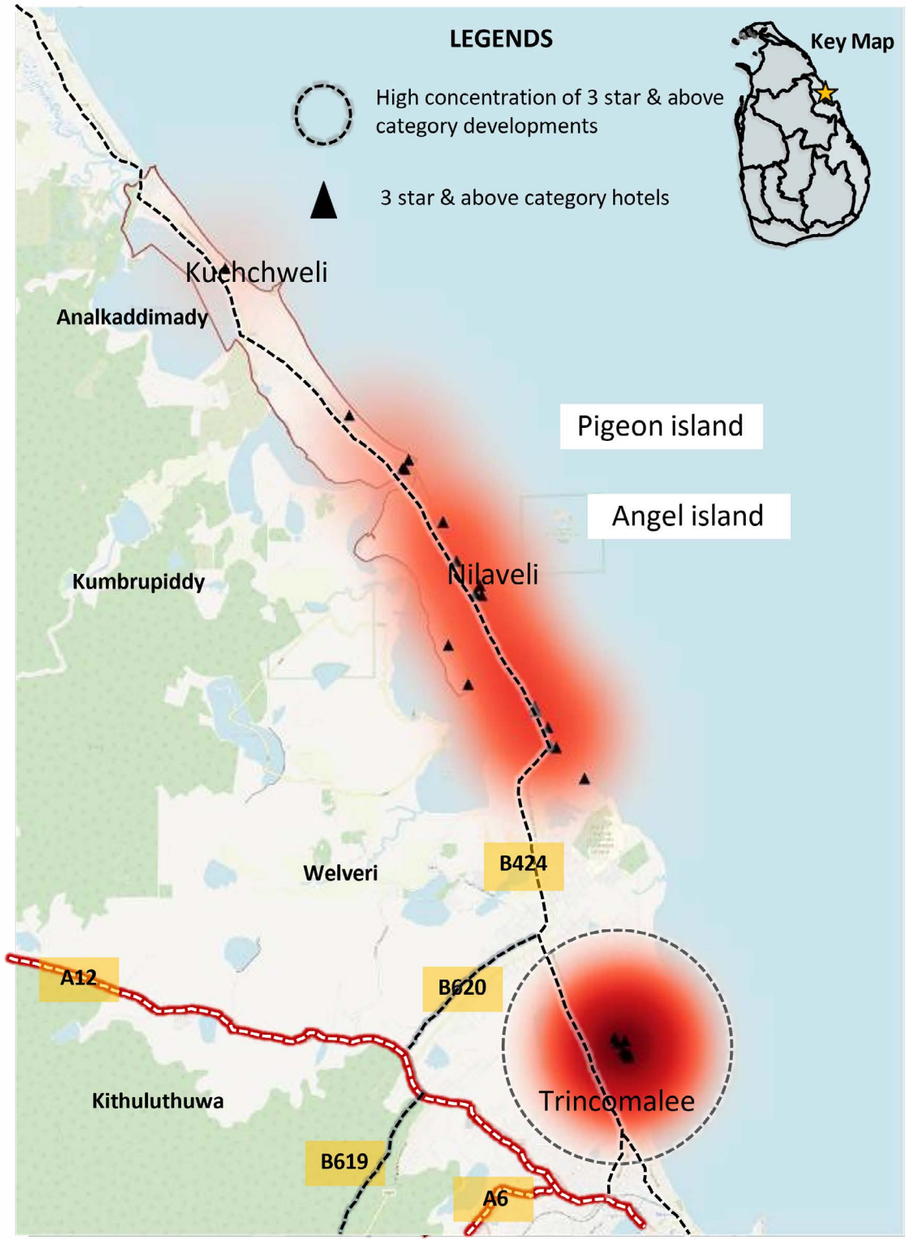


Figure 3.15 Nilaveli & Kuchchaveli: Hospitality Overview

3.4.4 SUBJECT LOCATION

Parameters	Details
Developable land area	**Total: 820 hectares** Kuchchweli- ~491 hectares Nilaveli- ~330 hectares
Population *(Trincomallee)*	**0.44 Mn** **(As of 2022)**
Distance from nearest city	**Trincomalee** – 30 kms
Key Economic activities *(Trincomalee)*	• Fishing – 70% • Farming – 10% • Others – 20%
Key tourist activities	• Beaches – Nilaveli beach, Kuchchweli beach, Pigeon island, Angel island • Beach activities – Snorkelling, Dolphin & Whale watching
Peak season	April - September
Source Market of tourists	Germany, Israel, France

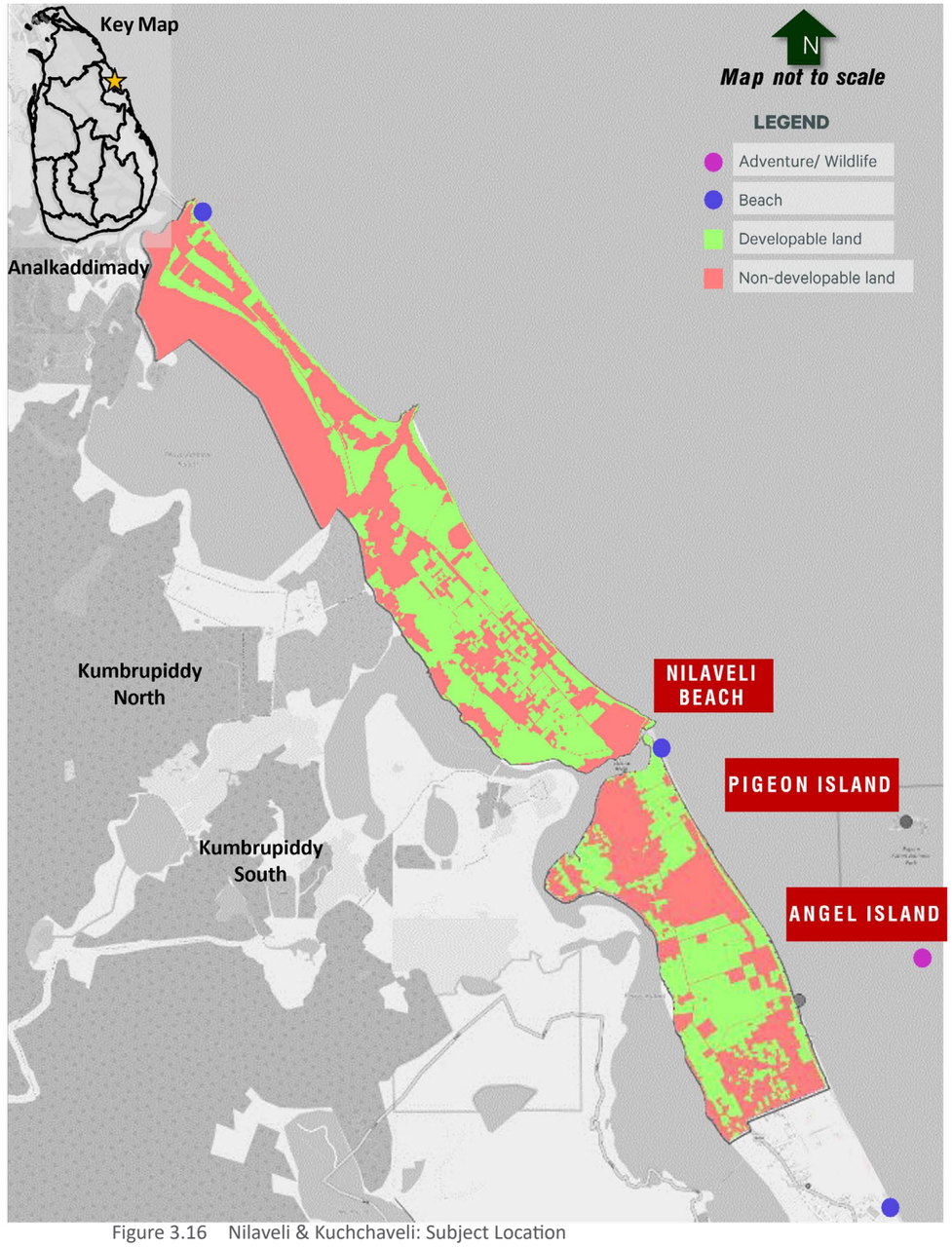


Figure 3.16 Nilaveli & Kuchchaveli: Subject Location

3.4.5 NILAVELI & KUCHCHAVELI : POSITIONING

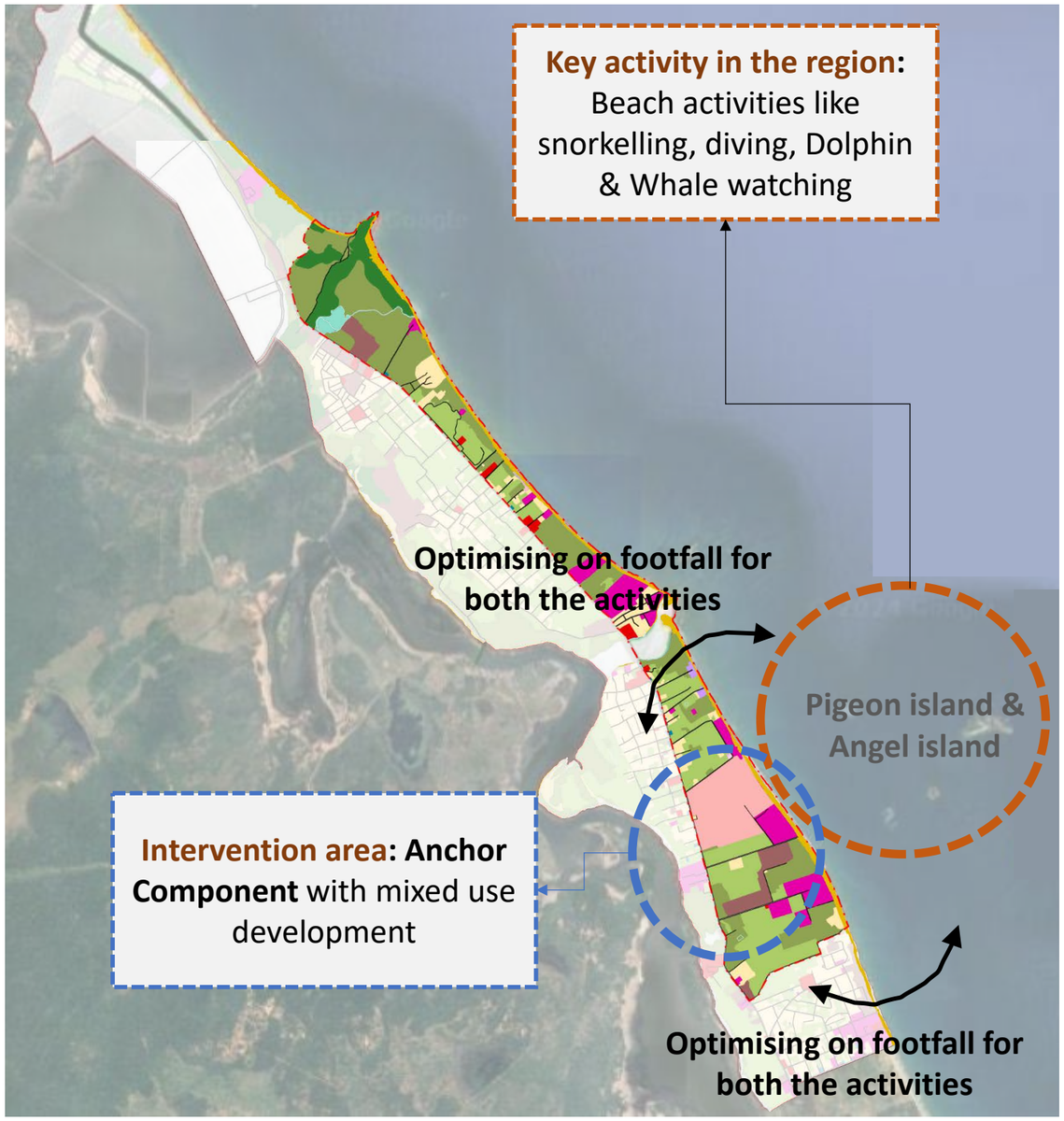


Figure 3.17 Development Recommendation: Nilaveli & Kuchchaveli

Nilaveli & Kuchchveli - a Marine diversity paradise to Protect, Respect & Relish

Key highlights

Coral Reefs | **Dolphins & Whales** | **Sharks & Turtles**

Key components

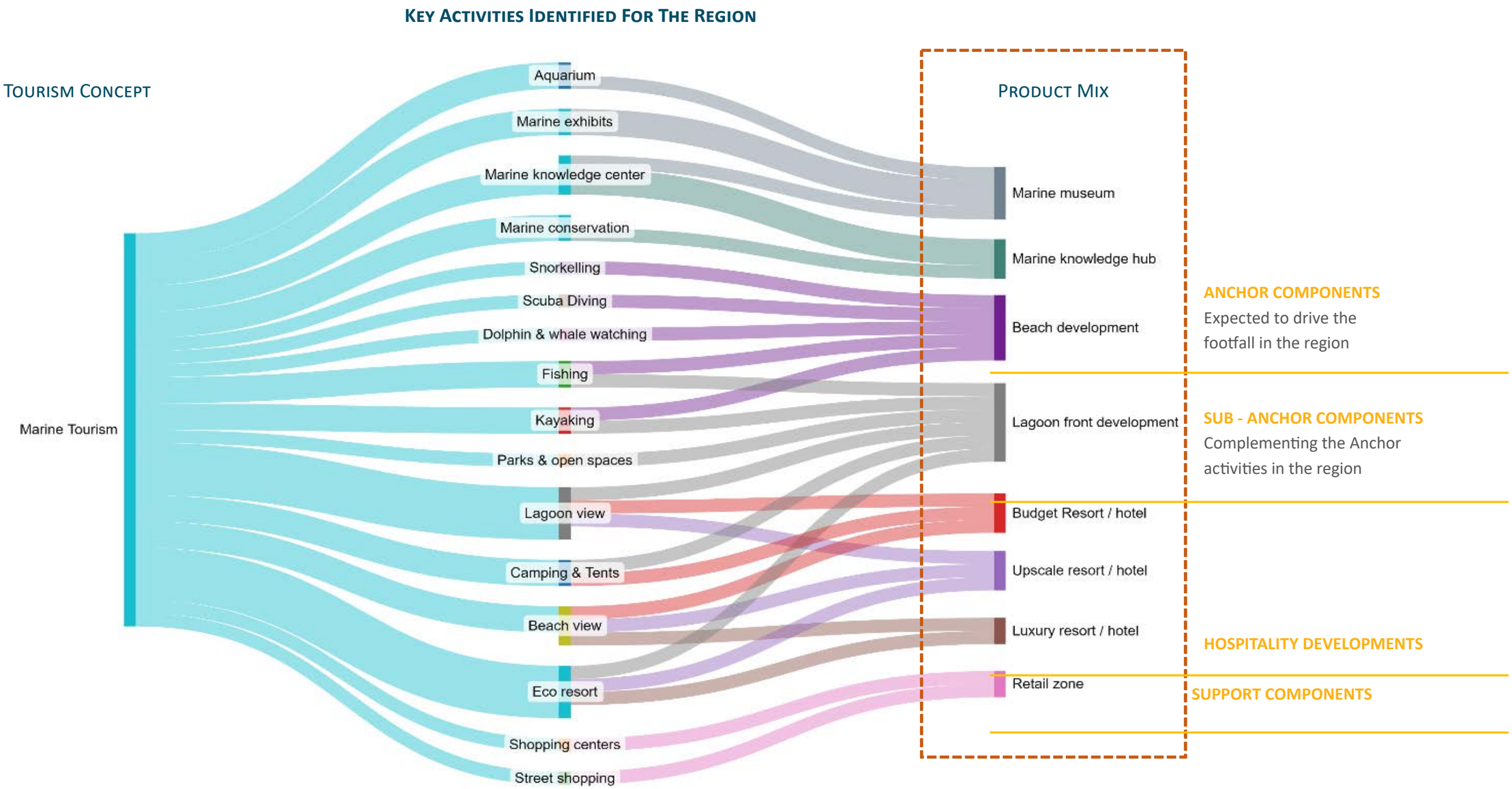
- To Preserve ***Sustainable Divers' Paradise***
- To Respect ***Marine Museum***
- To Relish ***Beach front developments***

Optimising the **1.5 – 2 lakh annual footfall** for Pigeon island and Angel island with Infrastructure developments

Key Visitor group:

- ***Domestic tourists***
- ***Cultural circuit foreign travellers***
- ***Backpackers***
- ***Corporates & Business related travellers***

3.4.6 NILAVELI & KUCHCHAVELI : PRODUCT MIX & ACTIVITIES



Activities are based on market study, gaps identified & potential for the location

Figure 3.18 Nilaveli & Kuchchaveli: Product Mix and Activities diagram

NILAVELI & KUCHCHAVELI – POSITIONED AS MARINE BASED TOURISM WITH MARINE BASED MUSEUM

TENTATIVE AREA (HIGH CASE SCENARIO)

Table 3.6 Nilaveli & Kuchchaveli Land Requirement (High Case Scenario)

Positioning: UPPER MID END TO PREMIUM

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Marine Museum**	4.2	2	0	Aquariums, Exhibits, Collections, Event halls, AV presentation rooms, Visitors facilities like lobby, restroom, food court etc.
2	**Beach development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters etc
3	**5-star resorts & Eco-lodges**	11	18	26	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts optimising the lagoon and beach views
4	**4-star resorts/hotels**	10	16	22	
5	**3-star Hotels**	1	2	3	Beach view resorts/ hotels
6	**Retail + Tourist amenities**	3	3	6	Retail - Regional brands, Handicrafts, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores etc Tourist amenities - Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information centre etc
7	**Investment residential**	0	0	12	
	Total	**29**	**41**	**69**	Total land area requirement (A+B+C) – **139 hectares**

NILAVELI & KUCHCHAVELI – POSITIONED AS MARINE BASED TOURISM WITH MARINE BASED MUSEUM

TENTATIVE AREA (LOW CASE SCENARIO)

Table 3.7 Nilaveli & Kuchchaveli Land Requirement (Low Case Scenario)

Positioning: UPPER MID END TO PREMIUM

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Marine Museum**	2	2	0	Aquariums, Exhibits, Collections, Event halls, AV presentation rooms, Visitors facilities like lobby, restroom, food court etc
2	**Beach development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters etc
3	**5-star resorts & Eco-lodges**	6	8	8	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts optimising the lagoon and beach views
4	**4-star resorts/hotels**	5	6	7	
5	**3-star Hotels**	1	1	1	Beach view resorts/ hotels
6	**Retail + Tourist amenities**	2	1	1	Retail - Regional brands, Handicrafts, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores etc Tourist amenities - Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information centre etc
7	**Investment residential**	0	0	6	
	Total	**16**	**18**	**23**	Total land area requirement (A+B+C) – **57 hectares**



Marine Museum



Luxury beach resorts



Shopping centre, Retail high street & Commercial centre



Beach front development

Figure 3.19 Nilaveli & Kuchchaveli: Intervention Area Reference Images



Upscale Beach resorts



Midscale beach resorts



Affordable beach resorts

Figure 3.20 Nilaveli & Kuchchaveli: Resorts and Hotels Images

3.5 RECOMMENDATIONS FOR TOURISM DEVELOPMENTS IN PASIKUDAH

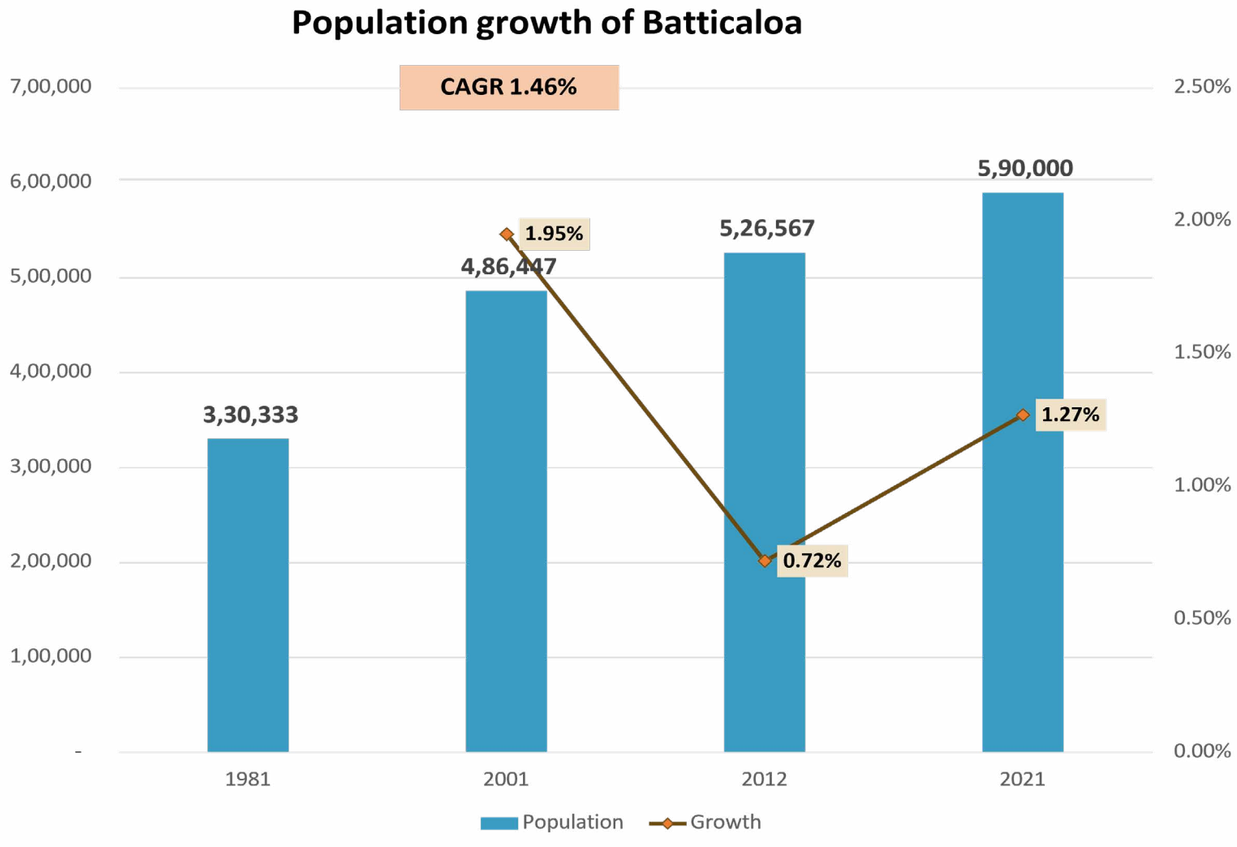
3.5.1 PASIKUDAH: TOURISM MARKET ANALYSIS OVERVIEW

Fishing & Farming are the major economic activity in Batticaloa with tourism activity in Pasikudah

Fishing, Farming, Small business & Tourism
Key Economic Activities

2,854
Land Area (Sq. Km)
4.3% share to Sri Lanka
29% share to EP

0.59
Population in Mn (2021)
2.7% share to Sri Lanka
33% share to EP



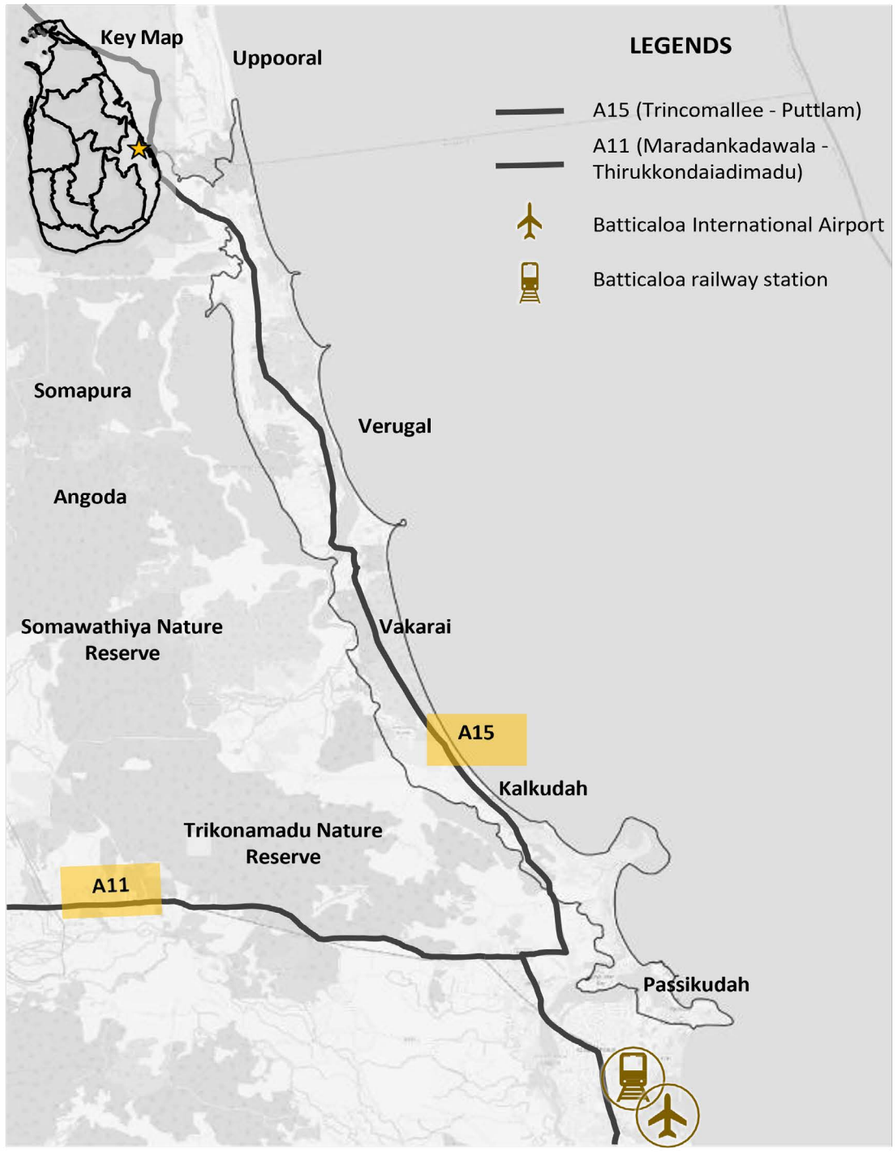


Figure 3.21 Pasikudah: Key Infrastructure

3.5.2 PASIKUDAH: TOURIST ACTIVITY

Pasikudah has few tourist activities/ attractions which are limited to wellness, hence tourists tend to travel to nearby location like Polonnaruwa, Sigiriya, Anuradhapura etc.

TOURIST PATTERN

Colombo — Entry point to SL

130 kms

Kandy — *Cultural triangle*

190 kms

Batticaloa — Beach side leisure

4 – 5 days
Average stay duration

USD 700 - 800
Average spending per person daily

NEARBY TOURIST ATTRACTIONS/ SITE SEEING		
Key location	Season/ Festival	Duration
Pollanaruwa	Throughout the year	8 – 10 hrs
Anuradhapura	Throughout the year	One day
Sigiriya	Throughout the year	One day

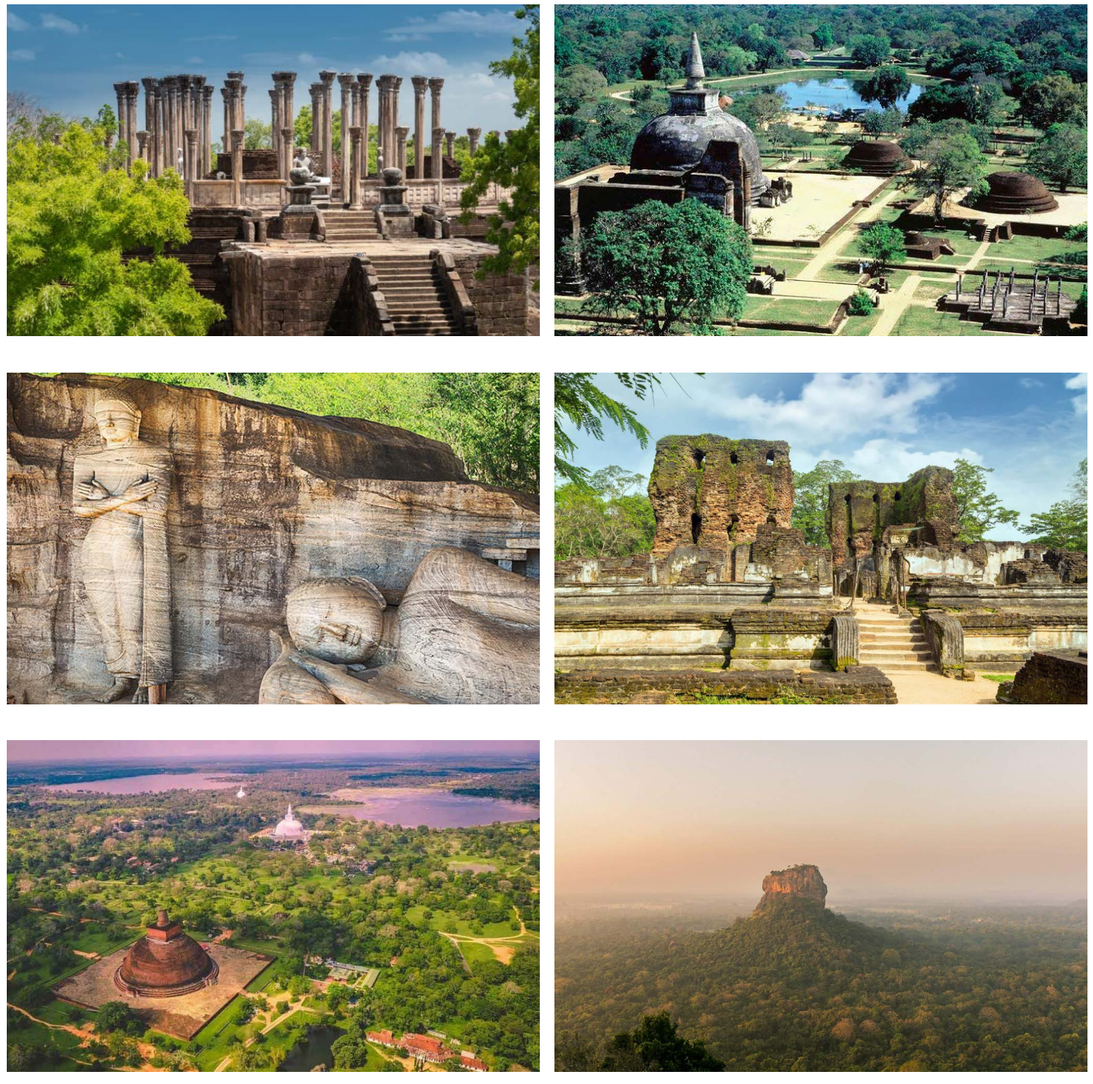


Figure 3.22 Pasikudah: Nearby Tourist Attractions (Polonnaruwa, Anuradhapura and Sigiriya)

Tourist activity is majorly concentrated in Pasikudah comprising of resorts offering spa & wellness as major activity in the region.

TOURIST PATTERN



BEACH RELATED TOURISM			
Key location	Activities	Charges	Duration
Passikudha Main beach	Coral watching in glass bottom boat	**USD 13 per person**	40 mins
	Fishing – Deep sea & bottom line	**USD 145 – 325 per boat**	2.5 – 6 hrs
Kalkudha Beach	Leisure	-	1 - 2 hr
Elephant rock	Snorkelling	**USD 45 per person**	3 hrs
Passi reef	Snorkelling	**USD 18 per person**	1 hr

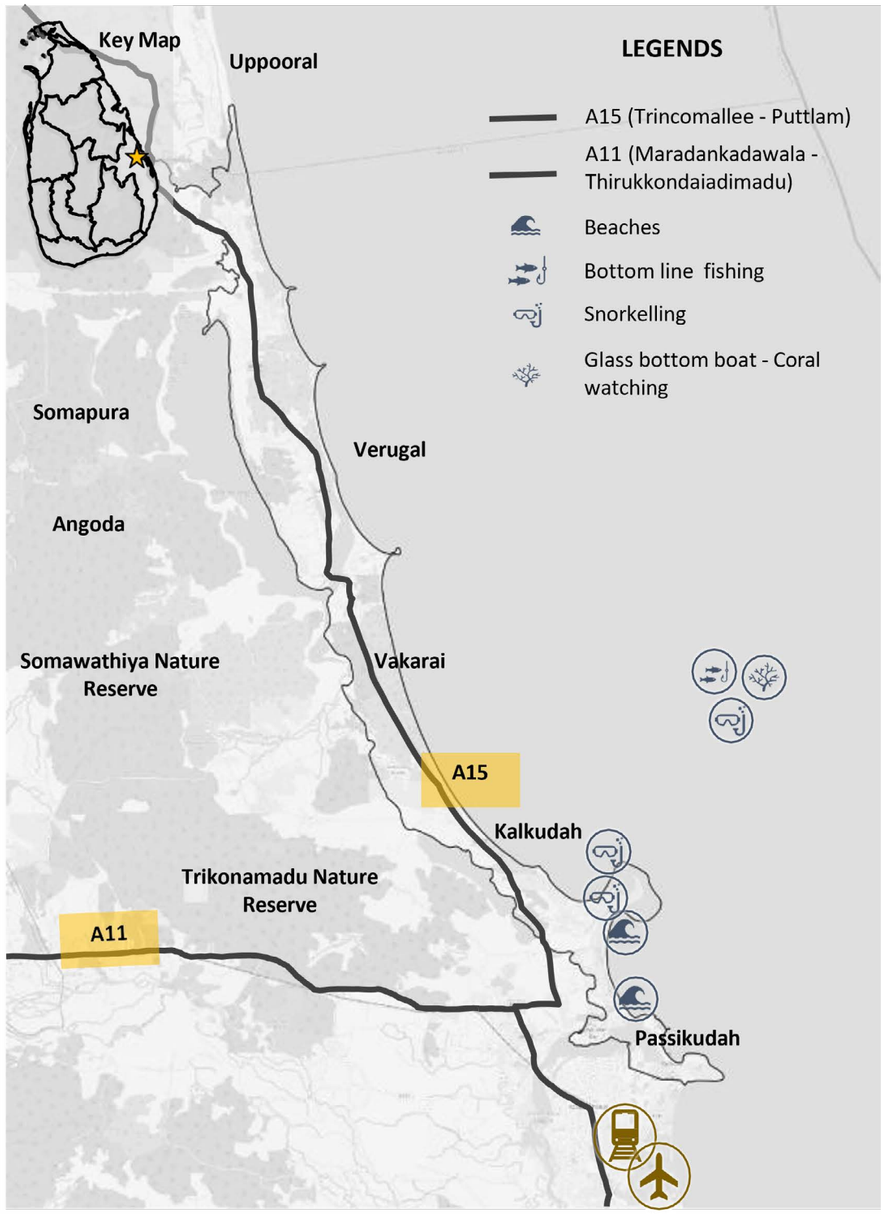
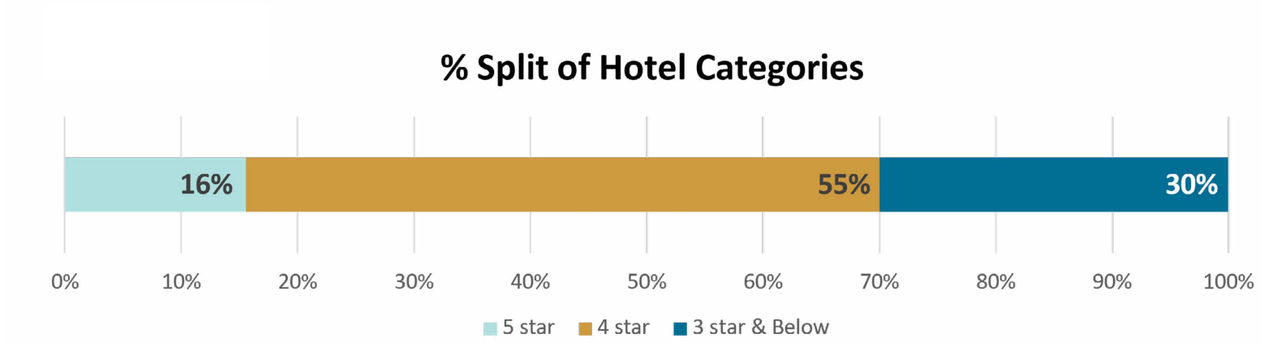


Figure 3.23 Pasikudah: Beach Related Tourism Nodes

3.5.3 PASIKUDAH: HOSPITALITY OVERVIEW

Presence of numerous Upscale and Luxury hospitality developments in the region with in-house activities like wellness and spas. The region is also known to host destination weddings due to the presence of pristine beaches.



Category	No. of rooms	Key players
5 star	112	• Uga Bay • Anilana • Aki Villa
4 star	393	• Anantaya • The Clam • Maalu Maalu • Sunrise bay • Amethyst • Amaya beach • Passi villa • Breeze
3 star & Below	215	• Cocovile • Marina beach • The Cove • Kay jay beach house

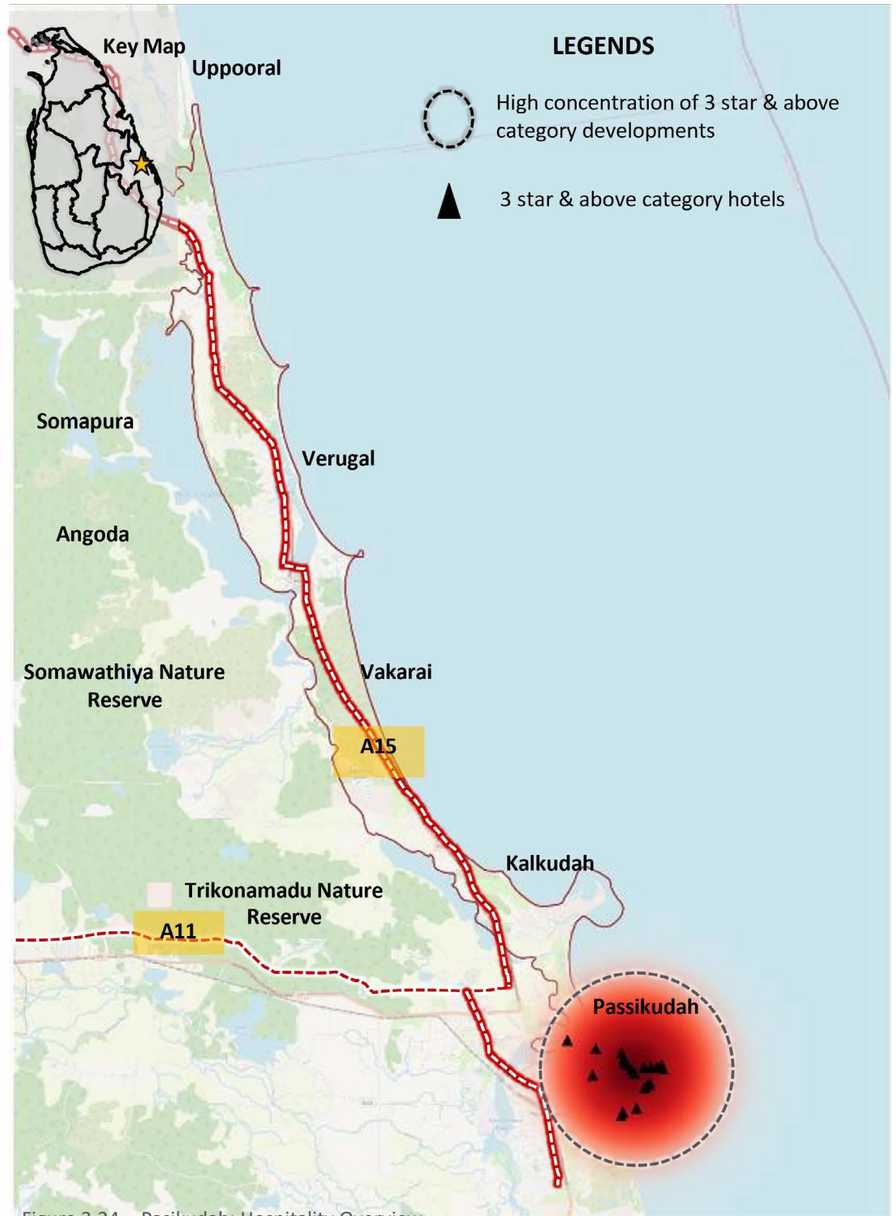


Figure 3.24 Pasikudah: Hospitality Overview

3.5.4 PASIKUDAH: SUBJECT LOCATION

Parameters	Details
Developable land area	**Total: 358.3 Ha**
Population *(Batticaloa)*	**0.59 Mn** (As of 2022)
Distance from nearest city	**Batticaloa** – 33 kms
Key Economic activities *(Batticaloa)*	• Fishing – 70% • Farming – 20% • Others – 10%
Key tourist activities	• Beaches – Passikudha Main beach & kalkudha beach • Beach activities – Fishing, Coral watching Glass bottom boat and snorkelling
Peak season	April - September
Source Market of tourists	Germany, Israel, France and Russia

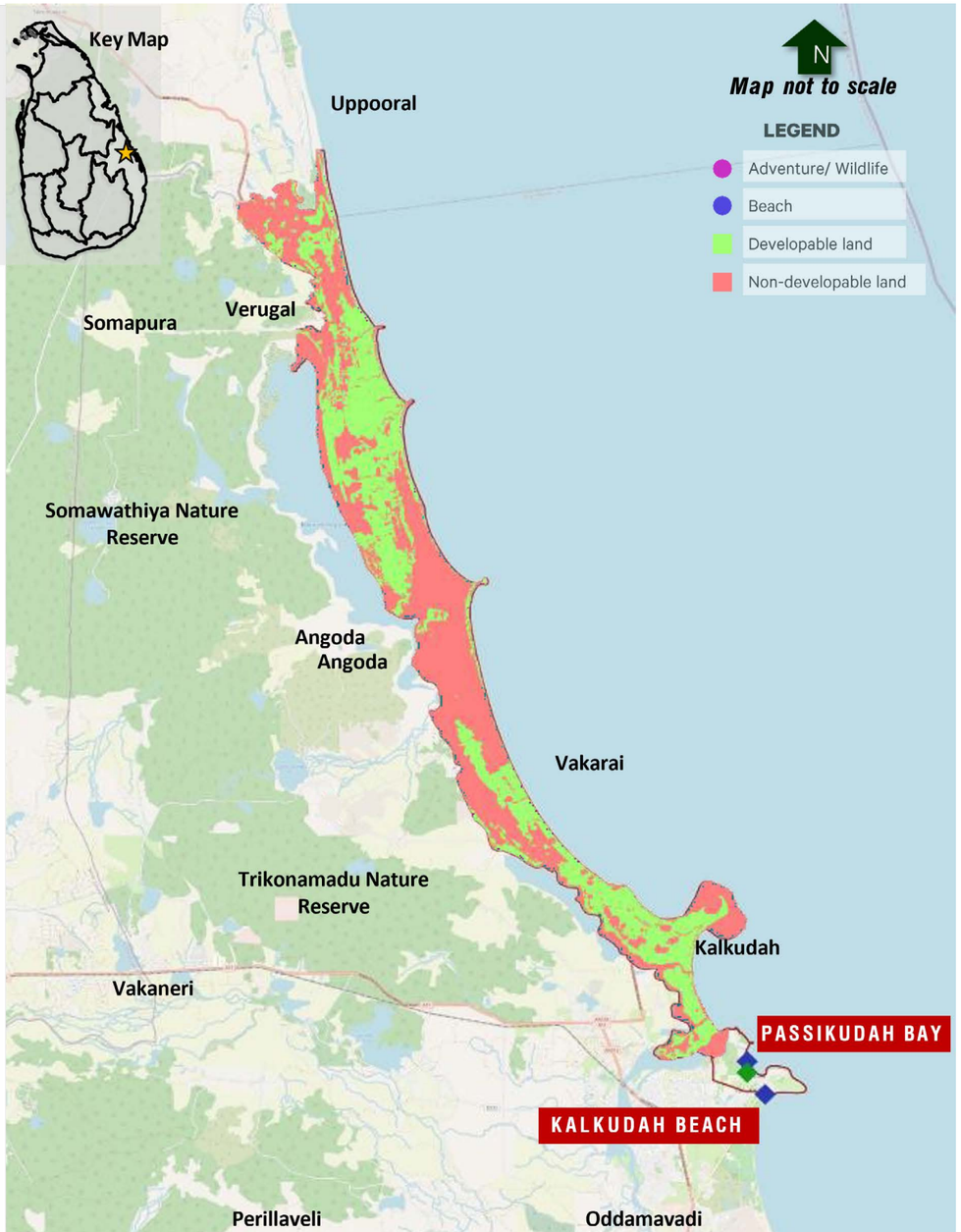


Figure 3.25 Pasikudah: Subject Location

3.5.5 PASIKUDAH: POSITIONING

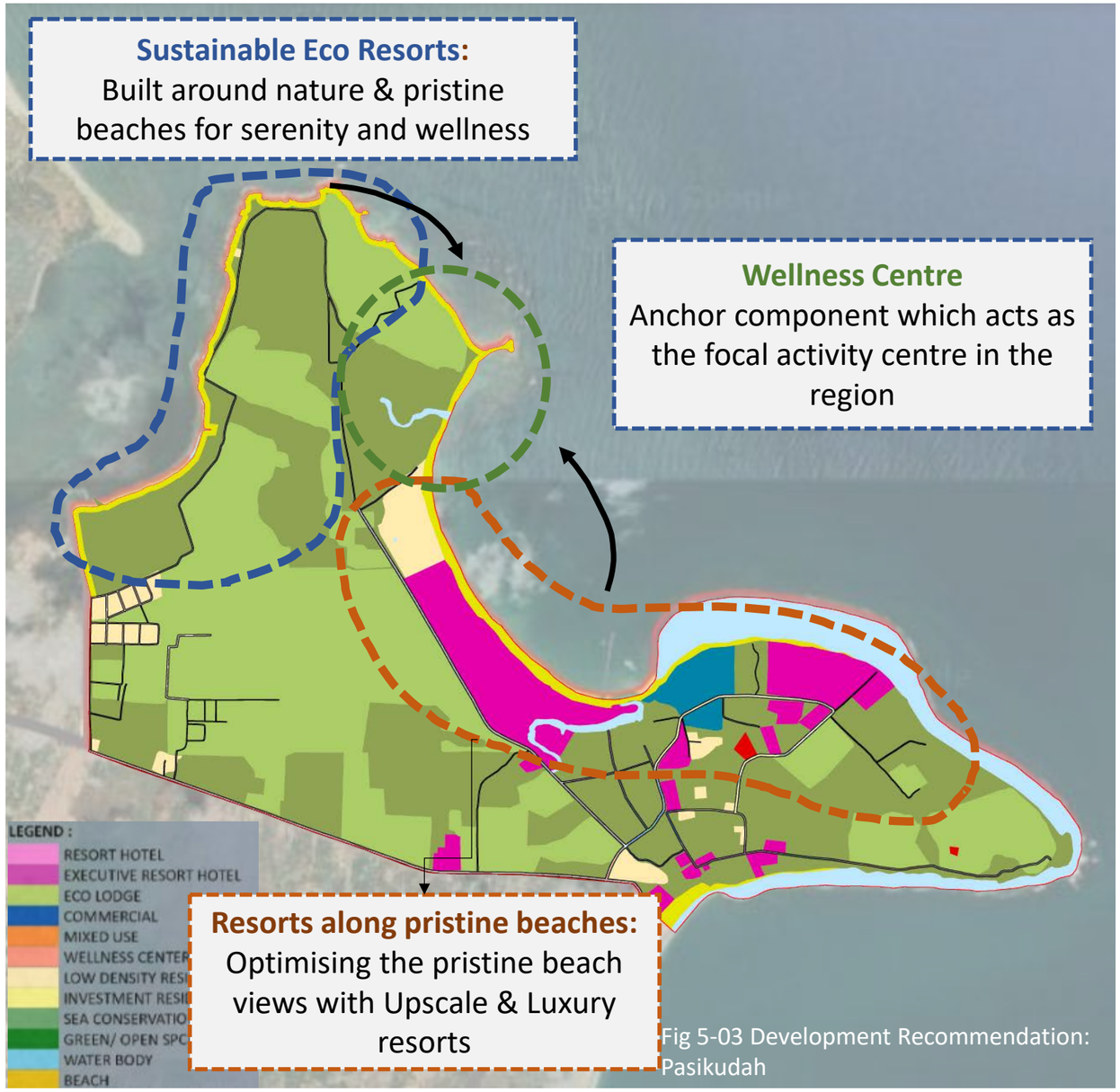


Figure 3.26 Development Recommendation: Pasikudah

Pasikudah- Serenity by the shore and Revitalize by the beach

Key highlights

- **Coral Reefs**
- **Pristine beaches**
- **Leisure & Wellness**

Key components

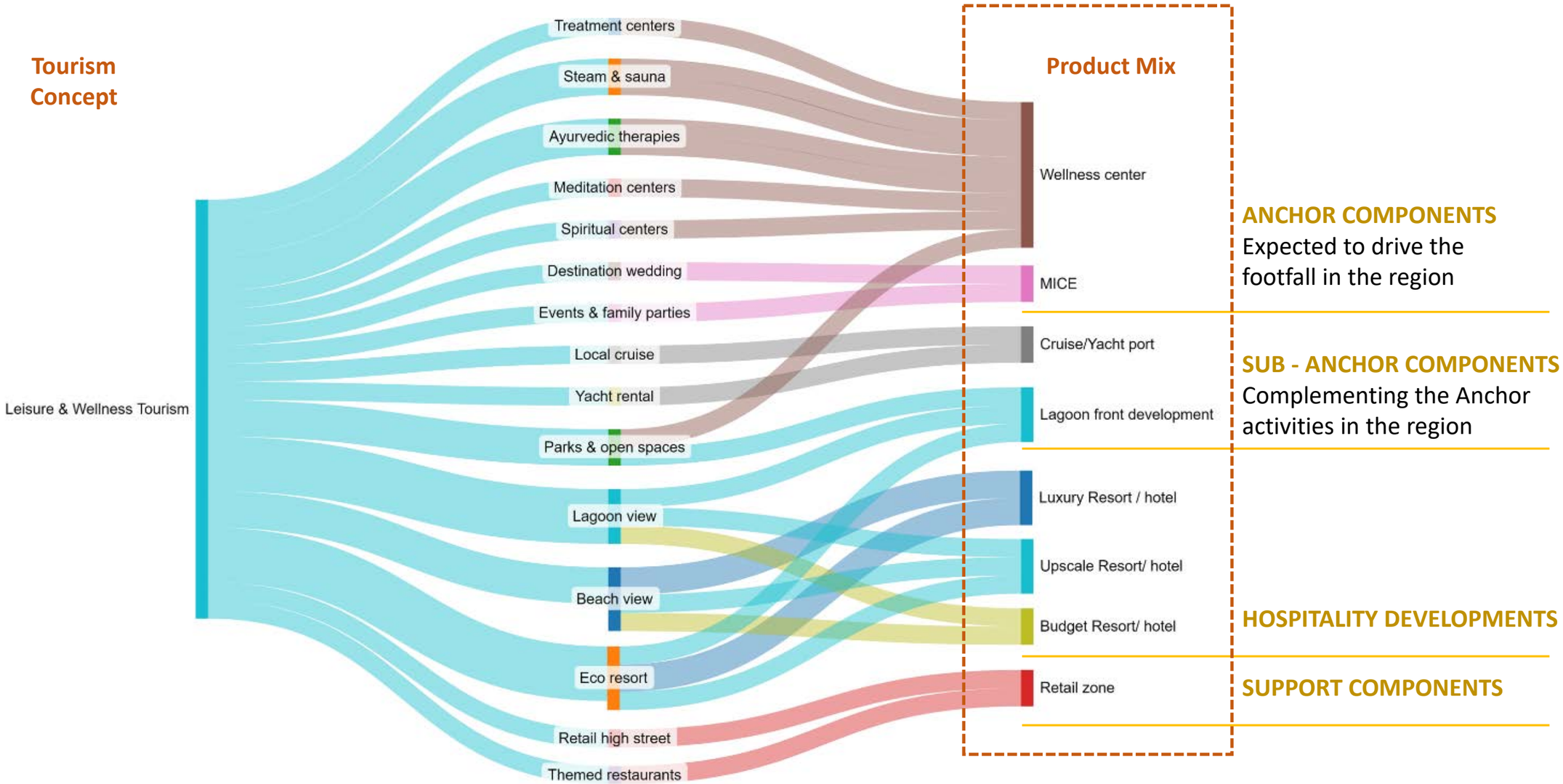
- ***Spa & Wellness***
- ***Meditation & Spiritual centre***
- ***Destination Weddings***

Key Visitor group:

- ***High spending Domestic Tourists***
- ***European leisure travellers***
- ***MICE visitors (destination weddings)***

3.5.6 PASIKUDAH : PRODUCT MIX & ACTIVITIES

Key Activities Identified For The Region



Activities are based on market study, gaps identified & potential for the location

Figure 3.27 Pasikudah: Product Mix and Activities diagram

PASIKUDAH – POSITIONED TO BE WELLNESS CENTRIC TOURISM DEVELOPMENT HAVING PRISTINE BEACHES ATTRACTING HIGH-END TOURIST IN THE REGION

TENTATIVE AREA (HIGH CASE SCENARIO)

Table 3.8 Pasikudah Land Requirement (High Case Scenario)

Positioning: HIGH END TO LUXURY

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Wellness Centre**	2	4	8	Meditation center, Yoga and Pilates center, Hydrotherapy, vitality pool, Male/female sauna and steam room, Yoga pavilion and Yoga bale, Consultation rooms, Springwater pools, Massage centers, Ayurvedic treatment centers
2	**5-star resorts & Eco-lodges**	16	26	37	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon and beach views – optimising the views for destination weddings & events
3	**4-star resorts/hotels**	13	21	30	
4	**3-star Hotels**	1	1	1	Beach view resorts/ hotels
5	**Yacht berth + Marina**	2	2	2	Yachts for rental as a day/ night activity hosting parties and leisure entertainment
6	**Retail + Tourist amenities**	3	3	7	Restaurants, cafes, F&B kiosks, Themed dining, departmental stores, retail stores, souvenir stores, entertainment etc. Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information center, visitors center etc
7	**Investment residential**	0	12	20	In next 15 years 2 to 3 projects can be proposed
	Total	**37**	**69**	**105**	Total land area requirement (A+B+C) – **211 hectares**

PASIKUDAH – POSITIONED TO BE WELLNESS CENTRIC TOURISM DEVELOPMENT HAVING PRISTINE BEACHES ATTRACTING HIGH-END TOURIST IN THE REGION

TENTATIVE AREA (LOW CASE SCENARIO)

Table 3.9 Pasikudah Land Requirement (Low Case Scenario)

Positioning: HIGH END TO LUXURY

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Wellness Centre**	1	2	4	Meditation center, Yoga and Pilates center, Hydrotherapy, vitality pool, Male/female sauna and steam room, Yoga pavilion and Yoga bale, Consultation rooms, Springwater pools, Massage centers, Ayurvedic treatment centers
2	**5-star resorts & Eco-lodges**	11	14	15	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon and beach views – optimising the views for destination weddings & events
3	**4-star resorts/hotels**	10	13	14	
4	**3-star Hotels**	0	1	1	Beach view resorts/ hotels
5	**Yacht berth + Marina**	2	2	2	Yachts for rental as a day/ night activity hosting parties and leisure entertainment
6	**Retail + Tourist amenities**	2	1	2	Restaurants, cafes, F&B kiosks, Themed dining, departmental stores, retail stores, souvenir stores, entertainment etc. Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information center, visitors center etc
7	**Investment residential**	0	12	20	In next 15 years 2 to 3 projects can be proposed
	Total	**26**	**45**	**58**	Total land area requirement (A+B+C) – **129 hectares**

PASIKUDAH– WELLNESS CENTRE & RESORTS



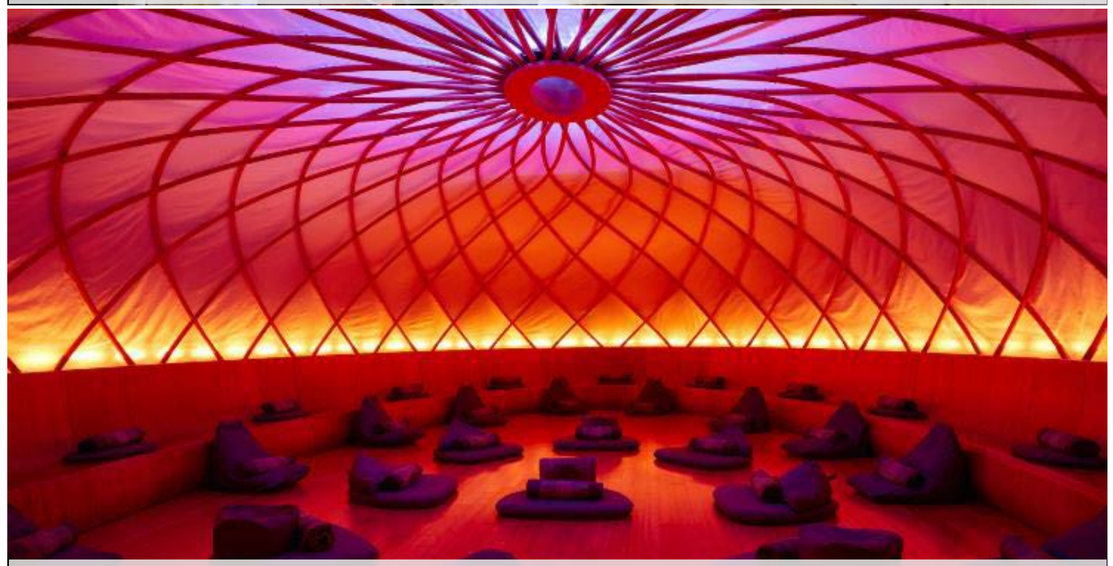
Wellness Eco resorts



Spa & Treatment centres



Luxury Wellness resorts



Meditation & Yoga centre

Figure 3.28 Pasikudah: Wellness Centre and Resort Reference Images



Destination Wedding events at Upscale & Luxury resorts



Candle light dinners



Rental Yacht



Beach side Family parties

Figure 3.29 Pasikudah: Destination Weddings, Events and Resort Reference Images

PASIKUDAH– CENTRE FOR SMALL BUSINESS & RETAIL ZONE



Centre for Small Business



Shopping centres & Retail High streets

Figure 3.30 Pasikudah: Retail high streets and Shopping Mall Reference Images

3.6 RECOMMENDATIONS FOR TOURISM DEVELOPMENTS IN WHISKY POINT, ARUGAM BAY AND PEANUT FARM

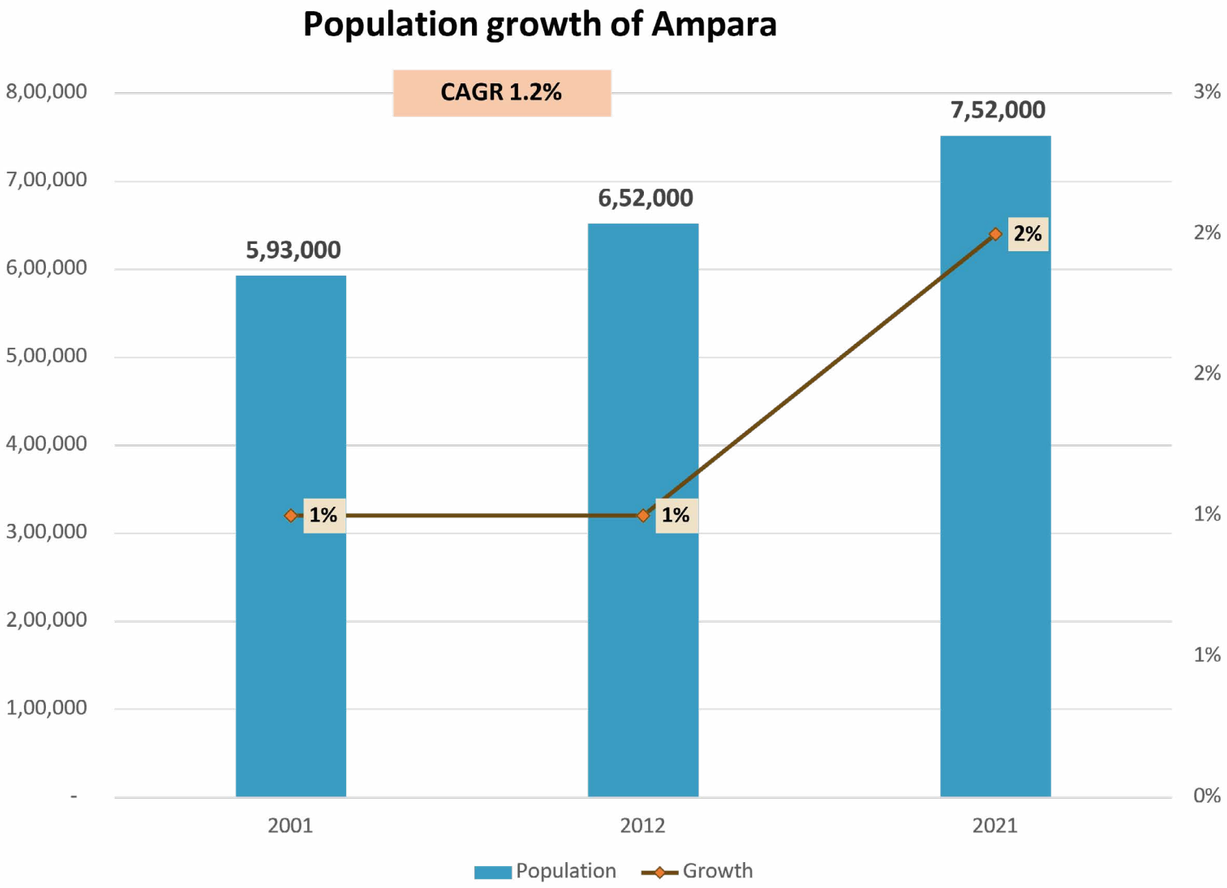
3.6.1 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: TOURISM MARKET ANALYSIS OVERVIEW

Agriculture is the major economic activity in for the district Ampara with Pottuvil being the economic center

Agriculture, Fishing and Hospitality
Key Economic Activities

4,415
Land Area (Sq. Km)
6.7% share to Sri Lanka
44% share to EP

0.75
Population in Mn (2023)
3% share to Sri Lanka
42% share to EP



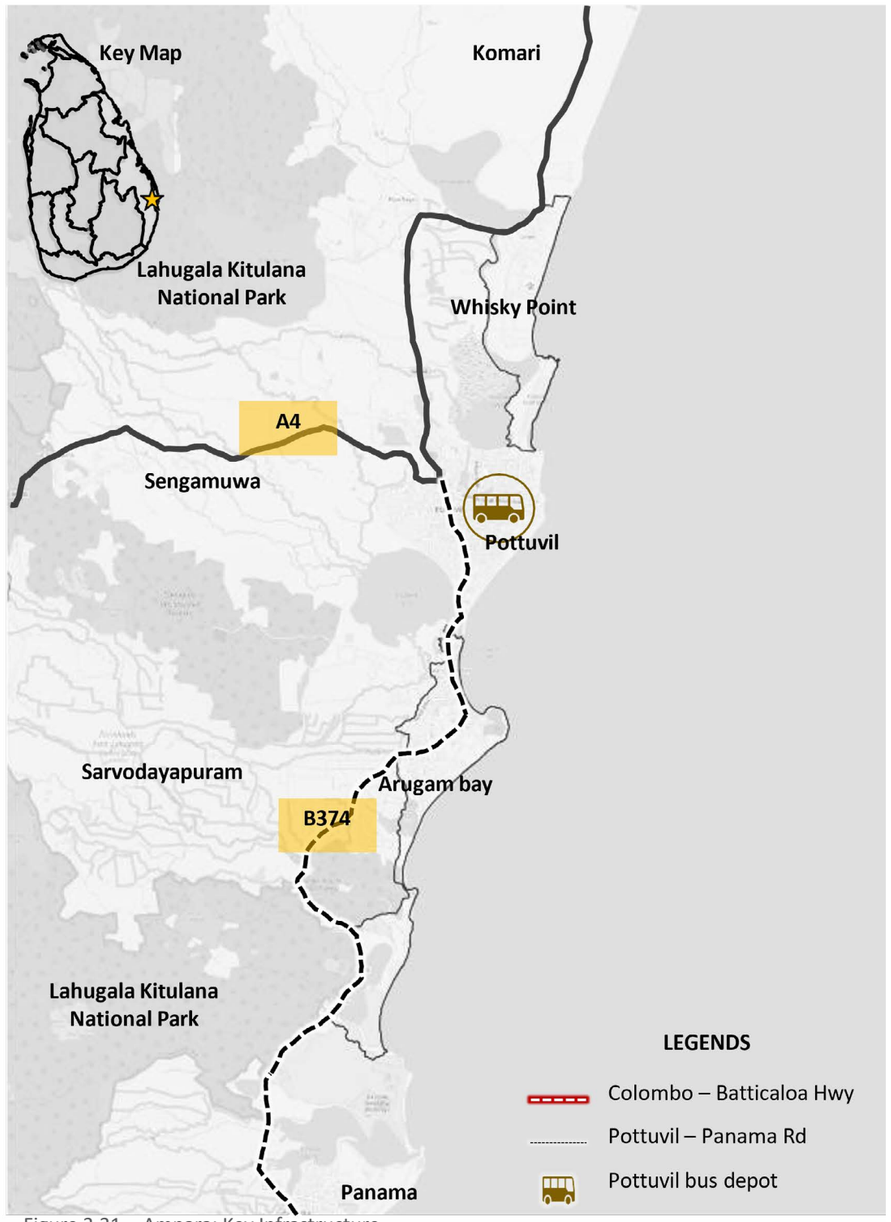


Figure 3.31 Ampara: Key Infrastructure

3.6.2 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: TOURIST ACTIVITY

Arugam Bay is an established tourist destination for known for surfing attracting tourists majorly from Europe and UK. Whisky Point is an emerging tourist destination known for its leisure and night life

TOURIST PATTERN

Colombo — Entry point to SL — **126 kms** — **Galle** — **274 kms** — ***Arugambay & Whiskey Point*** — Beach tourism

3 – 4 days or 2 – 3 months
Average stay duration

USD 150 - 200
Average spending per person daily

BEACH RELATED TOURISM			
Key location	Activities	Charges	Duration
Peanut Farm/ Elephant Rock/ Black Beach	Surfing	**USD 30 - 35**	2 hrs
Arugam Lagoon	Lagoon Safari	**USD 25 per person USD 100 for the entire jeep**	3 – 4 hrs
Resorts along the beach	Parties	-	2 – 3 hrs

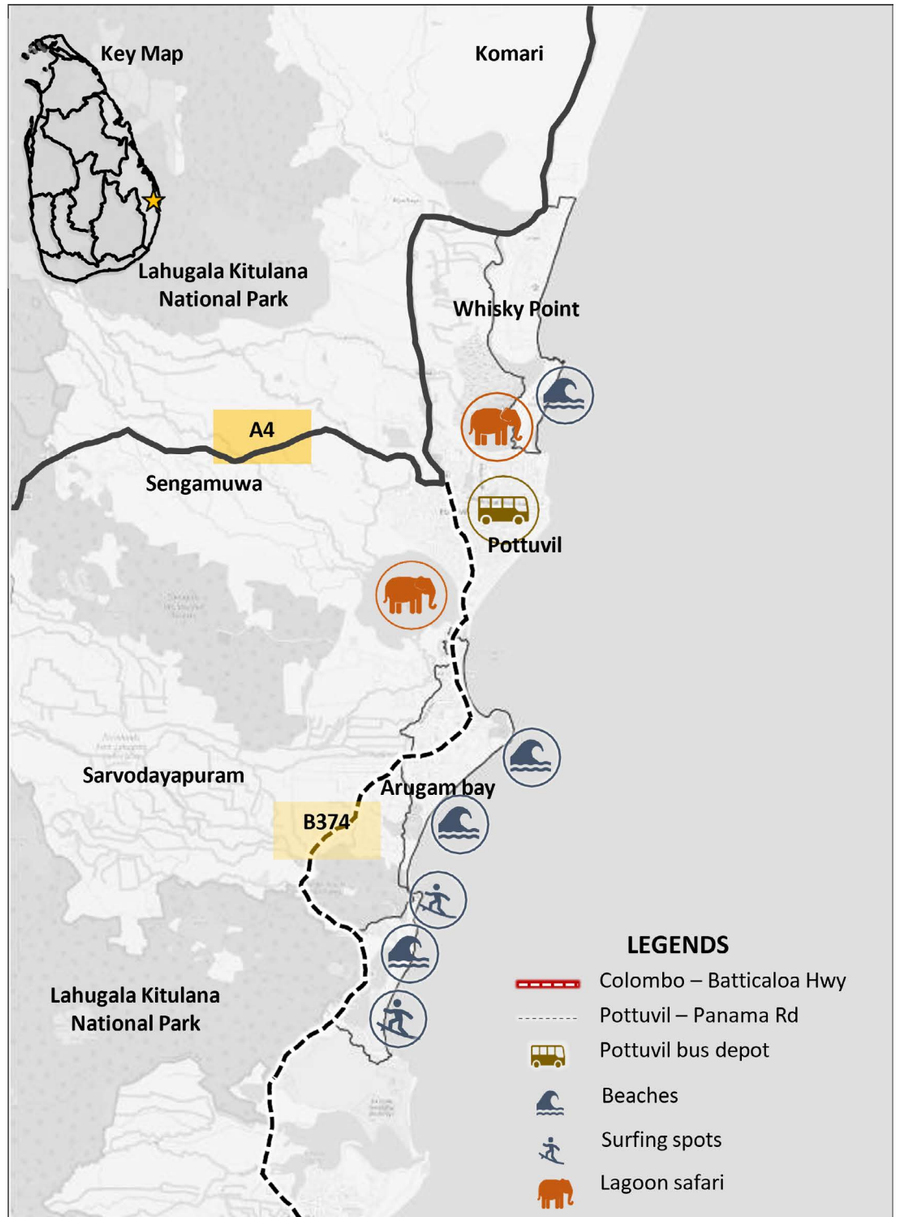
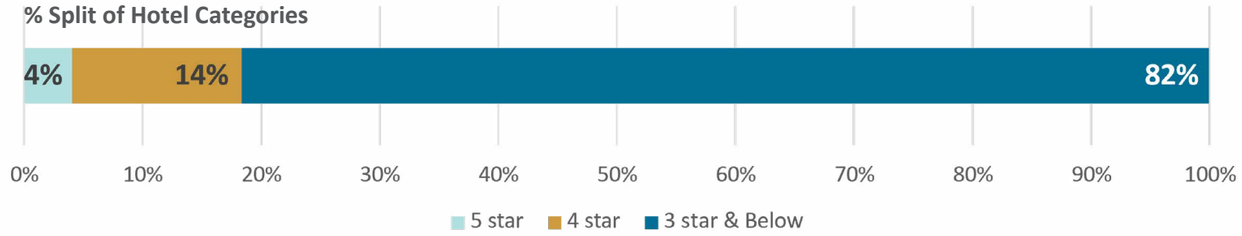


Figure 3.32 Ampara: Beach Related Tourism Nodes

3.6.3 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: TOURIST ACTIVITY

Backpackers and Adventure enthusiasts are the major category contributing to the footfall in the Arugam Bay indicating numerous presence of budget category hotels. Whisky point witnesses increasing number of beach



Category	No. of rooms	Key players
5 star	20	• Jetwing Surf
4 star	69	• The Bluewave - Arugambay • Eagle Resort
3 star & Below	400 - 450	• Bluewaters • Bay Vista • Arugambay Roccos • The Whisky Point resort • Dream Garden resort • Surf N Sun • The Spice Trials • Riva Del Sole

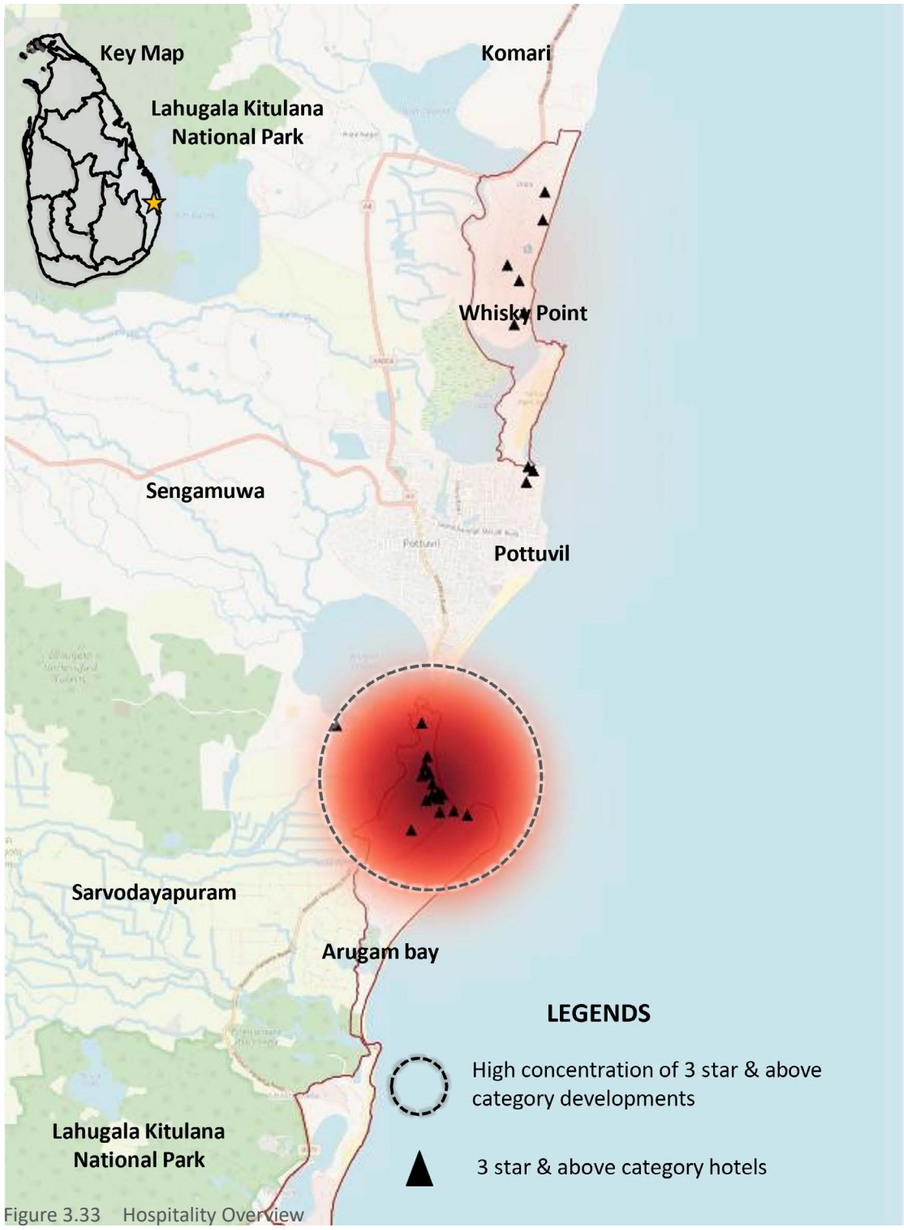


Figure 3.33 Hospitality Overview

3.6.4 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: SUBJECT LOCATION

Parameters	Details
Developable land area	**Total: ~ 395 hectares** Peanut farm - ~192 hectares Whisky Point - ~203 hectares
Population *(Ampara)*	**0.75 Mn** **As of 2022**
Distance from nearest city	**Panama** – 12 kms
Key Economic activities	• Farming – 45% • Fishing – 30% • Others – 25%
Key tourist activities	• Beaches – Peanut farm, Elephant beach, black beach and Whisky point beach • Beach activities – Surfing
Peak season	April - September
Source Market of tourists	Australia, Germany, France, Israel and Russia

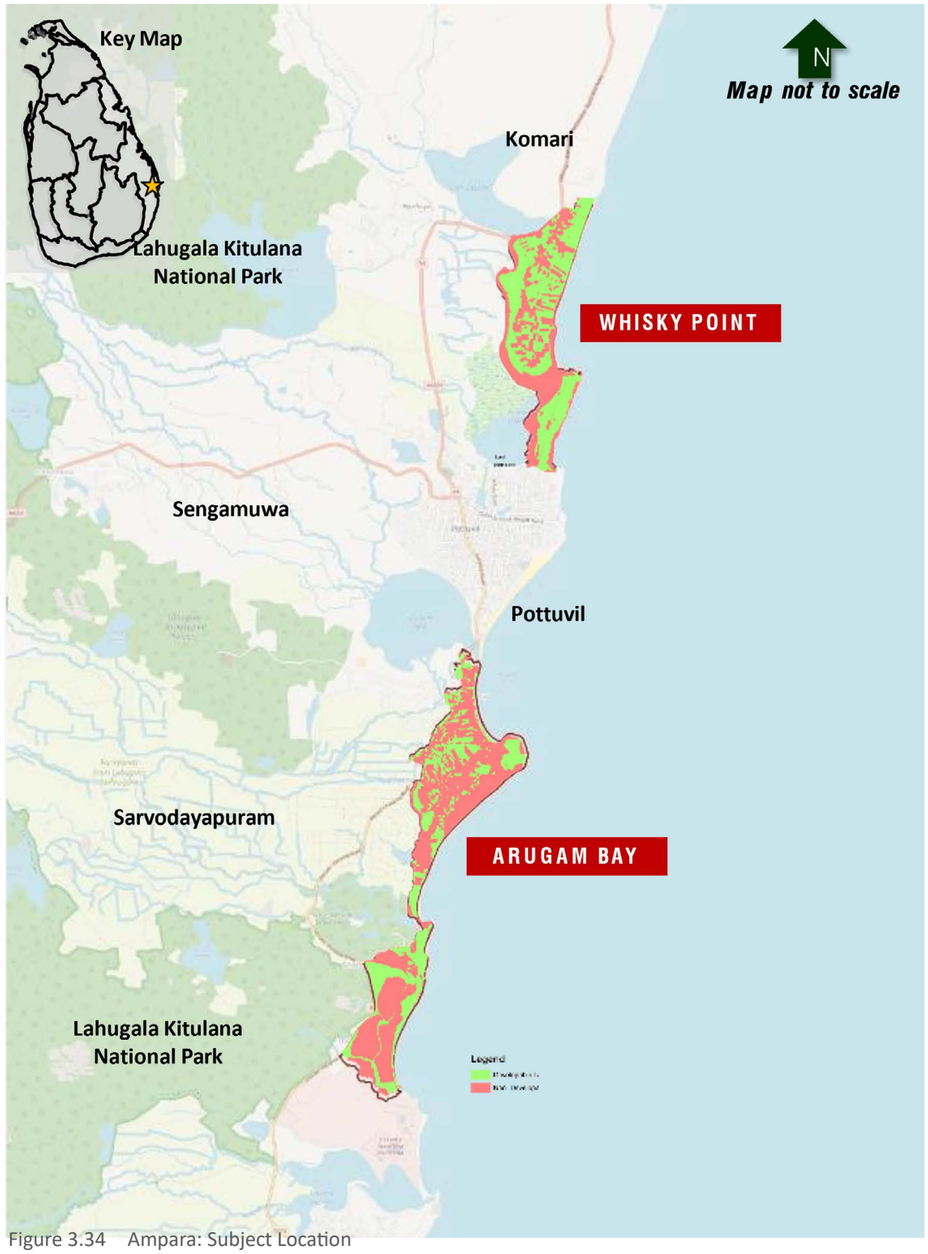


Figure 3.34 Ampara: Subject Location

3.6.5 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: POSITIONING

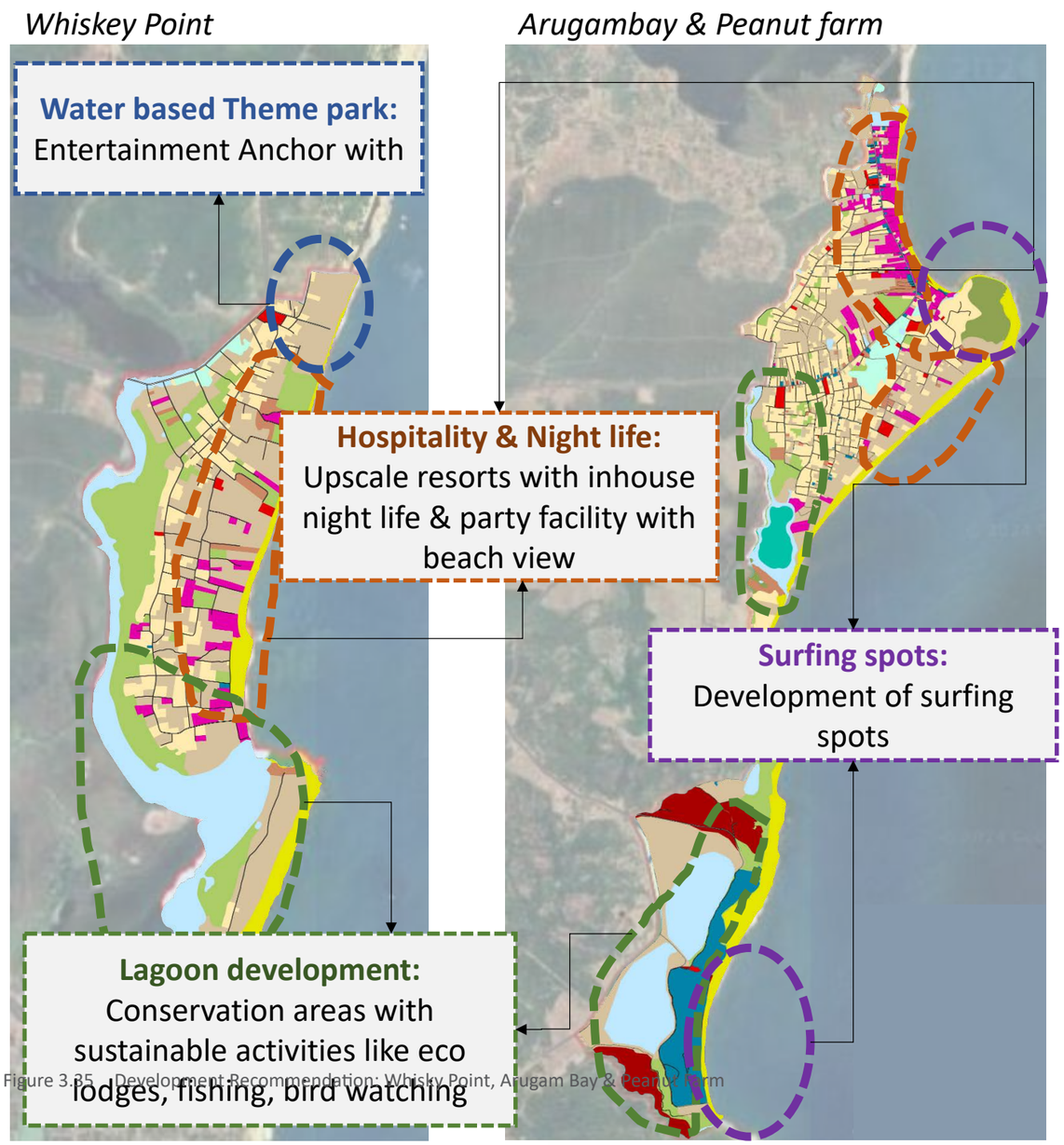


Figure 3.35 : Development Recommendation: Whisky Point, Arugam Bay & Peanut Farm

Dive, Surf and Soar to embrace the wild side of the coast

Key highlights

- **Surfing**
- **Night life**
- **Kayaking**

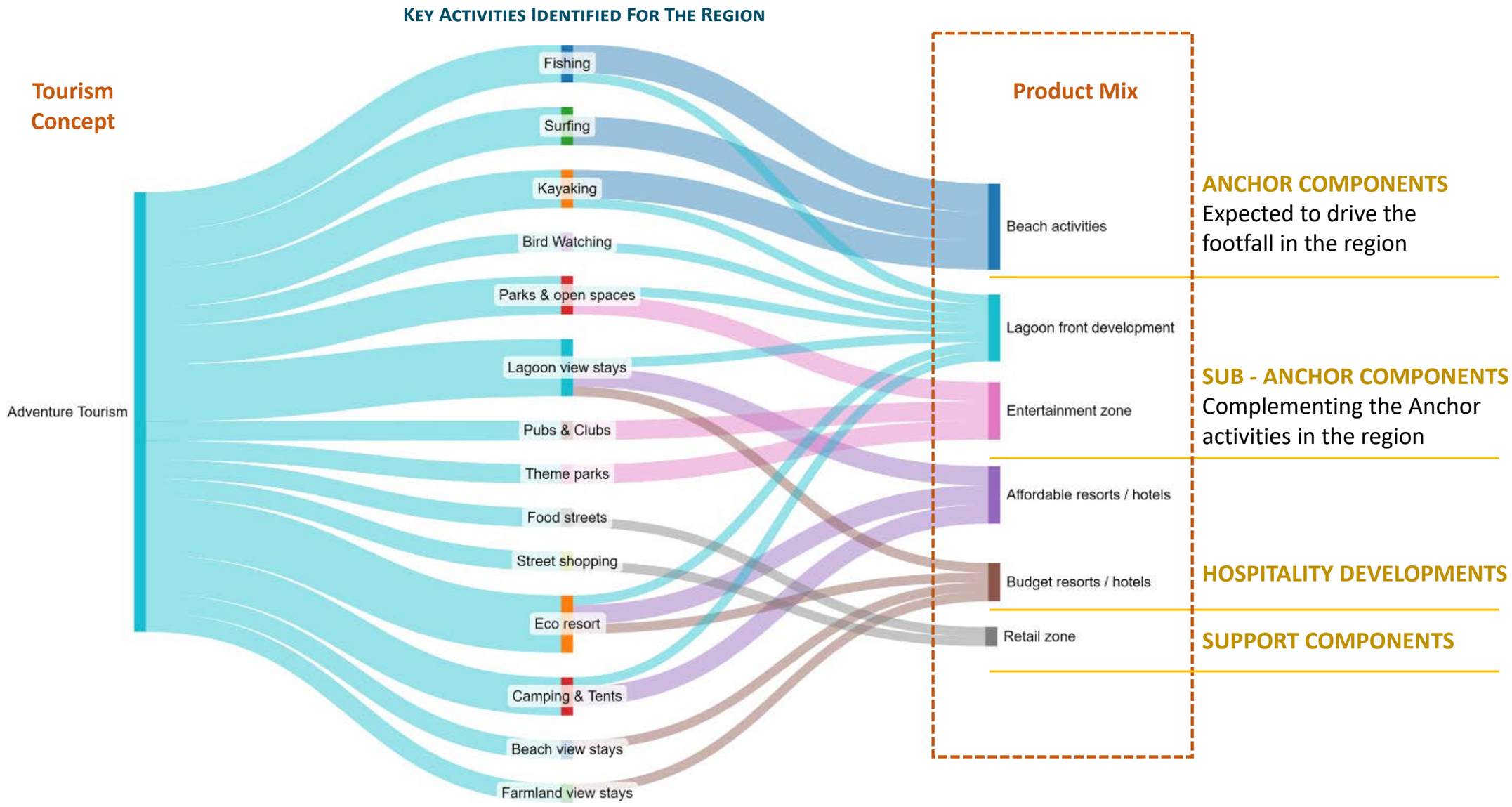
Key components

- ***Surfing Paradise***
- ***Lagoon front activities***
- ***Clubs & Pubs***

Key Visitor group:

- ***Foreign Backpackers (Europeans)***
- ***International Surfers***
- ***Domestic tourists***

3.6.6 WHISKY POINT, ARUGAM BAY AND PEANUT FARM: **PRODUCT MIX & ACTIVITIES**



Activities are based on market study, gaps identified & potential for the location

Figure 3.36 Whisky Point, Arugam Bay & Peanut Farm: Product Mix and Activities diagram

WHISKEY POINT, ARUGAM BAY & PEANUT FARM - POSITIONED TO BE A SURFING PARADISE ATTRACTING ADVENTURE TOURIST AND BACKPACKERS WITH LOW SPENDING CAPACITY

TENTATIVE AREA (HIGH CASE SCENARIO)

Table 3.10 Whisky Point, Arugam Bay & Peanut Farm Land Requirement (High Case Scenario)

Positioning: MID TO UPPER MID- END

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Beach front development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, gear rental stores, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters and F&B kiosks etc.
2	**Lagoon front development**	100 m Strip along the Lagoon to act as nature reserve - will be ticketed for tourists			Camping and tent stays, Bird watching, nature trails, cycling, lagoon kayaking, traditional fishing, parks & open spaces, picnic spots etc.
4	**4-star resort hotel**	5	8	11	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon, beach views and Farmland views
5	**3-star hotel**	2	2	4	Beach view Hotels
6	**Entertainment – water based Theme park + Entertainment zone**	0	12	12	Water based theme parks, Food street, Clubs & Pubs, Outdoor events area
7	**Retail High street + Tourist amenities**	6	6	4	Local crafts, local stores, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores, visitors center, Surfer's paradise
8	**Investment residential**	0	12	12	In next 15 years 2 to 3 projects can be proposed
	Total	**13**	**28**	**43**	Total land area requirement (A+B+C) – **84 hectares**

WHISKEY POINT, ARUGAM BAY & PEANUT FARM - POSITIONED TO BE A SURFING PARADISE ATTRACTING ADVENTURE TOURIST AND BACKPACKERS WITH LOW SPENDING CAPACITY

TENTATIVE AREA (LOW CASE SCENARIO)

Table 3.11 Whisky Point, Arugam Bay & Peanut Farm Land Requirement (High Case Scenario)

Positioning: MID TO UPPER MID- END

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Beach front development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, gear rental stores, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters and F&B kiosks etc.
2	**Lagoon front development**	100 m Strip along the Lagoon to act as nature reserve - will be ticketed for tourists			Camping and tent stays, Bird watching, nature trails, cycling, lagoon kayaking, traditional fishing, parks & open spaces, picnic spots etc.
4	**4-star resort hotel**	5	5	5	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon, beach views and Farmland views
5	**3-star hotel**	1	1	1	Beach view Hotels
6	**Entertainment – water based Theme park + Entertainment zone**	0	0	6	Water based theme parks, Food street, Clubs & Pubs, Outdoor events area
7	**Retail High street + Tourist amenities**	6	6	2.0	Local crafts, local stores, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores, visitors center, Surfer's paradise
8	**Investment residential**	0	0	12	In next 15 years 2 to 3 projects can be proposed
	Total	**12**	**12**	**23**	Total land area requirement (A+B+C) – **47 hectares**



Surfing Paradise



Affordable – Midscale resorts



Upscale resorts with Night life



Beach side Family parties

Figure 3.37 Whisky Point, Arugam Bay & Peanut Farm: Surfing and Night Life Activities Reference Images

WHISKEY POINT, ARUGAM BAY & PEANUT FARM - SURFING AND NIGHT LIFE



Agri Tourism



Eco lodge / Lagoon development



Lagoon development | Kayaking



Lagoon development | Nature trail

Figure 3.38 Whisky Point, Arugam Bay & Peanut Farm: Eco Lodge & Lagoon Development Reference Images

3.6.7 COMPONENTS FOR IMMEDIATE INTERVENTION (ALL NODES)

Table 3.12 Intervention Area Land Requirement for Nilaveli-Kuchchaveli and Pasikudah

Components	High case area (hectares)	Low case area (hectares)
NILAVELI & KUCHCHWELI		
MARINE MUSEUM	4.2	4.2
3 STAR HOTEL	1.0	1.0
DIVER'S PARADISE	1.5	1.0
BEACHFRONT PARK & RETAIL	2.3	1.0
Total	**9**	**7.2**
PASSIKUDAH		
WELLNESS CENTER	2.0	1.0
5 STAR RESORT	5.8	5.8
RETAIL/ NIGHT MARKET	1.3	1.0
VISITORS CENTER	0.8	0.8
Total	**9.9**	**8.6**

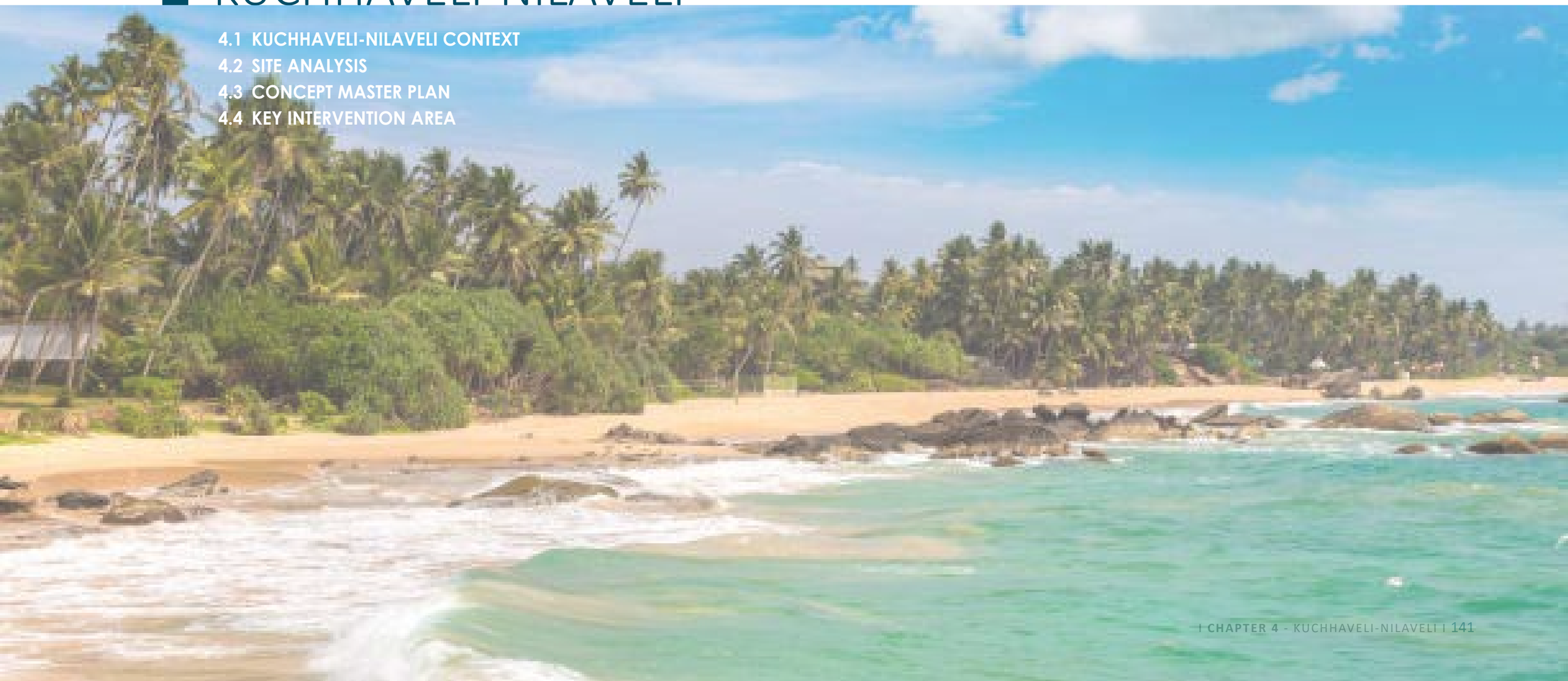
Table 3.13 Intervention Area Land Requirement for Peanut Farm, Whisky Point and Arugam Bay

Components	High case area (hectares)	Low case area (hectares)
	PEANUT FARM	
SURFERS PARADISE + RETAIL	3.9	0.3
VISITOR'S CENTER	0.7	0.3
Total	**4.6**	**0.7**
	WHISKEY POINT	
BEACHFRONT ENTERTAINMENT	1.2	0.4
4 STAR RESORT	5.1	5.1
NIGHT MARKET & ENTERTAINMENT	1.1	0.4
RETAIL	1.3	0.4
TOTAL	**8.7**	**6.1**
	ARUGAMBAY	
SURFER'S PARADISE + VISITORS CENTER	2.5	1
3 STAR HOTEL	2	-
BEACHFRONT PARK	0.52	0.52
TOTAL	**5**	**1.5**

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4 KUCHHAVELI-NILAVELI

4.1 KUCHHAVELI-NILAVELI CONTEXT
4.2 SITE ANALYSIS
4.3 CONCEPT MASTER PLAN
4.4 KEY INTERVENTION AREA



4.1 KUCHHAVELI-NILAVELI

TOURIST ATTRACTIONS

The primary tourist attractions in Kuchchaveli-Nilaveli revolve around its natural beauty and cultural heritage. Key highlights include stunning beaches, a marine national park, and various man-made sites like dams and a naval museum. Beach activities are particularly popular, offering visitors a chance to enjoy the pristine coastal environment.

Key nature and culture tourist attractions include:

1. Pigeon Island Marine National Park
2. Aqua Creed Dive Center
3. Uppuveli Beach, Kanniya Hot Water Springs & Lover's Leap
4. Dutch Bay Beach,
5. Sandy Cove Beach
6. Naval Museum
7. Trincomalee Harbour
8. Pure water Spring
9. Kanthale Dam
10. Sri Lakshmi Narayana Perumal Kovil
11. Thirukoneswaram Kovil

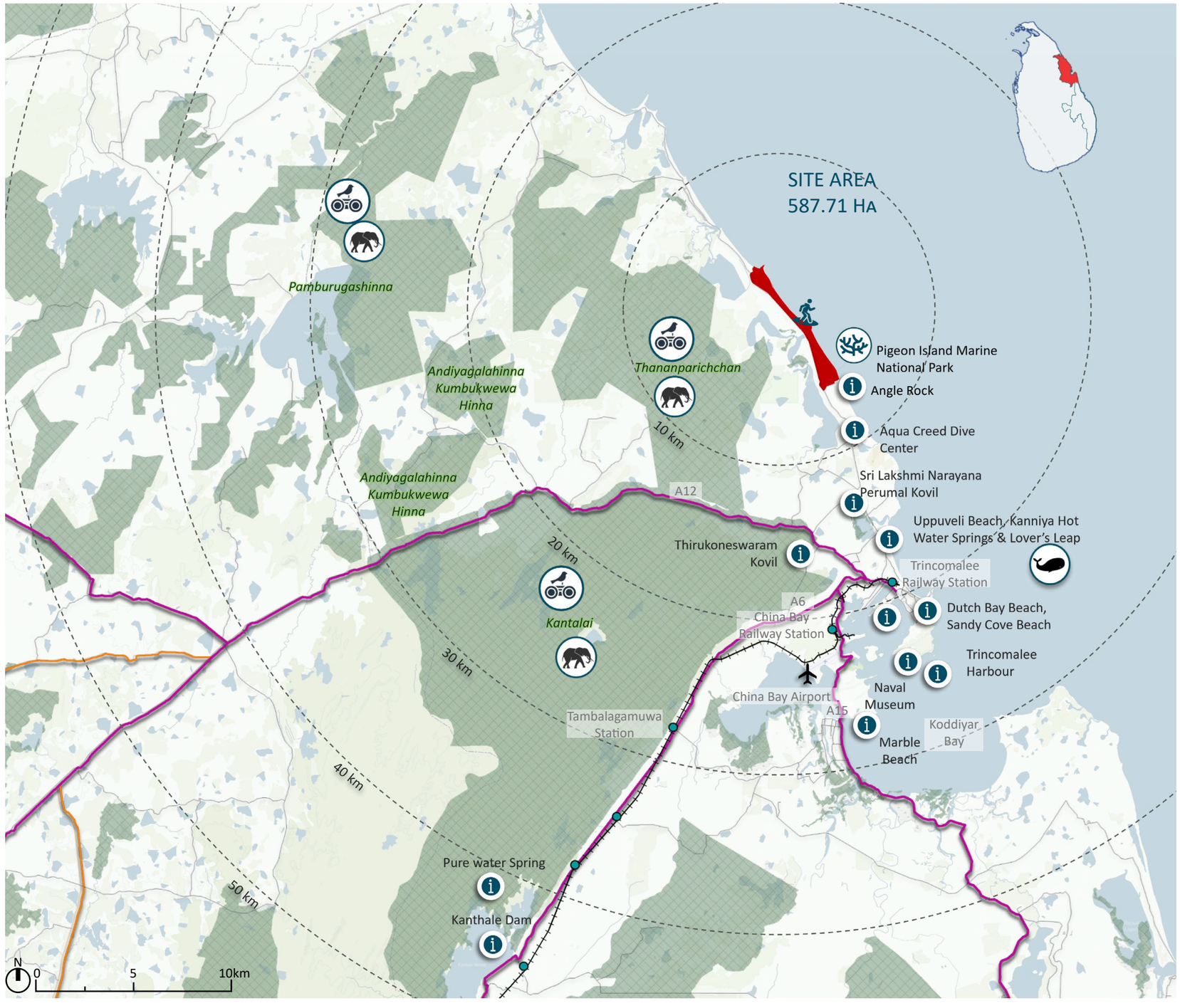


Figure 4.1 Tourist Attractions

ARCHEOLOGICAL SITES

The Trincomalee district is also rich in cultural and historical heritage, boasting numerous archaeological sites that significantly contribute to the area's wide-ranging tourist attractions. These sites offer a glimpse into the region's ancient civilizations and traditions.

The significant archaeological sites includes

1. Elada Kulam Archaeological Site
2. Kutchveli Archaeological Site
3. Myla Lake Archaeological Site
4. Pahalgama Archaeological Site
5. Pulikandi Kulam Archaeological Site
6. Three Medavachchiya Archaeological Site
7. Rangiri Spring Archaeological Site
8. Andagala Archaeological Site
9. Silver Mountain Archaeological Site
10. Rangiri Spring Archaeological Site
11. Galamatia Archaeological site
12. Pachchanur Stone Hill Archeological Site
13. Wilgam Vehera Archaeological Site
14. Seruvavila Archaeological Site

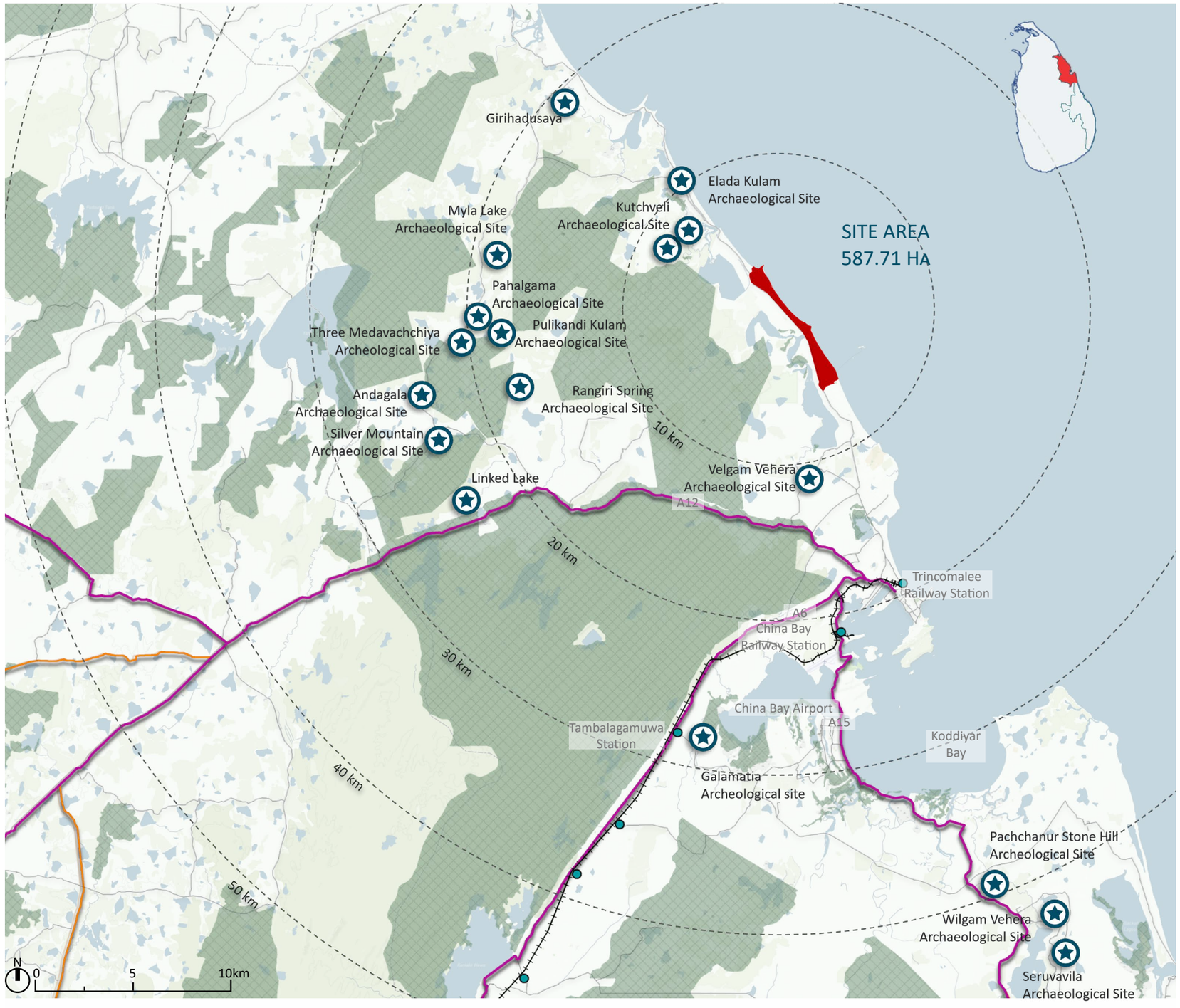


Figure 4.2 Tourism Attraction (Archeological Sites)

4.1.1 PIGEON ISLAND

Pigeon Island about 1 km away from the coast of Nilaveli Beach, which is approximately 18 km from Trincomalee is home to a variety of marine species, including colorful coral reefs, reef fish, turtles, and occasionally even blacktip reef sharks. Pigeon Island is declared a marine national park in 2003, aiming to protect its rich biodiversity and delicate ecosystems.

The island features two main coral reef formations, known as the large pigeon island and the small pigeon island. Both offer excellent snorkeling and diving spots. The clear waters and diverse marine life make it an ideal location for both beginners and experienced divers.

PIGEON ISLAND NATIONAL CONSERVATION ZONE IS THE STRATEGIC ASSET ATTRACTING TOURIST WITH HIGH SPENDING TO TRINCOMALEE



① Pigeon Island

Note:

Pigeon Island Buffer is reflected as per UDA, and subject to review by relevant authority.

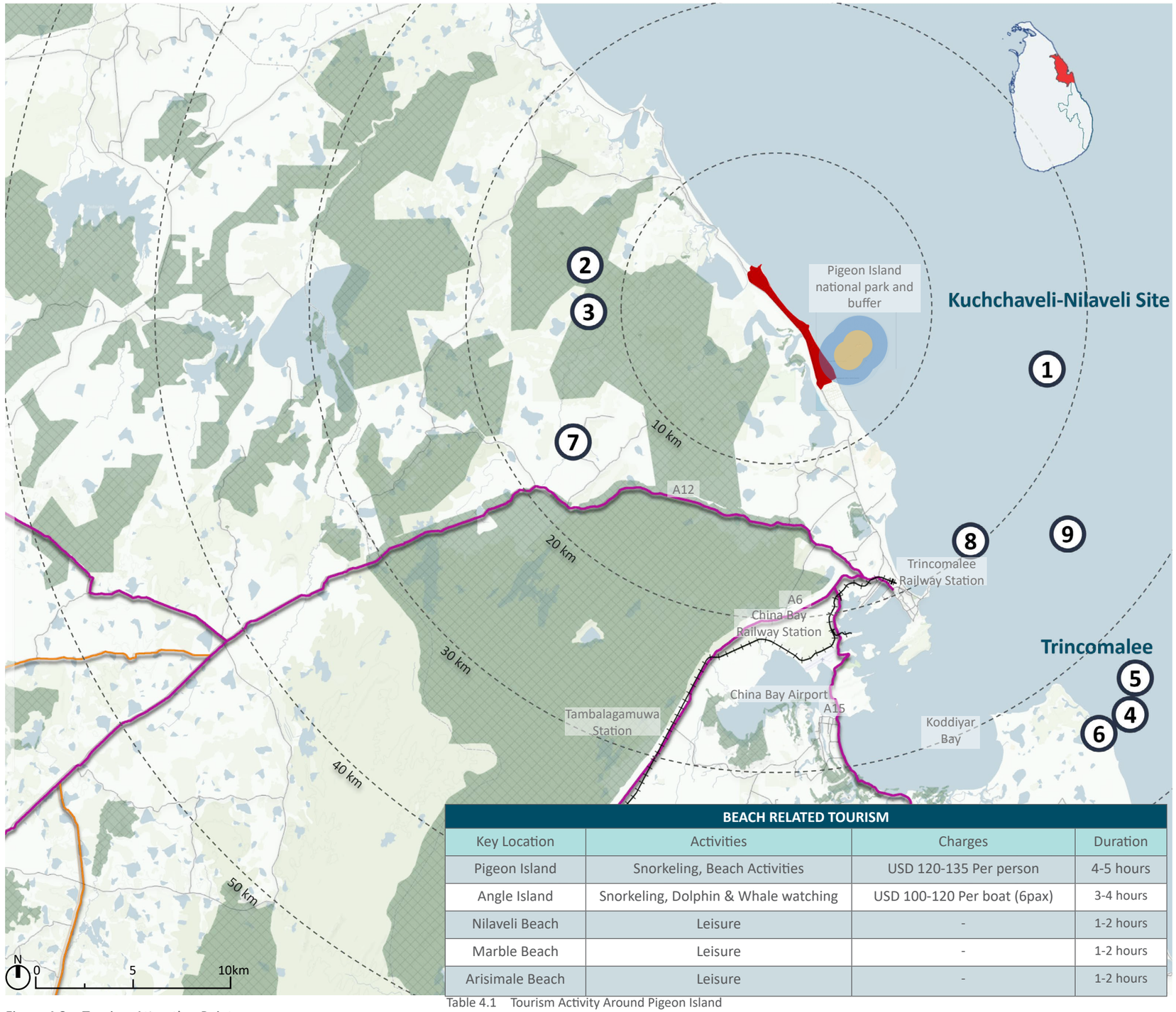
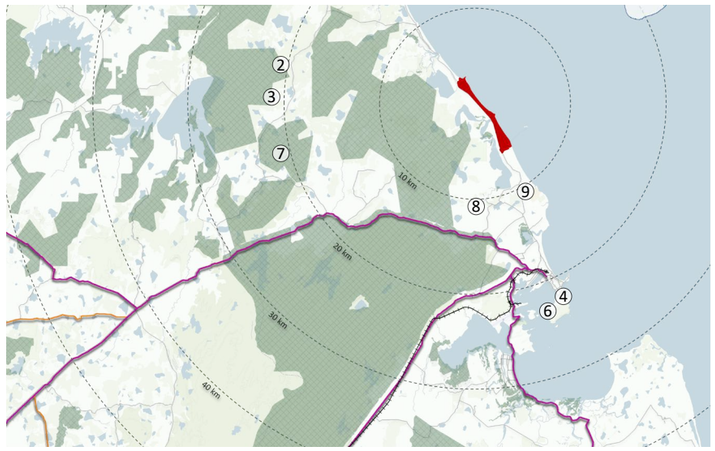


Figure 4.3 Tourism Attraction Points

BEACH RELATED TOURISM			
Key Location	Activities	Charges	Duration
Pigeon Island	Snorkeling, Beach Activities	USD 120-135 Per person	4-5 hours
Angle Island	Snorkeling, Dolphin & Whale watching	USD 100-120 Per boat (6pax)	3-4 hours
Nilaveli Beach	Leisure	-	1-2 hours
Marble Beach	Leisure	-	1-2 hours
Arisimale Beach	Leisure	-	1-2 hours

Table 4.1 Tourism Activity Around Pigeon Island





④ Fort Fredrick



⑦ Masanwewa Archaeological Site



② Mailawewa Archaeological site



⑤ Thirukoneswaram Temple



⑧ Velgam Vehera



③ Hindu Kovil Archaeological Site



⑥ Maritime & Naval Museum



⑨ Uppuveli Beach

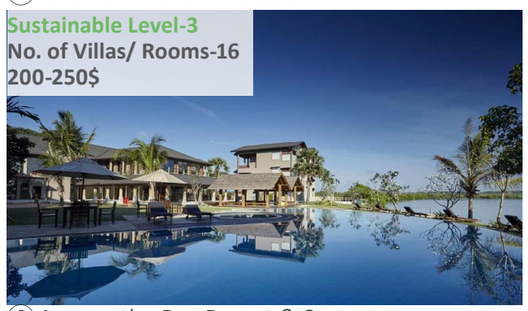
4.1.2 EXISTING ACCOMMODATION

Existing accommodation facilities are analysed based on development size, number of rooms availability , quality of service, diversity of pricing options, and sustainability infrastructure provision.

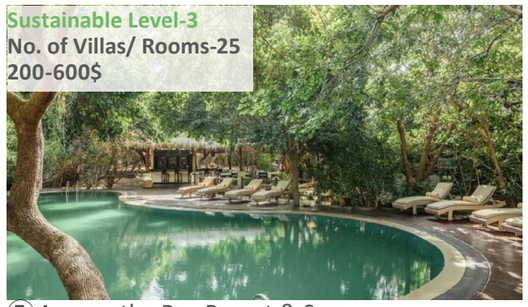
The selected accommodations, such as resorts, hotels, and villas, are listed below:



② 108 Palms Beach Resort



④ Amaranthe Bay Resort & Spa



⑤ Amaranthe Bay Resort & Spa

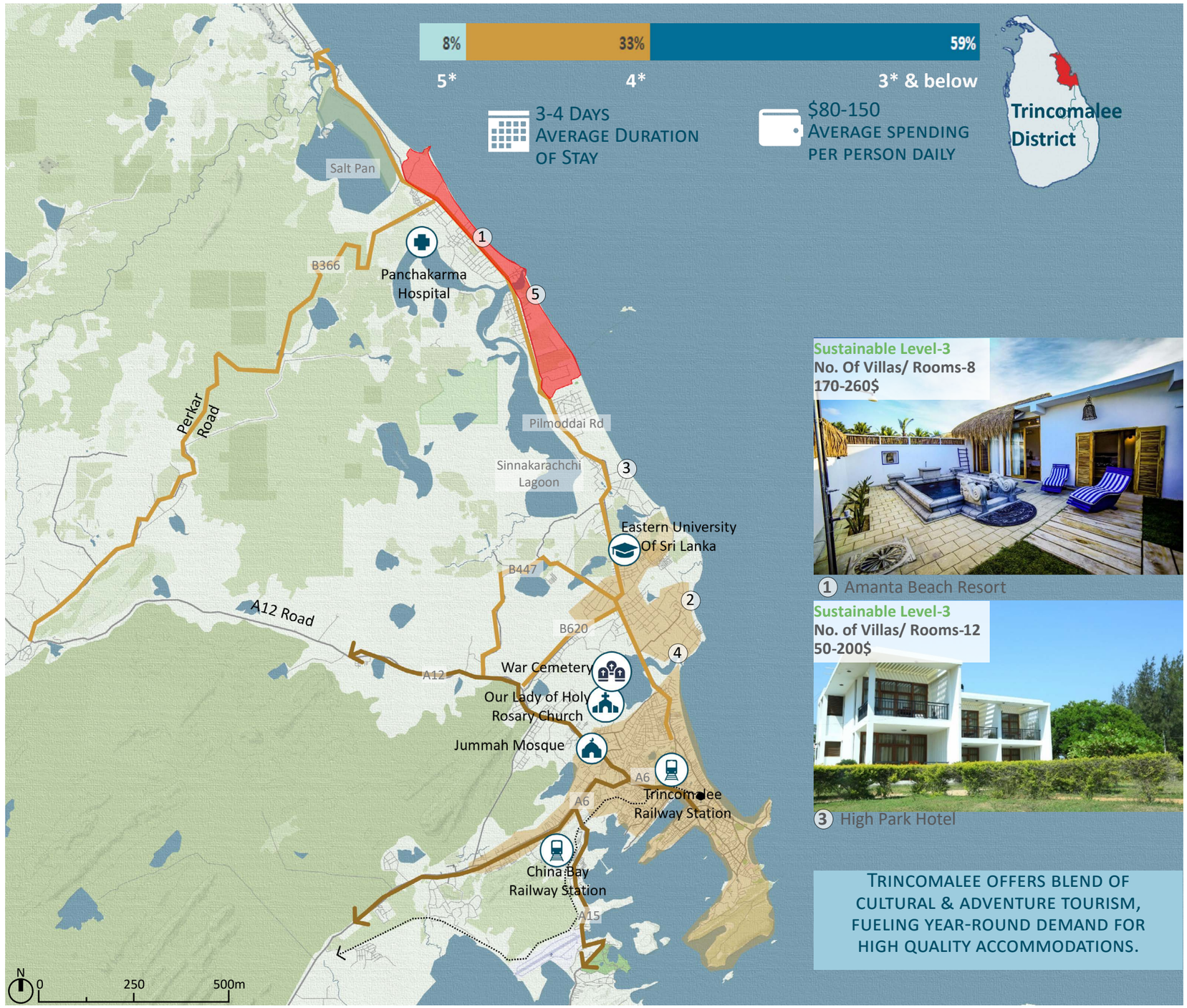


Figure 4.4 Existing Accommodation

4.1.3 EXISTING FACILITIES

Existing tourism supporting facilities within Kuchchaveli and Nilaveli sites focus on private diving equipment and training instructors' services. Some of the selected facilities, and pricing range are listed below.



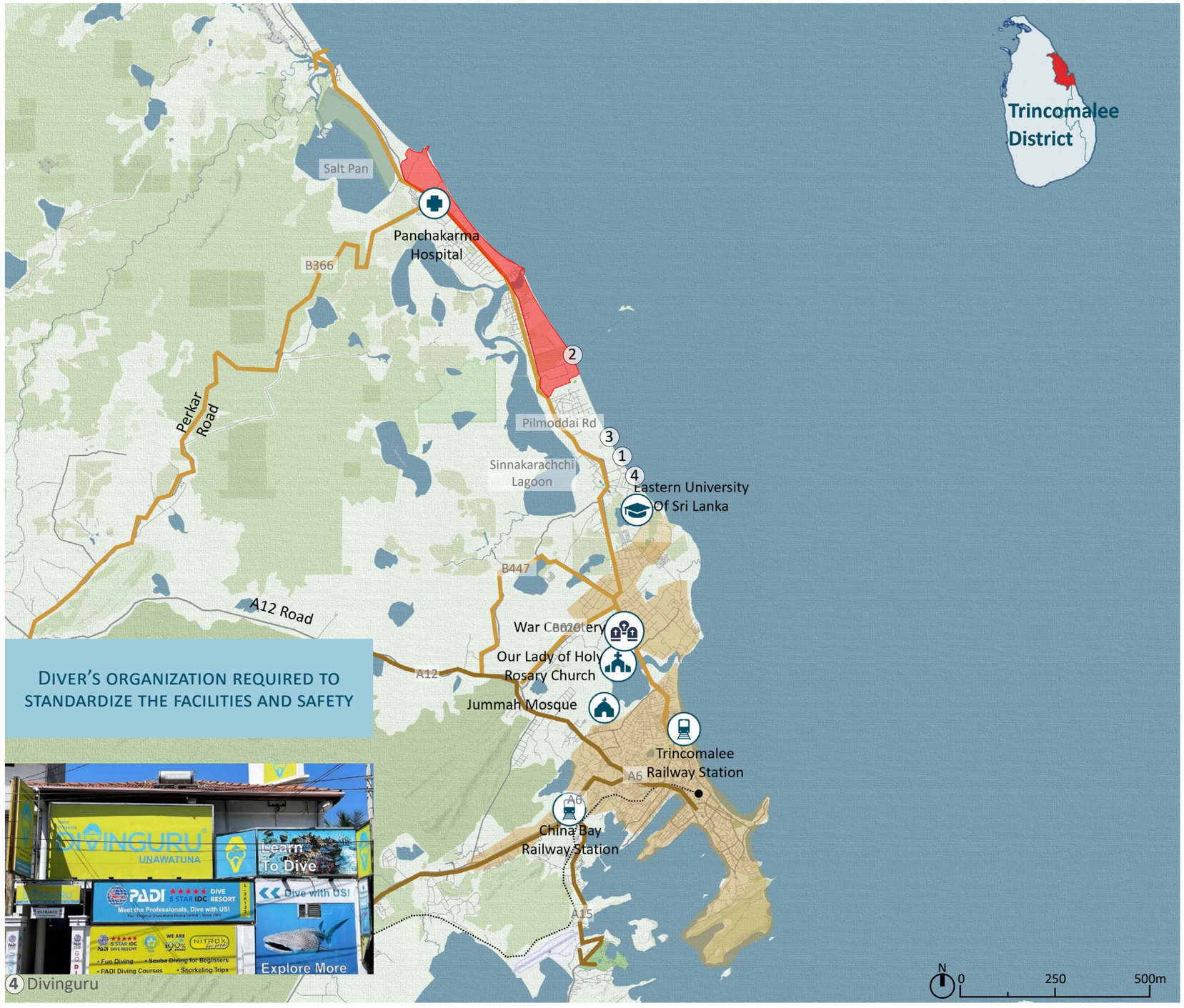
1 Divers Land Dive Club



2 Dive For You



3 Deep Blue Dive Center



4 Divinguru

Figure 4.5 Existing Facilities

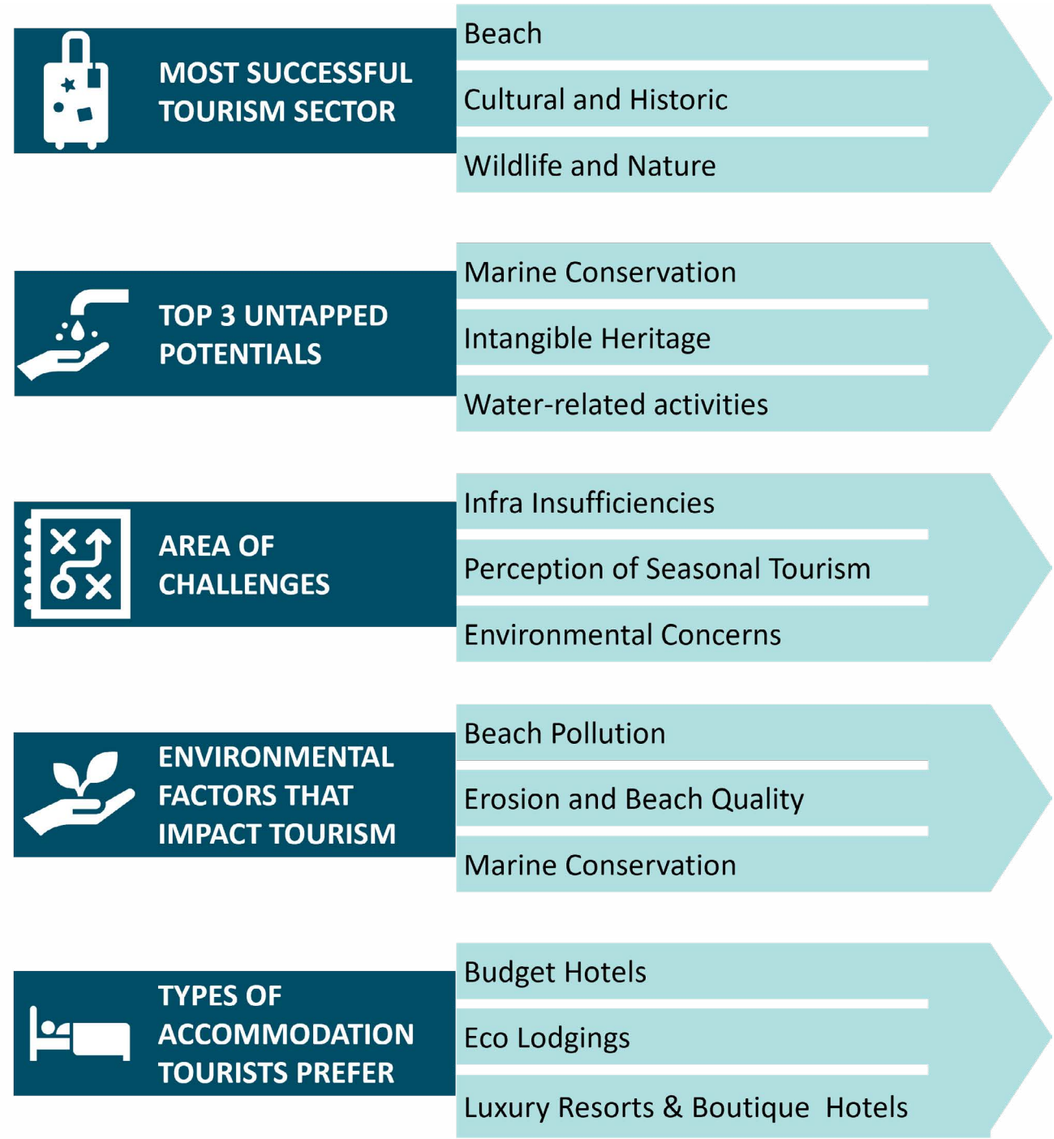
4.1.4 SUMMARY OF STAKEHOLDERS' INPUTS

Stakeholder discussions have been instrumental in gathering valuable insights regarding various aspects of tourism development aimed at optimizing the potential of the Kuchchaveli-Nilaveli site in Trincomalee district. The inputs obtained from these discussions have been categorized into several key areas for thorough analysis. The summary of these inputs is presented in the Fig.

Moreover, the analysis delves into the assessment of natural and heritage attractions based on activity types, diversity, and the richness of natural assets present in the Kuchchaveli-Nilaveli area. Additionally, the analysis examines the provision of infrastructure and evaluates the quality of existing tourism facilities, including accommodation choices.

The insights gathered from stakeholder discussions and subsequent analysis provide a solid foundation for strategic planning and decision-making to harness the full potential of the Kuchchaveli-Nilaveli site while addressing its challenges.

Natural & Heritage Attractions	Surfing	■
	Heritage Sites	■■■
	Ecological Sites (Forest & Wildlife)	■■■
	Ecological Sites (Coral Reef)	■■■■
Infrastructure Provision	Connectivity (Road)	■■
	Connectivity (Rail)	■■
	Connectivity (Air)	■■■
Quality of Accommodations	Quality of Existing Accommodation (Non-Budget)	■■
	Quality of Existing Accommodation (Budget)	■■



4.2 SITE ANALYSIS

4.2.1 SITE CONTEXT

Expanding on the location of Kuchchaveli and Nilaveli, we find that:

Situated within a rural setting, the study area offers a serene and natural environment, providing a peaceful retreat from urban life.
The land area is characterized by flat terrain, facilitating ease of access and potential for various development projects.

Abundant water bodies enrich the landscape, offering opportunities for recreational activities and ecological conservation efforts.
The pristine beach front along the ocean remains largely untouched, preserving its natural beauty and attract visitors seeking unspoiled coastal experiences.

To the north of the site boundary lies a salt pan area, contributing to the area's unique ecological diversity and cultural heritage.
Existing settlements are primarily situated between the lagoon area and the study boundary, forming a harmonious blend of residential and natural landscapes.

However, the main local road, though serving as a vital transportation artery, is narrow and divides the study area and existing villages, highlighting the need for infrastructure improvements to enhance connectivity and accessibility.

The Marine Knowledge Hub is set to be integrated into the Trincomalee Campus of the Eastern University of Sri Lanka, marking a significant step in marine research and education by empowering future marine scientists and conservationists.



Figure 4.6 Site Context

4.2.2 SITE STRENGTHS

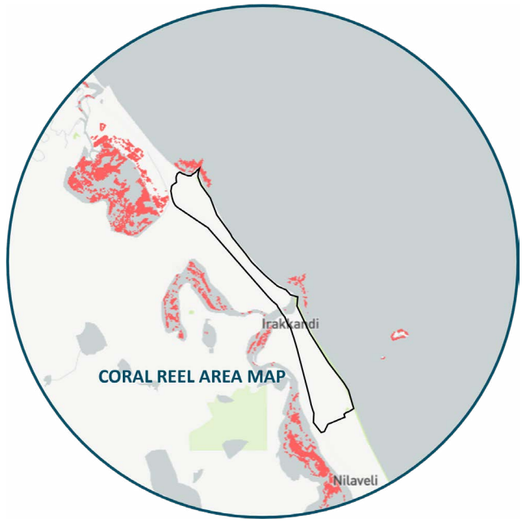
The study area of Kuchchaveli and Nilaveli presents significant potential and strengths, including sizeable green field land: Situated between the ocean and lagoon, the area boasts a considerable expanse of green field land, offering opportunities for various development projects and recreational activities.

Strategic Gateways

With three gateway points located at the north, south, and west; the area offers good accessibility, facilitating ease of entry and exit for visitors and tourists.

Expansive Beach front

Stretching over 9 kilometers, the beach front of Kuchchaveli and Nilaveli provides an extensive shoreline, for diverse activities.



Note:
Pigeon Island Buffer is reflected as per information received from UDA, and subject to review by relevant authority.



Figure 4.7 Site Strengths

Proximity to Pigeon Island Marine National Park

Just 2 kilometers away from the renowned Pigeon Island Marine National Park, the study area benefits from its proximity to this biodiverse marine ecosystem, offering opportunities for eco-tourism and nature exploration.

Rich Coral Reef Areas

Both within the lagoons and along the ocean beach, the presence of coral reef areas adds to the area's natural beauty and ecological significance.

Established Resorts and Semi-Developed Beach front

With existing resorts and semi-developed beach front properties, the area already possesses infrastructure and amenities to cater to visitors, laying a foundation for further development and enhancement.

Natural Viewpoints and Assets

Within the study area, existing viewpoints and natural assets offer scenic vistas and recreational opportunities, contributing to the overall attractiveness and appeal of Kuchchaveli and Nilaveli as a tourism destination.

These key potential and strengths of the site provide a solid foundation for strategic planning and development initiatives aimed at harnessing its full tourism potential while preserving its natural beauty and ecological integrity.







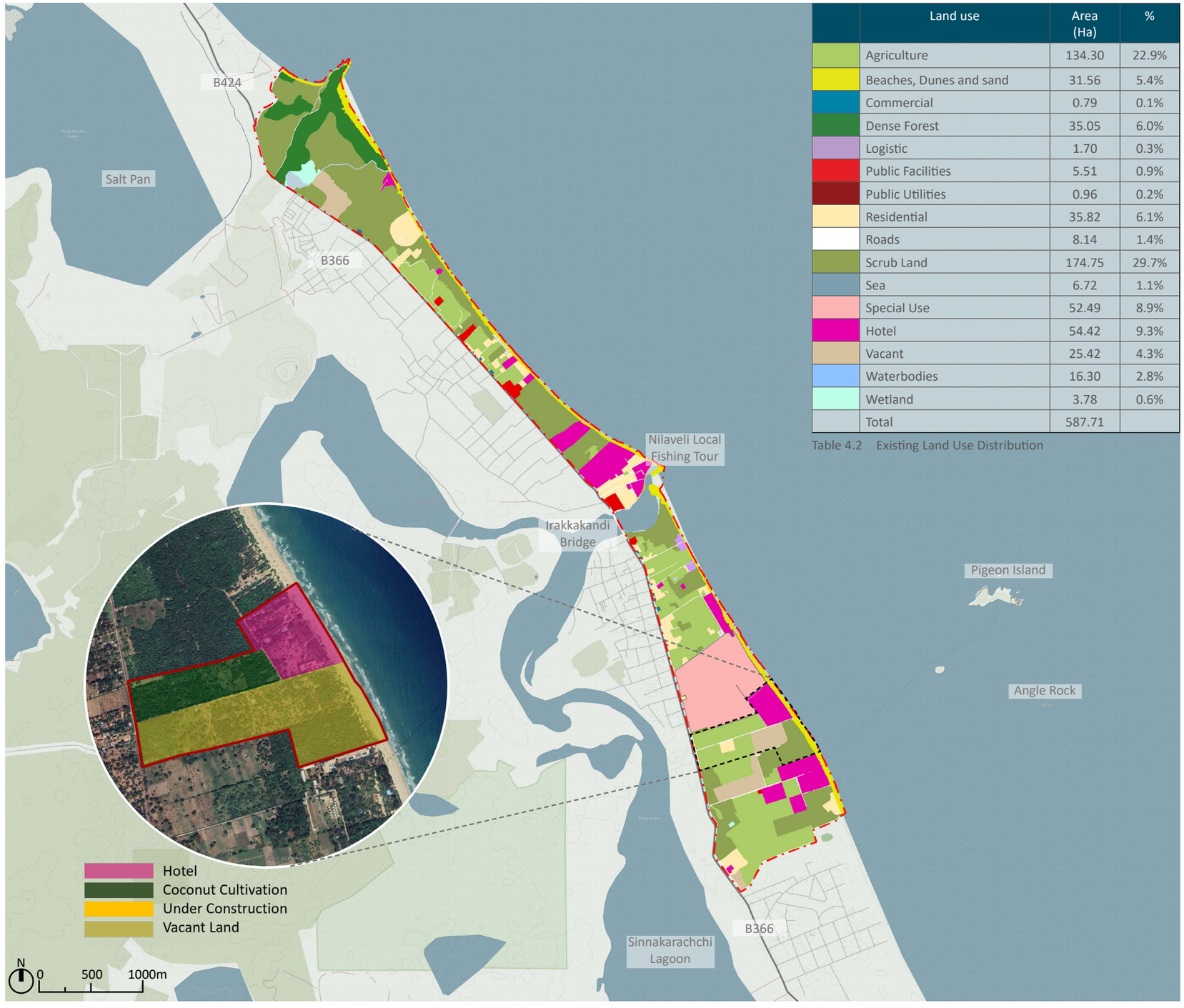
4.2.3 EXISTING LAND USE

SITE AREA: 587.71 Ha

- 91 Ha (15%) occupied by scattered tourism, commercial and residential uses.
- 35 Ha occupied by dense forest areas.
- Limited access and connectivity.

The study area of Kuchchaveli and Nilaveli encompasses approximately 587.71 hectares. Within this expanse, existing settlements occupy 15%, characterized by scattered tourism establishments such as resorts and hotels, alongside various commercial and residential uses. Additionally, 35 hectares of dense forests enhance the area's ecological diversity and natural ambience.

More than 50% of land area within the site is developable for future which encompasses agriculture land, scrub land and vacant area. The site presents an opportunity to transform into a vibrant coastal gateway and destination for diverse tourism activities. Limited infrastructure including inadequate road networks and utilities, and environmental concerns such as coastal erosion, waste management, flood management and preserving nature are key challenges for the strategic development and sustainable management of Kuchchaveli and Nilaveli.



	Land use	Area (Ha)	%
	Agriculture	134.30	22.9%
	Beaches, Dunes and sand	31.56	5.4%
	Commercial	0.79	0.1%
	Dense Forest	35.05	6.0%
	Logistic	1.70	0.3%
	Public Facilities	5.51	0.9%
	Public Utilities	0.96	0.2%
	Residential	35.82	6.1%
	Roads	8.14	1.4%
	Scrub Land	174.75	29.7%
	Sea	6.72	1.1%
	Special Use	52.49	8.9%
	Hotel	54.42	9.3%
	Vacant	25.42	4.3%
	Waterbodies	16.30	2.8%
	Wetland	3.78	0.6%
	Total	587.71	

Table 4.2 Existing Land Use Distribution

Figure 4.8 Existing Land Use

4.2.4 ENVIRONMENTAL ASSESSMENT

- Kuchchaveli- Puduvakattu (including Pirate Cove) Coastal area has been declared as Special Management Areas under the legal provisions of the CC&CRM Act.

- Kuchchaveli- Puduvakattu 50m setback is kept including 20m reservation as of CC & CRM Act.

- Pigeon Island National park is a nationally significant coral reef ecosystem which has been already identified as highly threatened due to invasive species and coral bleaching.

- Ground water resources are depleting, hence, sustainable water management practices are required in the tourism development plan.

- Tsunami, cyclone, droughts, storm surges and coastal flooding has been reported. In 2004 Tsunami, 2km inundation was recorded in Kuchchaveli.

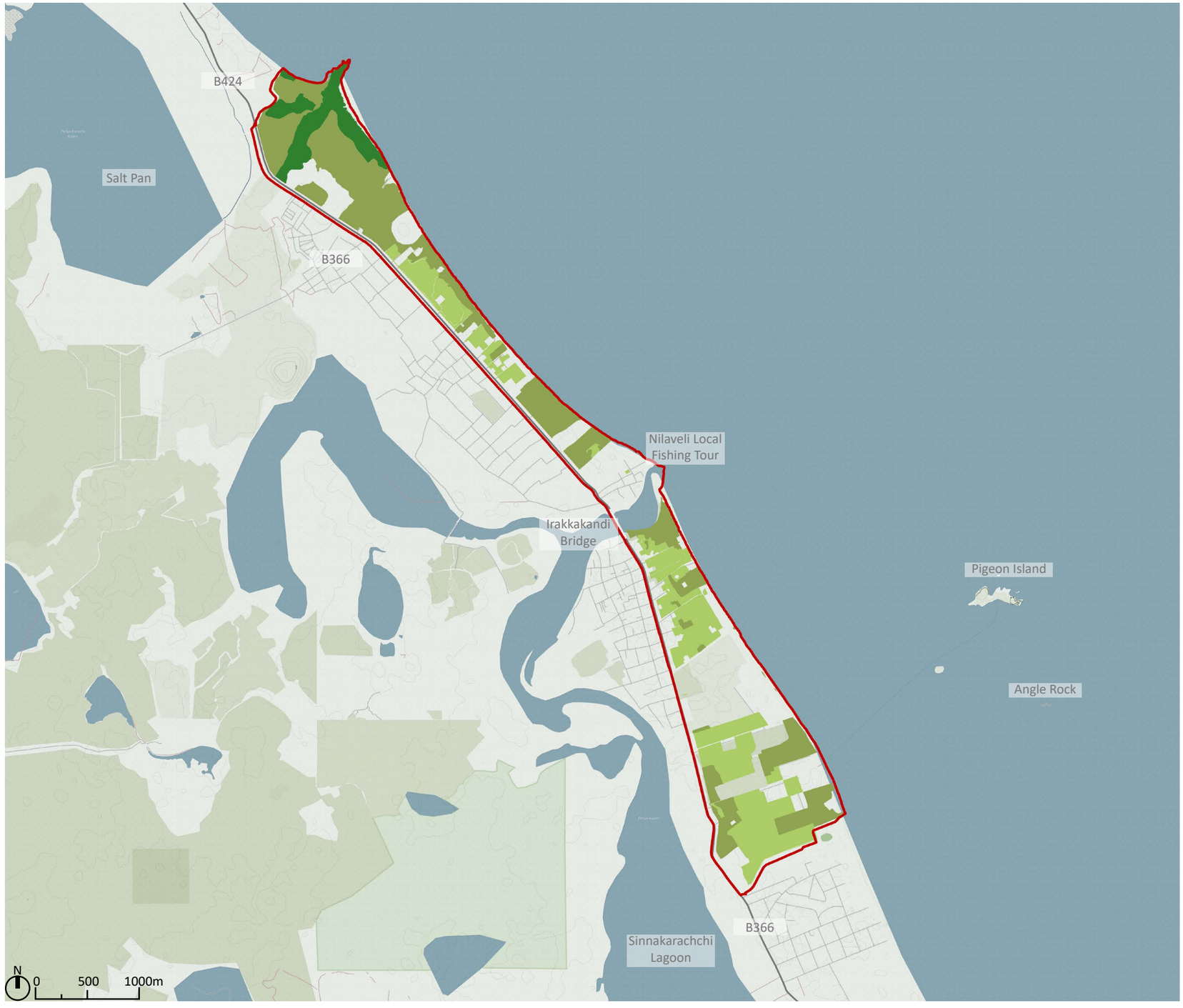


Figure 4.9 Environmental Assessment

PERMISSIBLE FLOOR AREA

- Total Permissible Floor Area' means the maximum extent of the floor space that shall be permitted by the relevant Authority to be achieved in one or more levels of the development, excluding ancillary facilities
- Additional parking area provided within the development in excess of regulatory parking requirement shall be included in the Permissible Floor Area.
- The area of the roof terrace shall be included in the Permissible Floor Area if it is used for an activity other than for the ancillary facilities of the main activities of the development.

Permissible Total Floor Area= Zone Factor x [Land Extent[a] + (Land Extend x 1 - % Plot Cover) + (1/2 (Road Frontage x Width of the Road))]

Zone Factor : To be decided according to the expected Development intensity, Likely Demand for Space, Availability of Road and Drainage Infrastructure

Road Frontage: The width of the Land at the point that directly abuts the access road. If there is more than one access roads, all such frontages shall be included)

Width of the Road : The Street/Building Line Width of the Road

a : If the land extent is 1000 sq meters or less apply the value of and if the extent is more than 1000 sq meters apply figure 1.05 (√(1+Plot Size)/10,000)

Subject to the controls imposed by the other regulations in place

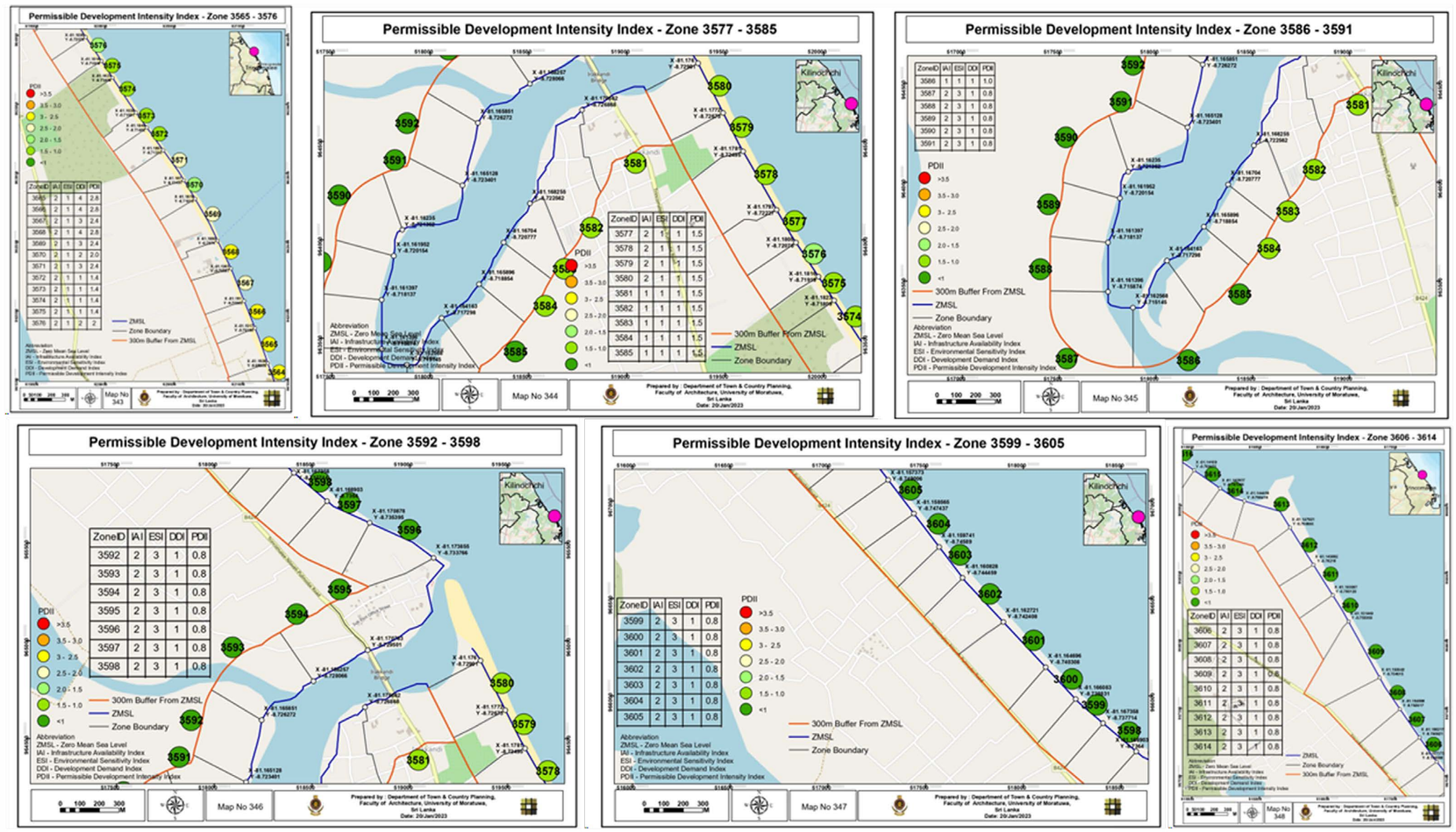


Figure 4.10 Permissible Development Intensity Index

4.2.5 SOCIAL ASSESSMENT

- As of 2022, the Trincomalee Town & Gravets Divisional Secretariat Division is home to 114,880 people, of whom 49% were males and 51% were females (Source: Resource Profile, Trincomalee Town & Gravets DSD).

- Ethnicity-wise, Trincomalee consists of 64% Tamils, 20% Sinhalese, 15% Sri Lankan Moors, and 1% other ethnic groups.

- Religion-wise, the population comprised of 54% Hindus, 20% Buddhists, 15% Islamic, 8% Roman Catholics, and 3% Other religious groups.

- Major occupations of the community include all public and private sector employments and self-employments, which include sectors such as agriculture, fishing, and tourism. Unemployment ratio in Trincomalee is 1.4% in 2021, as per the DCS Labour Force Survey.

- Trincomalee houses 13 archaeological reserves and 34 protected monuments listed by the Department of Archaeology that play a significant role in the tourism sector. Some of the notable places include Koneswaram temple, Fort Frederick, Seruvila temple, Thiriyaya temple, and so forth. They add incredible character to the Trincomalee town and the surrounding.

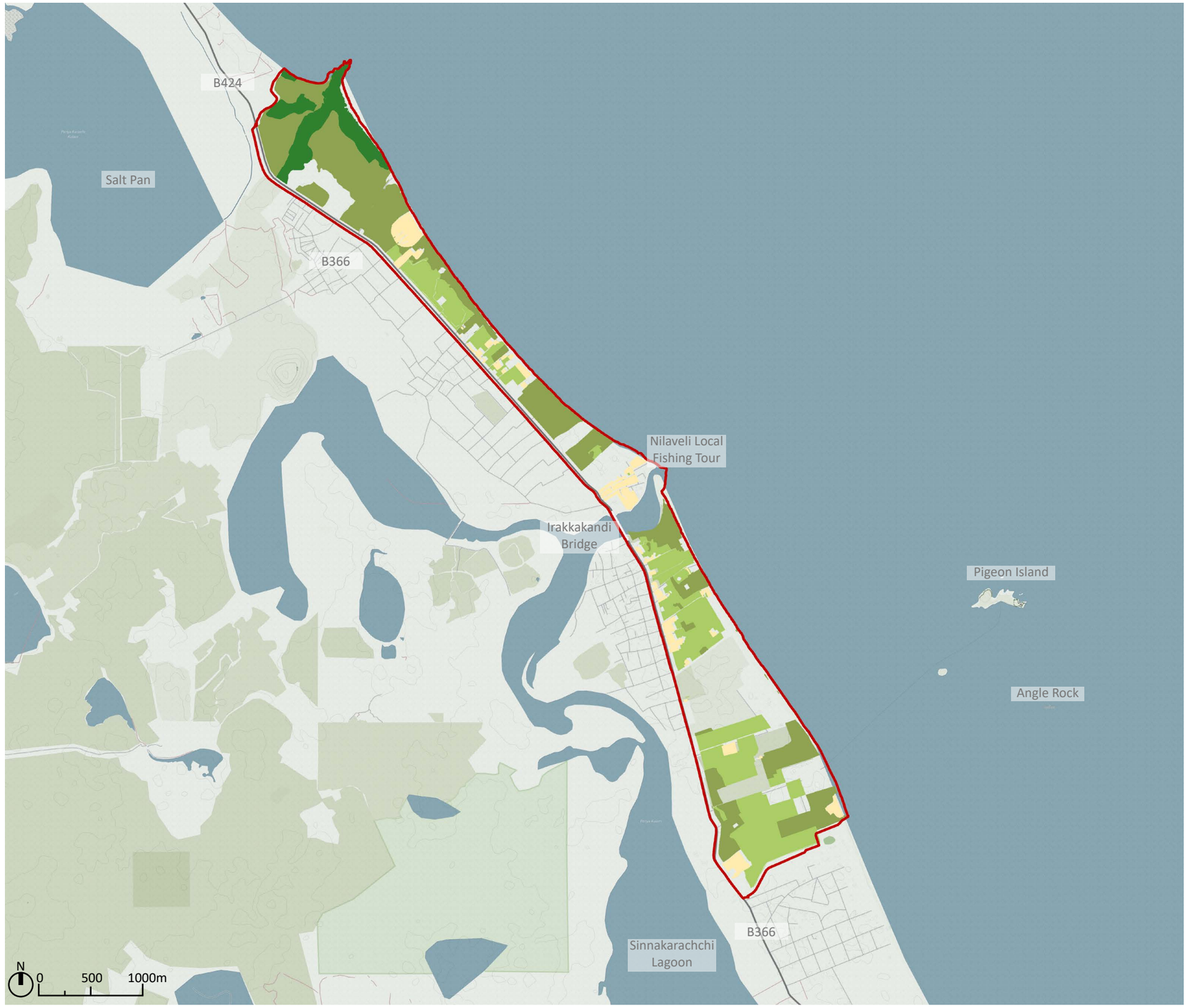


Figure 4.11 Social Assessment

4.2.6 DEVELOPABLE LAND

The total developable land area within the Kuchchaveli-Nilaveli study area spans 401 hectares, encompassing various land types including vacant land, agriculture land, scrub land, beaches, and sand. This expansive area offers a canvas for diverse development projects, ranging from tourism infrastructure to eco-friendly initiatives, presenting ample opportunities for strategic planning and sustainable growth. Whether it's preserving the natural landscape or creating new recreational spaces, this vast expanse holds promise for enhancing the region's appeal while maintaining its ecological balance.

Furthermore, the southern entrance at Nilaveli beach presents significant potential as a gateway intervention due to its proximity to Pigeon Island and the Trincomalee city center.

	Area (Ha)	Land use	Area (Ha)
Developable Land	401.2	Agriculture	130.7
		Beaches, and sand	31.6
		Scrub Land	161.9
		Special Use	52.5
		Vacant	24.6
Non - Developable Land	186.5	Commercial	0.8
		Dense Forest	32.9
		Flooding Areas	36.2
		Logistics	1.7
		Public Facilities	3.5
		Public Utilities	1.0
		Residential	31.1
		Roads	7.6
		Sea	6.7
		Tourism	48.0
		Waterbodies	14.3
		Wetland	2.6

Table 4.3 Developable/ Non Developable Land Area Distribution



Figure 4.12 Developable Land

4.2.7 KEY ENABLERS AND CHALLENGES

KEY ENABLERS

- Kuchchweli & Nilaveli are located away from the Trincomalee city - **Potential for the region to develop as a Tourism hub**
- Established location for Religious/ Cultural tourism in Trincomalee city with tourist footfalls – **Potential to capitalise on the footfall and boost tourism through other activities**
- Presence of one of a kind beach activity in the country like Marine conservation in Pigeon island offering coral reefs, marine animals, dolphin & Whale watching – **Potential to capitalize on the marine based activities Potential to capitalize on the marine based activities.**
- Trincomalee has various economic activities like factories, port related activities, small business etc. – **Potential to capitalize on the business footfalls to become tourist footfalls**

CHALLENGES

- Connectivity to the region is **limited to road and rail** which takes 8 – 10 hrs from Colombo city for foreign travelers.
- **Limited presence of infrastructure** for Tourism in the region – hospitality developments, Information centers, Restaurants, Money exchange offices etc.
- Existing tourist activities **are limited to adults** and does not engage all age group of people
- **Cost of visiting pigeon island** is more than the cost of accommodation in the region. This is due to Pigeon island being a marine conservative region, increasing the price of the ticket.
- **Political instability and public protests** as factors affecting development projects.

4.2.8 VISION FRAMEWORK



MARINE ECO LIFE



UNTOUCHED SANDY BEACHES



RICH CULTURE & HERTITAGE



CONNECTIVITY & INFRASTRUCTURE

KUCHHAVELI-NILAVELI

An International Destination for

MARINE ECO-ADVENTURE

Goal-1
ECO-ADVENTURE HUB

Goal-2
AQUATIC KNOWLEDGE CENTER

Goal-3
URBAN BEACHFRONT DESTINATION

KUCHCHAVELI-NILAVELI MARINE ADVENTURE DESTINATION

Goal-1
ECO-ADVENTURE HUB

IMMEDIATE STRATEGIES

1. Develop centralized **Marine Adventure Centre** comprising of international level diving centre, tourist centre and key diving related retail facilities.

2. **Optimize surrounding eco-tourism opportunities** and develop boardwalk and natural trails, Wildlife trails and rest camps.

3. **Improve Air Connectivity** & **Tourism linked infrastructure** including connectivity, Waste Management, renewable energy

ADVANCED PHASE

1. **Diver's organization** for safety standards
2. Coral & Marine Habitat **restoration & enhancement**
3. Facilities to **host Aquathlon**
4. Acquire **Blue Flag Certification**

Goal-2
AQUATIC KNOWLEDGE CENTER

IMMEDIATE STRATEGIES

1. **Develop a Hospitality School**

2. **Develop a Collaboration Hub** including exhibition gallery, training facilities for marine-related skill development

ADVANCED PHASE

1. **Marine science & conservation institution**
2. Marine **Research** Center/ Data Center
3. Marine Habitat **Museum**

Goal-3
URBAN BEACHFRONT DESTINATION

IMMEDIATE STRATEGIES

1. **Develop Beachfront including** commercial, facilities, Seaside Amphitheatre, Viewing Platforms, parks and open spaces.

2. **Develop Centre for Entertainment & Nightlife** including vibrant pedestrian street with commercial activity

3. **Develop Water related Theme Park**

4. **Develop sustainable infrastructure** including integrated **eco-friendly accommodations**, **sustainable last-mile-transport options** such as shared bikes, E-bike charging stations, etc, alternate public transport mode.

ADVANCED PHASE

1. **Integrated Theme Parks**

4.2.10 KEY PROGRAMMES

The key highlights of Kuchchaveli-Nilaveli include vibrant coral reefs, dolphin and whale watching, and opportunities to observe sharks and turtles in their natural habitat. Another major focus is optimizing visitors' footfall for Pigeon and Angel Islands, enhancing the tourism appeal of these areas. The primary visitor groups targeted are domestic tourists, cultural circuit foreign travelers, backpackers, and corporate and business-related travelers. To support these attractions, key programs will include the establishment of a marine museum, aimed at preserving and showcasing marine life. Additionally, there will be a concerted effort to develop and enhance the beaches and provide facilities for divers, ensuring they are key attractions for visitors.

KEY HIGHLIGHTS

Coral Reefs | **Dolphins & Whales** | **Sharks & Turtles**

OPTIMISING VISITORS' FOOTFALL FOR PIGEON AND ANGEL ISLANDS

Key Visitor group:

- Domestic tourists
- Cultural circuit foreign travellers
- Backpackers
- Corporate & Business-related travellers

MARINE DIVERSITY PARADISE

KEY PROGRAMS

DIVER'S PARADISE	MARINE MUSEUM	BEACH FRONT DEVELOPMENTS



Figure 4.13 Key Programmes

4.3 CONCEPT MASTER PLAN

4.3.1 CONCEPT STRUCTURE





Pigeon Island National Park





Diver's Paradise Commercial Area

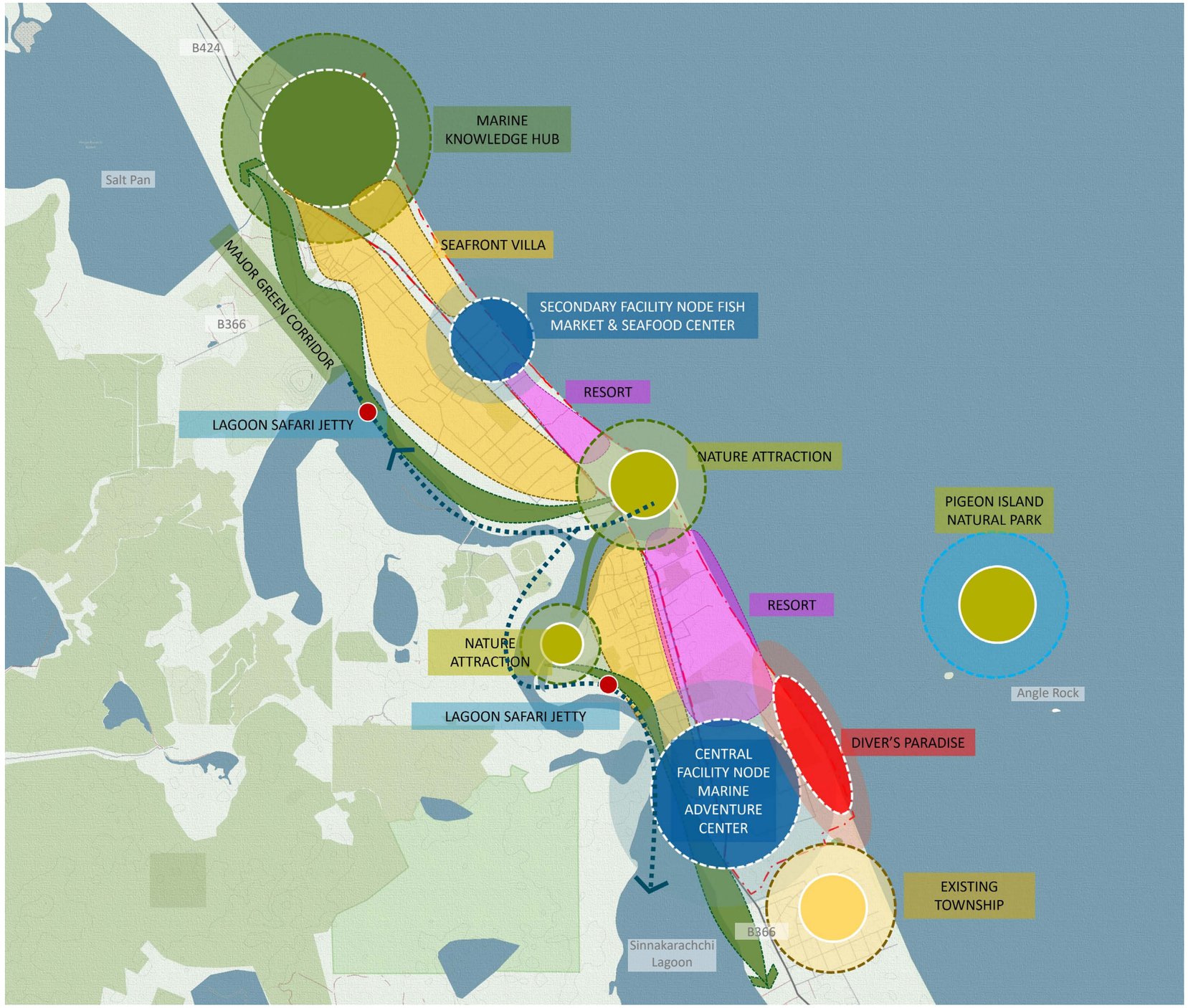


Figure 4.14 Concept Structure

Central Facility Node and Marine Adventure Centre:

Located at Nilaveli Beach, this commercial and activity hub will serve as the gateway to this tourism zone. It integrates a boat jetty to Pigeon Island with commercial facilities and a beach front activities centre.

Diver's Paradise:

Adjacent to the gateway centre along the beach area, Divers' Paradise will offer a range of adventure activities and services. These include scuba diving, snorkeling, diving training, kayaking, paddleboarding, and marine conservation activities such as coral reef monitoring, marine debris clean-ups, and educational programs. Visitors can also enjoy beach relaxation in this area.

Secondary Facility Node:

Secondary commercial node is situated at Kuchchaveli Beach, integrating a Fish Market and Seafood Centre to facilitate local commercial opportunities.

Beach front Resort:

Resorts and hotel accommodations cluster along the beach front area between the gateway commercial node at Nilaveli and the secondary commercial and facilities node at Kuchchaveli Beach optimizing on its scenic setting.

Green Corridor and Natural Attraction Nodes:

A green corridor runs along the lagoon front from Kuchchaveli to Nilaveli. A central nature attraction node is located at the mouth of the lagoon between Nilaveli and Kuchchaveli, with jetty stations at both locations to enhance safari tours within the lagoon area.

Seafront Villa:

A cluster of seafront villas for investment residential area is planned between the commercial and activities node and the Marine Knowledge Centre at Kuchchaveli along the beach.

Existing Settlements and proposed residential township:

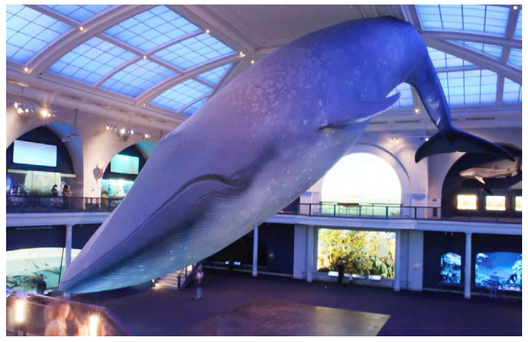
Existing settlements and an extended new township area are positioned between the beach activities development and the natural lagoon, fostering a sense of community and blending with the surrounding environment.



Secondary Facility Node: Fish Market & Seafood Center



Beach front Resort



Marine Knowledge Hub



Seafront Villa

4.3.2 PROPOSED LAND USE

Predominant land uses include resorts & hotels, marine museum and investment residential and low and mid-rise residential.

The green network seamlessly connects green and open spaces, parks, and natural areas along the north-south corridor, facilitating pedestrian movement and serving as a buffer between diverse land uses. This integration not only enhances connectivity but also promotes harmony and balance within the development. Furthermore, an eastern wet green network complements this system by offering pedestrian access from the main road to the beach front development area, ensuring both practical connectivity and the preservation of the coastal environment.

	Proposed Land use	Area (Ha)	%
	Beach Area	31.07	5.3%
	Commercial	19.33	3.3%
	Commercial Diverse Paradise	3.79	0.6%
	Eco Lodge	33.43	5.7%
	Resort	112.87	19.2%
	Residential Low Density	100.43	17.1%
	Residential Mid Density	54.17	9.2%
	Green Open Space	101.36	17.2%
	Mixed Use	47.34	8.1%
	Museum	4.27	0.7%
	Vocational School	1.03	0.2%
	Public Facilities	4.29	0.7%
	Public Utilities	5.38	0.9%
	Water Park	12.55	2.1%
	Road	39.61	6.7%
	Waterbodies	16.77	2.9%
	Total	587.71	

Table 4.4 Proposed Land Use Area Distribution

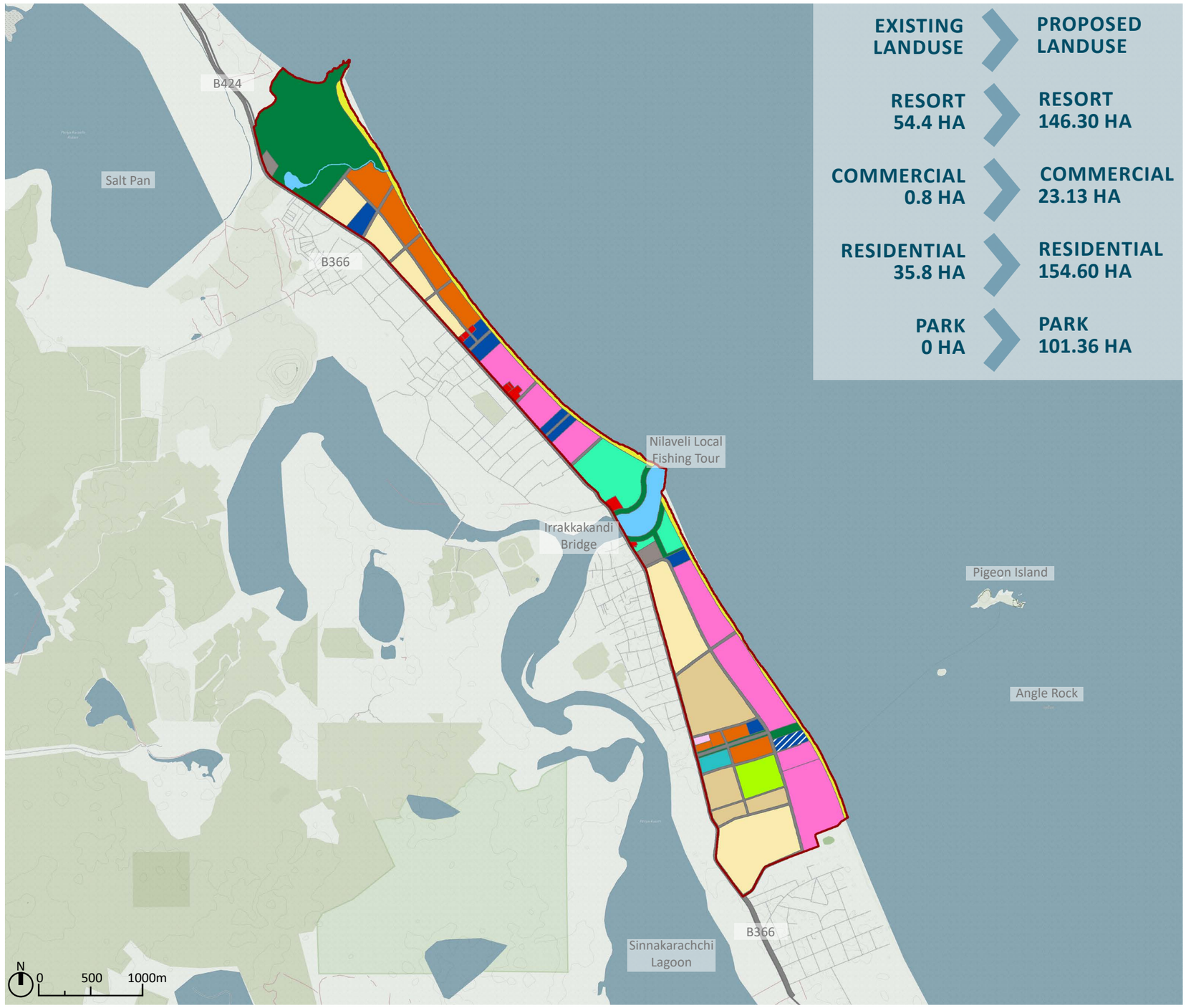


Figure 4.15 Proposed Land Use Plan

4.3.3 OPEN SPACE AND ATTRACTION POINTS

The proposed open space connectivity in Trincomalee forms a continuous green network between the dense northern landscapes and Pigeon Island National Park in the south, covering 101.36 hectares. This system stretches through the planning area, creating seamless connections via walkable neighborhoods, offering visitors the chance to experience a range of natural environments. Each section of this green corridor provides a distinctive experience, allowing tourists to explore the area on foot or by bicycle.

The connectivity extends from the ecological open spaces in the north to the marine knowledge hub in the south, and from the east to Pigeon Island Marine National Park and the marine museum, presenting an alternative and engaging way to discover the area's land and marine attractions.



Figure 4.16 Open Space and Attraction Points (Arugam Bay and Peanut Farm)

4.3.4 PROPOSED TRANSPORT PLAN

Road Network Hierarchy – Nilaveli and Kuchhaveli

The road network design for Nilaveli and Kuchhaveli is structured to enhance connectivity and support the evolving urban landscape. Each category of road within the hierarchy serves distinct yet interconnected functions, ensuring efficient traffic flow and accessibility to key areas and services.

Primary Arterial Roads

Primary arterial roads serve as the main conduits for high-speed and high-capacity traffic, effectively connecting Nilaveli and Kuchhaveli to Trincomalee and broader regions. These roads are engineered for efficiency, featuring strict access control to maintain high service levels and ensure safety. Direct property access is generally prohibited along these roads to minimize disruptions, with access provided via service roads or local roads that intersect at designated interchanges or intersections. This setup facilitates seamless long-distance travel and efficient freight movement, crucial for regional connectivity and economic development.

Secondary Arterial Roads

Secondary arterial roads in Nilaveli and Kuchhaveli serve a dual function. They connect significant local points of interest such as the Marine Knowledge Hub at Trincomalee, various commercial zones, and Investment Residential areas, while also providing routes to numerous resorts. These roads are designed to handle substantial traffic volumes with more access points than primary arterials, yet still maintain an effective flow of traffic.

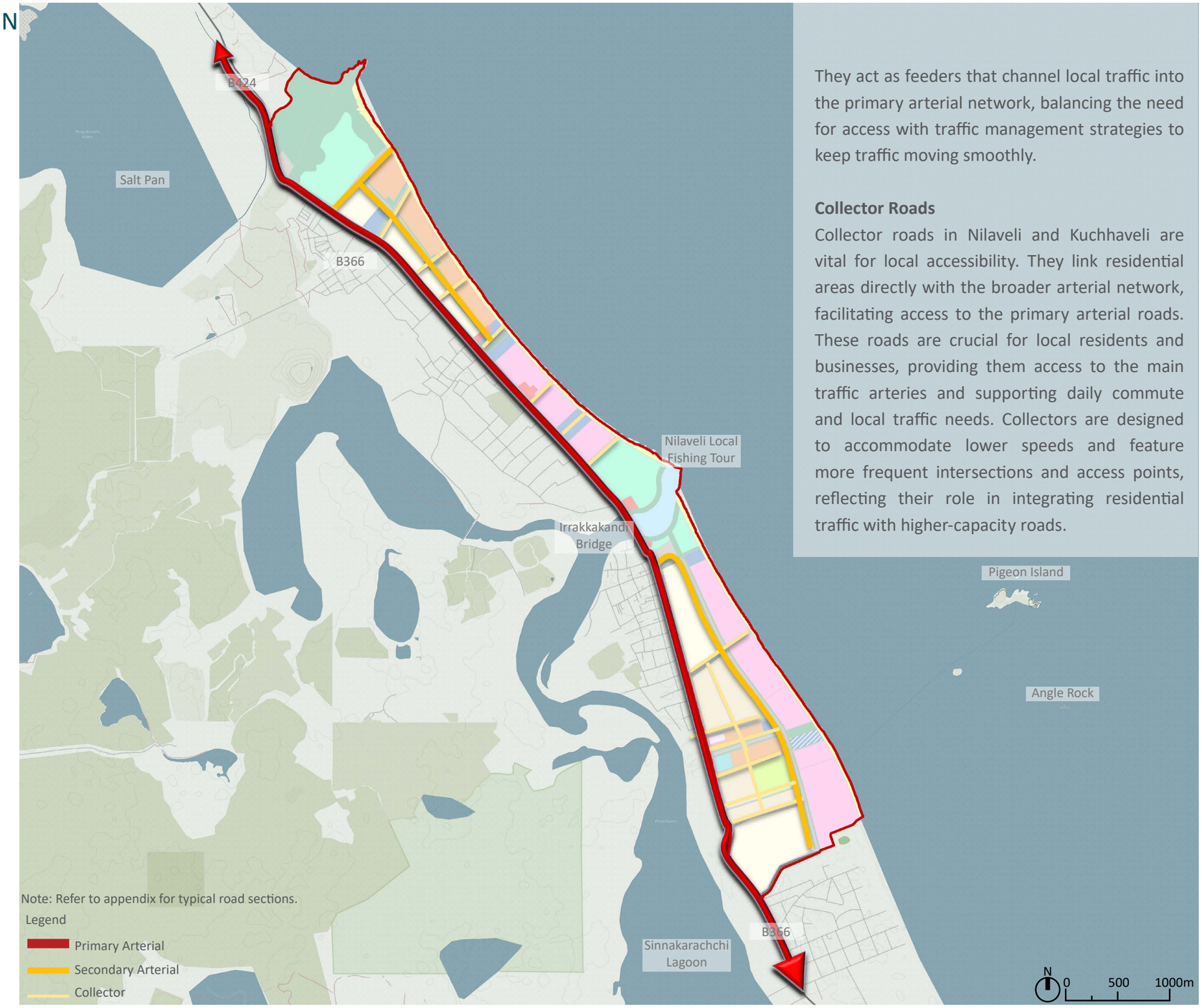


Figure 4.17 Proposed Transport Plan

They act as feeders that channel local traffic into the primary arterial network, balancing the need for access with traffic management strategies to keep traffic moving smoothly.

Collector Roads

Collector roads in Nilaveli and Kuchhaveli are vital for local accessibility. They link residential areas directly with the broader arterial network, facilitating access to the primary arterial roads. These roads are crucial for local residents and businesses, providing them access to the main traffic arteries and supporting daily commute and local traffic needs. Collectors are designed to accommodate lower speeds and feature more frequent intersections and access points, reflecting their role in integrating residential traffic with higher-capacity roads.

4.3.5 PROPOSED INFRASTRUCTURE

TRAFFIC DEMAND FORECASTING

TRIP GENERATION PROJECTION

This section provides a detailed analysis of the traffic demand for the Trincomalee study area, taking into account various land use types, their respective areas, plot ratios, total gross floor area (GFA), and trip generation values.

The proposed land use area for Trincomalee covers a total of 587.7 hectares. The land use distribution includes commercial areas, residential zones, resorts & hotels, public parks, and other facilities such as schools and amusement parks. This diverse mix of land uses is expected to generate substantial traffic, necessitating thorough planning and strategic management to ensure efficient traffic flow and minimize congestion.

Analysis and Observations

The traffic demand forecast for the Trincomalee study area reveals significant variations in trip generation across different land use types. The **commercial areas** exhibit substantial traffic generation, particularly during the PM OUT period, indicating high retail activity in the evening. This suggests that commercial zones are likely to experience peak traffic flows towards the end of the business day as people leave retail establishments.

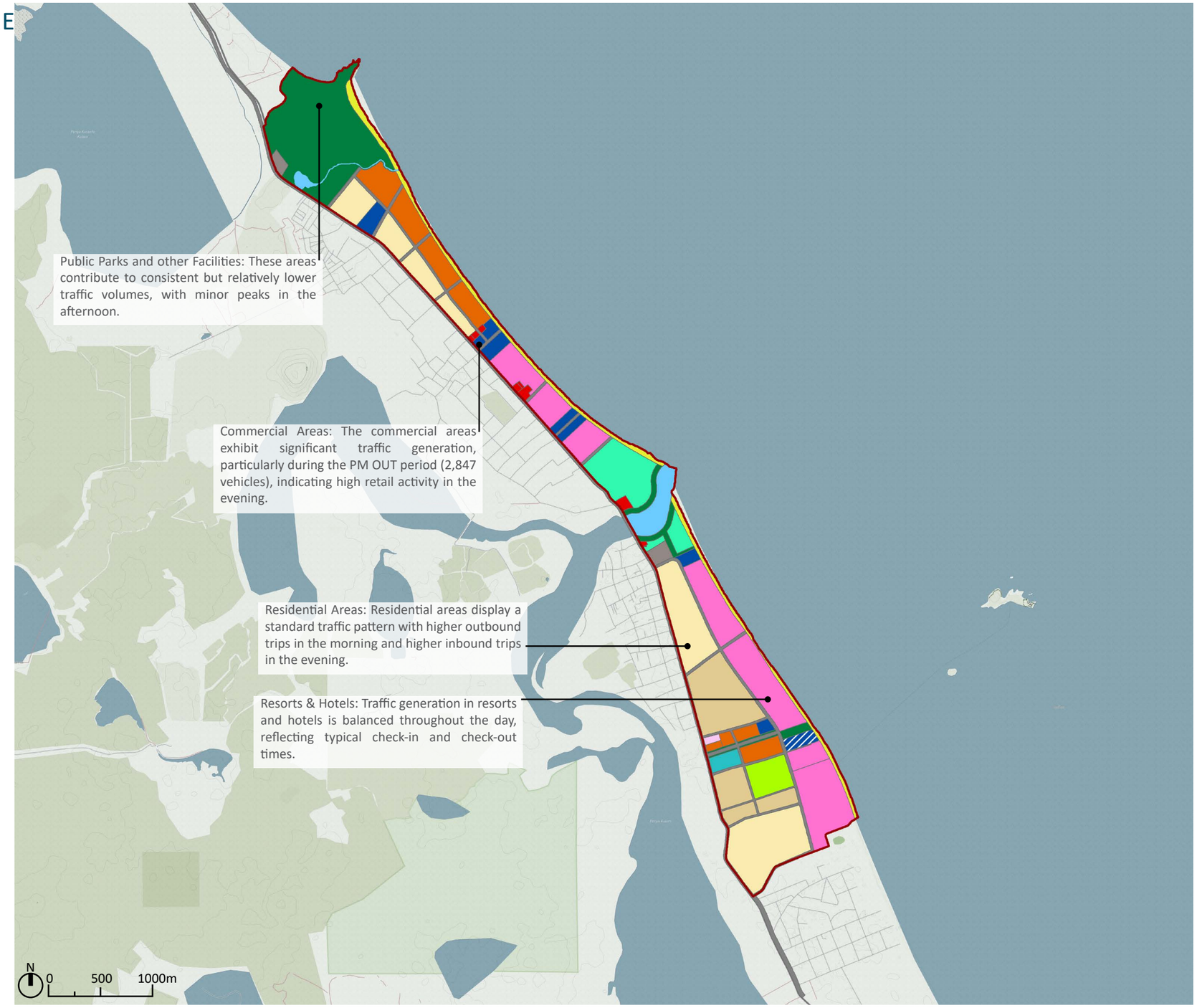


Figure 4.18 Traffic Demand Forecasting

Resorts & hotels generate balanced traffic throughout the day, with notable peaks in the morning and evening. This pattern aligns with typical check-in and check-out times, where guests arrive and depart predominantly during these periods.

Residential areas display a typical traffic pattern with higher outbound trips in the morning and higher inbound trips in the evening, reflecting daily commuting behaviors. This indicates that residential zones will experience significant traffic flows during morning and evening peak hours.

Public parks and other facilities such as schools and amusement parks contribute to consistent but relatively lower traffic volumes compared to commercial and residential areas. These areas exhibit minor peaks in the afternoon, coinciding with leisure and recreational activities.

The combined trip generation for all areas within the Trincomalee study area is substantial. These figures highlight the need for effective traffic management strategies to handle the high volume of vehicles and ensure smooth traffic flow.

	Proposed Land use	Total GFA (sqm)	Trip Gen (veh)			
			AM In	Am Out	PM In	Pm Out
	Commercial	193,318	853	514	2,666	2,882
	Commercial Diverse Paradise	37,947	167	101	523	566
	Eco Lodge	167,145	231	90	181	231
	Green Open Space	202,728	20	20	122	101
	Residential Mid Density	975,031	132	431	417	256
	Residential Low Density	502,148	138	439	439	264
	Mixed Use	710,101	591	386	477	545
	Resort	564,369	818	320	640	818
	Museum	42,710	390	192	192	390
	Waterpark	62,769	59	36	185	201
	Vocational School	10,289	425	348	68	83
	Total		**3,823**	**2,879**	**5,910**	**6,336**

Table 4.5 Trip Generation Projection

Peak Hour Calculation

To determine the required number of lanes, we calculate the peak hour traffic volume:

Total Peak Hour Volume (Inbound) = 5,910 vehicles/hour
Total Peak Hour Volume (Outbound) = 6,336 vehicles/hour

Since the site has four access points, the traffic will be divided among these accesses:

Peak Hour Volume per Access (Inbound) = 5,910/4 = 1,478 vehicles/hour

Peak Hour Volume per Access (Outbound) = 6,336/4 = 1,584 vehicles/hour

Lane Capacity

Assuming a lane capacity of 1,100 vehicles per hour per lane:

Number of Lanes= Peak Hour Volume/Lane Capacity

Inbound Lanes Calculation per Access

Number of Inbound Lanes= 1,478/1,100 ≈ 1.34 ≈ 2 lanes (rounded up)

Outbound Lanes Calculation per Access

Number of Outbound Lanes= 1,584/1,100 ≈ 1.44 ≈ 2 lanes (rounded up)

Conclusion

Given the peak hour traffic volumes distributed across four access points, each access will require approximately 2 lanes for both inbound and outbound traffic to ensure smooth traffic flow and avoid congestion, especially during peak hours. Thus, the proposed ROW for the entire development provides sufficient capacity to handle the traffic at each access, considering potential future traffic growth.

PHASE 1 (HIGH CASE)							
Land use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	3.66	36,593	6.6	161	97	505	546
Commercial Diver's Paradise	3.64	36,447	6.6	161	97	503	543
Mixed Use	11.35	113,549	20.4	142	93	114	131
Resort	31.66	316,592	56.9	229	90	180	229
Museum	4.27	42,710	7.7	390	192	192	390
Vocational School	1.03	10,289	1.8	425	348	68	83
TOTAL	**55.62**	**556,180**		**1,508**	**917**	**1,561**	**1,922**

Table 4.6 Traffic Demand for Phase 1 (Low Case)

PHASE 1 (LOW CASE)							
Land use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	2.21	22,126	4.0	98	59	305	330
Commercial Diver's Paradise	1.73	17,299	3.1	76	46	239	258
Mixed Use	1.04	10,367	1.9	13	8	10	12
Resort	11.26	112,578	20.2	82	32	64	82
Museum	2.33	23,317	4.2	213	105	05	213
Vocational School	1.03	10,289	1.8	425	348	68	83
TOTAL	**19.6**	**195,976**		**906**	**598**	**791**	**977**

Table 4.7 Traffic Demand for Phase 1 (High Case)

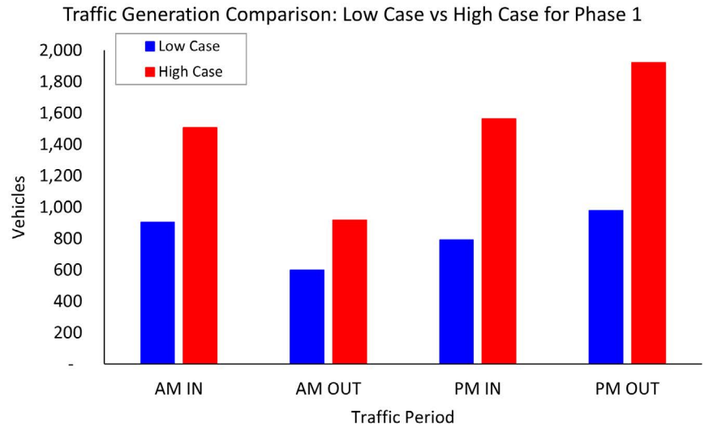


Figure 4.19 Traffic Demand for Phase 1: Comparing High Case and Low Case Scenario

Impact Analysis:

Low Case Scenario Impact:

- **Traffic Volume:** The low case scenario generates significantly lower traffic volumes compared to the high case scenario.
- **Infrastructure Requirements:** Requires fewer infrastructure upgrades. Each access point will need approximately 1 lane for both inbound and outbound traffic.
- **Congestion Levels:** Lower traffic volumes will result in less congestion, easier traffic management, and lower infrastructure costs.
- **Suitability:** Suitable for gradual development and easier to manage within the short-term planning horizon (0-5 years).

High Case Scenario Impact:

- **Traffic Volume:** The high case scenario generates substantially higher traffic volumes.
- **Infrastructure Requirements:** Requires more robust infrastructure. Each access point will need approximately 1 lane for both inbound and outbound traffic.
- **Congestion Levels:** Higher traffic volumes may lead to more congestion, requiring advanced traffic management strategies and higher infrastructure investment.
- **Suitability:** Suitable for more aggressive development, aiming for higher economic activity but necessitates careful planning and investment in traffic management and infrastructure.

Specific Impacts Due to High Case Scenario:

- **Increased Traffic Congestion:** The 30.7% increase in AM IN traffic and 42.3% increase in PM IN traffic will lead to higher congestion during peak hours. This necessitates advanced traffic management systems to handle the increased load.
- **Higher Infrastructure Costs:** To accommodate the higher traffic volumes, additional infrastructure investments will be required. This includes widening roads, adding lanes, and improving intersections to ensure smooth traffic flow.
- **Enhanced Public Transport Needs:** With the higher traffic volumes, there will be a greater need for efficient public transport systems to reduce reliance on private vehicles. This includes increasing the frequency of buses, adding new routes, and potentially introducing new forms of public transport.
- **Environmental Impact:** Higher traffic volumes can lead to increased emissions and noise pollution. Sustainable transport solutions and green infrastructure will be necessary to mitigate these environmental impacts.
- **Economic Activity:** The high case scenario supports a higher level of economic activity due to the increased development intensity. This can attract more businesses and tourists, leading to greater economic benefits for the area.

TRANSPORT PROJECTS

To accommodate the projected increase in traffic volumes, it is imperative to upgrade and expand existing road networks within the intervention area. This expansion should include widening roads, constructing additional lanes, and developing new bridges. Special consideration should be given to creating pedestrian spaces and integrating greenery as part of a long-term plan to ensure safety and accessibility for all road users. Expanding the road to the proposed right-of-way (ROW) will facilitate a balanced approach to vehicle traffic and pedestrian movement, enhancing the overall urban environment.

Proposed Projects

The following projects are proposed to enhance connectivity and handle increased traffic demand effectively:

1. **Upgrading of Existing Primary Arterial Road**
    - Focus on widening and adding lanes to the primary arterial road to manage high traffic volumes.
    - Improve road surface quality and signage for better traffic flow and safety.
    - Expand the road to the proposed ROW, incorporating pedestrian pathways and green spaces to create a more pleasant urban environment.
2. **Upgrading of Existing Secondary Arterial Road**
    - Enhance the secondary arterial road by adding lanes and improving intersections to reduce bottlenecks.
    - Implement traffic management systems to ensure smooth traffic flow during peak hours.
    - Integrate pedestrian spaces and greenery along the expanded ROW.
3. **Upgrading of Existing Collector Road**
    - Expand the collector road network to improve connectivity between residential areas and major highways.
    - Include pedestrian walkways and bicycle lanes to promote sustainable transport modes.
    - Develop green corridors along the collector roads to enhance the aesthetic appeal and provide environmental benefits.
4. **Construction of Integrated Mobility Hub (Long-term)**
    - Although a future plan, an integrated mobility hub will centralize bus operations, facilitating streamlined services and connectivity to major highways and local roads.
    - This will play a crucial role in connecting air travelers with the local road network, especially promoting tourism in the region.

PROPOSED ROAD NETWORK

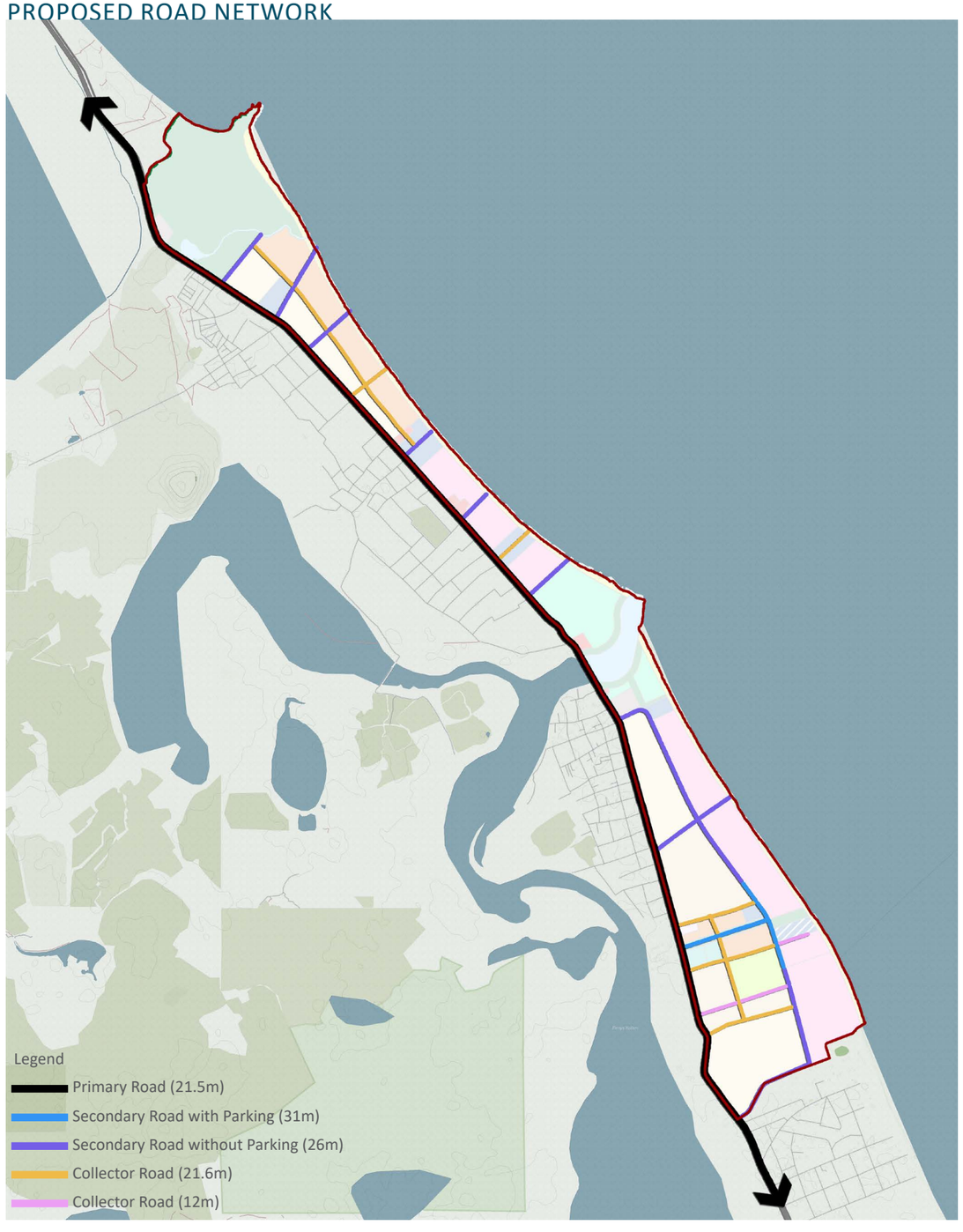


Figure 4.20 Road Network

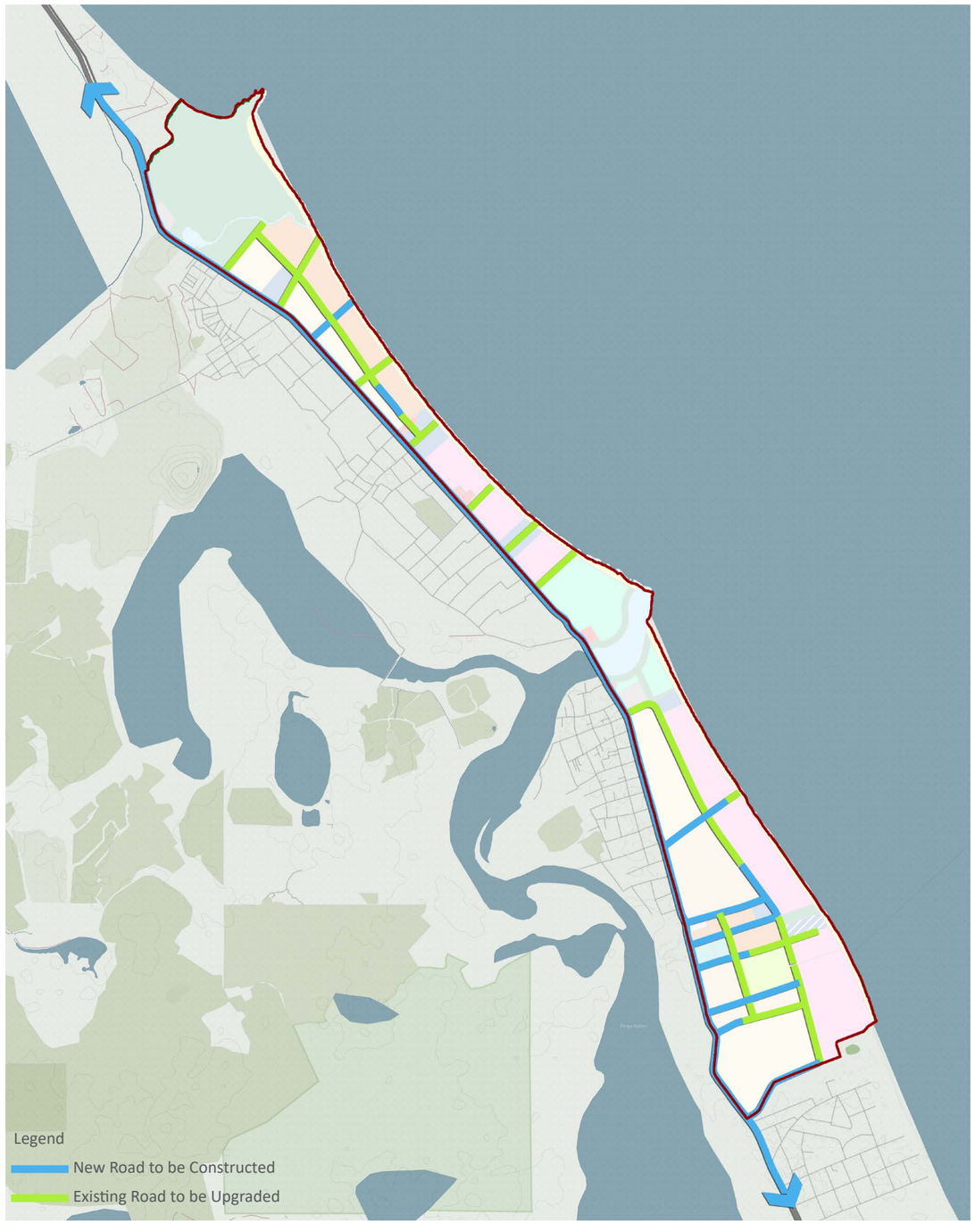


Figure 4.21 New and Upgrade Roads

STORM WATER DRAINAGE

- Storm water drainage is considered as basic infrastructure, which will not only reduce the flood damage, but also promote economic activities & improve the water environment.

- Being located along coastal line, developments are extremely vulnerable to the impact of sea level rise. This is especially serious when high tides coincide with heavy rain.

Measures to be considered:

- Coastline to be protected by sea walls / stone embankments that protect land and infrastructure from erosion and seawater intrusion.
- Structures such as dams and tidal gates & pumping stations where there are coastal reservoirs & outlet drains.
- Optimal planning such as detention pond, open space, park, etc.
- Source control – treatment at source, such as rainwater harvesting system, and others can be considered for the purpose of:
  - minimising post development runoff
  - improving runoff water quality.
  -providing landscaping & recreational space.

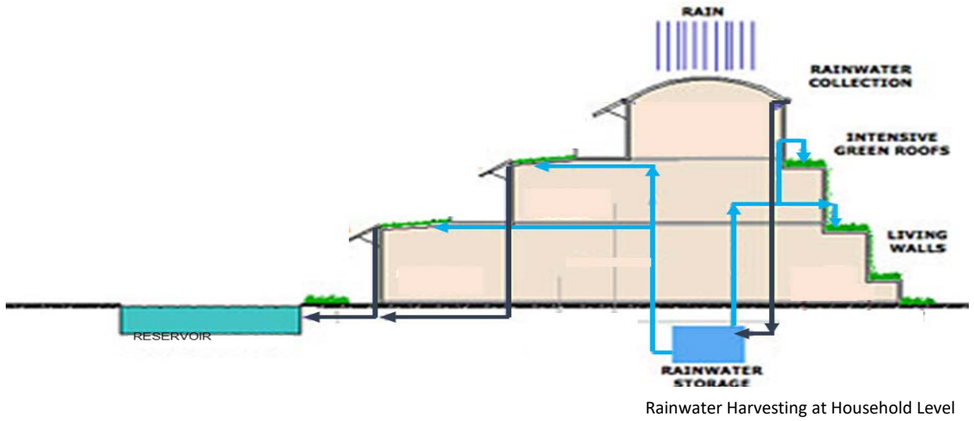
- The collection and convey system comprises the roadside drains and their main function is to collate all the surface runoff from the land plots and carriageway and release to the nearest water body. The size of the drains varies from about 1.2 to 2.0m approximately for various categories of roads. This can vary depending on sub-catchment of storm water discharge location and alignment.



Type of Green Roof/ Rooftop Greenery



Stormwater pond at Yishun (Source: Nparks, Singapore)



Rainwater Harvesting at Household Level

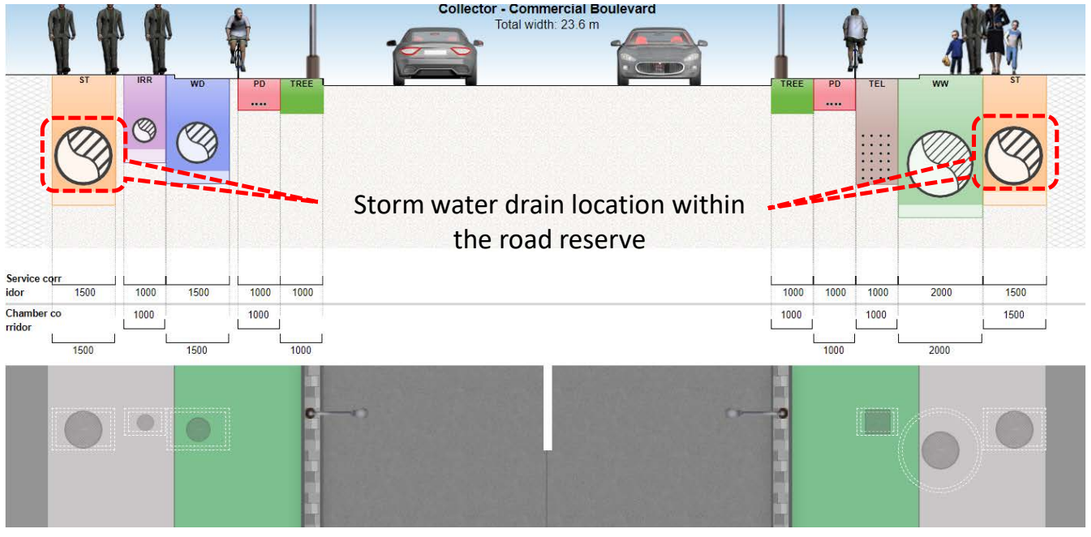


Figure 4.22 Typical Service Corridor Section

PROPOSED INFRASTRUCTURE UNIT DEMAND

- In deriving the projected utilities demand for the planning boundary, the unit demand of the various uses would need to be determined first, the table shows the unit utility (water, sewer, solid waste & power) demand used for Eastern Province. These figures are obtained from various sources including local standards and similar projects carried out by SJ in different countries.

- Based on the proposed unit demand, proposed land use distribution and projected population, the ultimate total average demand for various utilities has been worked out and shown in the following sections.

Sl No	Land Use	Unit Water Demand (m3/ha/d)/(lpcd)	Unit Solid Waste Generation (kg/ha/d), (room),(kg/d)	Unit Power Demand (VA/m2)
1	COMMERCIAL	15 - 25 m3/ha/d	160 - 200 kg/ha/d	90 - 110
2	ECO LODGE	250 - 350 l/room	1.6 kg/room	40 - 60
3	3*, 4* & 5* HOTEL	300 - 500 l/room	1.6 kg/room	70 - 90
4	MUSEUM	15 - 25 m3/ha/d	180 - 220 kg/ha/d	70 - 90
5	OPEN SPACE/PARK	5 - 10 m3/ha/d		
6	MID-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
7	LOW-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
8	MIXED USE	135 lpcd	0.8 kg/c/d	70 - 90
9	RESORT	500 - 700 l/room	1.6 kg/room	50 - 70
10	WATERPARK	30 - 40 m3/ha/d	180 - 220 kg/ha/d	5 - 15

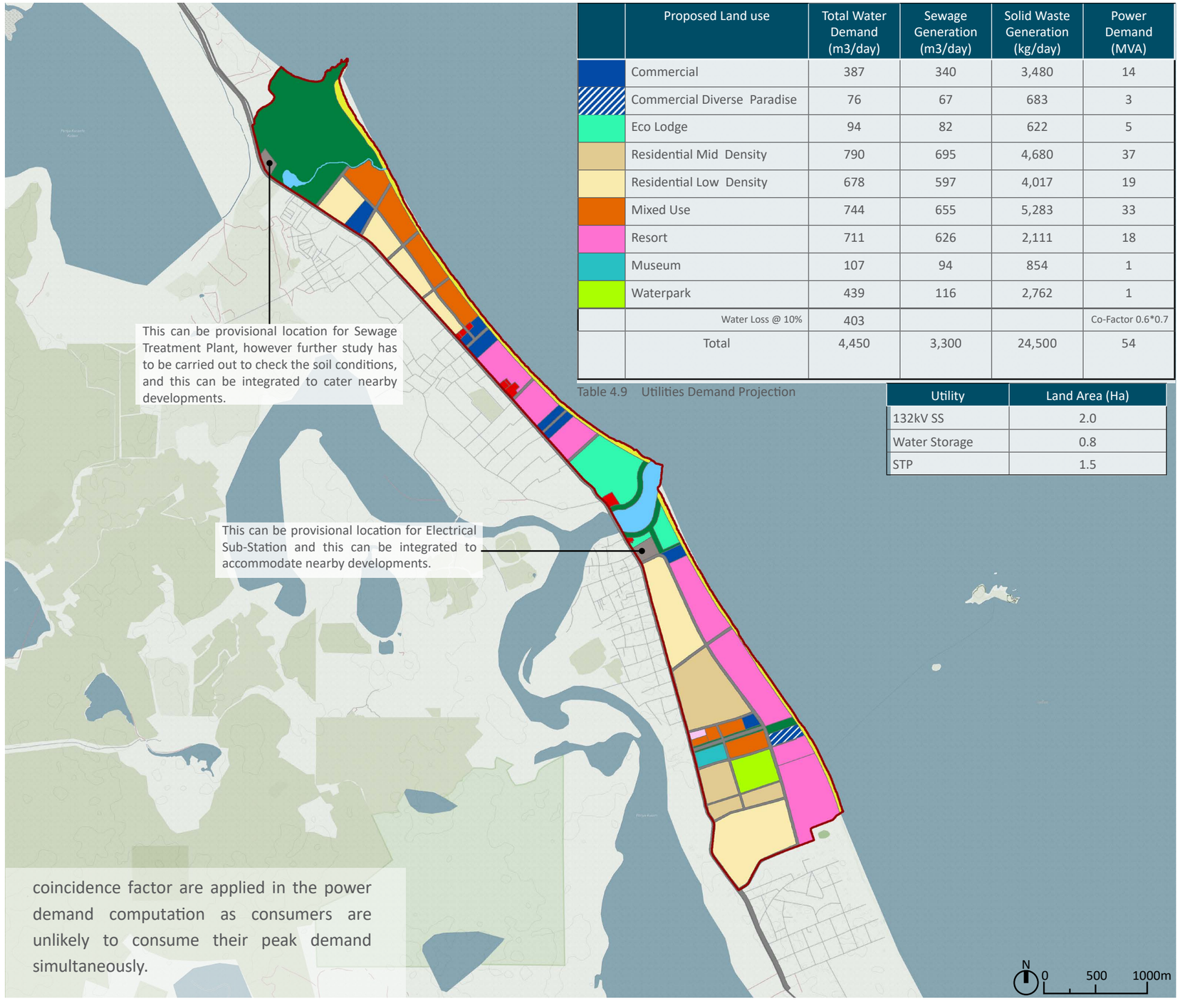
Table 4.8 Unit Demand (Water, Solid Waste and Power)

Note:

- lpcd = litre per capita per day
- Sewage; 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration.
- Recycle Water; The source for recycle water is from sewage treatment plant. The recycle water is treated to standards required for its various uses (i.e. made fit-for-purpose)

UTILITIES DEMAND PROJECTION & PROPOSAL

- The average water demand for the development is estimated by using unit water demand for each land use. Both potable water and recycle water shall serve the development. Water from local authority / Ground water / rainwater harvested, can be the main sources of raw water. The source for recycle water shall be from the proposed Sewage Treatment Plant (STP). The recycle water can be used for non-potable purposes.
- Nilaveli area is under Kuchchaveli DS Division, presently there is shortage of water, but a proposal to construct water treatment plant with the capacity of 20,000 m²/day at Wanela would be able to supply to the proposed development.
- 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration. Sewage generated from the commercial / residential activities shall be conveyed to sewage treatment plant.
- The solid waste generation is estimated based on population and land use within the proposed development. To treat the ultimate solid waste generated, about 6ha of landfill site is required, this has to be located outside the development or augment existing landfill site.
- Power demand is projected based on land use distribution, gross plot ratio, power demand density and coincidence factor. Generally, coincidence factor are applied in the power demand computation as consumers are unlikely to consume their peak demand simultaneously.



	Proposed Land use	Total Water Demand (m3/day)	Sewage Generation (m3/day)	Solid Waste Generation (kg/day)	Power Demand (MVA)
	Commercial	387	340	3,480	14
	Commercial Diverse Paradise	76	67	683	3
	Eco Lodge	94	82	622	5
	Residential Mid Density	790	695	4,680	37
	Residential Low Density	678	597	4,017	19
	Mixed Use	744	655	5,283	33
	Resort	711	626	2,111	18
	Museum	107	94	854	1
	Waterpark	439	116	2,762	1
	Water Loss @ 10%	403			Co-Factor 0.6*0.7
	Total	4,450	3,300	24,500	54

Table 4.9 Utilities Demand Projection

Utility	Land Area (Ha)
132kV SS	2.0
Water Storage	0.8
STP	1.5

Figure 4.23 Utilities Demand Projection

4.3.6 ENVIRONMENTAL STRATEGIES

COASTAL EROSION

- Restrict construction activities within the Reservation Zone
- Maintain natural vegetation line along the coastal area
- Recommend Coastal Protection Strategies
- Adopt appropriate erosion control techniques that are effective and socially and environmental acceptable
- Protection and restoration of natural features that inhibit erosion.
- Established and enforce Permanent Vegetation Line and setback

MARINE POLLUTION

- Proposed waste disposal and sewage treatment facilities to prevent run-off into the ocean

DAMAGE TO THE CORAL REEFS

- Designated marine protected areas (maps) to restrict damaging activities like fishing and anchoring near coral reefs.
- Promote eco-friendly tourism practices and regulations to minimize reef impact.
- Follow marine conservation zone guidelines
- Promote ecosystem based approach to fisheries management

THREATS TO FLORA & FAUNA ELEPHANT, AND HUMAN CONFLICT

- Implement integrated land use planning strategies that prioritize elephant habitats and land use conflicts
- Establish protected area and wildlife corridors



- Restore and managed degraded critical habitat
- Sustainable agriculture practices
- Engaged local community in habitat restoration and wild life management

Figure 4.24 Environmental Strategies

4.3.7 SOCIAL STRATEGIES

Community-based Fisheries Management: Fishing has been a key economic activity along the eastern coastal areas, including Trincomalee, Pasikudah, and Arugam Bay, so promoting fisheries industry is important for local as well as national economic development. However, in order to minimise impacts on local communities, it is recommended to engage communities through participatory decision making in fisheries management.

Integrate existing cultural heritage with tourism-led development interventions: While ensuring that the current cultural heritage (e.g. protected monuments, archaeological sites, and so forth) is well protected as per the provisions of the Antiquities Ordinance and other laws, they need to be integrated into a sustainable tourism development plan. Currently, the Department of Archaeology of Sri Lanka has listed 34 protected monuments and 13 reserves in Trincomalee District which may be of great potential for future tourism development.

Integration of traditional fishing industry with tourism: Traditional fishing is a great potential to promote tourism in the eastern coastal belt, including Trincomalee. In addition, benefits can be leveraged to local fishing communities by integrating fishing and tourism industries. Traditional fishing villages shall be preserved. However, value addition activities in fishing communities/ fishing areas (e.g. fish markets/ sea food restaurants for tourists and local visitors, etc.) shall be promoted. Local communities shall be provided with a mandatory quota for the employment opportunities generated through these value addition activities.



Community-focused physical development: If physical development leads to community segregation through relocation that does not achieve the development targets or sustainability of proposed development activities. Hence, physical development shall focus on leveraging benefits to local communities rather than forcing them to be left out from development activities either through relocation or not letting them in the decision making process.

Figure 4.25 Social Strategies

4.3.8 DEVELOPMENT PHASING (HIGH CASE SCENARIO)

Key programs are not the sole focus during the phasing process, but they hold critical importance as the primary drivers. Alongside these key programs, additional supporting facilities and initiatives will also be implemented to complement and enhance the overall framework.

In short terms, it was recommended the establishment of a significant portion of the hospitality sector, encompassing 11 hectares dedicated to 5-star resorts and eco-lodges, offering luxurious and environmentally friendly accommodations. Additionally, 10 hectares will be allocated for a 4-star hotel, and 1 hectare will be reserved for a 3-star hotel, catering to a diverse range of travelers. To support these hospitality services, 3 hectares will be designated for retail and tourist amenities, providing essential services and entertainment options for visitors. Moreover, 4.2 hectares will be used to establish a marine museum, serving as an educational and cultural attraction. The total land requirement for this phase will amount to 25 hectares.

In medium term, the development will further expand the hospitality offerings, with 18 hectares set aside for 5-star resorts and eco-lodges, 16 hectares for a 4-star hotel, and 2 hectares for a 3-star hotel. The tourism support facilities will be enhanced with 3 hectares of retail and tourist amenities, alongside a 2-hectare marine museum. This phase will continue to build on the foundation laid in Phase 1, increasing the overall capacity and appeal of the destination.

Long terms will be a major step forward in the development, with an extensive 26 hectares devoted to 5-star resorts and eco-lodges, and 22 hectares for a 4-star hotel. 6 hectares will be used for retail and tourist amenities. Additionally, this phase will introduce 12 hectares of investment residential land for luxury villas, attracting long-term residents and investors.

Finally, a substantial reserve of 239 hectares has been set aside for future development, ensuring that there is ample space for expansion and additional projects as the area continues to grow and evolve. This strategic reserve will provide flexibility to adapt to future needs and opportunities, securing the long-term success of the development.

Positioning: UPPER MID END TO PREMIUM

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Marine Museum**	4.2	2	0	Aquariums, Exhibits, Collections, Event halls, AV presentation rooms, Visitors facilities like lobby, restroom, food court etc.
2	**Beach development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters etc
3	**5-star resorts & Eco-lodges**	11	18	26	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts optimising the lagoon and beach views
4	**4-star resorts/hotels**	10	16	22	
5	**3-star Hotels**	1	2	3	Beach view resorts/ hotels
6	**Retail + Tourist amenities**	3	3	6	Retail - Regional brands, Handicrafts, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores etc Tourist amenities - Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information centre etc
7	**Investment residential**	0	0	12	
	Total	**29**	**41**	**69**	Total land area requirement (A+B+C) – **139 hectares**

Table 4.10 Development Phasing (High Case Scenario)

PHASE-1 (0-5 YEAR)

DIVER'S PARADISE: Establishment of diving facilities such as boat rides, diving guides, and retail activities.

TOURISM: Expansion of 4/5 stars hotels.

MARINE MUSEUM: Museum as key landmark.

VOCATIONAL SCHOOL: Skill upgrading program.

Tourism related MIXED USE to support tourism activity.

PHASE-2 (5- 10 YEAR)

TOURISM: Expansion of 4 to 5 stars Hotels and Eco Lodge.

ECO TOURISM: Introducing Eco-Lodge as alternative attraction for marine knowledge hub.

PHASE-3 (10- 15 YEAR)

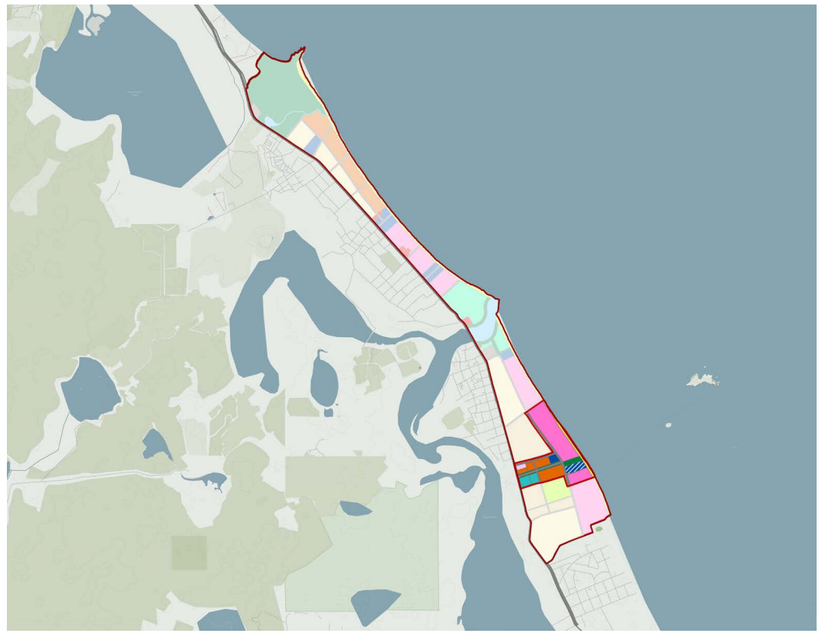
TOURISM: Expansion of 4 to 5 stars Hotels and Eco Lodge.

MIXED USE: Tourism related Mixed Use to support tourism activity.

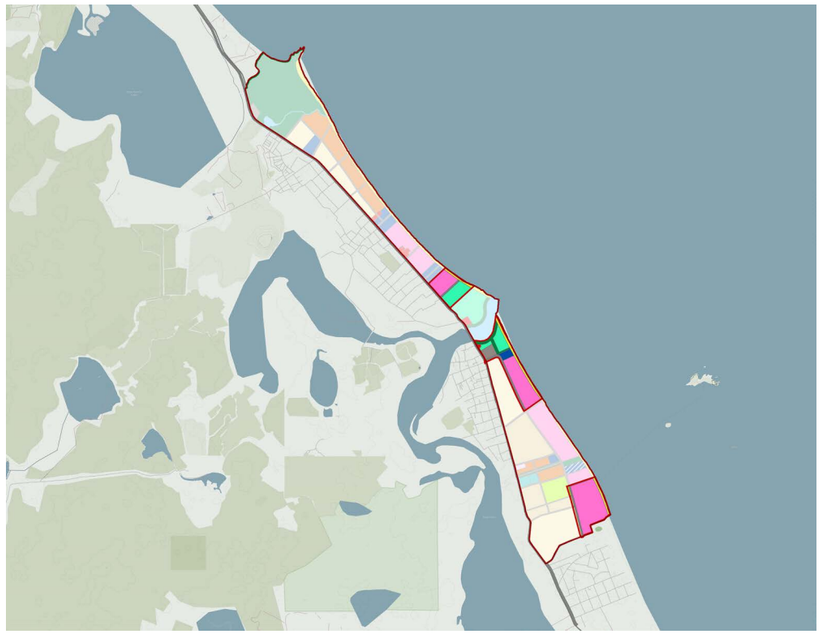
PHASE-4 (FUTURE)

THEME PARK: Introducing water related theme park as one of the important landmark.

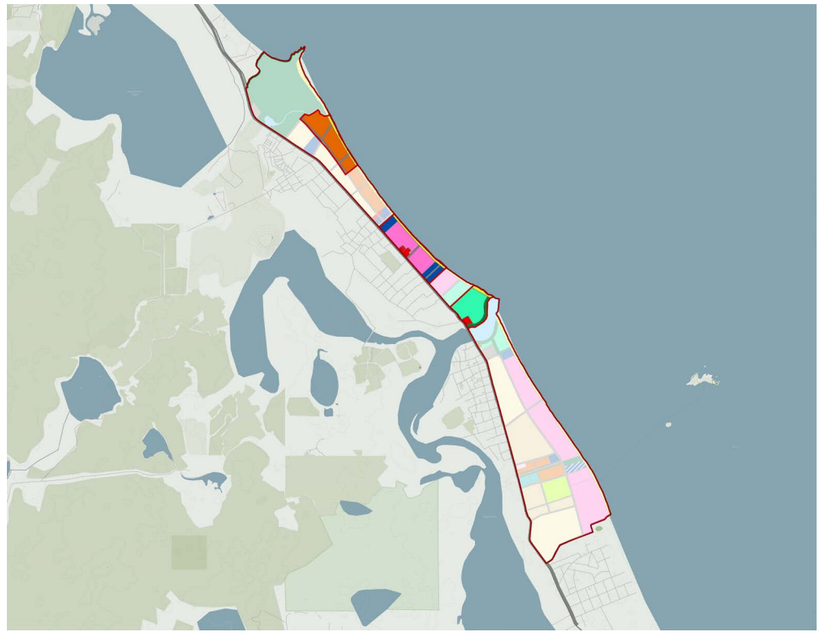
RESIDENTIAL: Low to Mid density residential to attract real estate market and to support future tourism activities.



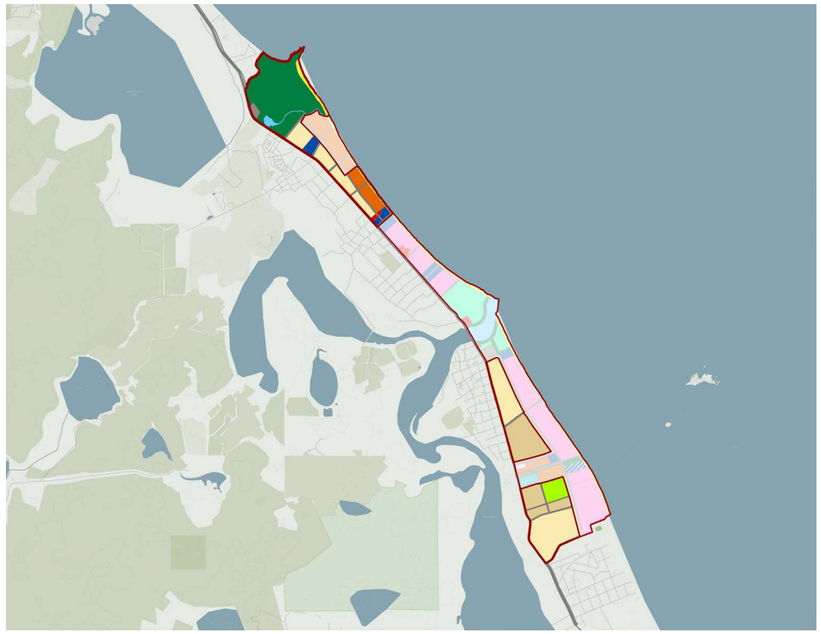
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 4.26 Phasing Strategies (High Case Scenario)

4.3.9 DEVELOPMENT PHASING (LOW CASE SCENARIO)

Key programs are not the sole focus during the phasing process, but they hold critical importance as the primary drivers. Alongside these key programs, additional supporting facilities and initiatives will also be implemented to complement and enhance the overall framework.

In the low-case scenario, which serves as the baseline for the development, the project is divided into three phases, each with specific allocations for hospitality, tourism support facilities, and investment residential areas.

Phase 1 will focus on establishing the core hospitality infrastructure. This phase will include 6 hectares dedicated to 5-star resorts and eco-lodges, 5 hectares for a 4-star hotel, and 1 hectare for a 3-star hotel. In addition to these accommodations, 2 hectares will be allocated for retail and tourist amenities, providing necessary services and attractions to support tourism. Furthermore, 2 hectares will be reserved for a marine museum, adding an educational and cultural dimension to the development. Altogether, Phase 1 will require a total land area of 16 hectares.

Phase 2 will expand the hospitality offerings established in the first phase. This expansion includes 8 hectares for 5-star resorts and eco-lodges, 6 hectares for a 4-star hotel, and 1 hectare for a 3-star hotel. In terms of tourism support facilities, 1 hectare will be devoted to retail and tourist amenities, and 2 hectares will be allocated to further develop the marine museum, enhancing its capacity and exhibits.

Phase 3 continues the expansion of the hospitality sector and introduces a new component for investment residential areas. This phase will add 8 hectares for 5-star resorts and eco-lodges, 7 hectares for a 4-star hotel, and 1 hectare for a 3-star hotel. Additionally, 1 hectare will be designated for retail and tourist amenities, similar to the previous phases. However, a significant new development in this phase is the allocation of 6 hectares for luxury villas, marking the beginning of residential investment opportunities within the project.

This phased approach ensures a gradual yet comprehensive development of the area, balancing hospitality services, tourism amenities, and residential investments across different stages of the project.

Positioning: UPPER MID END TO PREMIUM

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Marine Museum**	2	2	0	Aquariums, Exhibits, Collections, Event halls, AV presentation rooms, Visitors facilities like lobby, restroom, food court etc.
2	**Beach development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters etc
3	**5-star resorts & Eco-lodges**	6	8	8	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts optimising the lagoon and beach views
4	**4-star resorts/hotels**	5	6	7	
5	**3-star Hotels**	1	1	1	Beach view resorts/ hotels
6	**Retail + Tourist amenities**	2	1	1	Retail - Regional brands, Handicrafts, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores etc Tourist amenities - Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information centre etc
7	**Investment residential**	0	0	6	
	Total	**16**	**18**	**23**	Total land area requirement (A+B+C) – **57 hectares**

Table 4.11 Development Phasing (Low Case Scenario)

PHASE-1 (0-5 YEAR)

DIVER'S PARADISE: Establishment of diving facilities such as boat rides, diving guides, and retail activities.

TOURISM: Expansion of 4/5 stars hotels.

MARINE MUSEUM: Museum as key landmark.

VOCATIONAL SCHOOL: Skill upgrading program.

Tourism related MIXED USE to support tourism activity.

PHASE-2 (5- 10 YEAR)

TOURISM: Expansion of 4 to 5 stars Hotels

DIVER'S PARADISE: Expansion of diving facilities such as boat rides, diving guides, and retail activities.

PHASE-3 (10- 15 YEAR)

TOURISM: Expansion of 4 to 5 stars Hotels and Eco Lodge.

MIXED USE: Tourism related Mixed Use to support tourism activity.

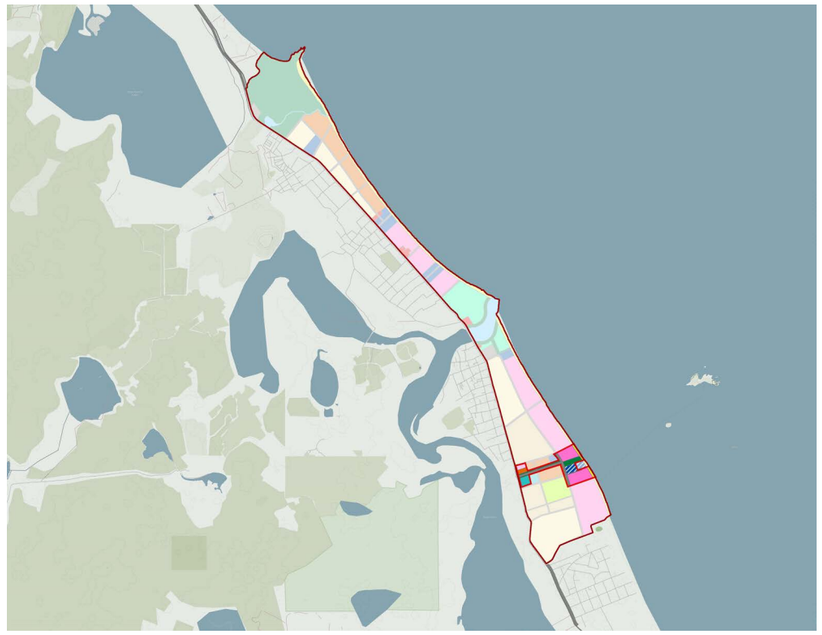
PHASE-4 (FUTURE)

TOURISM: Expansion of 4 to 5 stars Hotels and Eco Lodge.

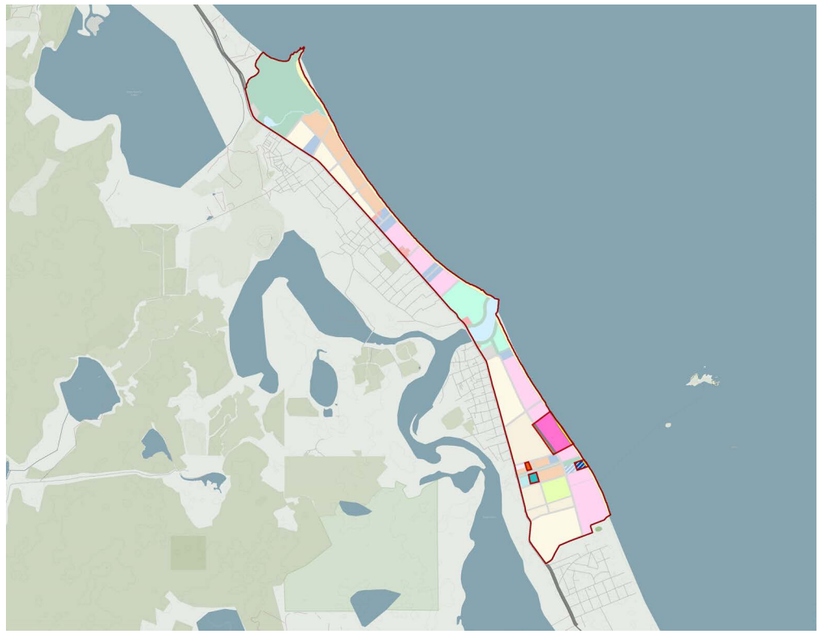
THEME PARK: Introducing water related theme park as one of the important landmark.

MIXED USE: Tourism related Mixed Use to support tourism activity.

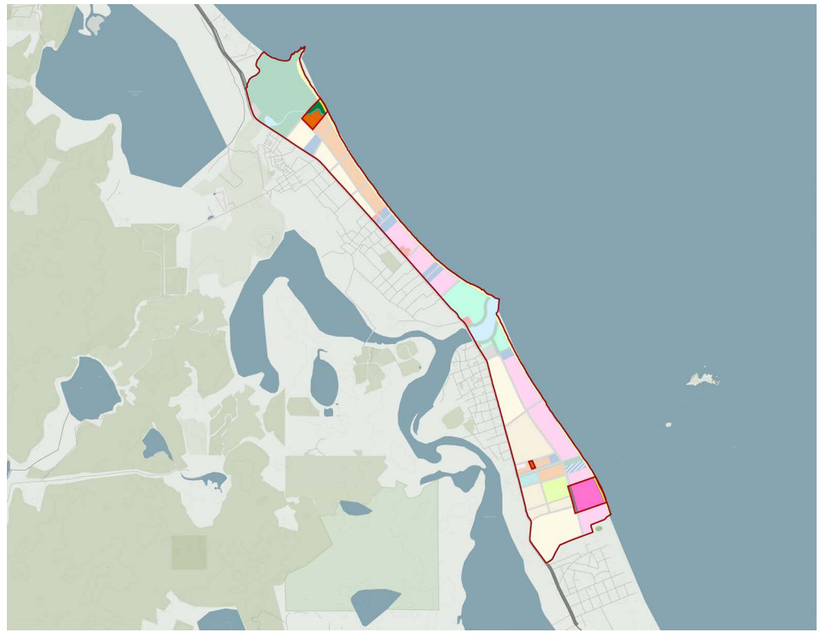
RESIDENTIAL: Low to Mid density residential to attract real estate market and to support future tourism activities.



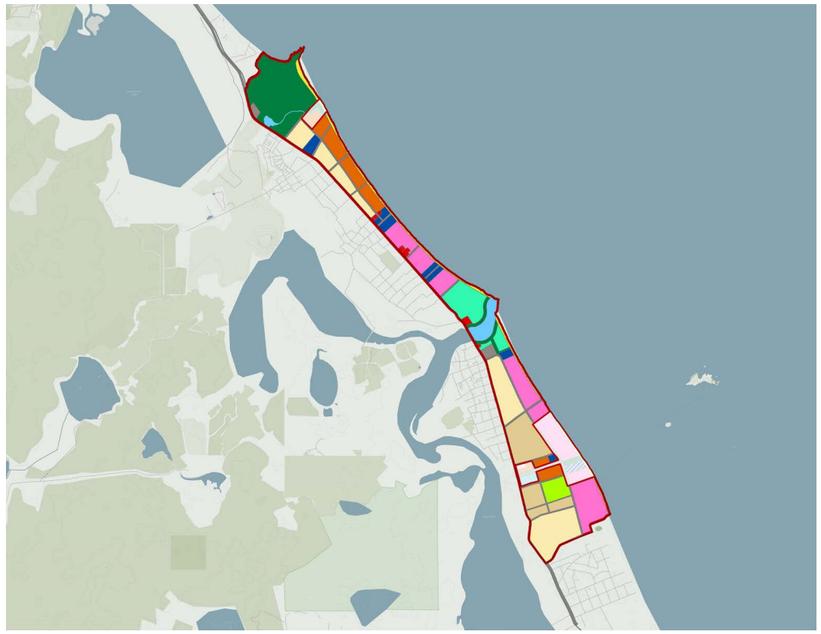
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 4.27 Phasing Strategies (Low Case Scenario)

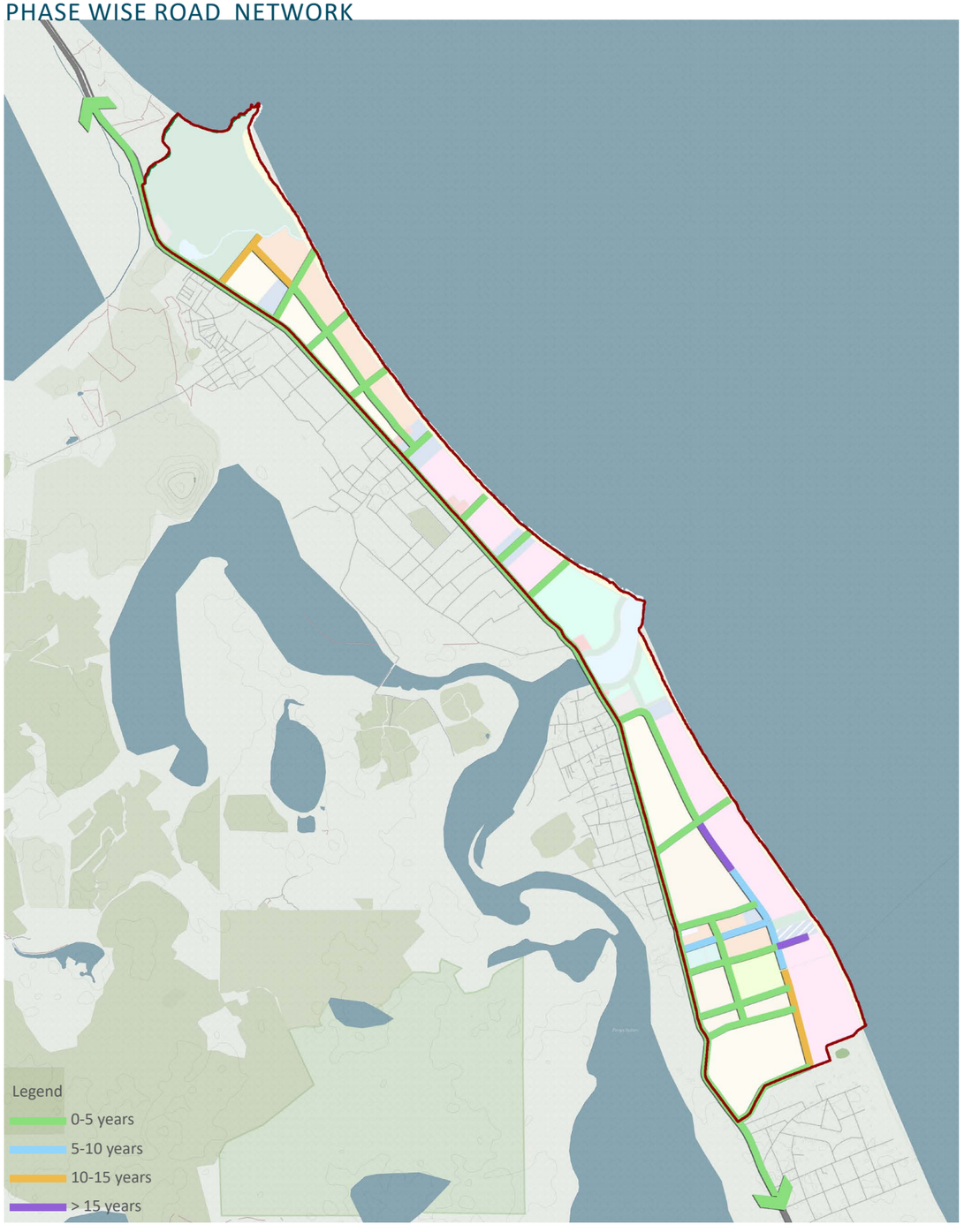


Figure 4.28 Phase wise Road Network (High Case)

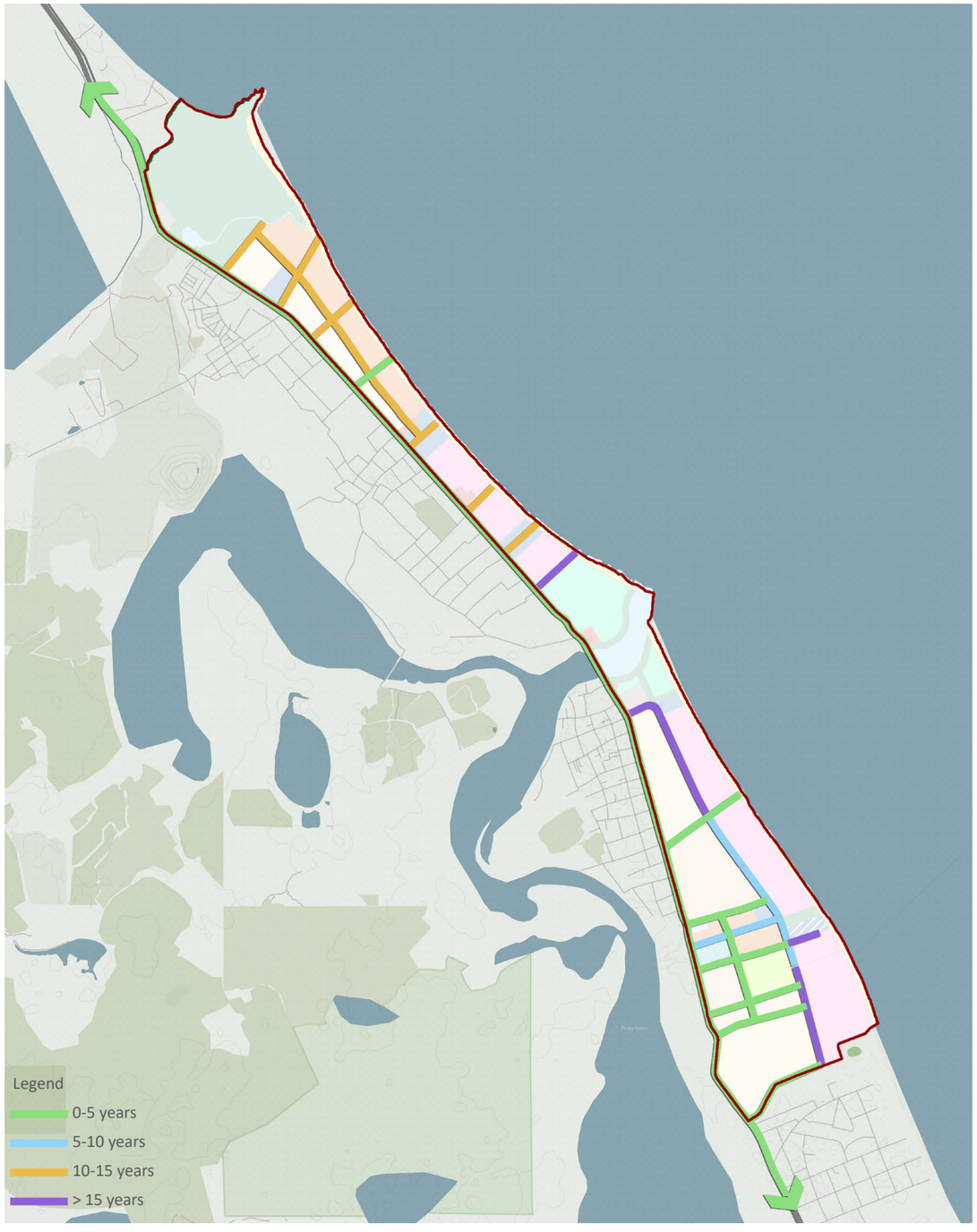


Figure 4.29 Phase wise Road Network (Low Case)

OVERALL UTILITIES INFRASTRUCTURE

SUBSTATION – 2.0 HA

STP- 1.8 HA

WATER STORAGE- 0.9 HA

(Water storage will be distributed across multiple areas based on demand and ground level.)

Construction of water treatment plant (at Wanela), Sewage Treatment Plant, Solid waste treatment (Landfill) with waste segregation plant (to recycle and reuse) and Electrical Sub-station to support the new development.

Note: Critical Infrastructure Projects are applicable for both High Case and Low Case Scenarios, module design will come under detailed engineering

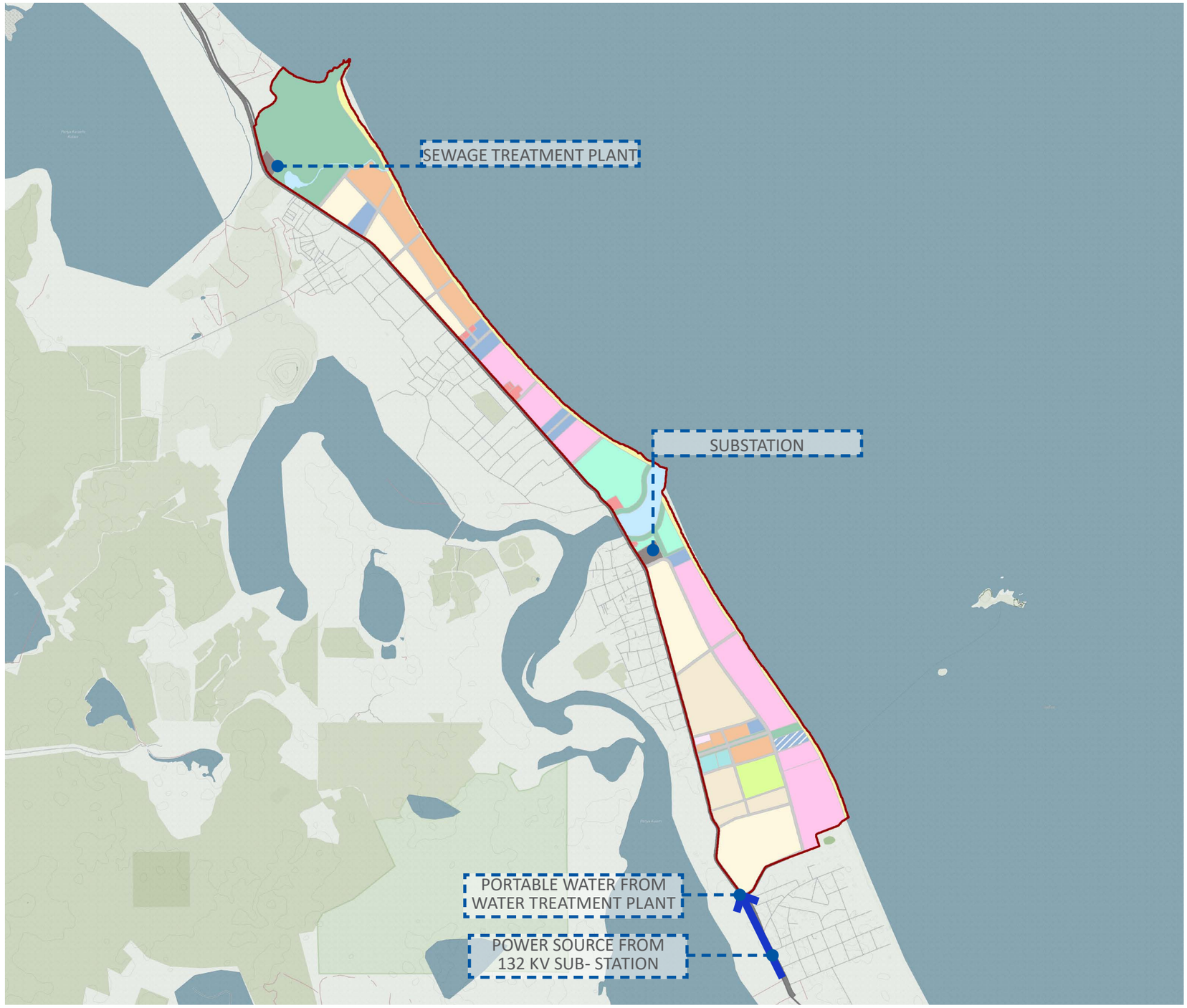
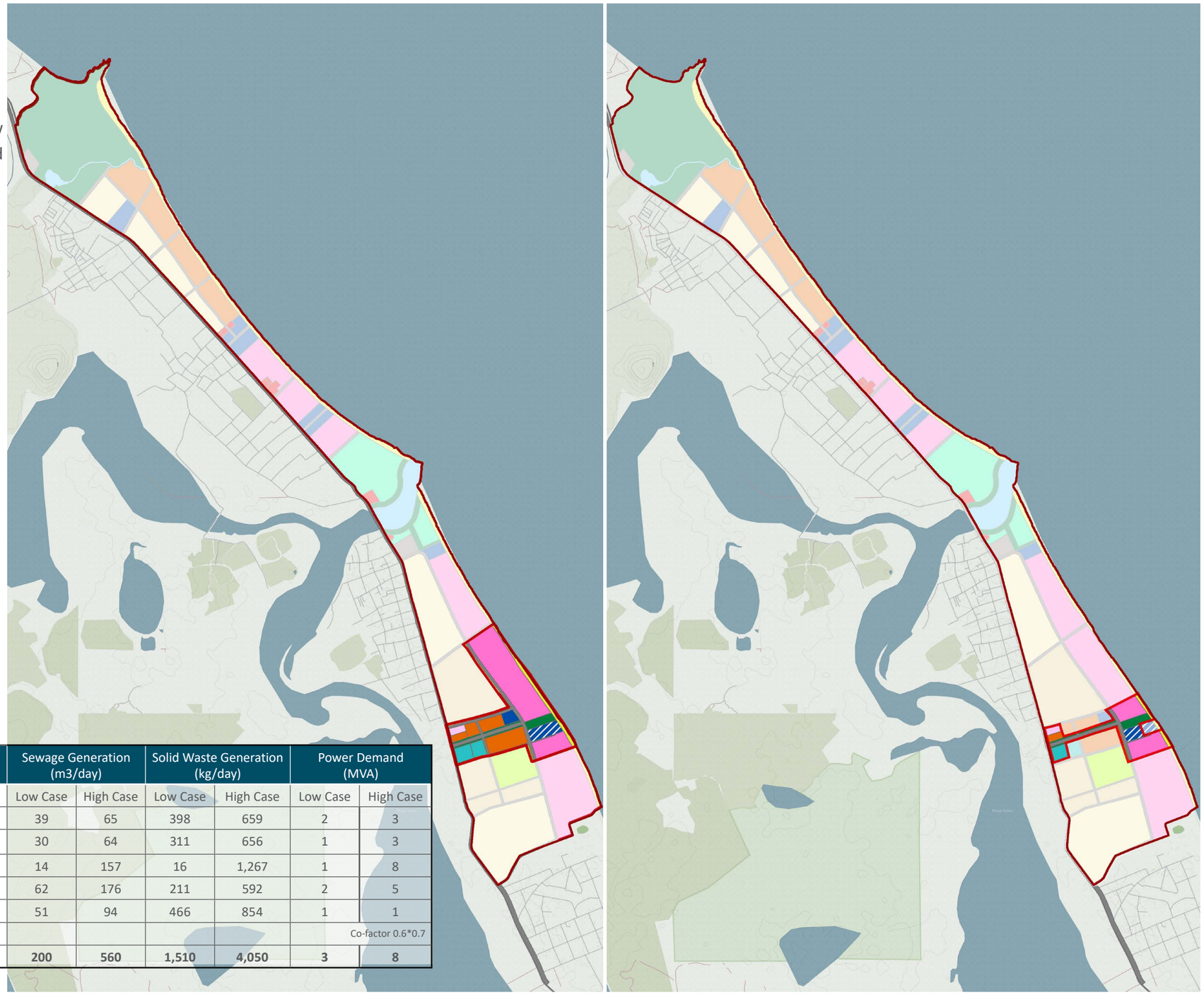


Figure 4.30 Critical Infrastructure Projects

UTILITIES DEMAND PROJECTION (KUCHHAVELI-NILAVELI)

- Utilities demand projection for Phase 1 (Low Case & High Case Scenario) are estimated and shown in the table below.



Proposed Land use		Total Water Demand (m3/day)		Sewage Generation (m3/day)		Solid Waste Generation (kg/day)		Power Demand (MVA)	
		Low Case	High Case	Low Case	High Case	Low Case	High Case	Low Case	High Case
	Commercial Diverse Paradise	44	74	39	65	398	659	2	3
	Resort (5* Hotel)	35	73	30	64	311	656	1	3
	Mixed Use	16	179	14	157	16	1,267	1	8
	Resort	71	200	62	176	211	592	2	5
	Museum	58	107	51	94	466	854	1	1
	Water Loss @ 10%	22	63						Co-factor 0.6*0.7
	Total	**250**	**700**	**200**	**560**	**1,510**	**4,050**	**3**	**8**

Table 4.12 Utilities Demand Projection

4.3.10 ACTION PROJECTS

CATALYTIC PROJECTS

Trincomalee Marine Adventure Hub is the key catalytic project proposed to realize the vision of making Kuchhaveli- Nilaveli the international destination for Marine Eco Adventure. The catalytic project is identified as the Urban Design intervention area elaborated in subsequent sections.

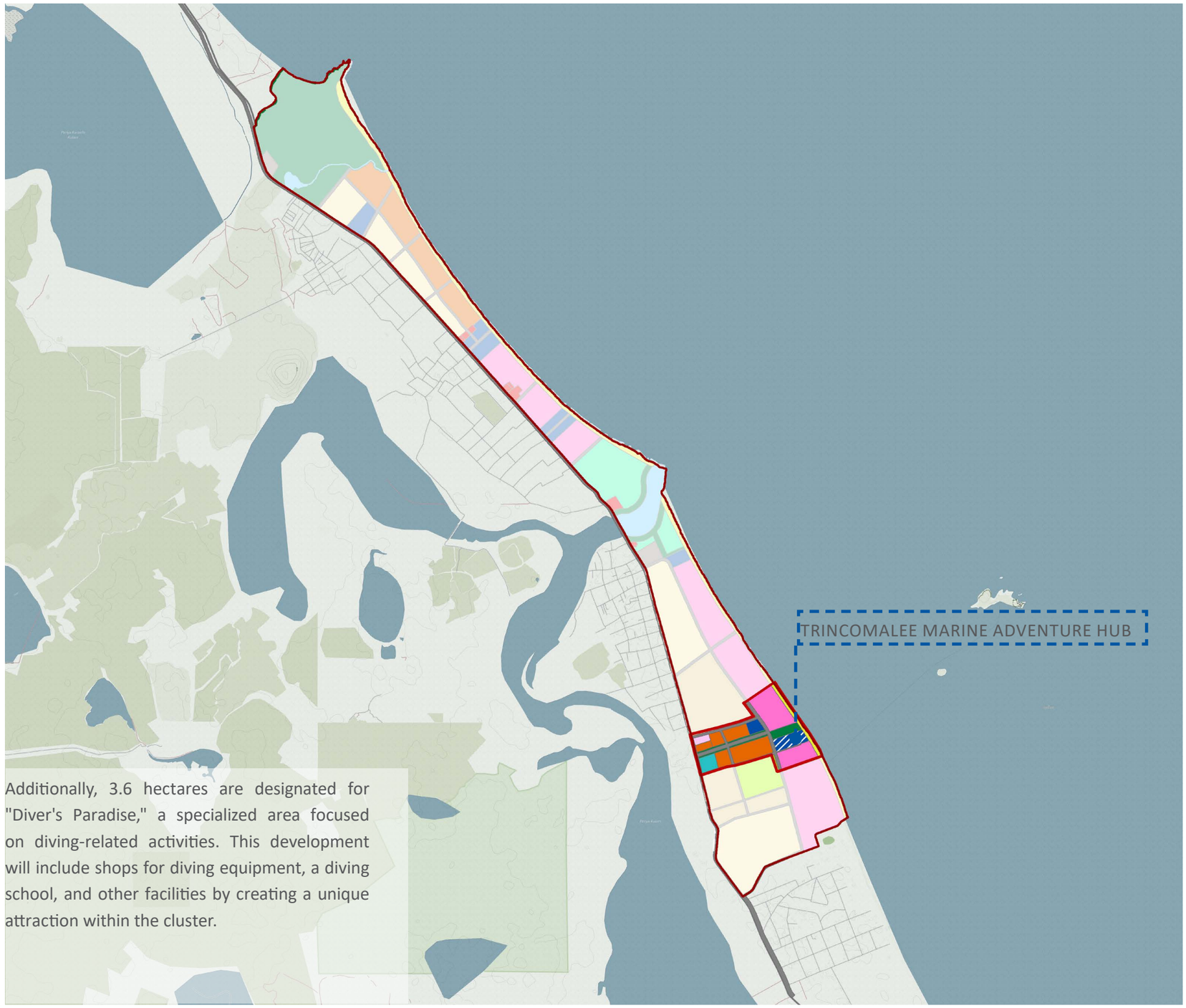
The priority projects within the gateway cluster are strategically planned to enhance both tourism and local amenities, ensuring a balanced mix of cultural, commercial, and recreational spaces.

A key component of these projects is the allocation of 2.3 hectares for the development of a marine museum. This facility is intended to serve as both an educational and cultural attraction, highlighting marine life, conservation efforts.

In addition to the marine museum, 2.07 hectares are designated for mixed-use development. This area will integrate commercial, residential, and possibly office spaces, creating a dynamic environment where people can live, work, and shop.

The cluster also includes 6.3 hectares dedicated to hotel development. The hotels will likely offer a range of accommodations.

To complement these developments, 2.21 hectares are reserved for a beach front park and retail area. This space will provide a scenic and recreational area for visitors, with the park offering open green spaces, walking paths, and areas for relaxation by the water.



Additionally, 3.6 hectares are designated for "Diver's Paradise," a specialized area focused on diving-related activities. This development will include shops for diving equipment, a diving school, and other facilities by creating a unique attraction within the cluster.

Figure 4.31 Catalytic Project (High Case Scenario)

4.3.11 PROPOSED TRANSPORT & INFRASTRUCTURE

INTERVENTION AREA

- The Eco-Adventure Gateway development for Urban Development Area (UDA) includes a series of transport facility improvements to enhance connectivity, safety, and sustainability within the designated area.

- The primary focus is on upgrading 2,879 meters of existing roads to improve traffic flow, accessibility, and safety. These upgrades support the area's development by providing better infrastructure for key projects, including mixed-use areas, a museum, hotels, and beach front parks.

- Enhanced road surfaces, widened lanes, improved signage, and better lighting and drainage systems will ensure a safer and more efficient transport network for residents and visitors.

- Incorporating an integrated mobility hub and parking as part of the future development will further enhance public transport connectivity and support sustainable transport modes.

Sl No	Land Use	Total Water Demand (m3/d)	Sewage Generation (m3/d)	Solid Waste Generation (kg/d)	Power Demand (MVA)
1	COMMERCIAL DIVERSE PARADISE	76	67	683	3
2	COMMERCIAL	33	29	294	1
3	MIXED USE	182	161	1,295	8
4	MUSEUM	107	94	854	3
5	RESORT	105	92	311	3
	Water Loss @ 10%	50			Co-factor 0.6 * 0.7
	TOTAL	**600**	**450**	**3,450**	**8**

Table 4.13 Unit Demand (Water, Solid Waste and Power)

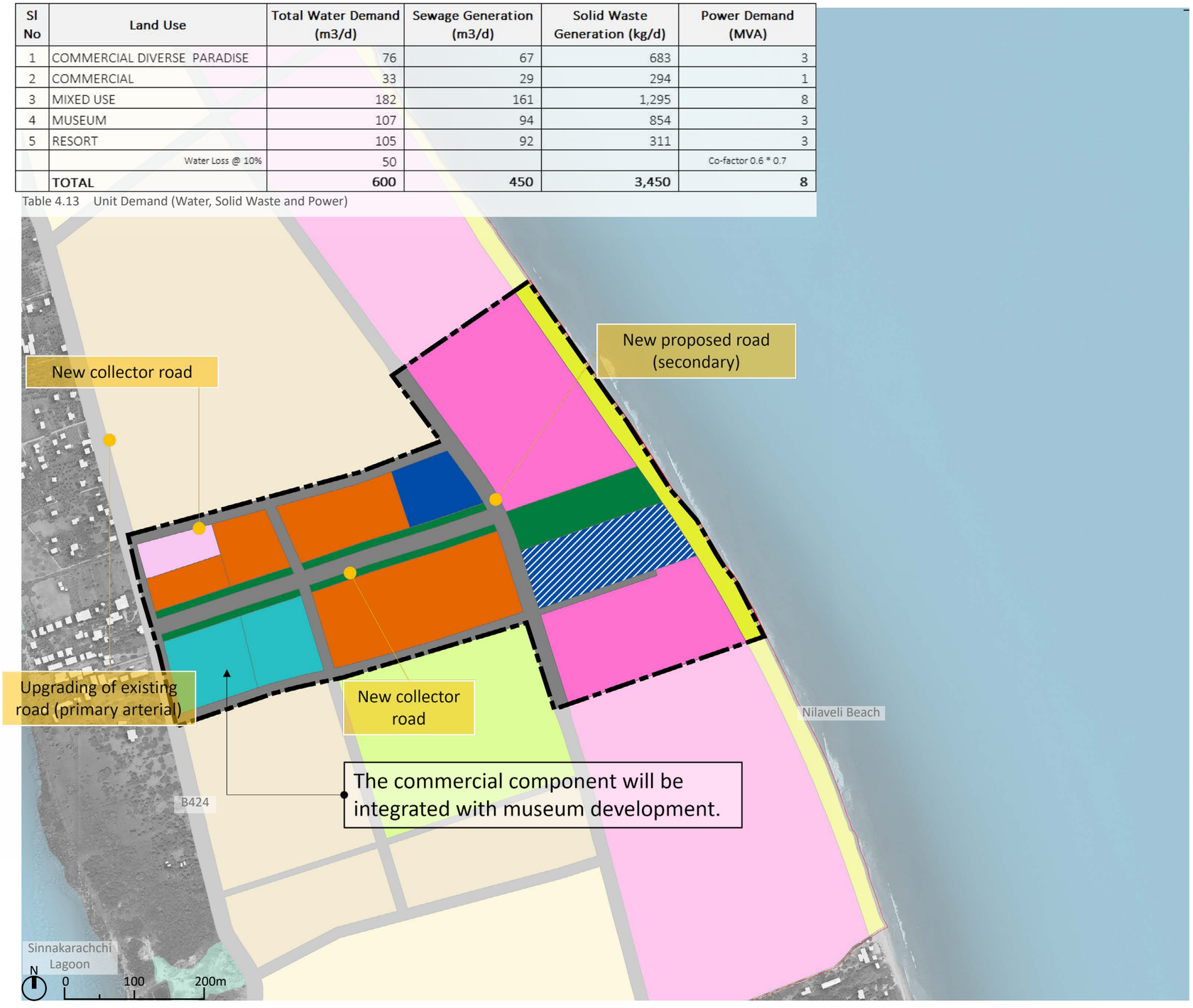


Figure 4.32 CIP Transportation Projects

4.4 KEY INTERVENTION AREA

4.4.1 MARINE ADVENTURE DESTINATION



① View from B424 Road



② Existing Dirt Road



③ Beach front with boat service to Pigeon Island



④ Existing Beach front

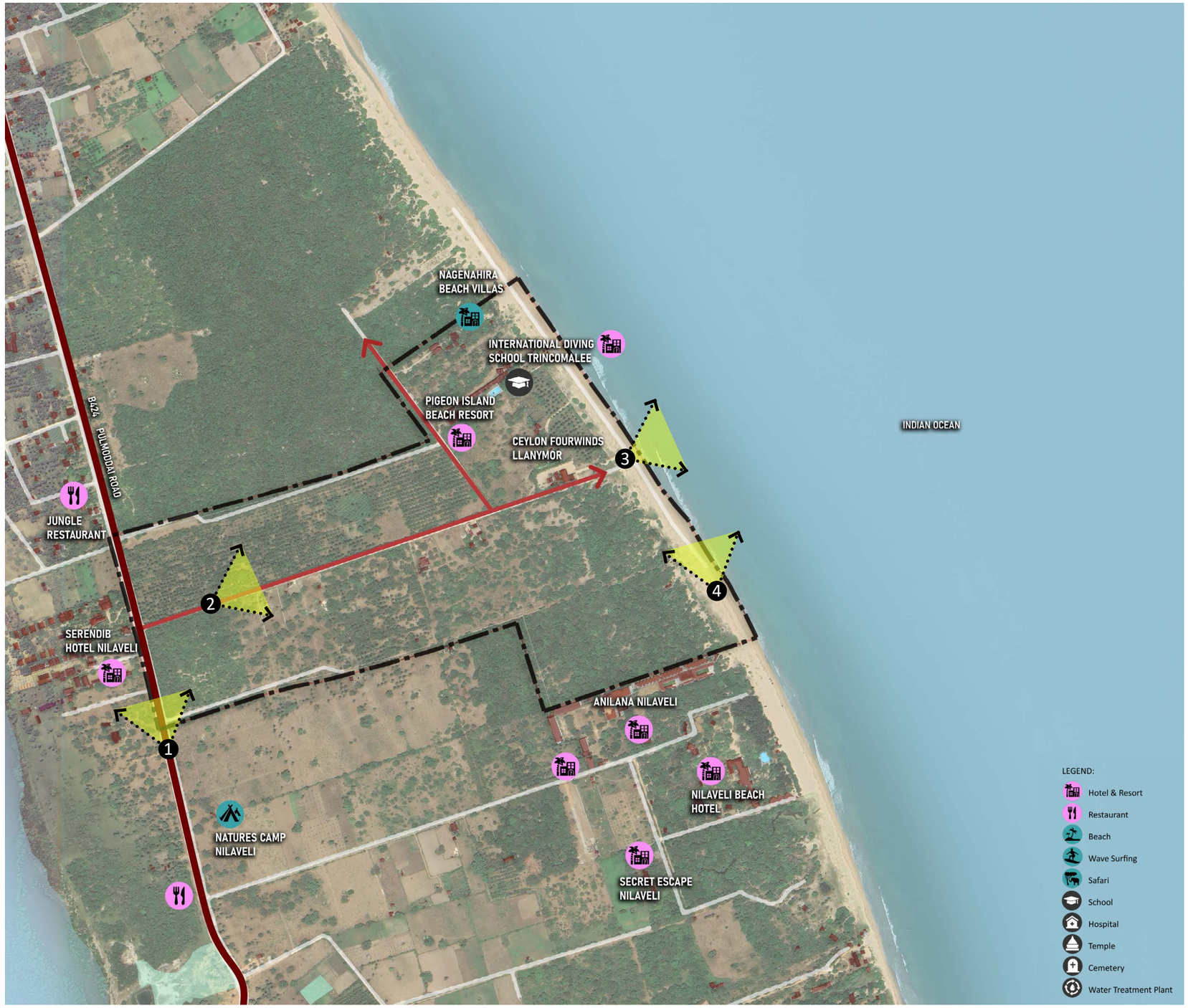


Figure 4.33 Intervention Area Context

LAND OWNERSHIP

The entire site is owned and managed by state authorities in collaboration with semi-governmental organizations. These entities are responsible for overseeing the land's usage, maintenance, and development, ensuring it aligns with governmental policies and strategic objectives. The ownership structure reflects the importance of the site to public interests, allowing for coordinated efforts in its management and future planning.



Figure 4.34 Intervention Area Land Ownership

4.4.2 PROPOSED LANDUSE PLAN

The immediate intervention area of Kuchhaveli-Nilaveli is envisioned as an eco-adventure gateway. This concept leverages both the existing natural and environmental features and proposed components like marine museum. To ensure holistic development, it includes commercial elements supporting marine-related activities, such as a designated commercial area for divers, a beach front park for nightlife activities, and a vocational institution for skill improvement in the hospitality sector. These initiatives aim to create a comprehensive and sustainable eco-adventure destination, enhancing both the local economy and environmental conservation efforts.

	Proposed Land use	Area (Ha)	%
	Beach Area	2.80	5.1%
	Commercial	1.64	3.0%
	Commercial Diverse Paradise	3.79	6.9%
	Green Open Space	4.34	7.9%
	Mixed Use	11.61	21.1%
	Museum	4.27	7.8%
	Resort	16.61	30.2%
	Road	8.88	16.2%
	Vocational School	1.03	1.9%
	Total	54.96	

Table 4.14 Intervention Area Proposed Land use Distribution

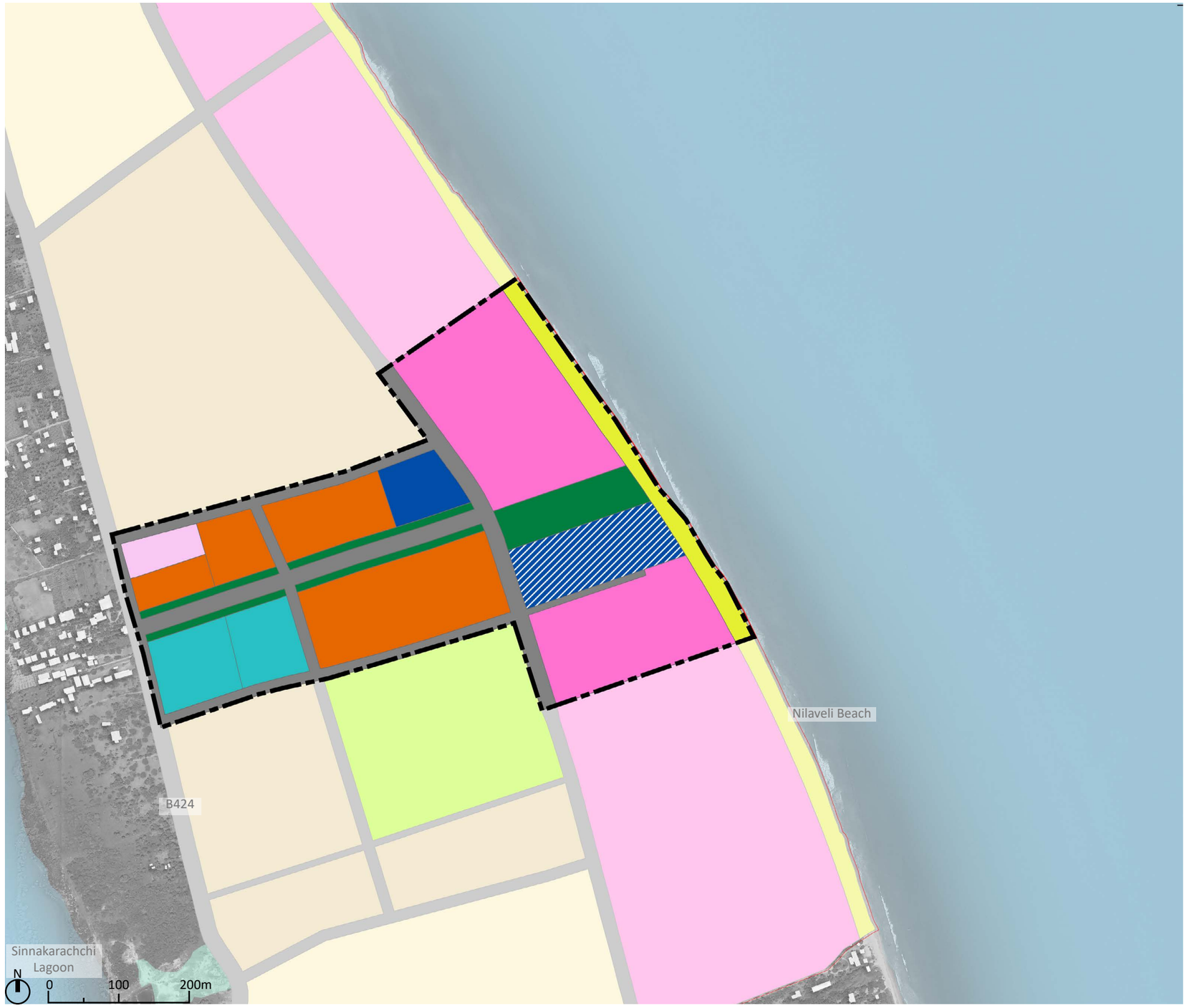


Figure 4.35 Intervention Area Proposed Land use Plan

KEY FEATURES

The Central Facility Node and Marine Diving Centre feature a Marine Adventure Centre with facilities tailored for divers, alongside beach front commercial spaces, beach facilities, entertainment venues, and vibrant pedestrian streets bustling with commercial activity.

The Beach front Resort offers a range of accommodations, including luxury resorts, upscale hotels, and budget-friendly options, all designed to provide diverse and eco-friendly lodging experiences.

Divers' Paradise is equipped with services and facilities for marine eco-adventure activities, including urban garden (reserve for future water park) and Seaside Amphitheater, ensuring excitement and entertainment for enthusiasts.

Within the Mixed-Use Cluster, visitors can find a variety of amenities such as mixed-use commercial spaces, retail outlets, and food and beverage options. Additionally, there's a Hospitality School, a collaboration hub, exhibition galleries, tourist services, a visitor centre, ample car parking, and utility areas.

Furthermore, the green network, open plazas, central park, and beach front park facilitate pedestrian connectivity from the main road to the beach front, ensuring seamless access for all.



Figure 4.36 Intervention Area Key Features

4.4.3 ARTIST'S IMPRESSION



KUCHHAVELI-NILAVELI:
AN INTERNATIONAL DESTINATION FOR MARINE ECO-ADVENTURE

From a bird's-eye view over the sea, the stunning coastline of Kuchhaveli-Nilaveli, reveals a luxurious array of four- and five-star hotels lining the shore. Just next to these opulent accommodations lies the Diver's Paradise, a hub dedicated to diving enthusiasts, featuring top-tier commercial facilities catering to every diver's need. Adjacent to Diver's Paradise, a beach front park provides a serene escape with lush green spaces, seamlessly connected to the major road by a green boulevard. This boulevard is flanked by a vibrant commercial edge, bustling with shops, cafes, and restaurants, offering both convenience and a lively atmosphere for visitors.

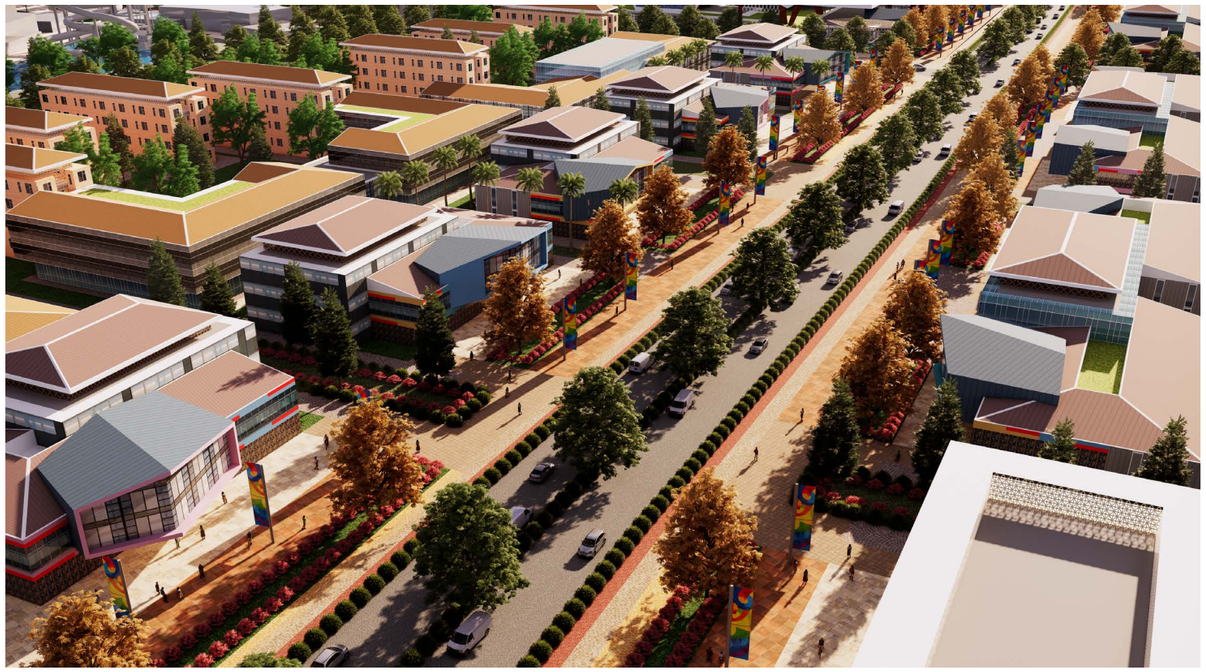


Figure 4.37 View-1 from Active Pedestrian Spine

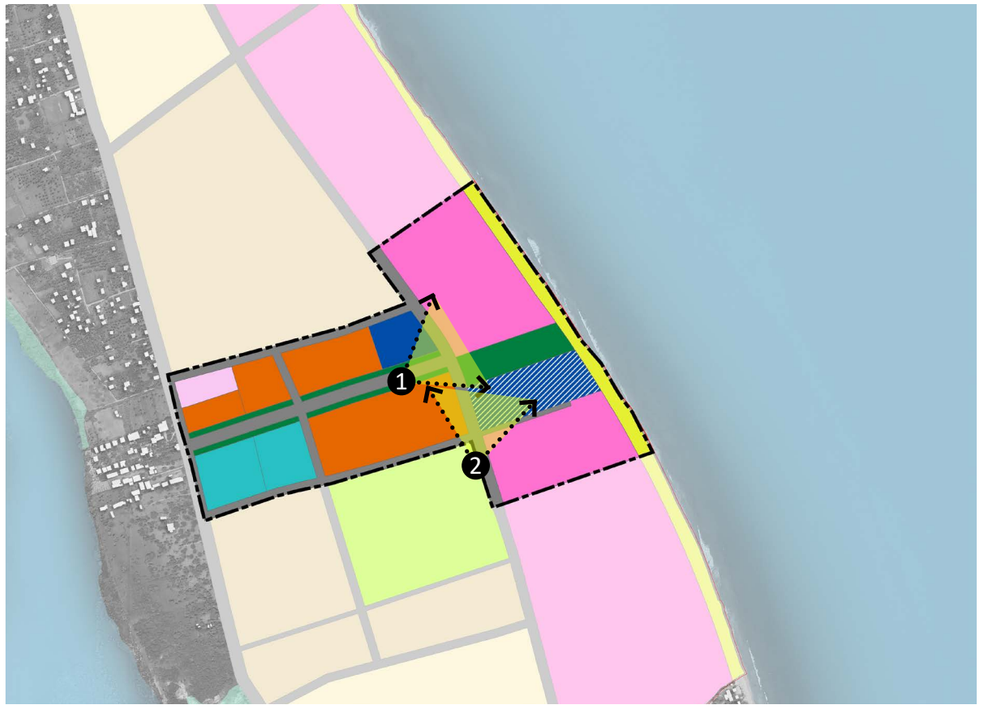




Figure 4.38 View-2 Overlooking Diver's Paradise to the Beach

4.4.4 URBAN DESIGN CONCEPT

The development's strategic placement between the beach front and a major road allows for the delineation of landmarks into two distinct zones. At the entrance of the site, two prominent landmarks create a striking sense of arrival. The beach front landmark plaza serves as a central hub of public activity, seamlessly connecting to the significant national landmark, Pigeon Island.

These key landmarks are connected by a pedestrian-friendly boulevard lined with vibrant commercial spaces. This walkable boulevard encourages visitors to explore and immerse themselves in the ambiance of the area, enhancing the overall experience of the development.

The walkability extends seamlessly along the beach front, providing convenient and direct connections to adjacent areas. This accessible pathway enhances mobility of the area, allowing residents and visitors to enjoy uninterrupted access to the surrounding coastal landscapes and amenities.

Legend

- Oceanfront Landmark Plaza
- Landmark Building
- Major Open Space Node
- Beach Frontage
- Active Edge
- Active Green/ Pedestrian Connectivity
- Passive Green
- Major Public Space
- Beach front Visual Axis

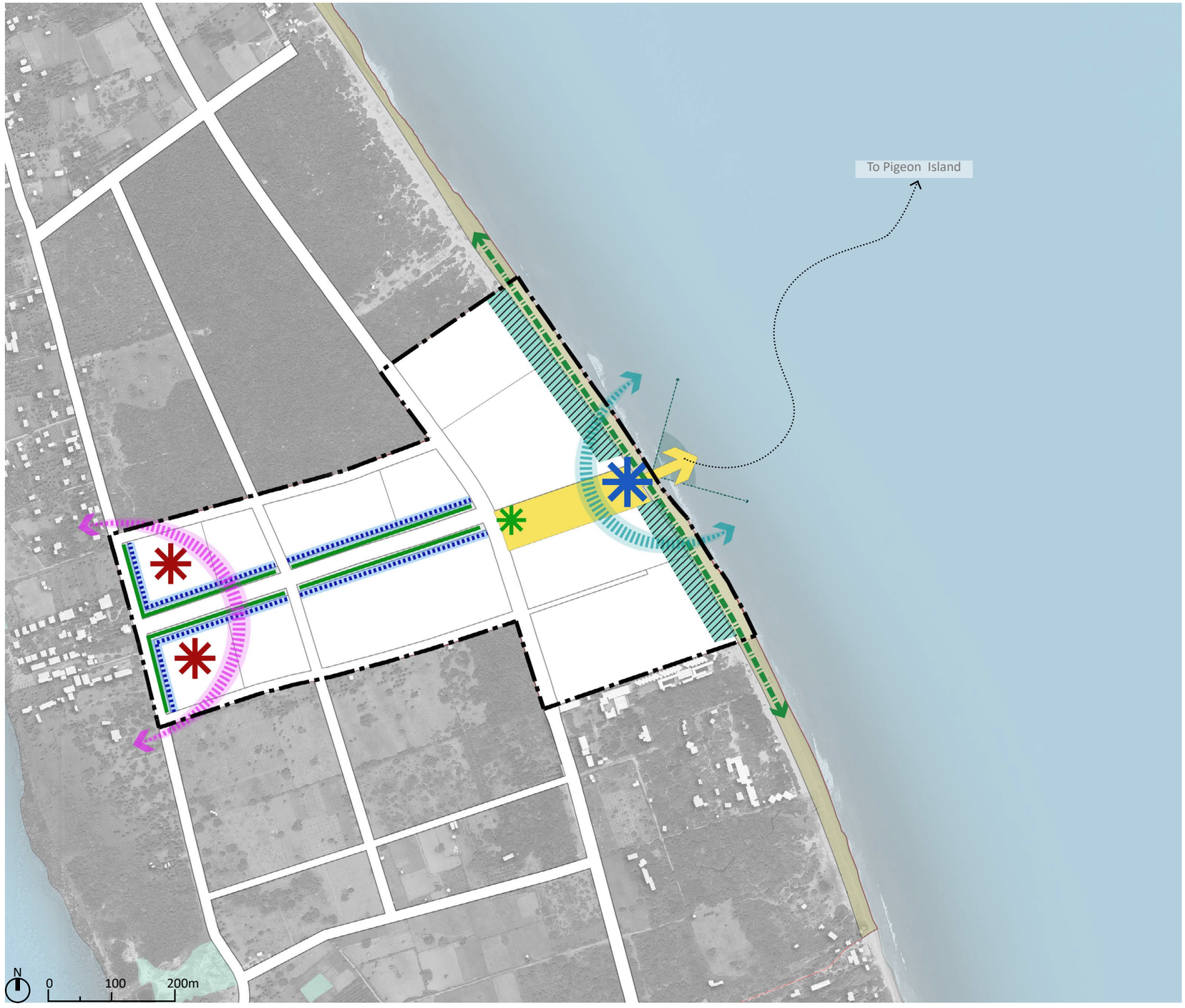
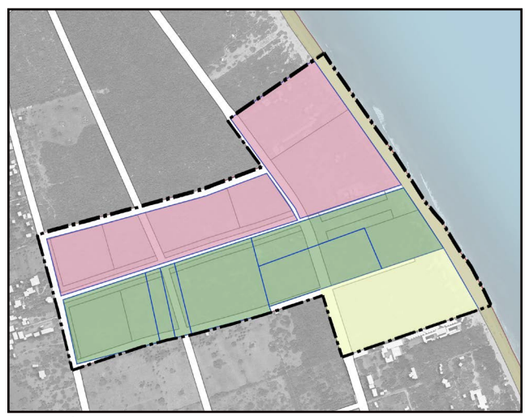


Figure 4.39 Urban Design Concept

4.4.5 PARCELLATION STRATEGIES

Despite the current land parcels being under different ownership titles, optimizing the developable land necessitates strategic reconfiguration. Some parcels are subdivided into smaller units to allow for more flexible development options, catering to diverse needs and projects. Conversely, certain parcels are amalgamated to enhance the overall value and efficiency of land use. This approach ensures that the land is utilized in the most effective manner, balancing the goals of flexibility and optimization.

The new parcellation strategy ensures that the land is divided into sizable and marketable units. However, based on market demands, further adjustments to parcel sizes may be necessary. This flexibility allows for tailored solutions that can better meet the capacities and needs of potential investors, ensuring that the land is utilized efficiently and effectively.



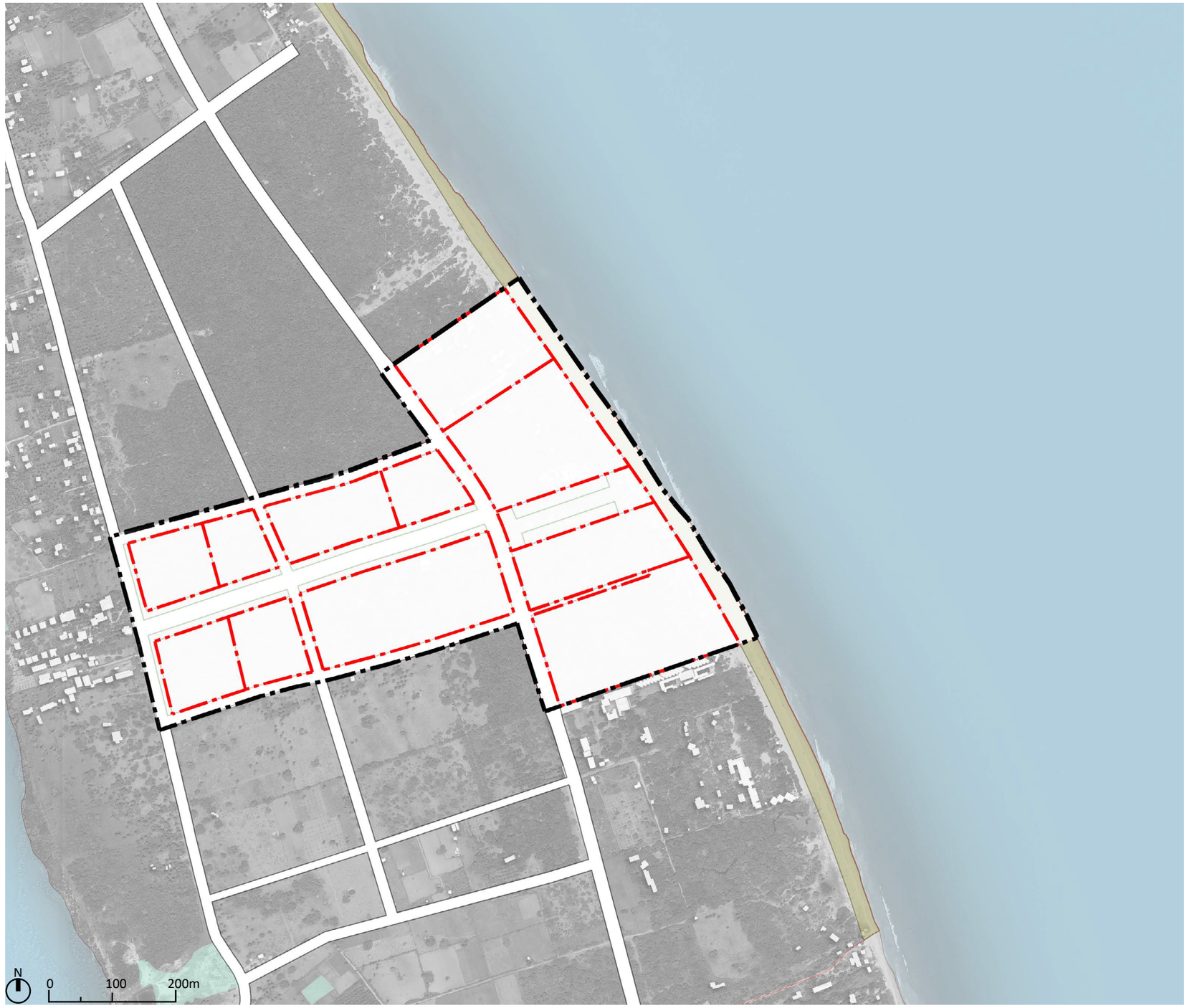
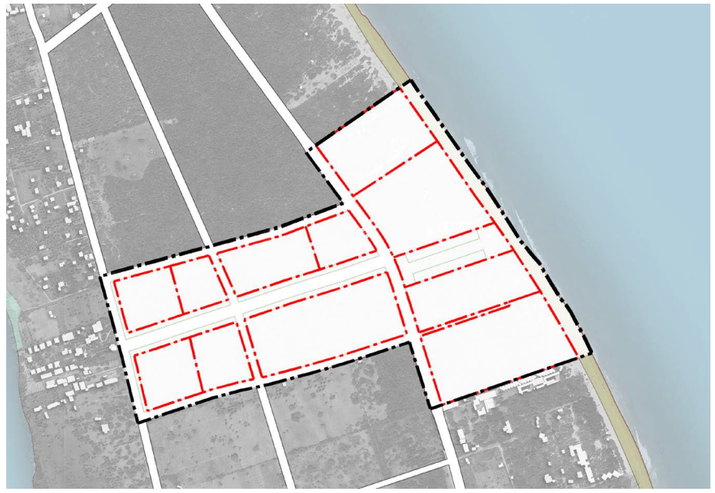


Figure 4.40 Parcellation Strategies

4.4.6 URBAN DESIGN GUIDE PLANS

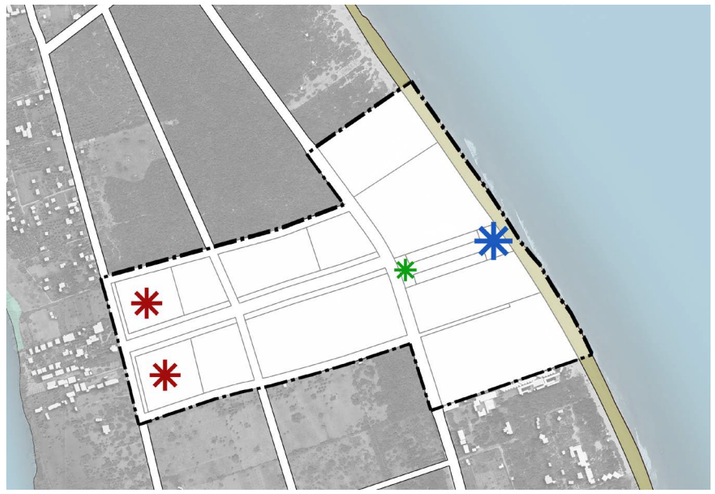
PARCEL & BUILDING USE



Legend

- Proposed Parcel

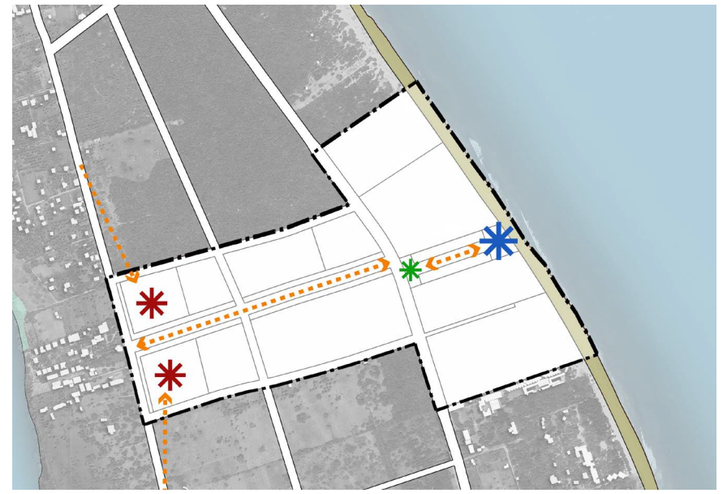
LANDMARKS & NODES



Legend

- Oceanfront Landmark Plaza
- Landmark Building

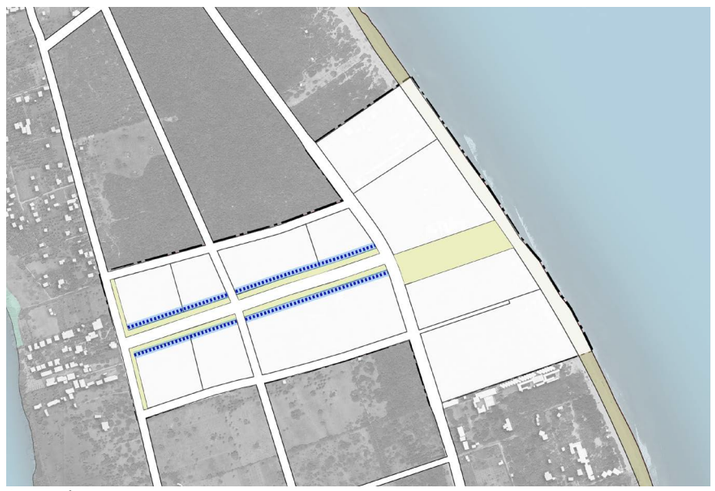
VIEWS AND VISTAS



Legend

- Oceanfront Landmark Plaza
- Landmark Building
- Oceanfront Landmark Plaza
- View and Vista

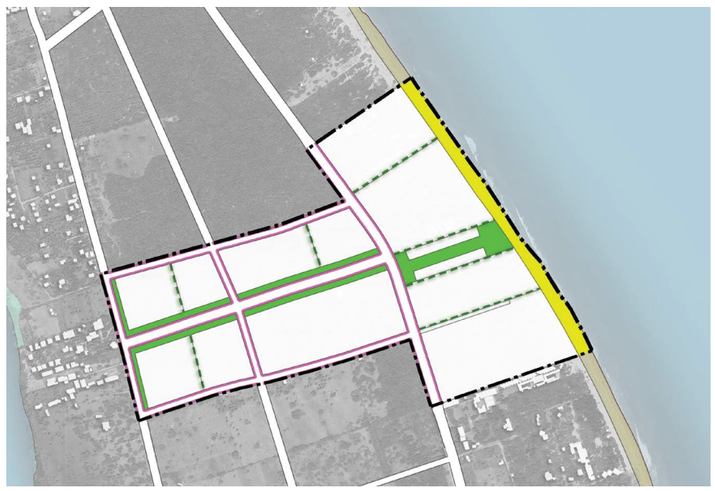
BUILDING EDGE & ACTIVITY GENERATION USES



Legend

- Active Edge
- Plaza/ Open Space

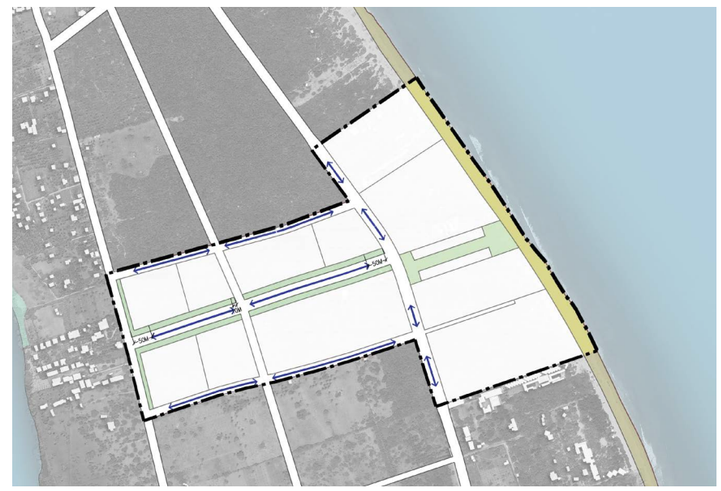
PUBLIC OPEN SPACES



Legend

- Active Edge
- Plaza/ Open Space

ACCESS & CIRCULATION



Legend

- Vehicular Entrances

SECTIONS

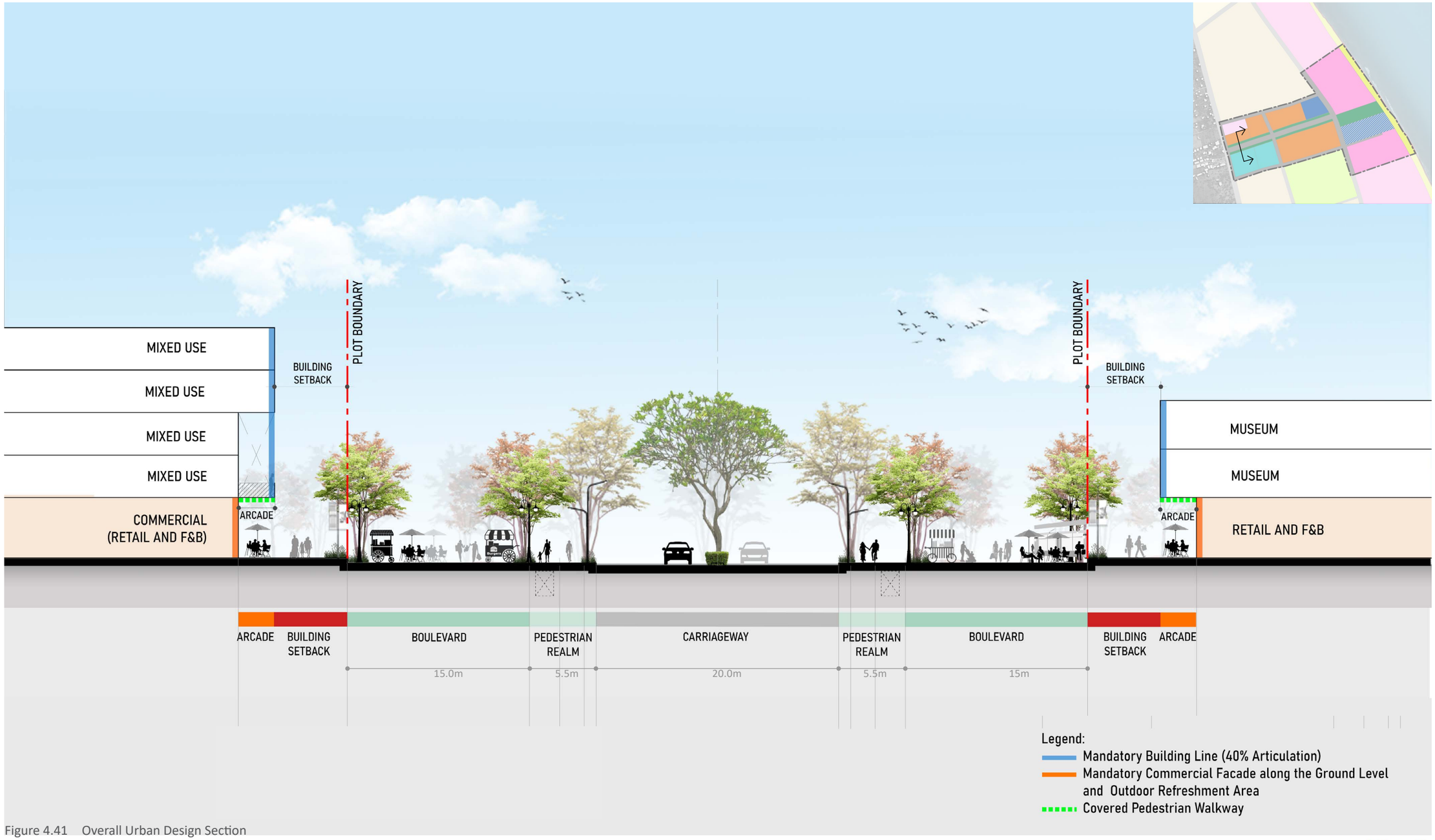


Figure 4.41 Overall Urban Design Section

4.4.7 PRIORITY PROJECTS

HIGH CASE SCENARIO

1. Museum

Including commercial, Restaurants/ food courts and other retail
Site Area: 4.3Ha
Plot Ratio: 1.0
Building Height: G+2

2. Hotel

Site Area: 6.6Ha
Plot Ratio: 0.5
Building Height: G+2

3. Commercial Diver's Paradise

Site Area: 3.83Ha
Plot Ratio: 1.0
Building Height: G+2

4. Beach front Park & Retail

Site Area: 2.34Ha
Plot Ratio: 0.2

5. Road Enhancement

Secondary Road with Parking (31m)
New Road to be Constructed- 389m
Existing Road to be Upgraded- 716m

Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	389	716	1,105
Collector	21.6	-	319	319
Collector	12	259	-	259

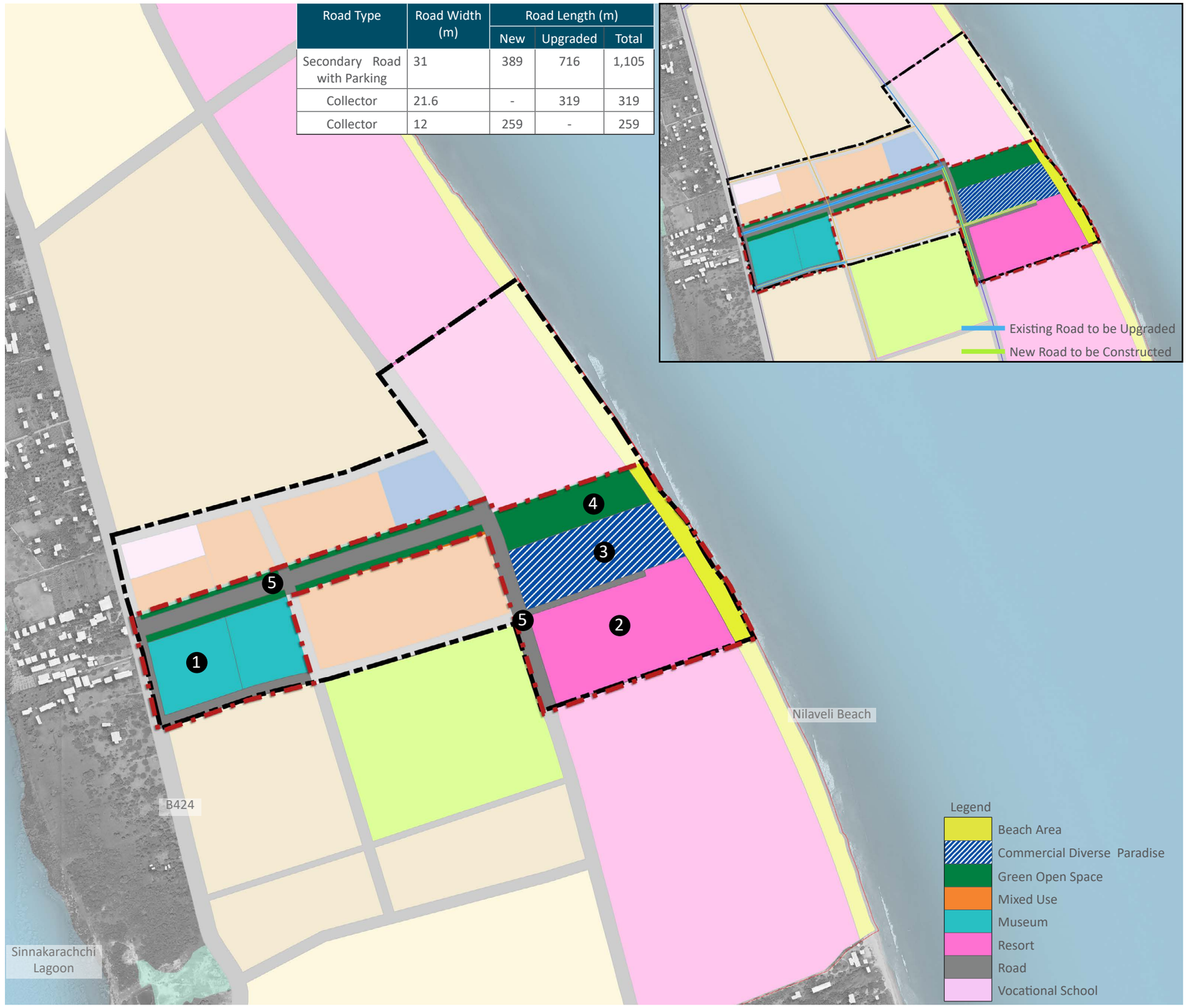


Figure 4.42 Priority Projects (High Case Scenario)

LOW CASE SCENARIO

1. Museum

Including commercial, Restaurants/ food courts and other retail

Site Area: 2.33Ha

Plot Ratio: 1.0

Building Height: G+2

2. Hotel

Site Area: 6.3Ha (1.0Ha to be developed in Phase-1)

Plot Ratio: 0.5

Building Height: G+2

3. Commercial Diver's Paradise

Site Area: 3.64Ha (1.0Ha to be developed in Phase-1)

Plot Ratio: 1.0

Building Height: G+2

4. Beach front Park & Retail

Site Area: 2.21Ha (1.0Ha to be developed in Phase-1)

Plot Ratio: 0.2

5. Road Enhancement

Secondary Road with Parking (31m)

New Road to be Constructed- 389m

Existing Road to be Upgraded- 716m

Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	389	716	1,105
Collector	21.6	-	169	169
Collector	12	179	-	179

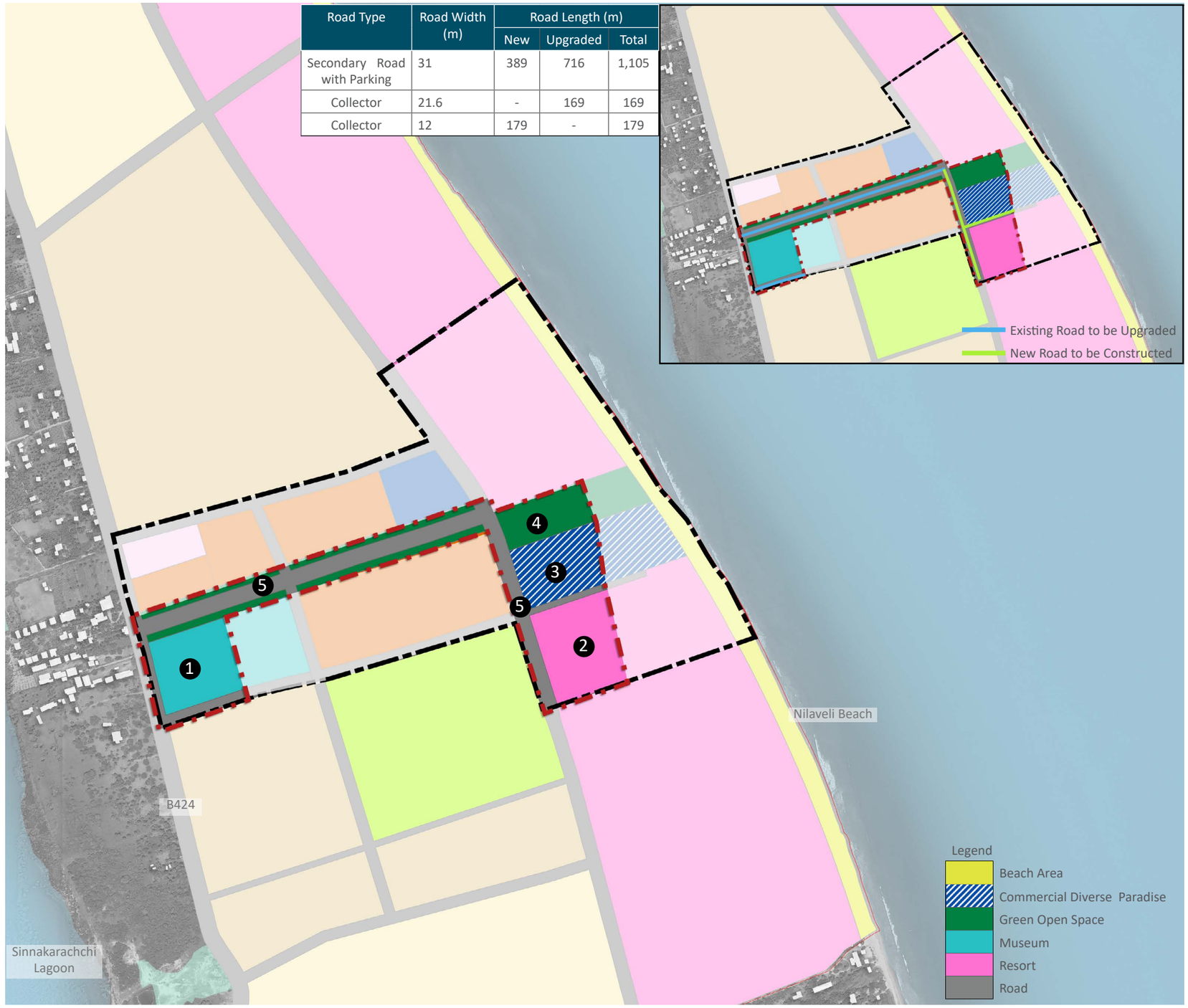


Figure 4.43 Priority Projects (Low Case Scenario)

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4.4.8 PRIORITY PROJECT DESIGN BRIEF GUIDELINES

Note: The proposed land use plan (PLU) is based on a high-case scenario to maximize opportunities for both the community and the region. Accordingly, project-level guidelines for priority initiatives have been developed in alignment with the PLU and the high-case scenario framework.



PROJECT BRIEF: OVERALL KUCHHAVELI-NILAVELI

RATIONALE OF PROJECT

What is the problem, need or the existing gap/ deficiency?

The Eastern Province of Sri Lanka, despite its rich natural resources and pristine beaches, is witnessing a decline in tourist visits. There is a pressing need to leverage these resources to boost tourism in the region and enhance its economic status.

What are the root-causes, underline causes and immediate causes that contribute for the problem or the need that the project intents to address?

The primary issue is the limited connectivity to the Eastern Province, as foreign tourists must first land in Colombo - the only location with an international airport in Sri Lanka. From there, it takes 8-10 hours to reach the Eastern Province by road. Other challenges include:

- The absence of tourist facilities such as banks, exchange offices, and visitor centers.
- The lack of a marketing strategy to promote the region.
- The static tourist landmarks that do not attract much tourist attention.
- Low tourist spending due to limited opportunities except for accommodations.
- Insufficient tourist amenities like waiting areas, shower and changing rooms, restaurants, and retail outlets.

How does this project contribute to fulfill the existing gap in the sector?

The project is designed to address the difficulties and challenges encountered by tourists in the Eastern Province and to adapt to the economic conditions and current situation in Sri Lanka. Tourism initiatives are planned for each area based on existing developments and proposed tourism concepts. These initiatives are expected to drive the tourist inflow into the region and enhance the tourist experience

What is the mode of intervention of this project in addressing the gap?

- Nilaveli & Kuchchweli are focused on a marine concept, with a Marine Museum as the central element to attract visitors.
- Besides the central elements in each area, tourist facilities such as visitor centers, retail, restaurants, parks, etc. are suggested to enhance the tourist experience.

1	Project Location	Nilaveli Beach, Trincomalee District, Eastern Province
2.	Rationale of Project	**Mode of Intervention** Nilaveli & Kuchchweli are focused on a marine concept, with a Marine Museum as the central element to attract visitors.
3.	Cost Breakdown (Construction/ Establishment)	USD 14.1 Mn (for intervention projects)
4.	Revenue Forecast	5.4 USD Mn (Year 1 – 5)
		46 USD Mn (Year 6 – 10)
		76.5 USD Mn (Year 11 – 15)
		128 USD Mn (Total)
5.	Findings of the Economic and Financial Analysis	15 – 16% avg: IRR in avg: 10 years payback period

1. MUSEUM PARCEL

SITE CONTEXT

Plot MU-01 is a Museum use plot located at the entrance of the Intervention area with a site area of 4.3Ha. A museum development, located at the intersection of a major road and the main boulevard, has the potential to become a significant iconic landmark. This prominent positioning enhances its visibility and establishes a strong sense of arrival for the area.

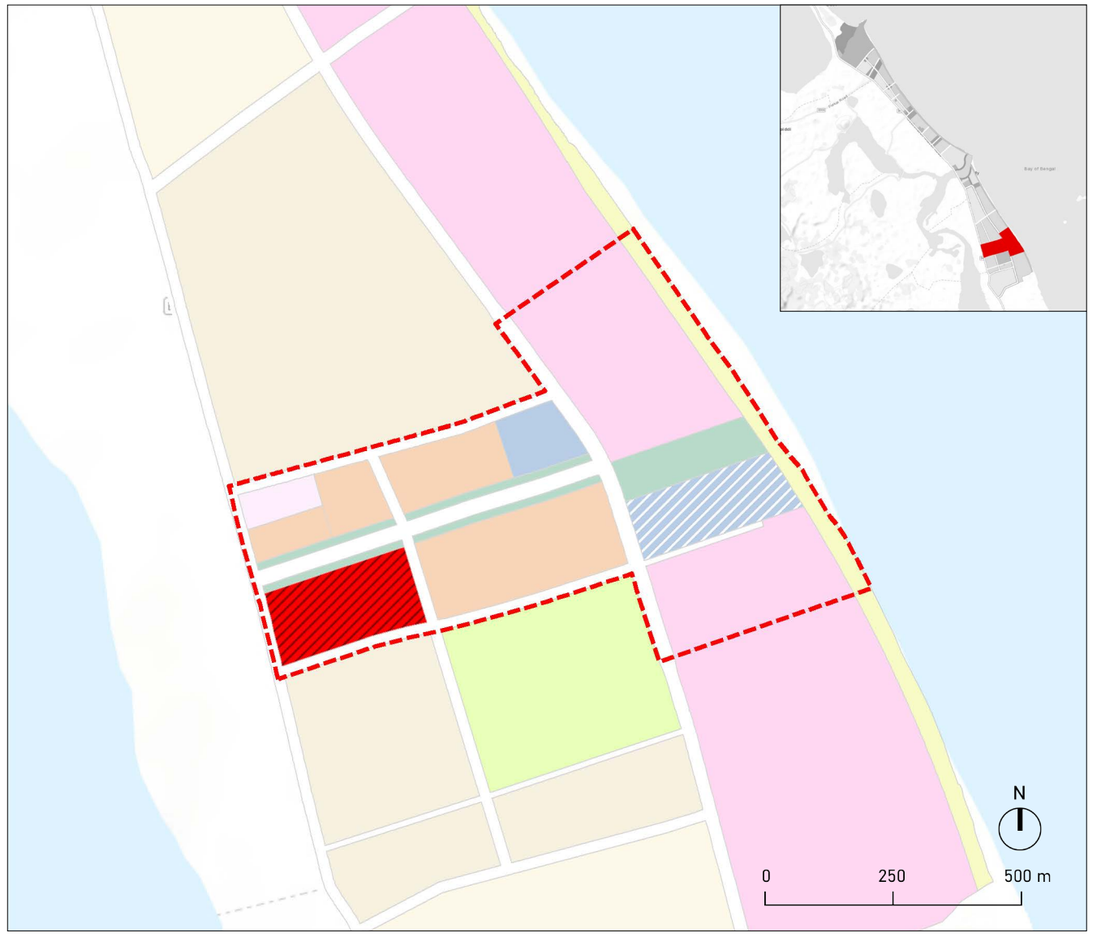
OBJECTIVE

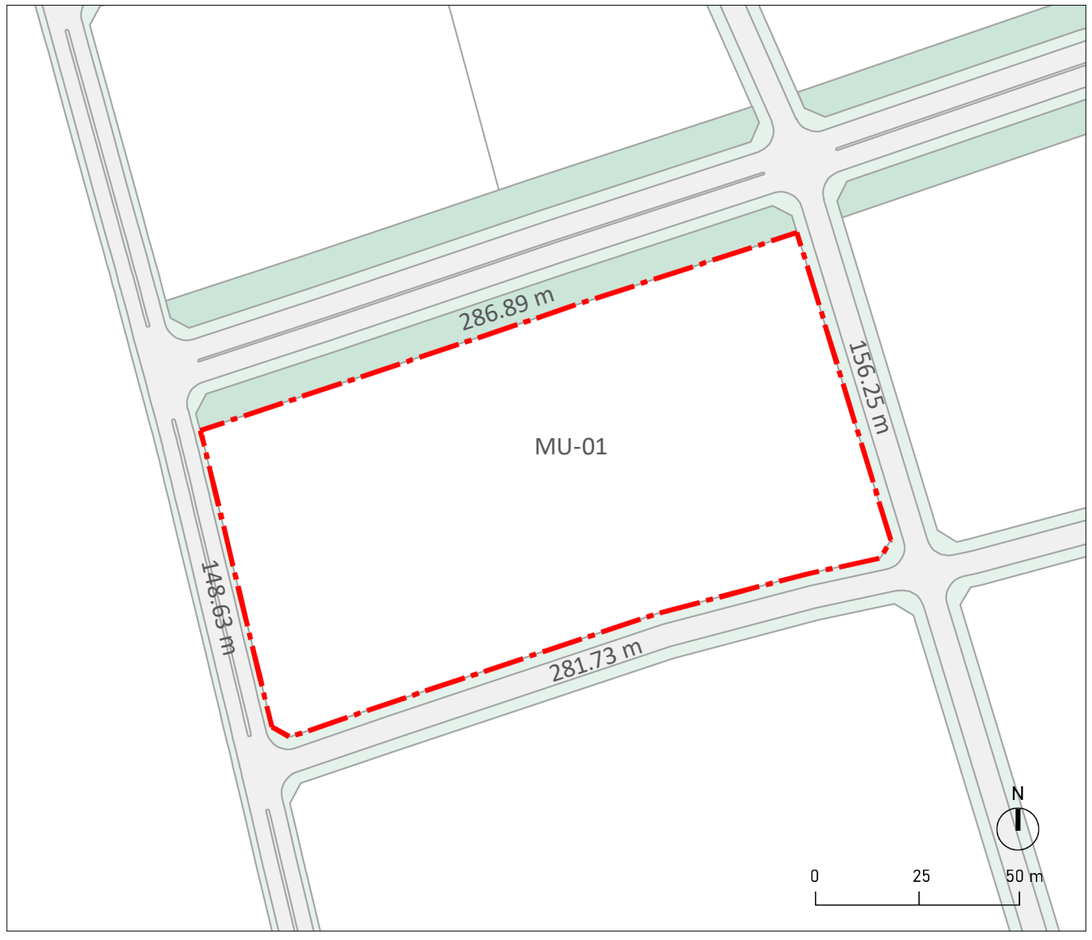
Due to its strategic location, future developments will resemble iconic design and architecture. The edge along the green spine will be vibrant and active with museum-related commercial activities

DEVELOPMENT PROGRAMME

The development feature a dedicated exhibition area focused on marine life as well as cafes, gift shops, and outdoor exhibits area.

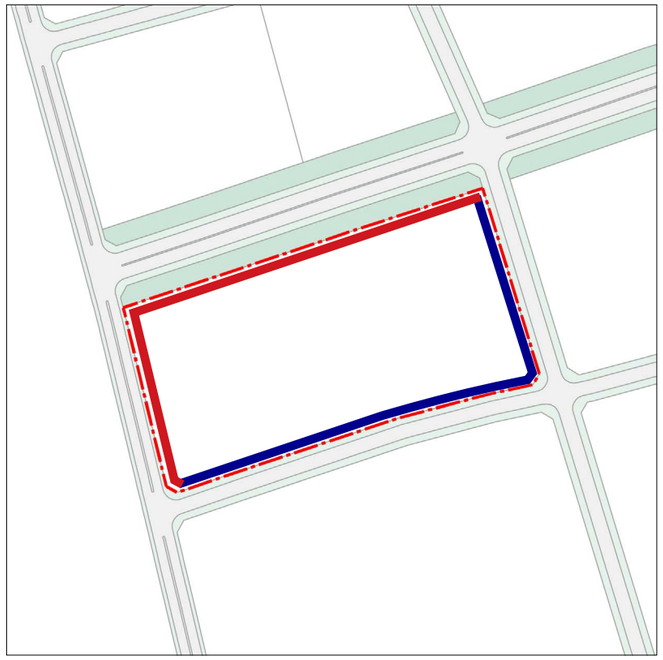
PLANNING PARAMETERS	
PLOT NUMBER	MU-01
ALLOWABLE USE	MUSEUM USE
PLOT AREA	4.3HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2





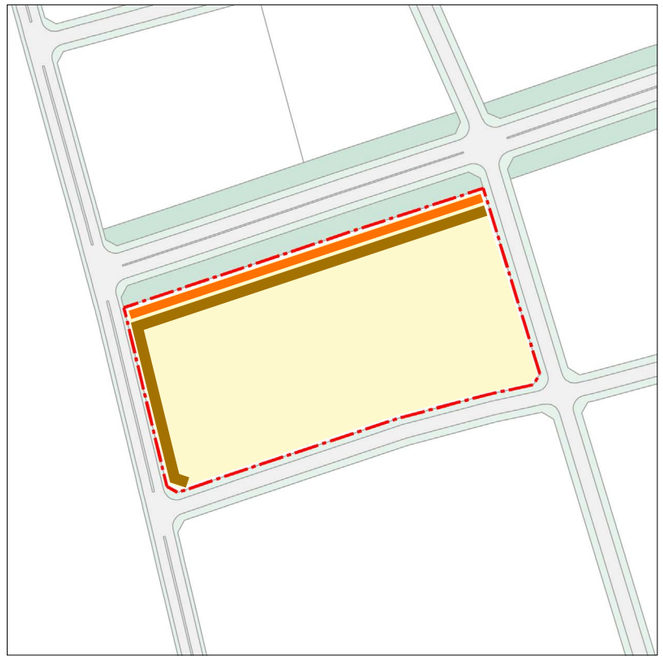
PLOT REGULATIONS

BUILDING SETBACK



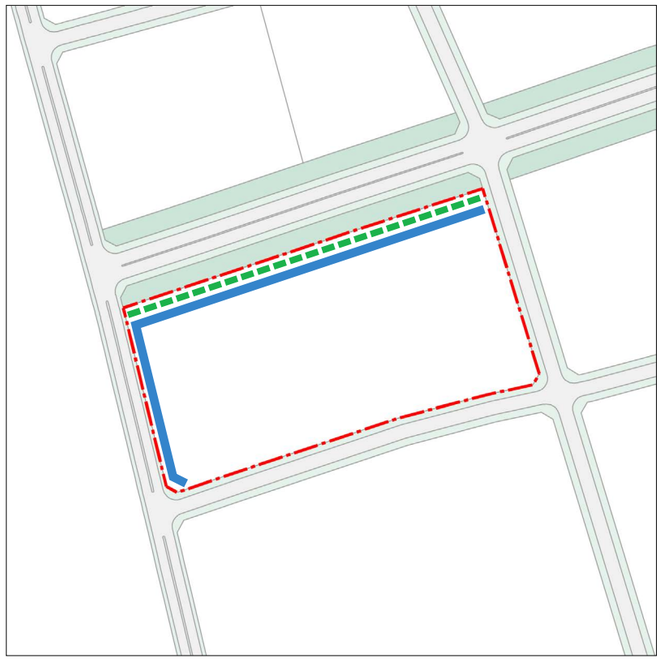
- Planning Area Boundary
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)

BUILDING USE



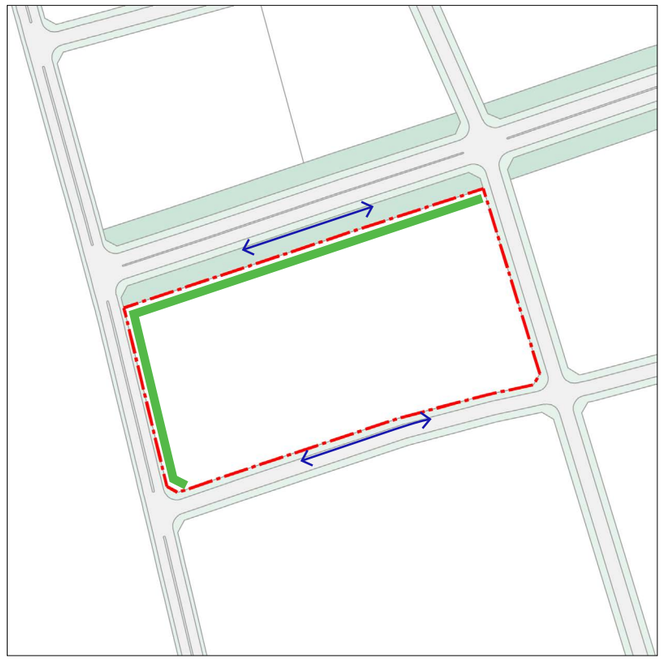
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



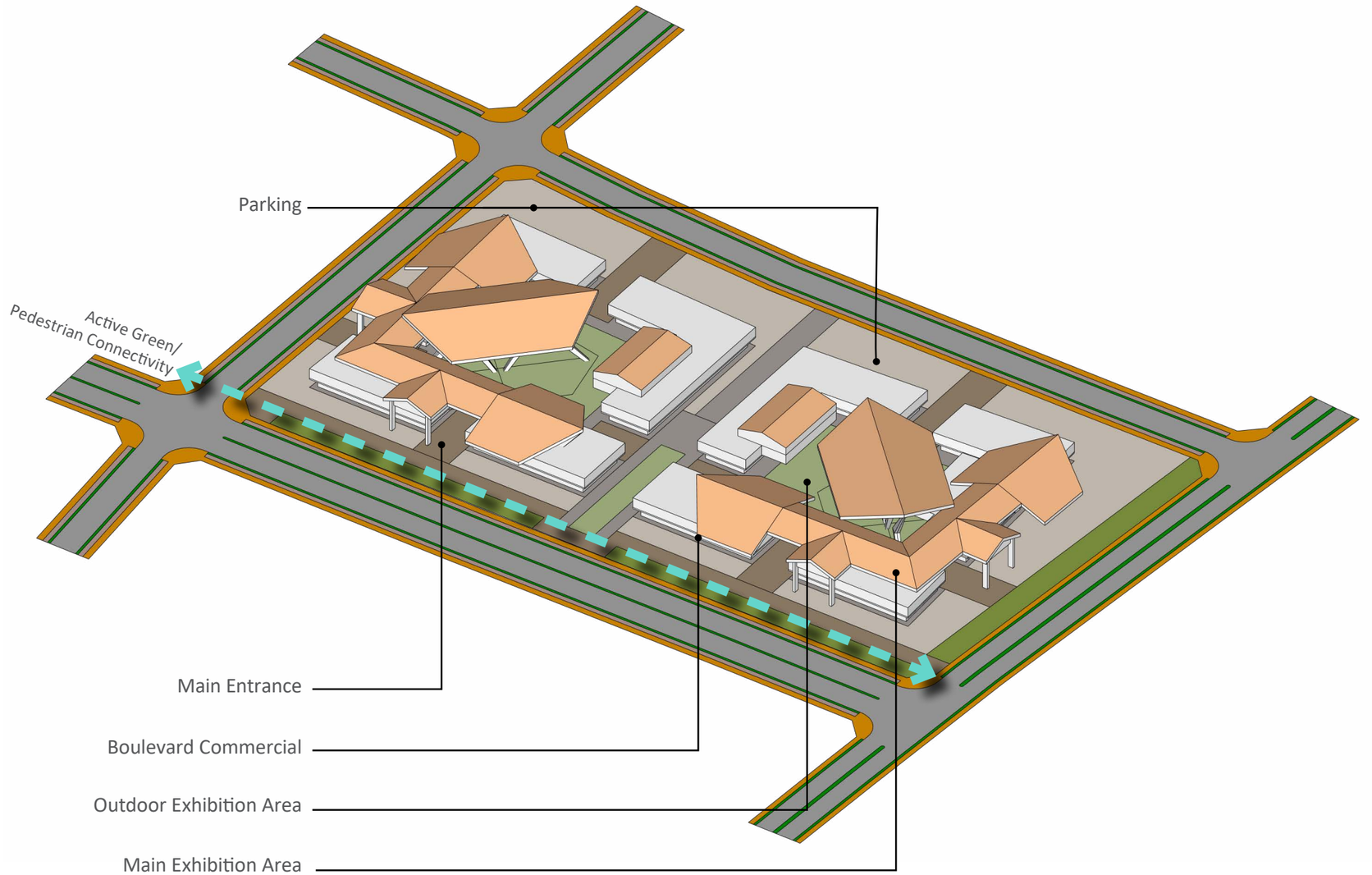
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Museum Parcel- 01
2.	Project Location	Nilaveli Beach, Trincomalee District, Eastern Province
3.	Land Requirement for the Project	4.3Ha
4.	Location of the Land	Located along the Pulmoddai road (B424) at the entrance gateway to UD intervention area of Nilaveli beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
10.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Required Consents	Consent required from relevant organizations for project implementation.
13.	Project Objectives	Objective 1 Preservation and Conservation: Establish the museum as a center for the preservation and conservation of marine life, ecosystems, and historical artifacts related to maritime history. This includes creating exhibits that highlight endangered species, marine biodiversity, and the impact of human activities on oceans. Objective 2 Education and Public Awareness: Develop engaging and educational programs aimed at raising public awareness about marine science, environmental issues, and maritime history. This could include interactive exhibits, workshops, and collaborations with schools and research institutions. Objective 3 Cultural and Economic Enrichment: Contribute to the cultural and economic growth of the local community by becoming a prominent attraction. This can be achieved through innovative exhibits, hosting special events, and partnering with local businesses to enhance tourism and community involvement.
14.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of marine based knowledge center and attraction 2. Project Contribution to existing gap:Job creation, tourist attraction, awareness on marine life 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Raising awareness about marine conservation, supporting research, and promoting sustainable practices. 3. Social: Promote educational facility and community engagement
16.	Project Outcomes	1. Total Land Area: 4.3Ha 2. Phasing Targets: 0-5 years

Remark: The construction cost and financial estimates for the marine museum have been omitted due to insufficient market data.

17.	Project Outputs	Result/ Benefit for communities • Promotes Marine Conservation: Raises awareness about protecting marine ecosystems. • Eco-Tourism: Attracts tourists interested in marine life, benefiting local businesses. • Creates Jobs: Offers employment in museum operations and education. • Educates Community: Provides learning opportunities about the ocean and its importance. • Supports Local Identity: Highlights the region's marine heritage and biodiversity.
18.	Planned Activities in Achieving Outputs	The following activities are designed to ensure a well-planned, and sustainable museum development which will support the tourism development within the region. • Site Assessment: Assess land, environment, and feasibility. • Stakeholders Consultation: Gather input through community consultations • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Secure Funding: Identify and obtain financial support through grants, sponsorships, and investments. • Develop Educational Programs: Create programs and materials for schools and visitors. • Market the Museum: Promote the museum to attract visitors and raise awareness. • Launch and Operate: Open the museum and manage day-to-day operations. • Monitor Progress: Track and evaluate the development's impact.
19.	Relevant Sustainable Development Goals	4- Quality Education 11- Sustainable Cities and Communities 13- Climate Action 14- Life Below Water
20.	Risk Assumption	Not Required
21.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
22.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
23.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
24.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

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2. HOTEL PARCEL

Site Context

Plot H-01 is a 4-5 Star Hotel plot located in between beach and secondary road with a site area of 6.6Ha. The plot located at a prime beach front location with stunning ocean views and direct access to the beach front as well as located close proximity to Diver's Paradise.

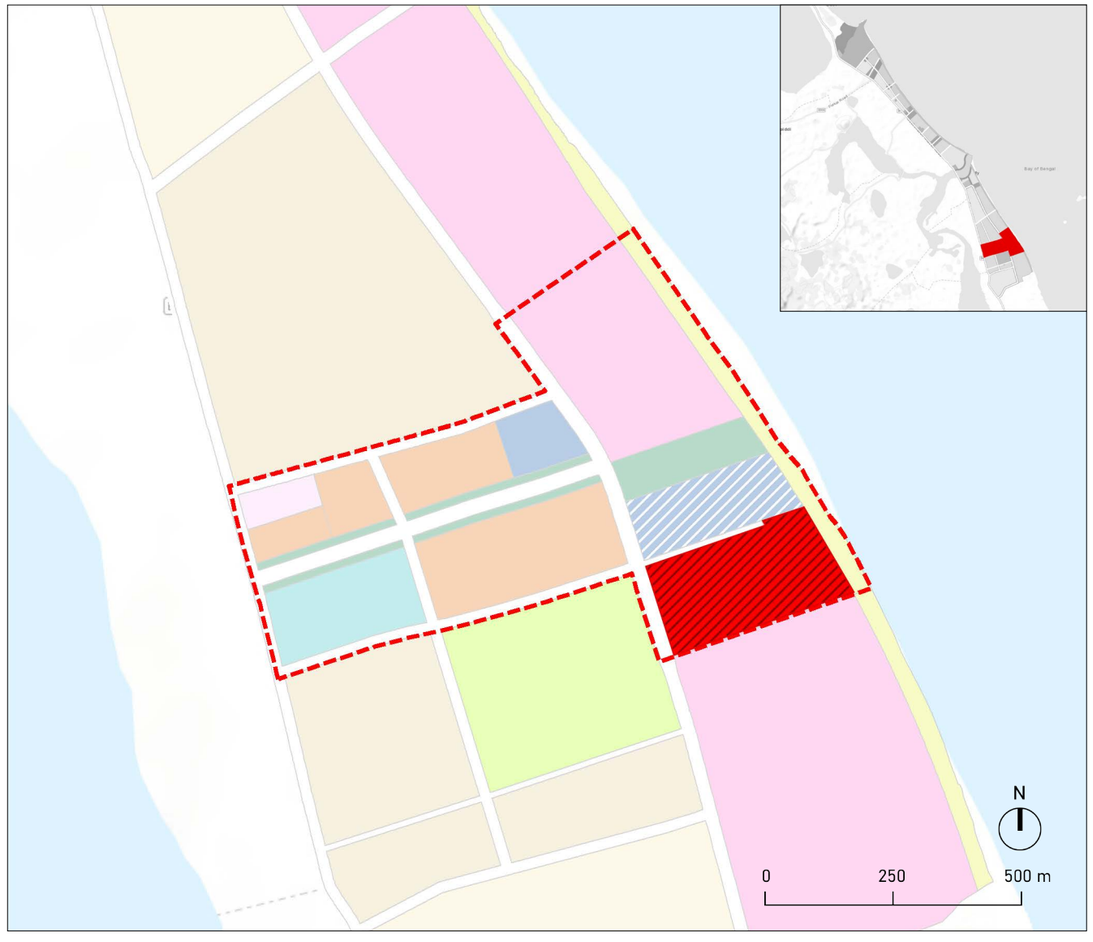
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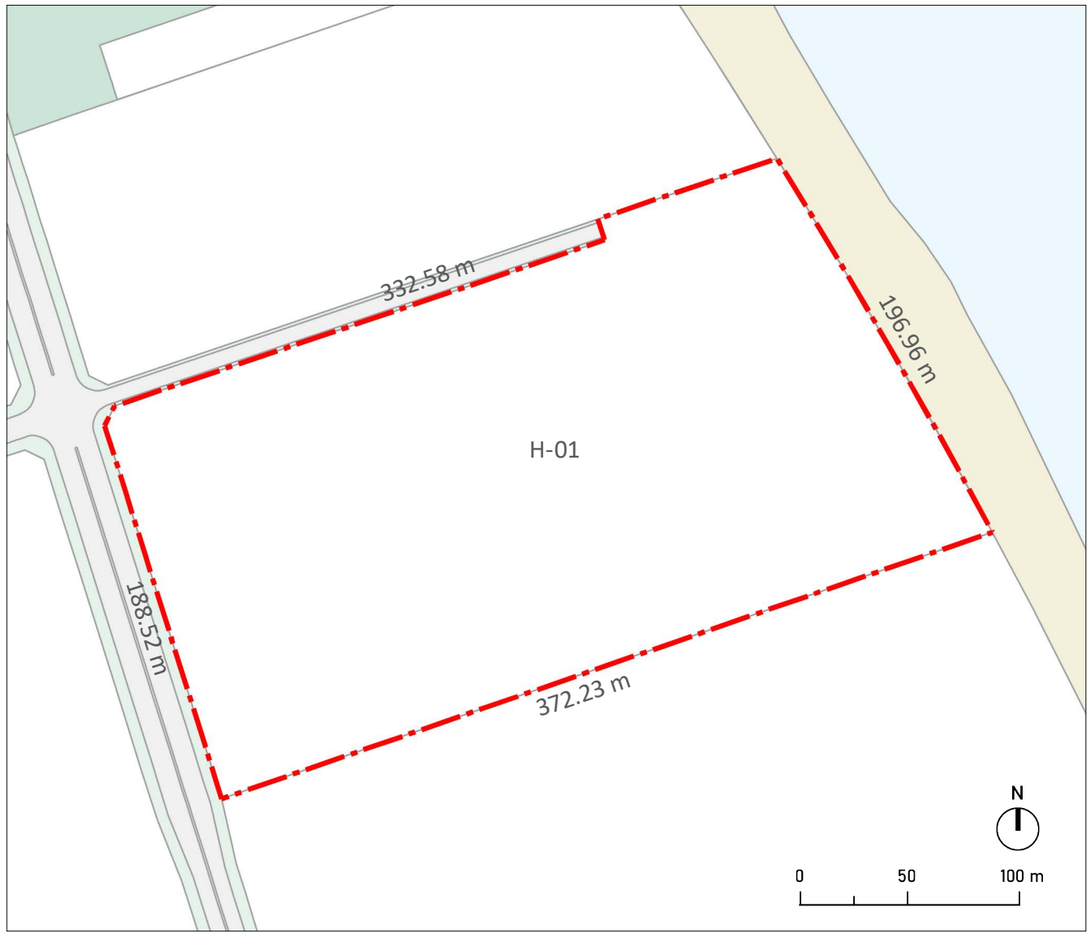
Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development will include a hotel facility featuring fine dining and café options along the pedestrian street.

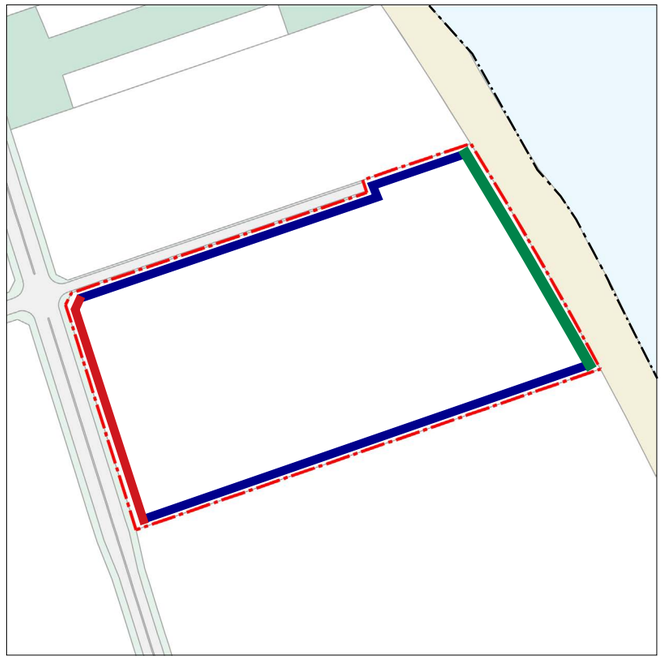
PLANNING PARAMETERS	
PLOT NUMBER	H-01
ALLOWABLE USE	HOTEL
PLOT AREA	6.6HA
PLOT RATIO	0.5
BUILDING HEIGHT	G+2





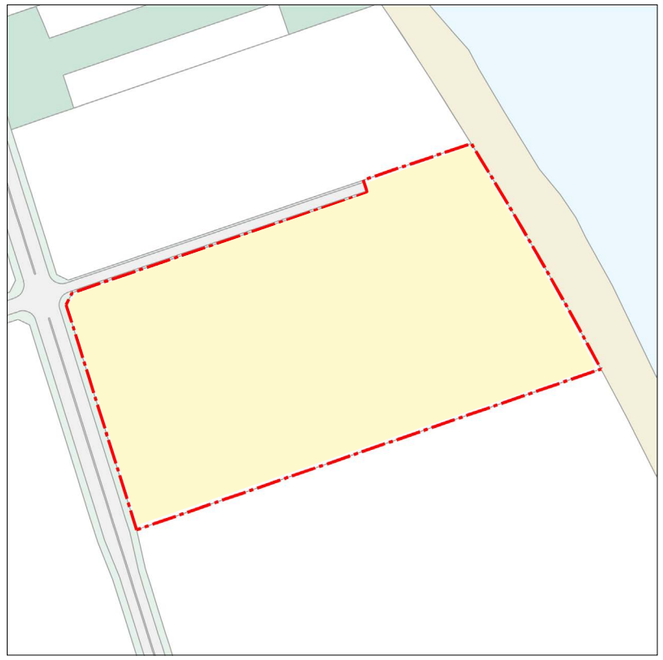
PLOT REGULATIONS

Building Setback



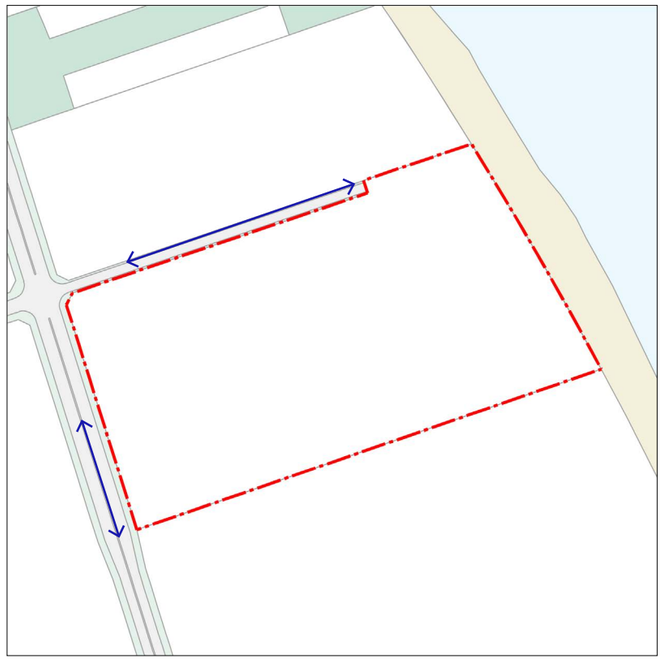
- Planning Area Boundary
- Indicative PVL Line
- 50.0m Setback from Indicative PVL Line (Subject to CCD Approval)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)

Building Use



- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use

Public And Vehicular Access

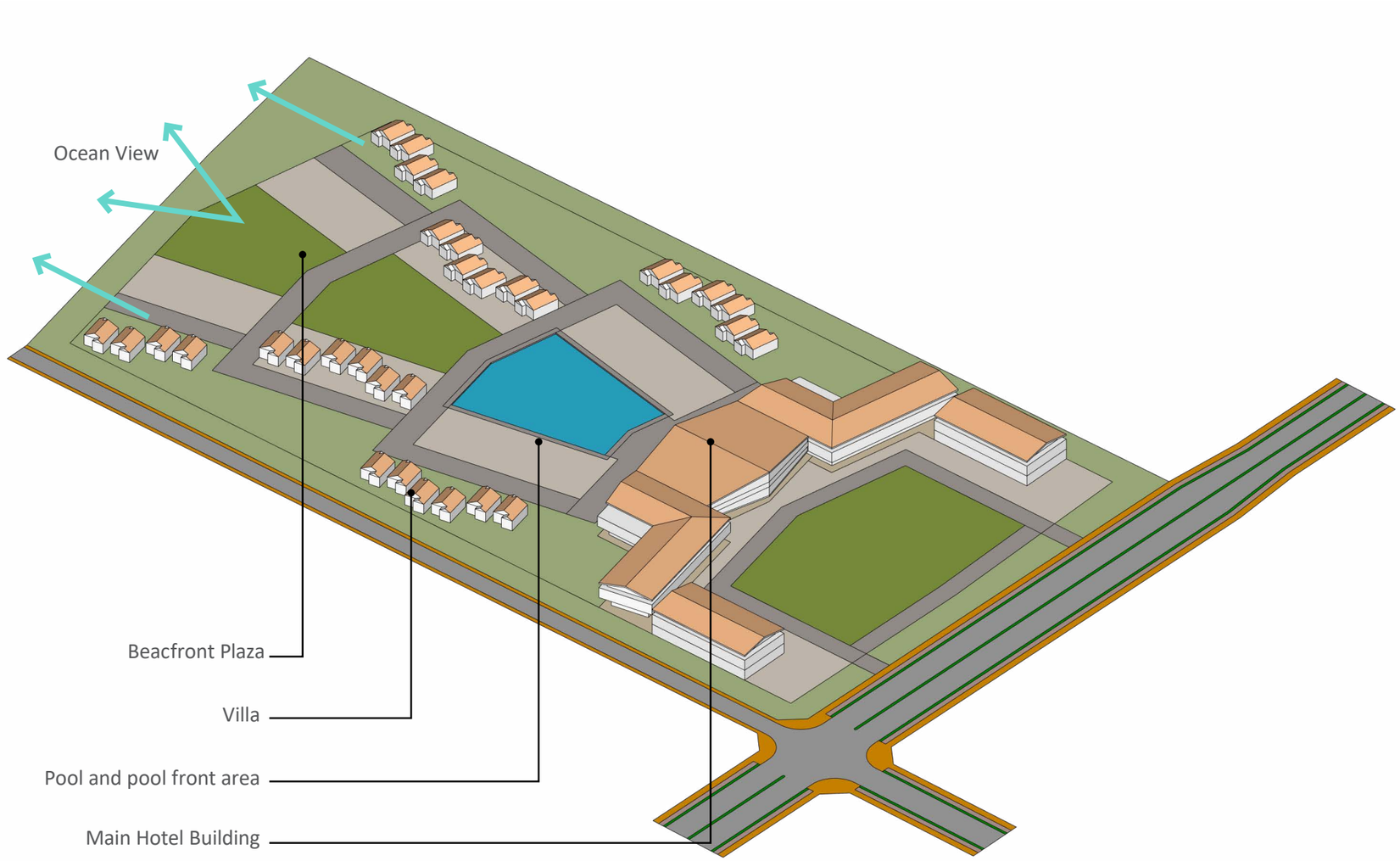


- Planning Area Boundary
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Hotel Parcel- 01
2.	Project Location	Nilaveli Beach, Trincomalee District, Eastern Province
3.	Land Requirement for the Project	1 Ha to be developed in the priority/ immediate term (Total available land area - 6.6 Ha)
4.	Location of the Land	Located at UD intervention area of Nilaveli beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Cost of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Project Preliminary Activities
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Revenue Share
14.	Required Consents	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhance Guest Experience:** Provide high-quality accommodations and services that cater to both leisure and business travelers, ensuring a memorable and comfortable stay. Objective 2 **Increase Revenue Generation:** Capitalize on the high foot traffic and demand in the core tourism area to drive consistent occupancy rates and maximize profitability. Objective 3 **Contribute to Local Economic Growth:** Support the local economy by creating jobs, promoting local businesses, and attracting higher-spending tourists to the area.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period
19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Land Area: 6.6 Ha 2. Phasing Targets: 0-5 years
21.	No. of Rooms	60-70 Rooms
22.	Land Cost	0.7 USD Mn
23.	Total Development Cost	4.4 USD Mn

24.	Revenue (30 years)	206 USD Mn
25.	IRR for 30 years	21%
26.	IRR for 30 years without land cost	23%
27.	Break even (year)	8 years
28.	Stabilisation period(year)	8 years
29.	Project Outputs	Result/ Benefit for communities • Tourism: Attracts more visitors, increasing local business and service demand. • Creates Jobs: Generates employment opportunities in hospitality and related sectors. • Enhances Infrastructure: Improves local amenities and services for residents and guests. • Stimulates Local Economy: Drives spending in local businesses and markets. • Provides Recreation: Offers leisure and entertainment options for locals and tourists. • Supports Community Development: Contributes to improved public facilities and services.
30.	Planned Activities in Achieving Outputs	• Market Research: Analyze demand, competition, and target demographics. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Recruit and Train Staff: Hire and train employees for various roles in hospitality and management. • Market and Promote: Create marketing strategies to attract visitors and build brand awareness. • Launch Operations: Open the resort or hotel and begin day-to-day management. • Monitor and Improve: Track performance, gather guest feedback, and make necessary improvements.
31.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
32.	Risk Assumption	Not Required
33.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
34.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
35.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
36.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

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3. COMMERCIAL PARCEL (DIVER'S PARADISE)

SITE CONTEXT

Plot C-01 is strategically located between a beach and a secondary road, offering a prime site area of 3.83 hectares. This plot benefits from its adjacency to a vibrant beach park, providing easy access to recreational activities and scenic views. The location's blend of natural beauty and upscale amenities makes it an ideal spot to host tourism and hospitality facilities.

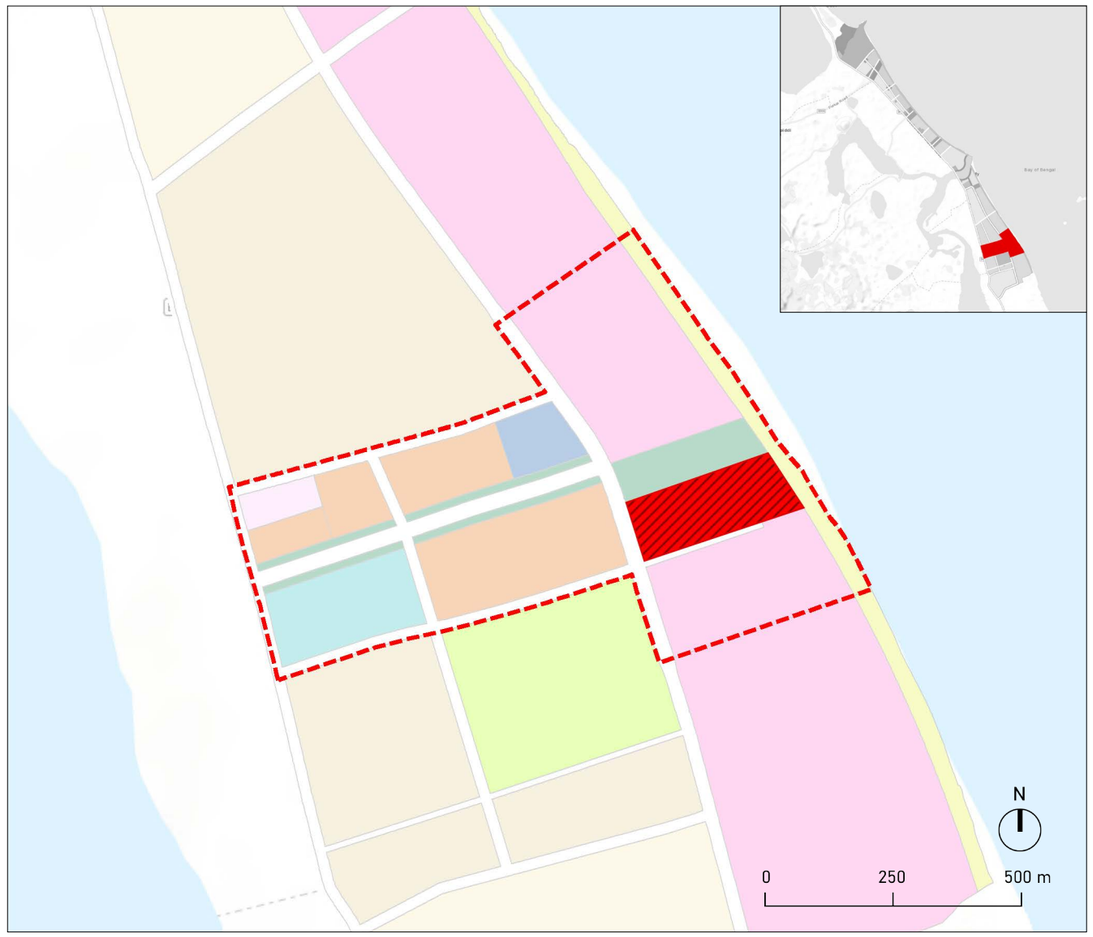
OBJECTIVE

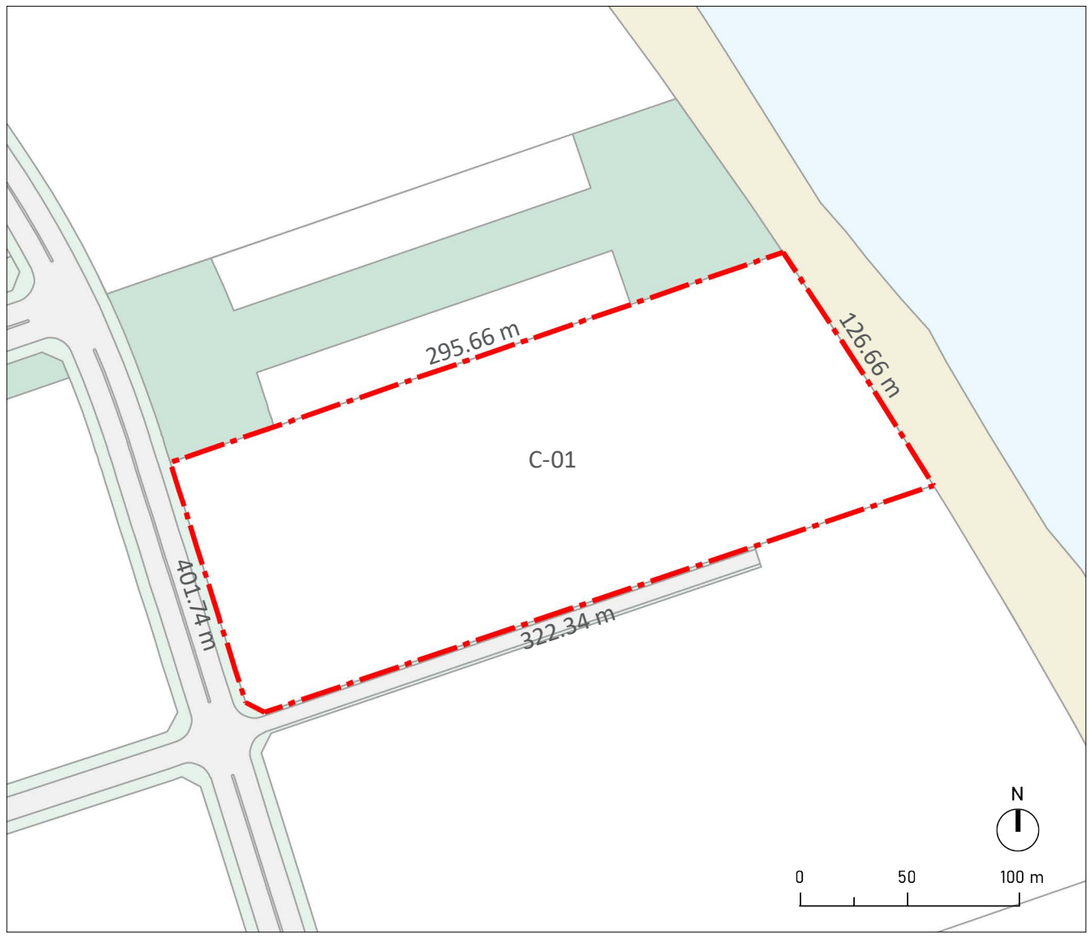
The architecture of Plot C-01 will feature a low-density bazaar-style design with an open plaza, fostering a vibrant and welcoming atmosphere with a jetty along beach front, providing convenient access to accommodate visitors to Pigeon Island

DEVELOPMENT PROGRAMME

The development will include a commercial area dedicated for divers.

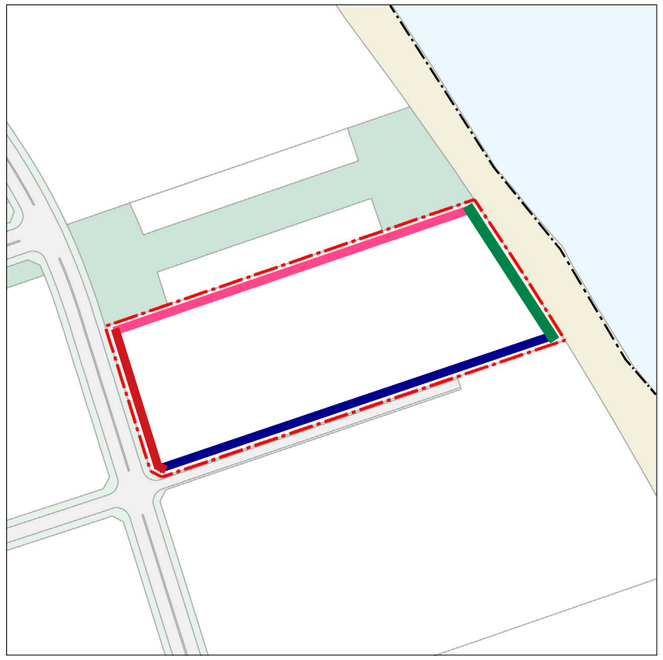
PLANNING PARAMETERS	
PLOT NUMBER	C-01
ALLOWABLE USE	COMMERCIAL
PLOT AREA	3.83HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2





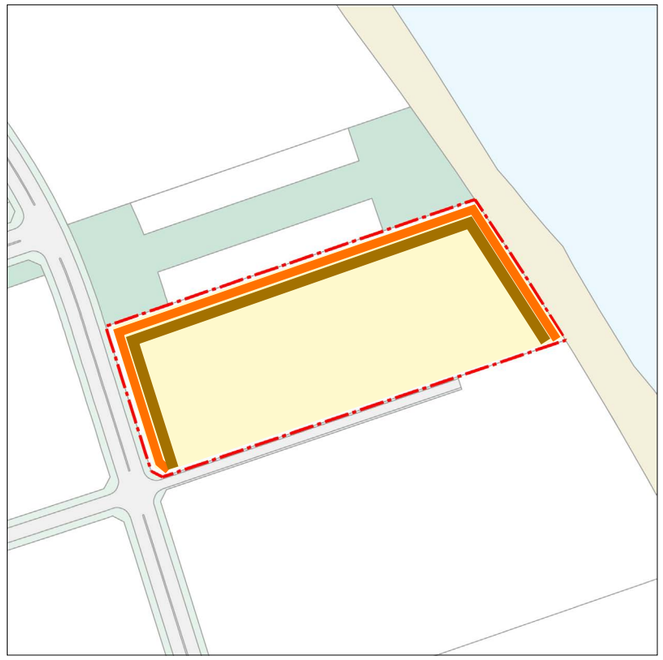
PLOT REGULATIONS

Building Setback



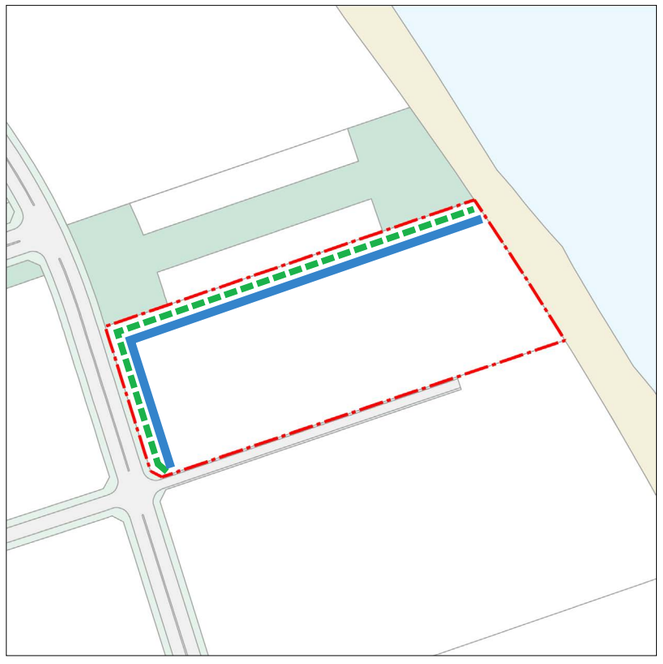
- Planning Area Boundary
- Indicative PVL Line
- 50.0m Setback from Indicative PVL Line (Subject to CCD Approval)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

Building Use



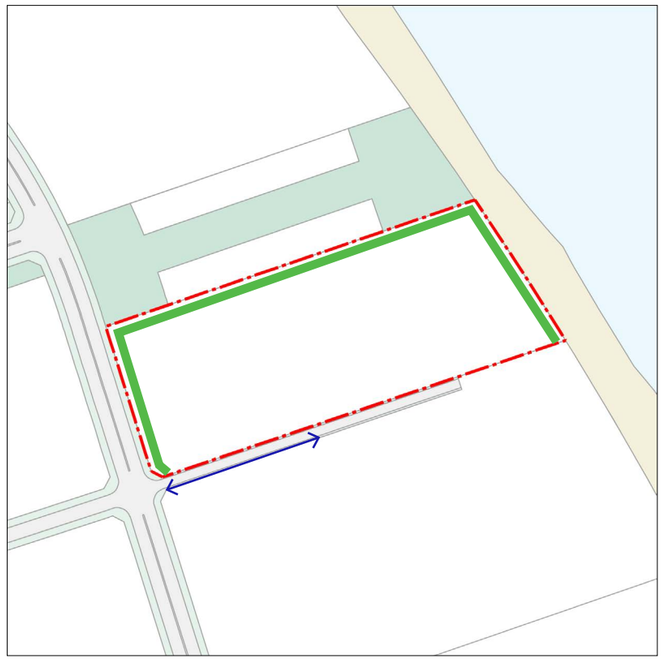
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

Building Edge & Covered Walkway



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

Public And Vehicular Access



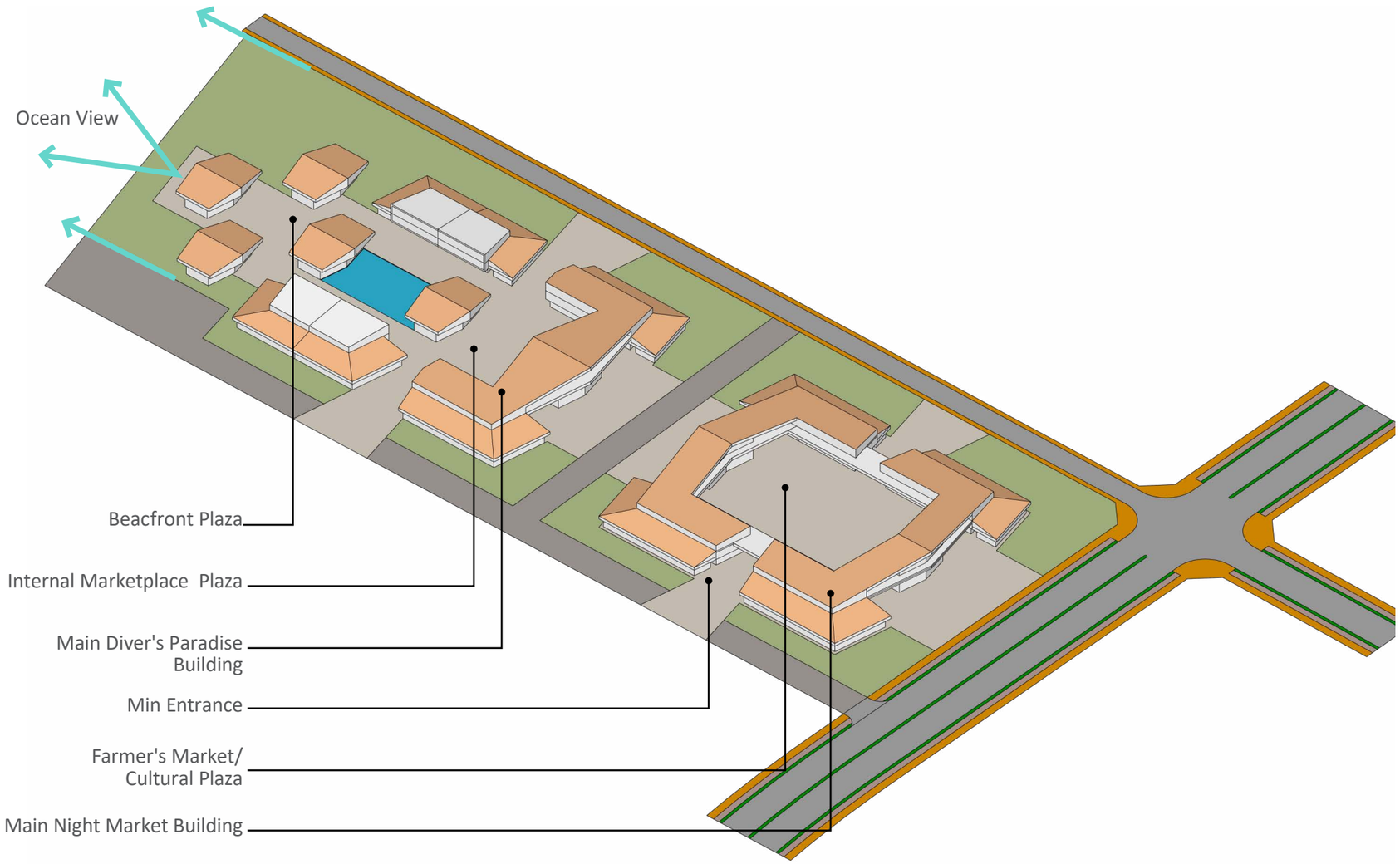
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Commercial Parcel- 01 (Diver's Paradise)
2.	Project Location	Nilaveli Beach, Trincomalee District, Grama Nila Division, Eastern Province
3.	Land Requirement for the Project	1 Ha to be developed in the priority/ immediate term (Total available land area - 3.83 Ha)
4.	Location of the Land	Located at UD intervention area of Nilaveli beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Support Amenity
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long Term Lease with Annual Concession Fee (ACF)
14.	Required Consents	Consent required from relevant organizations for project implementation.
11.	Project Objectives	Objective 1 **Enhance Revenue Streams:** Develop a comprehensive range of diving-related businesses, such as dive shops, equipment rental services, and certified diving schools, to attract both novice and experienced divers. This will boost tourism revenue by catering to niche markets and increasing the average tourist spend. Objective 2 **Boost Tourist Engagement:** Create unique and immersive diving experiences, such as underwater tours and eco-friendly dive packages, to attract and retain more tourists. Objective 3 **Strengthen Community Engagement:** Foster local employment by training and hiring local residents for various roles within the diving industry, including instructors, guides, and retail staff. This objective aims to increase local participation in the tourism economy and improve community well-being.
12.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of commercial activities 2. Project Contribution to existing gap:Job creation, tourist attraction, tourism service and community facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
13.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
14.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period

15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Implement eco-friendly design, Eco-Tourism Promotion 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 1 Ha 2. Phasing Targets: 0-5 years
17.	Land Cost	1.0 USD Mn
18.	Total Development cost	3.8 USD Mn
19.	Revenue (30 years)	24 USD Mn
20.	IRR for 30 years	12%
21.	IRR for 30 years without land cost	14%
22.	Break even (year)	11 years
23.	Stabilisation period(year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Increased Property Values: Raises value of nearby properties. • Promote Tourism: Attracts visitors through enhanced retail, dining, and entertainment options. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
25.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.

26.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
27.	Risk Assumption	Not Required
28.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
29.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
30.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
31.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

4. BEACHFRONT PARK PARCEL

Site Context

Plot P-01 is strategically situated at the end of a prominent green boulevard, serving as a key open space with direct access to the sea and it is encircled by a mix of hotel and commercial establishments. Additionally, the plot is conveniently positioned between a secondary road and the beach front, providing seamless connectivity and accessibility for both pedestrians and vehicles.

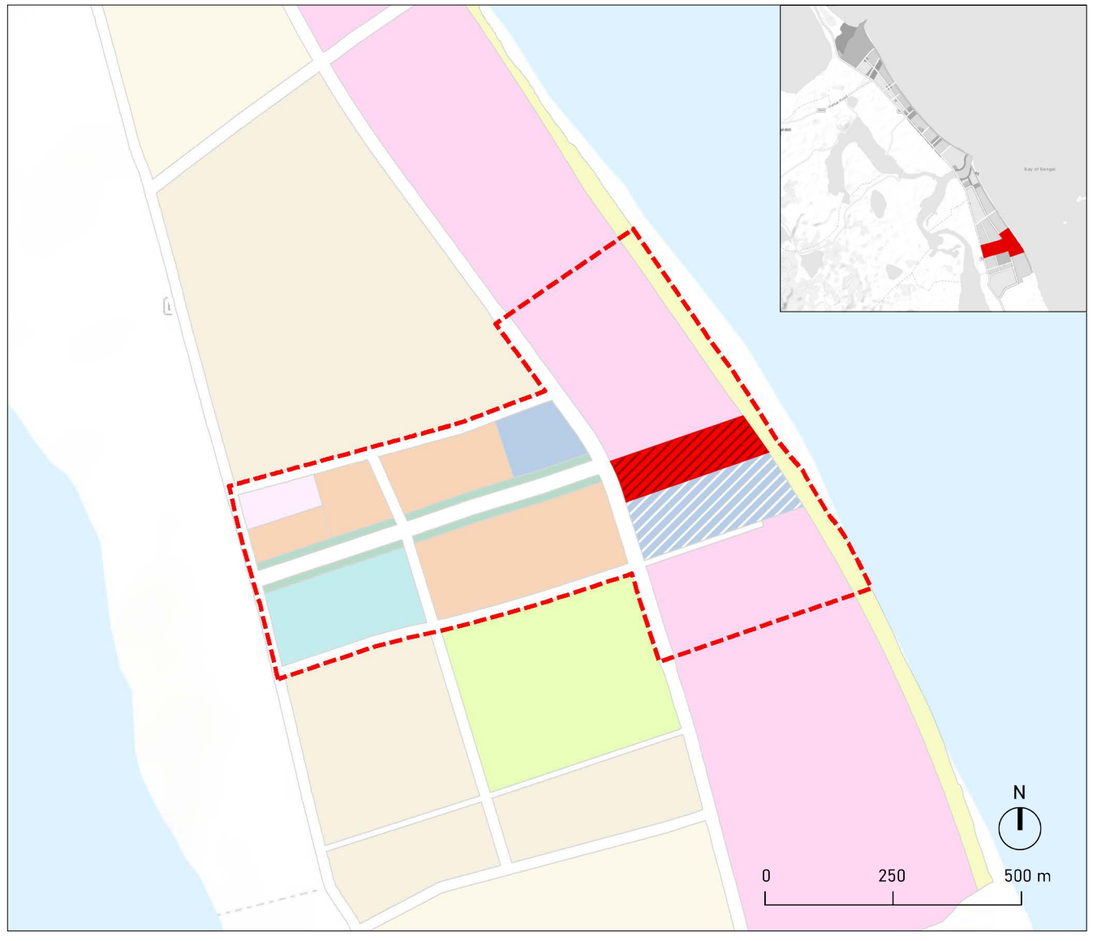
OBJECTIVE

Plot P-01 is designated primarily as an open space, ensuring minimal permanent structures to maintain its identity. The temporary and flexible structures will enhance the usability of the space without compromising its primary function as a communal and recreational area.

DEVELOPMENT PROGRAMME

The development plan focus on the kiosks and small retail to provide services to visitors.

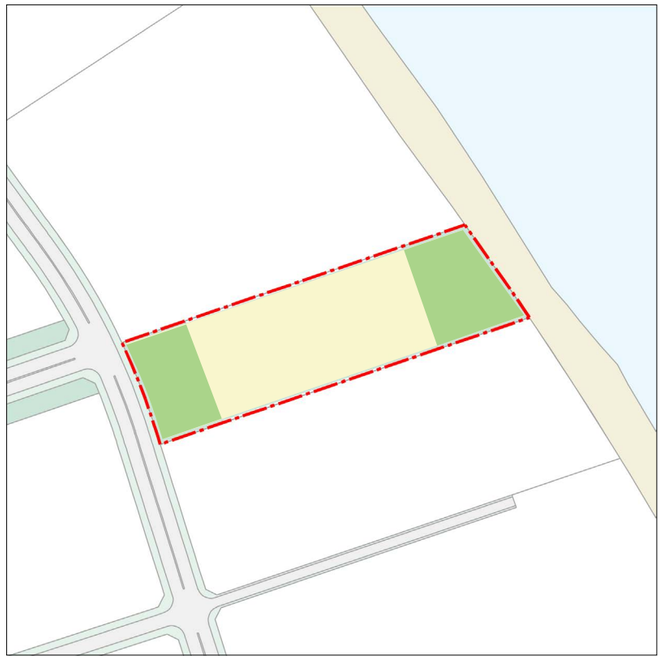
PLANNING PARAMETERS	
PLOT NUMBER	P-01
ALLOWABLE USE	PARK & RETAIL
PLOT AREA	2.34HA
PLOT RATIO	0.2
BUILDING HEIGHT	G+1





PLOT REGULATIONS

Building Use

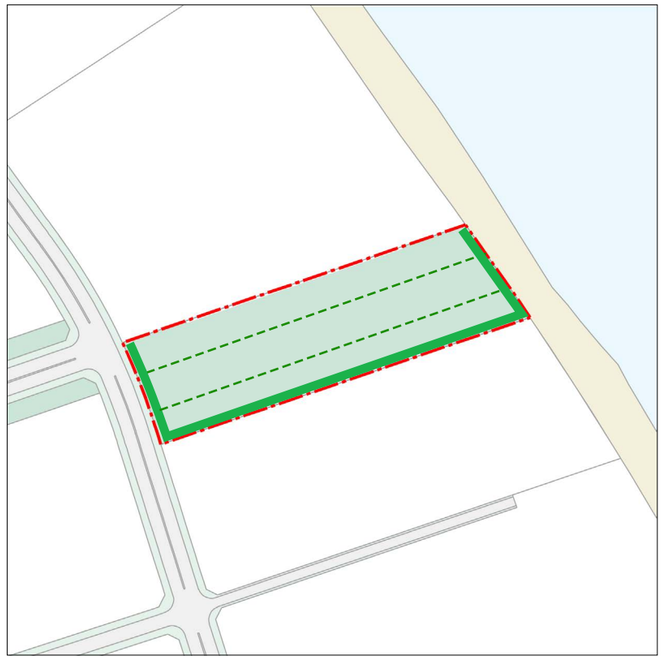


Planning Area Boundary

5% of the Ground Level to be used as Retail and Food Outlets or other activity generating use

Mandatory Open Plaza

Public And Vehicular Access



Planning Area Boundary

Publicly Accessible Area (No Physical Perimeter Fencing is allowed)

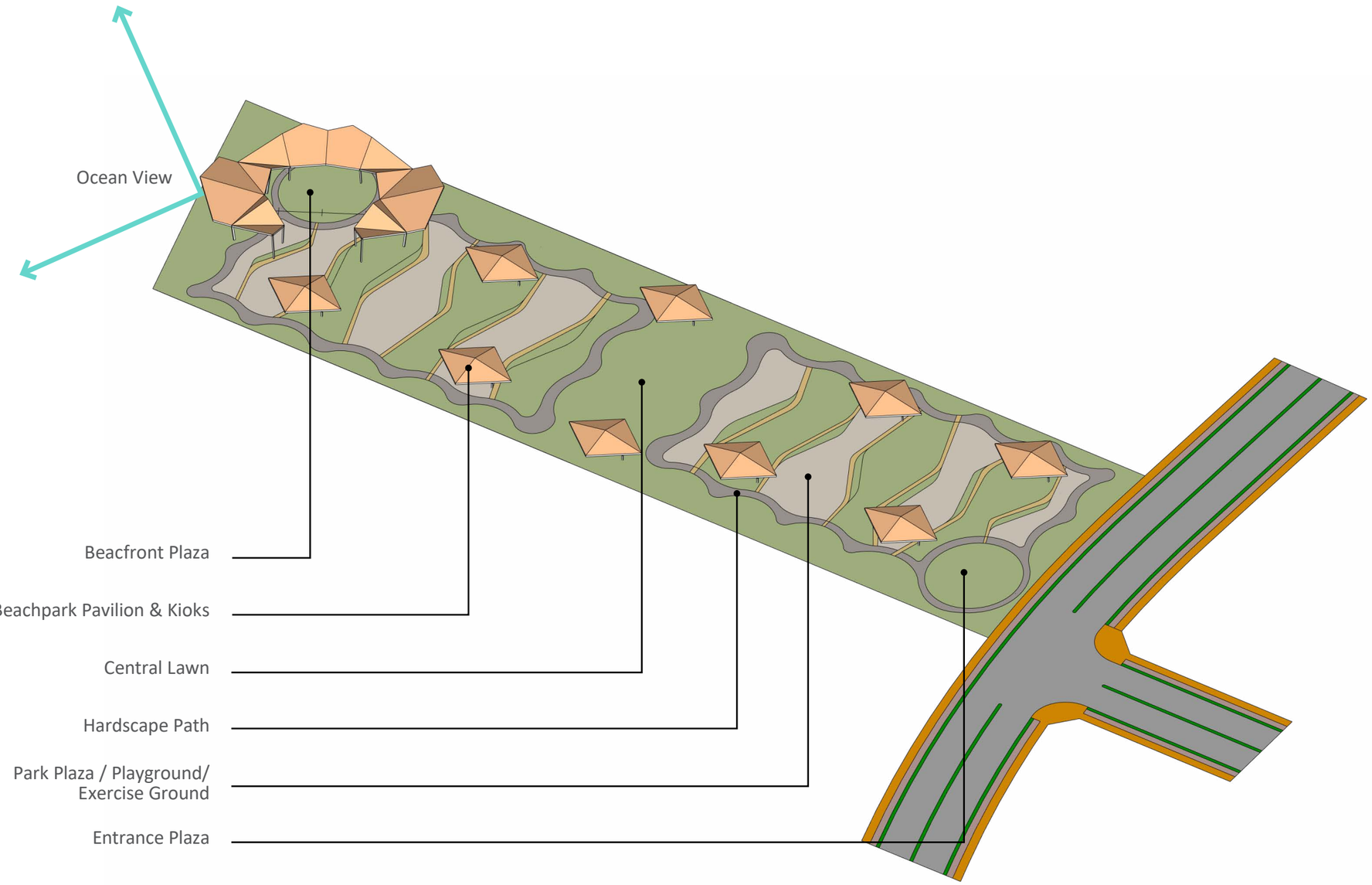
Proposed Public Access for Pedestrian Linkage (30m. Minimum)

PROJECT BRIEF

1.	Project Title	Beach front Park Parcel- 01
2.	Project Location	Nilaveli Beach, Trincomalee District, Grama Nila Division, Eastern Province
3.	Land Requirement for the Project	2.34Ha
4.	Location of the Land	Located at UD intervention area of Nilaveli beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Revenue Share
15.	Project Objectives	Objective 1 **Promote Cultural Engagement:** Establish the park as a vibrant venue for cultural events, showcasing local traditions, arts, and performances. This will enhance the cultural experience for tourists and support the preservation and promotion of local heritage. Objective 2 **Enhance Tourist Experience:** Create a relaxing and scenic environment where tourists can unwind, enjoy the natural beauty of the beach front, and take advantage of leisure activities. The park should offer amenities and spaces that encourage relaxation and recreation. Objective 3 **Boost Economic Impact Through Tourism:** Leverage the beach front park as a key attraction to drive increased foot traffic to the area, supporting local businesses and creating job opportunities. By offering a well-maintained and attractive venue for tourists, the park will contribute to the economic vitality of the tourism sector, encouraging longer stays and repeat visits.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of commercial and mix activities 2. Project Contribution to existing gap:Job creation, tourist attraction, tourism service and community facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner

18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period
19.	Project Impacts	1. Economic: Job creation, Support economic growth 2. Environment: Green area, permeable surfaces 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.34Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	1.6 USD Mn
22.	Total Development Cost	5.9 USD Mn
23.	Revenue (30 years)	43 USD Mn
24.	IRR for 30 years	14%
25.	IRR for 30 years without land cost	17%
26.	Break even (year)	10 years
27.	Stabilisation period(year)	5 years
28.	Project Outputs	Result/ Benefit for communities • Economic Growth: Boosts local businesses, creates jobs, and attracts investment. • Environmental Impact: Enhances coastal ecosystem health and preserves natural habitats. • Social Benefits: Provides recreational space, strengthens community identity, and encourages social interaction. • Health and Well-being: Promotes physical activity and mental well-being. • Cultural and Educational Value: Showcases local culture and offers educational opportunities. • Safety and Accessibility: Improves safety and accessibility for all users.

29.	Planned Activities in Achieving Outputs	• Environmental Assessment: Conduct impact studies and implement conservation measures. • Community Engagement: Hold consultations and workshops to gather input and foster support. • Construction: Oversee the building of park facilities, pathways, and landscaping. • Programming: Organize events, educational programs, and recreational activities. • Maintenance: Establish ongoing upkeep and management plans for sustainability. • Marketing: Promote the park to attract visitors and local users.
30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	• Coastal Erosion: Loss of beach area and park infrastructure due to natural erosion processes. • Tsunami Impact: Potential for severe damage to park facilities and surrounding areas from tsunami waves • Flooding: Risk of flooding from storm surges or high tides impacting park infrastructure.
32.	Mainstreaming the Disaster Risk Reduction (DRR)	• Erosion Control Measures: Implement beach nourishment, dune restoration, and vegetation planting. • Enhanced Coastal Defenses: Build or upgrade sea walls, breakwaters, and other protective structures. • Early Warning Systems: Install and maintain tsunami and flood warning systems.
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

4.5 FINANCIAL AND PROJECT IMPLEMENTATION MODEL

4.5.1 CASE SCENARIO AND CONSTRUCTION PHASING

HIGH CASE

The estimated cost of land within the development is projected to be 0.6 to 0.7 million US dollars per hectare, reflecting the prime location and potential value of the area.

In terms of revenue assumptions, for hospitality, the average room rent for a 3-star hotel is projected to range between $75 and $80 per night. This pricing is aligned with industry standards for mid-range accommodations, balancing affordability with quality service.

Retail spaces, mixed-use developments, and the Diver's Paradise area, which includes shops and specialized facilities for diving enthusiasts, are expected to generate revenue through rental fees. The rental income is projected to range from $7 to $10 per square meter per month, depending on the location and type of establishment within these areas.

These revenue assumptions are based on current market trends and the specific attractions and amenities planned for the development.

For the high-case scenario, the table 4.14 presents the required land area, land cost, total development cost, 30-year revenue estimates, 30-year IRR projections, as well as the estimated break-even point and stabilization period

FINANCIAL ANALYSIS – High case scenario

Cost of Land
0.6 – 0.7 Mn USD/ hectare

Revenue Assumptions	
3 star hotel (Average Room Rent)	**Rentals** – Retail, Mixed use, Diver's paradise (per sqm per month)
75 – 80 USD	**7 – 10 USD**
Revenue streams for Museum include ticket charges, revenue through food & beverage kiosks, food court, souvenir shops, special experience charges*	

Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even (year)	Stabilisation period (year)
3 STAR HOTEL (60 – 70 rooms)	1.0	0.7	4.4	206	**21%**	**23%**	8	8
DIVER'S PARADISE – Vocational school, diving & surfing related shops & booking office, Food court	1.5	1.0	3.8	24	**12%**	**14%**	11	5
BEACHFRONT PARK & RETAIL – Retail shops, park, restaurants, amenities	2.3	1.6	5.9	43	**14%**	**17%**	10	5
TOTAL	**4.8**	**3.2**	**14.1**	**273**	**16%**	**18%**		

Table 4.15 Financial Analysis – High Case Scenario

Note:

- *Financial for Marine museum is not performed as the scope of construction cost if from the client and CBRE has not received it
- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
3 STAR HOTEL (60 – 70 rooms)	**4,000**	50%	50%			
DIVER'S PARADISE – Vocational school, diving & surfing related shops & booking office, Food court	**4,500**	100%				
BEACHFRONT PARK & RETAIL – Retail shops, park, restaurants, amenities	**6,900**	100%				

Table 4.16 Construction Phasing High Case

LOW CASE

For the low-case scenario, the table 4.15 presents the required land area, land cost, total development cost, 30-year revenue estimates, 30-year IRR projections, as well as the estimated break-even point and stabilization period.

Cost of Land
0.6 – 0.7 Mn USD/ hectare

	Revenue Assumptions		
	Museum	**3 star hotel** (Average Room Rent)	**Rentals** – Retail, Mixed use, Diver's paradise (per sqm per month)
		75 – 80 USD	**7 – 10 USD**
	Revenue streams for Museum include ticket charges, revenue through food & beverage kiosks, food court, souvenir shops, special experience charges*		

Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even (year)	Stabilisation period (year)
3 STAR HOTEL (60 – 70 rooms)	1.0	0.7	4.4	193	**20%**	**22%**	8	8
DIVER'S PARADISE – Vocational school, diving & surfing related shops & booking office, Food court	1.0	0.7	2.6	16	**12%**	**14%**	11	5
BEACHFRONT PARK & RETAIL – Retail shops, park, restaurants, amenities	1.0	0.7	2.6	43	**14%**	**17%**	10	5
TOTAL	**3**	**2.0**	**9.5**	**252**	**15%**	**18%**		

Table 4.17 Financial Analysis – Low Case Scenario

Note:

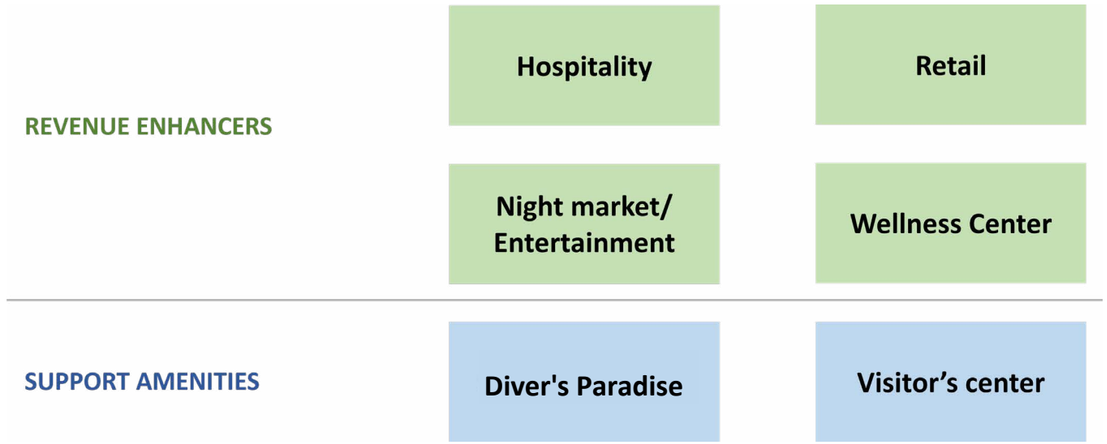
- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

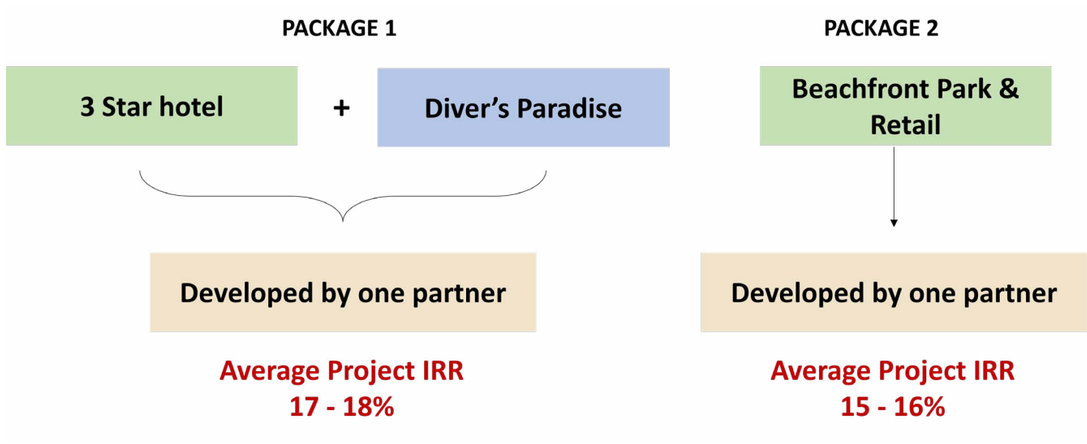
Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
3 STAR HOTEL (60 – 70 rooms)	**4,000**	50%	50%			
DIVER'S PARADISE – Vocational school, diving & surfing related shops & booking office, Food court	**3,000**	100%				
BEACHFRONT PARK & RETAIL – Retail shops, park, restaurants, amenities	**3,000**	100%				

Table 4.18 Construction Phasing Low Case

4.5.2 IMPLEMENTATION MODEL OF PROJECTS

The IRR for Support components have lower IRR compared to revenue enhancers as they are non-revenue generating and the main source of revenue is through rentals of the stores. Though they are non- revenue generators, they are critical as they form a part of essential tourist amenities and enhance the experience of the tourists.





- Option 2: For self development of the projects by the Authorities, the project IRR without land cost can be considered for returns.

Components	Category of project	Development model	Category of project	
3 STAR HOTEL	Revenue enhancer	Long term lease with Revenue Share	• **Land ownership** lies with the government • **Collects revenue share** from Partner	• **Design, build, fund and operate and generates revenue** until the concession period • **Provides revenue share** to the Government • **Returns the land** and building to UDA after concession period
DIVER'S PARADISE	Support Amenity	Long term lease with Annual Concession Fee (ACF)	• **Land ownership** lies with the government • **Collects Annual Concession Fee (ACF)** from the partner	• **Design, build, Fund and Operate** the development until the concession • **Generates revenue** through rentals until the concession period • **Returns the land** and building to UDA after concession period
BEACHFRONT PARK & RETAIL	Revenue enhancer	Long term lease with Revenue Share	• **Land ownership** lies with the government • **Collects revenue share** from Partner	• **Design, build, fund and operate and generates revenue** until the concession period • **Provides revenue share** to the Government • **Returns the land** and building to UDA after concession period

Table 4.19 Implementation Model of Projects (Trincomalee)

GENERAL ASSUMPTIONS (HIGH CASE)

	DIVER'S PARADISE	BEACH FRONT PARK & RETAIL
General Assumptions		
Land Area (Ha)	1.5	2.3
Cost Assumptions		
Base Cost of Construction (USD per sqm)	695	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0%
Escalation in Cost of Construction (per annum)	5.0%	5.0%
Revenue Assumptions		
Escalation in Revenues (per annum)	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%

Table 4.14 General Assumptions (High Case)

3 STAR HOTEL		
General Assumptions		
Land Area	Ha	1.0
Cost Assumptions		
Construction Cost (USD per sqm)		1,014
Construction Cost (USD Mn per room)		0.04
Escalation in Construction Cost		6.0%
Revenue Assumptions		
Average Room Rent (ARR)	USD	75
Escalation ARRs	% per annum	5.0%
Operating Revenues Assumptions		
Food & Beverage Revenue	% of Room Revenue	60.0%
Minor Operating Department Revenue	% of Room Revenue	10.0%
Spa & Health Club Revenue	% of Room Revenue	10.0%
Other Revenue	% of Room Revenue	5.0%
Operating Expenditure Assumptions		
Room Cost	% of Room Revenue	10.0%
Food & Beverage Cost	% of F&B Revenue	40.0%
Minor Operating Department Cost	% of MOD Revenue	40.0%
Spa & Health Club Cost	% of Spa & health Club Revenue	40.0%
Other Costs	% of Other Revenue	30.0%
Other Overhead Expenditure Assumptions		
Administrative Expenditure	% of Total Revenue	10.0%
Maintenance Expenditure	% of Total Revenue	5.0%
Payroll Expenses	% of Total Revenue	10.0%
Operating Expenses	% of Total Revenue	10.0%
Marketing Expenditure	% of Total Revenue	2.0%
Base Management Fee	% of Total Revenue	3.0%
Management Incentive Fee	% of Gross Operation Profit	2.0%

Table 4.15 General Assumptions of 3 Star Hotel (High Case)

GENERAL ASSUMPTIONS (LOW CASE)

	DIVER'S PARADISE	BEACH FRONT PARK & RETAIL
General Assumptions		
Land Area (Ha)	1.0	1.0
Cost Assumptions		
Base Cost of Construction (USD per sqm)	695	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0 %
Escalation in Cost of Construction (per annum)	5.0%	5.0%
Revenue Assumptions		
Escalation in Revenues (per annum)	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%

Table 4.16 General Assumptions (Low Case)

3 STAR HOTEL		
General Assumptions		
Land Area	Ha	1.0
Cost Assumptions		
Construction Cost (USD per sqm)		1,014
Construction Cost (USD Mn per room)		0.04
Escalation in Construction Cost		6.0%
Revenue Assumptions		
Average Room Rent (ARR)	USD	75
Escalation ARRs	% per annum	5.0%
Operating Revenues Assumptions		
Food & Beverage Revenue	% of Room Revenue	60.0%
Minor Operating Department Revenue	% of Room Revenue	10.0%
Spa & Health Club Revenue	% of Room Revenue	10.0%
Other Revenue	% of Room Revenue	5.0%
Operating Expenditure Assumptions		
Room Cost	% of Room Revenue	10.0%
Food & Beverage Cost	% of F&B Revenue	40.0%
Minor Operating Department Cost	% of MOD Revenue	40.0%
Spa & Health Club Cost	% of Spa & health Club Revenue	40.0%
Other Costs	% of Other Revenue	30.0%
Other Overhead Expenditure Assumptions		
Administrative Expenditure	% of Total Revenue	10.0%
Maintenance Expenditure	% of Total Revenue	5.0%
Payroll Expenses	% of Total Revenue	10.0%
Operating Expenses	% of Total Revenue	10.0%
Marketing Expenditure	% of Total Revenue	2.0%
Base Management Fee	% of Total Revenue	3.0%
Management Incentive Fee	% of Gross Operation Profit	2.0%

Table 4.17 General Assumptions of 3 Star Hotel (Low Case)

4.5.3 FINANCIAL IMPLICATIONS

HIGH CASE

REVENUE SHARE MODEL

Components	Built up area (sqm)	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
3 STAR HOTEL	4,000	5%	5	3%	5	30	19%	21%	22%	22%
BEACHFRONT PARK & RETAIL	6,900	5%	5	3%	5	30	11%	14%	15%	16%

Concession period of 30 years has been considered for higher returns for the project

ANNUAL CONCESSION FEE (ACF) MODEL

Components	Built up area (sqm)	Annual Concession Fee (ACF) (USD Mn)	Escalation in ACF (%)	Frequency (years)	Concession period	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
DIVER'S PARADISE	4,500	0.09	5%	3	30	5%	9%	11%	12%

Table 4.18 Plotwise Financial Implementation High Case (Trincomalee)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• 3 star hotel • Diver's paradise	13%	16%	17%	18%
Package 2	• Beachfront park & Retail	11%	14%	15%	16%

REVENUE TO AUTHORITY

Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	1%	7%	9%	11%
Total revenue to Authority (ACF+RS) (USD Mn)	3.5	6.6	10.9	17.1

Table 4.19 Package wise Financial Implementation and Revenue to Authority High Case (Trincomalee)

LOW CASE

REVENUE SHARE MODEL

Components	Built up area (sqm)	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
3 STAR HOTEL	4,000	5%	5	5%	5	17%	20%	21%	21%
BEACHFRONT PARK & RETAIL	3,000	5%	5	3%	5	11%	14%	15%	16%

ANNUAL CONCESSION FEE (ACF) MODEL

Components	Built up area (sqm)	Annual Concession Fee (ACF) (USD Mn)	Escalation in ACF (%)	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
DIVER'S PARADISE	3,000	0.07	5%	3	30	4%	8%	10%	11%

Table 4.20 Plotwise Financial Implementation Low Case (Trincomalee)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• 3 star hotel • Diver's paradise	13%	16%	17%	18%
Package 2	• Beachfront park & retail	11%	14%	15%	16%

REVENUE TO AUTHORITY

Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	2%	8%	10%	11%
Total revenue to Authority (ACF+RS) (USD Mn)	3.1	5.6	9	14

Table 4.21 Package wise Financial Implementation and Revenue to Authority Low Case (Trincomalee)

HIGH CASE

REVENUE TO AUTHORITY THROUGH REVENUE SHARE (USD Mn)

Components	15 years	20 years	25 years	30 years
3 STAR HOTEL	1.2	2.7	4.9	8.3
BEACHFRONT PARK & RETAIL	0.8	1.7	3.2	5.3

REVENUE TO AUTHORITY THROUGH ACF (USD Mn)

Components	15 years	20 years	25 years	30 years
DIVER'S PARADISE	1.5	2.2	2.8	3.5

The **3-star hotel, beachfront park, and retail components** are categorized under a **revenue-sharing model** due to their higher project IRRs of 22% and 17%, respectively. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 5% is proposed to achieve the Partners' IRRs of 22% and 16%, which is expected to attract global investors to Sri Lanka.

In contrast, **Divers Paradise** serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an **Annual Concession Fee** model of USD 0.09 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.

LOW CASE

REVENUE TO AUTHORITY THROUGH REVENUE SHARE (USD Mn)

Components	15 years	20 years	25 years	30 years
3 STAR HOTEL	1.2	2.7	4.9	8.3
BEACHFRONT PARK & RETAIL	0.4	0.8	1.4	2.3

REVENUE TO AUTHORITY THROUGH ACF (USD Mn)

Components	15 years	20 years	25 years	30 years
DIVER'S PARADISE	1.5	2.1	2.8	3.4

The **3-star hotel, beachfront park, and retail components** are categorized under a **revenue-sharing model** due to their higher project IRRs. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 5% is proposed to achieve the Partners' IRRs of 21% and 16%, which is expected to attract global investors to Sri Lanka.

In contrast, **Divers Paradise** serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an **Annual Concession Fee** model of USD 0.07 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.

4.5.4 NET PRESENT VALUE FOR PROJECTS

WACC Calculation	Cost	Proportion
Debt	17%	60%
Equity	20%	40%
WACC Rate / Discount rate		**18%**
Date of valuation	20th Nov 2024	
Capitalisation year	10th year	

	High case scenario			Low case scenario		
Projects	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**
Diver's Paradise	1	25	17	0.6	17	17
Beachfront park & retail	1.6	46	20	0.3	20	20
3 star hotel	0.7	18	18	-	-	-

The NPV is higher than the total cost of the land, hence the projects are feasible

4.5.5 ROAD COST ESTIMATION

SCENARIOS	ROAD TYPE	ROAD WIDTH (M)	ROAD LENGTH (M)			COST IN SKR MN			COST IN USD MN		
			NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL
PRIORITY PROJECTS (HIGH CASE SCE-NARIO)	Secondary road with parking	31	389	716	1,105	276	234	511	0.9	0.8	1.7
	Collector	21.6	-	319	319	-	72	72	-	0.2	0.2
	Collector	12	259	-	259	71	-	71	0.2	-	0.2
PRIORITY PROJECTS (LOW CASE SCE-NARIO)	Secondary road with parking	31	389	716	1,105	276	234	511	0.9	0.8	1.7
	Collector	21.6	-	169	169	-	38	38	-	0.1	0.1
	Collector	12	179	-	179	49	-	49	0.2	-	0.2

The basic data is received from Highway Authority of Sri Lanka.

Table 4.22 Road Cost Estimation

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5 PASIKUDAH–VERUGAL

5.1 PASIKUDAH–VERUGAL CONTEXT
5.2 SITE ANALYSIS
5.3 CONCEPT MASTER PLAN
5.4 KEY INTERVENTION AREA



5.1 PASIKUDAH–VERUGAL CONTEXT

5.1.1 TOURIST ATTRACTIONS

TOURIST ATTRACTIONS

Key nature and culture tourist attractions include:

1. Somawathiya National Park
2. Trikonamadu Nature Reserve
3. Verugal Muhathuvaram
4. Thoppigala
5. Kumari Point
6. Sallitheevu Beach
7. Panichachankerni Beach
8. Vakari Beach
9. Maankenu Fishing Point
10. Mavadiodai Beach
11. Kayankerni Coral Reef
12. Sail Lanka charter
13. Pasikudah Beach
14. Pasikudah Elephant Stones
15. Sunrise Viewpoint

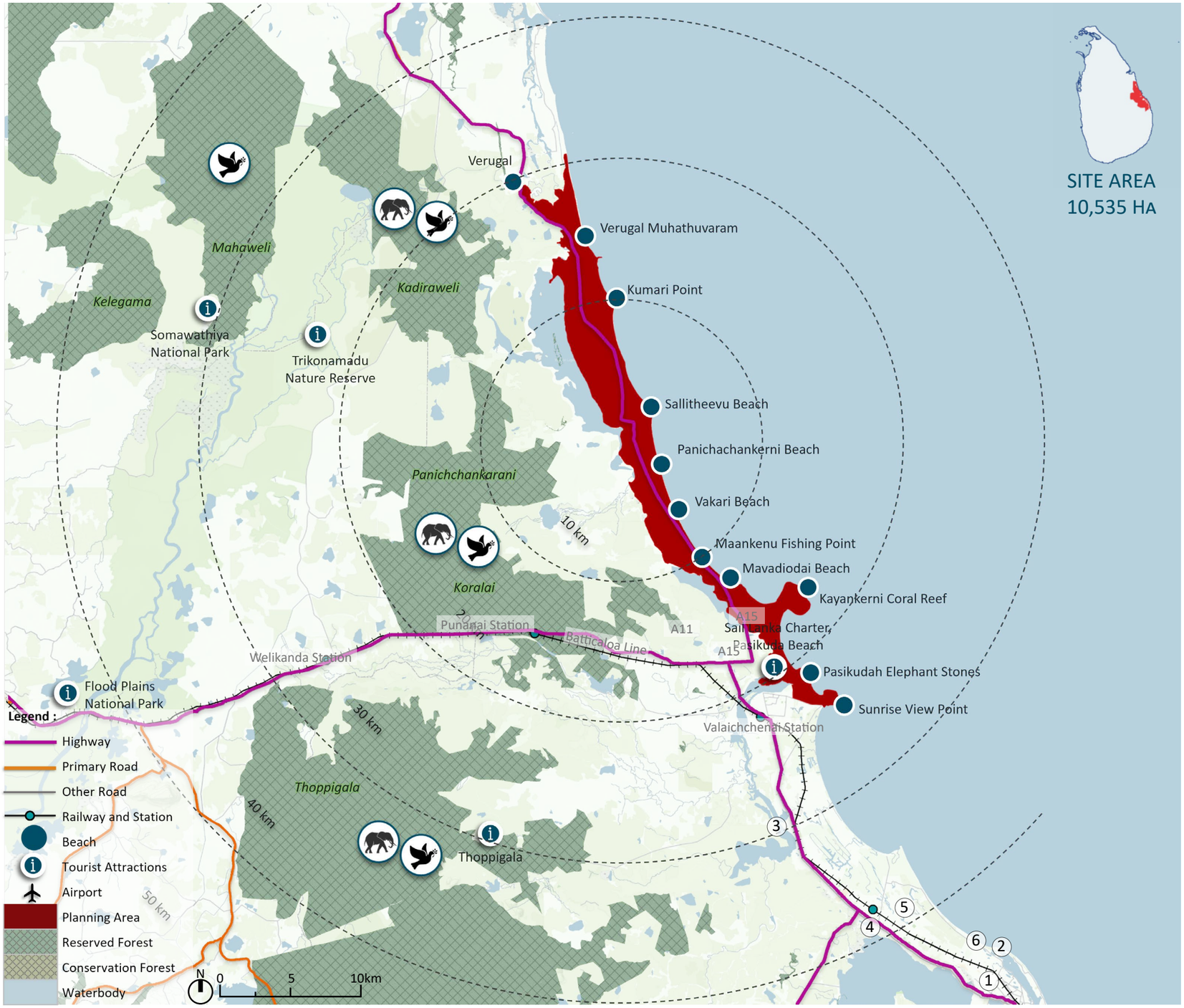


Figure 5.1 Tourist Attractions



Batticaloa Fort



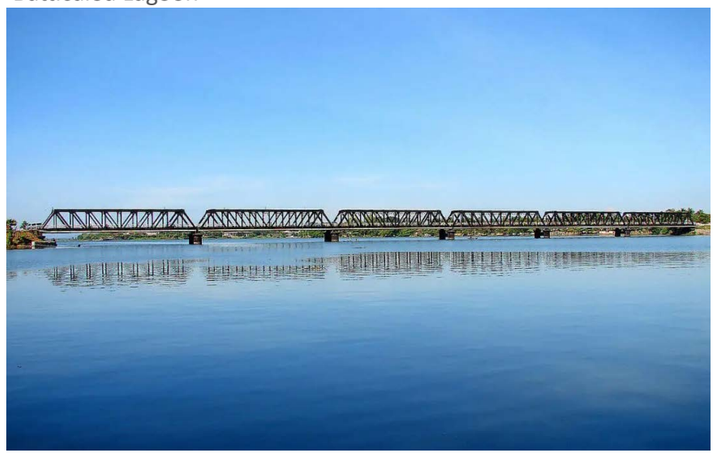
Batticaloa Lagoon



Kalmunai Handloom Village



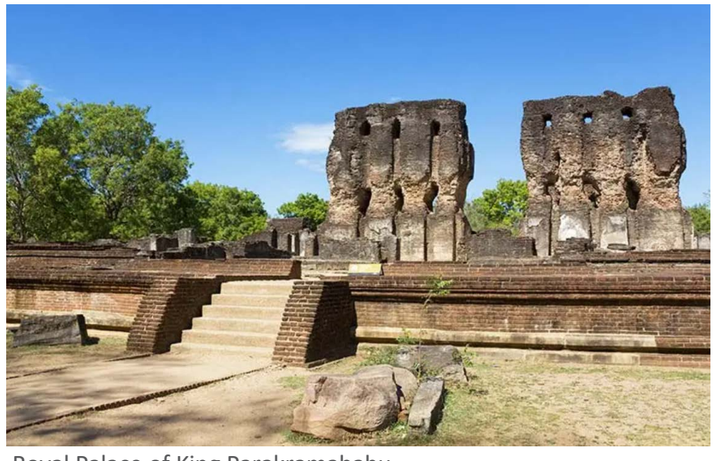
Batticaloa Light House



Kallady Bridge



Kattankudy Heritage Museum



Royal Palace of King Parakramabahu



Lake Road Wall Art Batticaloa



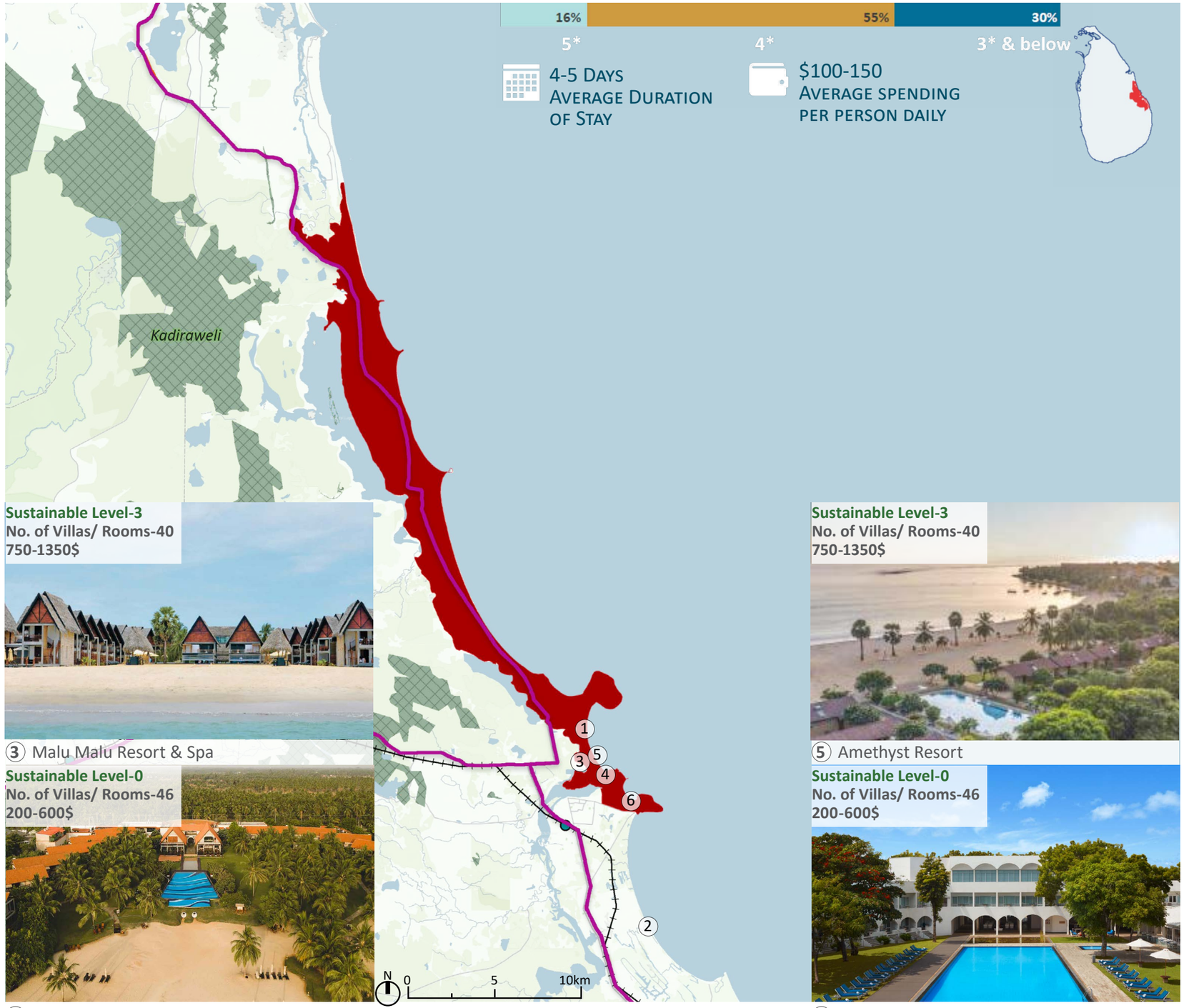
Sri Mamangeswarar Kovil

5.1.2 EXISTING ACCOMMODATION

Existing accommodation facilities are analysed based on development size, number of rooms availability, quality of service, diversity of pricing options, and sustainability infrastructure provision.

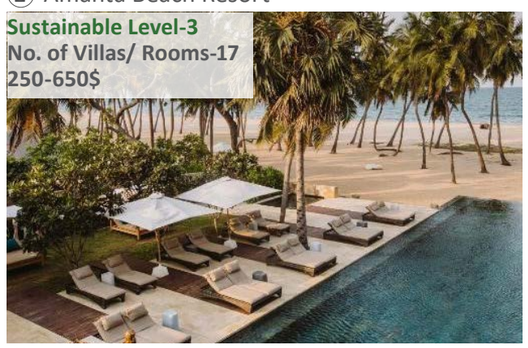
The selected accommodations, such as resorts, hotels, and villas, are listed below:

PASIKUDAH HAS SIGNIFICANT POTENTIAL FOR 4 & 5 STAR CATEGORY DEVELOPMENTS WHICH HAS SEEN HIGHER OCCUPANCY RATES COMPARED TO OTHER CATEGORIES.





① Amanta Beach Resort



② Karpaha Sands

③ Malu Malu Resort & Spa

④ UGA Bay

⑤ Amethyst Resort

⑥ Anilana Pasikudah

Figure 5.2 Existing Accommodation

5.1.3 EXISTING FACILITIES

Existing tourism support facilities encompass various essential services, including transport nodes like bus stations and networks, hospitals and emergency healthcare facilities, food stalls, and fishery ports. These facilities play a crucial role in ensuring that tourists have access to transportation, medical care, food, and local markets, contributing to a positive travel experience. However, the current infrastructure is inadequate to meet the increasing demands of the growing number of tourists. The insufficient capacity and outdated condition of these facilities often lead to overcrowding, long wait times, and reduced quality of service, which can detract from the overall attractiveness of the destination and hinder the sustainable development of the tourism sector.



① Pasikudah Army Stall



② Valaichchenai Bus Stand



Figure 5.3 Existing Facilities

③ Valaichchenai Base Hospital

④ Kannakkudah Fishing Point

5.1.4 SUMMARY OF STAKEHOLDERS' INPUTS

Stakeholder discussions have been instrumental in gathering valuable insights regarding various aspects of tourism development aimed at optimizing the potential of the Pasikudah-Verugal site in Batticaloa district. The inputs obtained from these discussions have been categorized into several key areas for thorough analysis. The summary of these inputs is presented in the Fig.

Moreover, the analysis delves into the assessment of natural and heritage attractions based on activity types, diversity, and the richness of natural assets present in the Pasikudah-Verugal area. Additionally, the analysis examines the provision of infrastructure and evaluates the quality of existing tourism facilities, including accommodation choices.

The insights gathered from stakeholder discussions and subsequent analysis provide a solid foundation for strategic planning and decision-making to harness the full potential of the Pasikudah-Verugal site while addressing its challenges.

Natural & Heritage Attractions	Surfing	
	Heritage Sites	
	Ecological Sites (Forest & Wildlife)	
	Ecological Sites (Coral Reef)	
Infrastructure Provision	Connectivity (Road)	
	Connectivity (Rail)	
	Connectivity (Air)	
Quality of Accommodations	Quality Of Existing Accommodation (Non-Budget)	
	Quality Of Existing Accommodation (Budget)	



5.2 SITE ANALYSIS

5.2.1 OVERALL SITE CONTEXT

With its extensive ocean frontage and natural features, the site offers opportunities for tourism, environmental preservation, and real estate development, benefiting the regional economy. However, there are challenges, especially regarding accessibility, connectivity, and environmental concerns.

There are opportunities to conserve existing nature and environmentally sensitive areas to safeguard the region's biodiversity. Additionally, measures shall be implemented to protect and enhance the productivity of existing agricultural land through improved connectivity and modern technology, thus bolstering the regional economy. To maximize tourism potential, sustainable eco-tourism zones can be proposed near natural forests and agricultural areas.

Future extensions of existing settlement areas shall be strategically planned in suitable locations to accommodate growth.

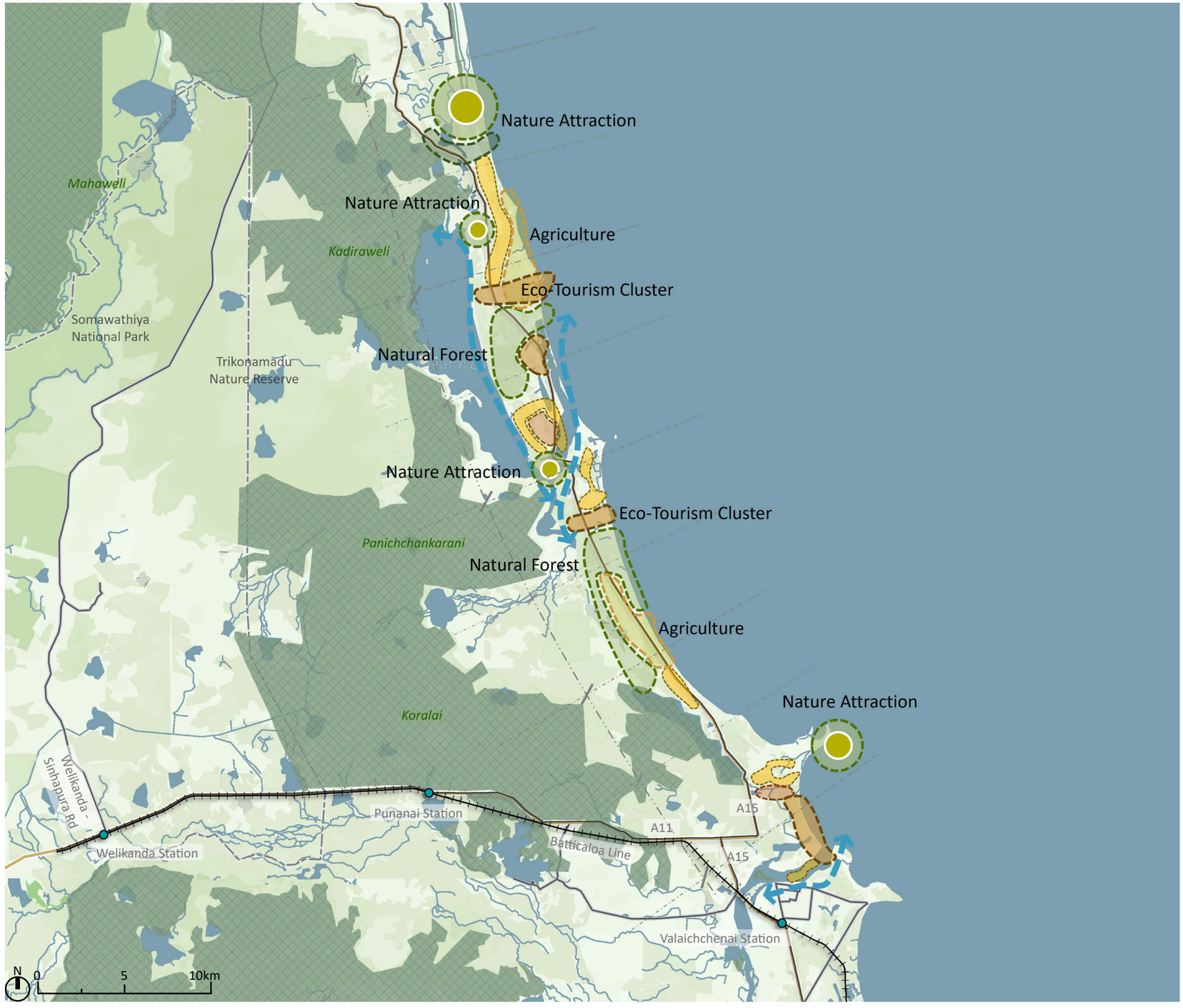


Figure 5.4 Overall Site Context

5.2.2 PASIKUDAH SITE CONTEXT

An Assessment of the Pasikudah study area summarize the following key aspects:

- Situated within a rural setting, the study area offers a serene and natural environment, providing a peaceful retreat from urban life.
- The land area is characterized by flat terrain, facilitating ease of access and potential for various development projects.
- The pristine beach front along the ocean remains largely untouched, preserving its natural beauty and allure visitors seeking unspoiled coastal experiences.
- Established resorts and hotels are located along the ocean front which has opportunities to expand as well as potential competition for new developments.
- However, the limited road connectivity to the study area highlights the need for infrastructure improvements to enhance connectivity and accessibility.



Figure 5.5 Pasikudah Site Context

5.2.3 PASIKUDAH SITE STRENGTHS

The study area of Pasikudah holds significant potential and strengths for tourism development:

Green Field Land

A sizable expanse of green field land between the ocean and lagoon presents opportunities for diverse development projects.

Accessibility

With access via Valaichchenai railway station and the A15 highway, the area strategically caters to visitors, though limited road infrastructure poses challenges.

Expansive Beach front

Pasikudah boasts a lengthy beach front along the lagoon and two peninsulas, offering diverse tourism experiences.

Rich Coral Reef Areas

The presence of coral reef areas enhances the area's natural beauty and ecological importance.

Established Resorts

With existing resorts and semi-developed beach front properties, the area has a foundation for further enhancement.

Natural Viewpoints

Existing viewpoints and natural assets provide scenic beauty and recreational opportunities.

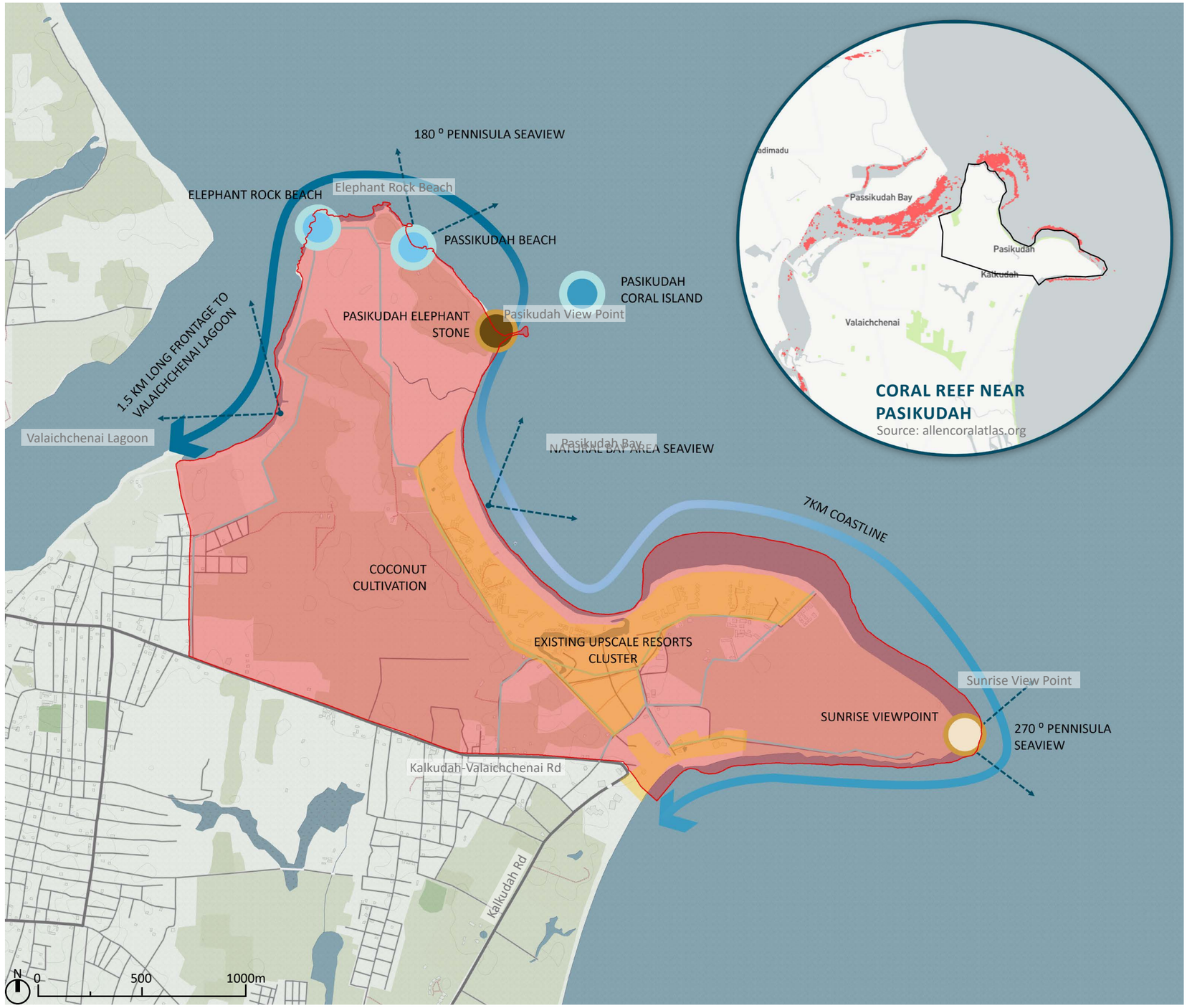


Figure 5.6 Pasikudah Site Strengths

5.2.4 OVERALL EXISTING LAND USE

The Pasikudah and Verugal area covers about 10,536 hectares, mainly consisting of scrub land and agricultural areas. Existing settlements, making up 8% of the land, include tourism facilities like resorts and hotels, as well as commercial and residential zones. There are also 1700 hectares of sparse forests and swamps, highlighting the area's ecological diversity.

	LAND USE	Area (Ha)	%
	Agriculture	1938.40	18.4%
	Beaches, Dunes and sand	297.2	2.8%
	Coastal marshes	101.86	1.0%
	Commercial	11.90	0.1%
	Defence Activities	0.33	0.0%
	Dense Forest	143.41	1.4%
	Hotel	37.17	0.4%
	Industrial	4.83	0.0%
	Inland marshes	0.70	0.0%
	Lagoons	2.19	0.0%
	Mangroves	73.34	0.7%
	Open forest	186.99	1.8%
	Public Facilities	74.11	0.7%
	Public Utilities	3.64	0.0%
	Residential	661.59	6.3%
	Roads	146.16	1.4%
	Scrub Land	3171.81	30.1%
	Sparse Forest	1700.75	16.1%
	Swamp forest	21.74	0.2%
	Vacant	15.42	0.1%
	Waterbodies	1032.91	9.8%
	Wetland	909.23	8.6%
	Total	10535.69	

Table 5.1 Overall Existing Land Use Distribution

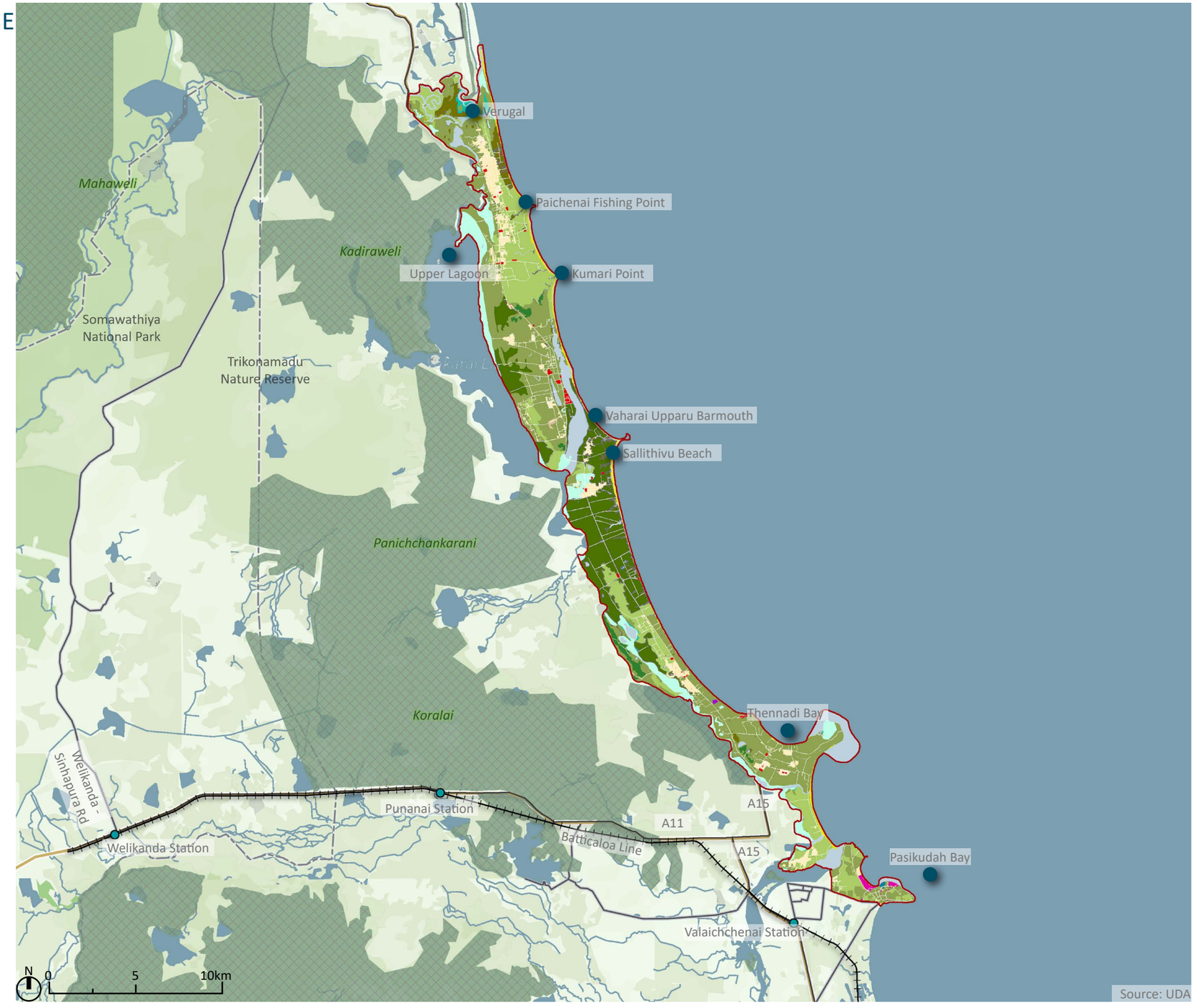


Figure 5.7 Overall Existing Land Use

5.2.5 EXISTING LAND USE

SITE AREA: 479.7 Ha

- 57 Ha (12%) occupied by scattered tourism, commercial and residential uses.
- Requires flood management, and improved connectivity.

The Pasikudah site area covers about 480 hectares, mainly consisting of scrub land and agricultural areas. Existing established resorts and hotels occupied extensive ocean frontage between two peninsula areas.

Adjacent to Kalkudah, available land area includes scrub and agriculture land which provides opportunities to extension of residential area in the future.

	LAND USE	Area (Ha)	%
	Agriculture	174.06	36.3%
	Beaches, Dunes and sand	8.86	1.8%
	Commercial	6.51	1.4%
	Hotel	35.73	7.4%
	Public Facilities	0.57	0.1%
	Residential	14.48	3.0%
	Roads	11.28	2.4%
	Scrub Land	195.15	40.7%
	Waterbodies	33.06	6.9%
	Total	479.71	

Table 5.2 Existing Land Use Distribution



Figure 5.8 Existing Land Use Map

5.2.6 OVERALL ENVIRONMENTAL ASSESSMENT

- Pasikudah- Kalkudah Bays have been declared as Special Management Areas under the legal provisions of the CC&CRM Act.
- Punniyakudah Point to Outlet Near Pasikudah Fishery Landing Site, 65m setback is kept including 25m reservation as of CC & CRM Act. Outlet Near Pasikudah Fishery Landing Site to Nasivanthive Lagoon Mouth, 110m setback is kept including 40m reservation as of CC & CRM Act
- Only 2% of the island contains fringing coral reefs and Pasikudah is one of the sites. However on 20% was live coral in 2020. An active coral mining and Coral lime kilns has specifically observed at Pasikudah and Vandeloose Bay area.
- Upparu Lagoon is a major mangrove site in the eastern region. Lagoon is surrounded by an evergreen forest. The lagoon encompasses a few seagrass beds too.

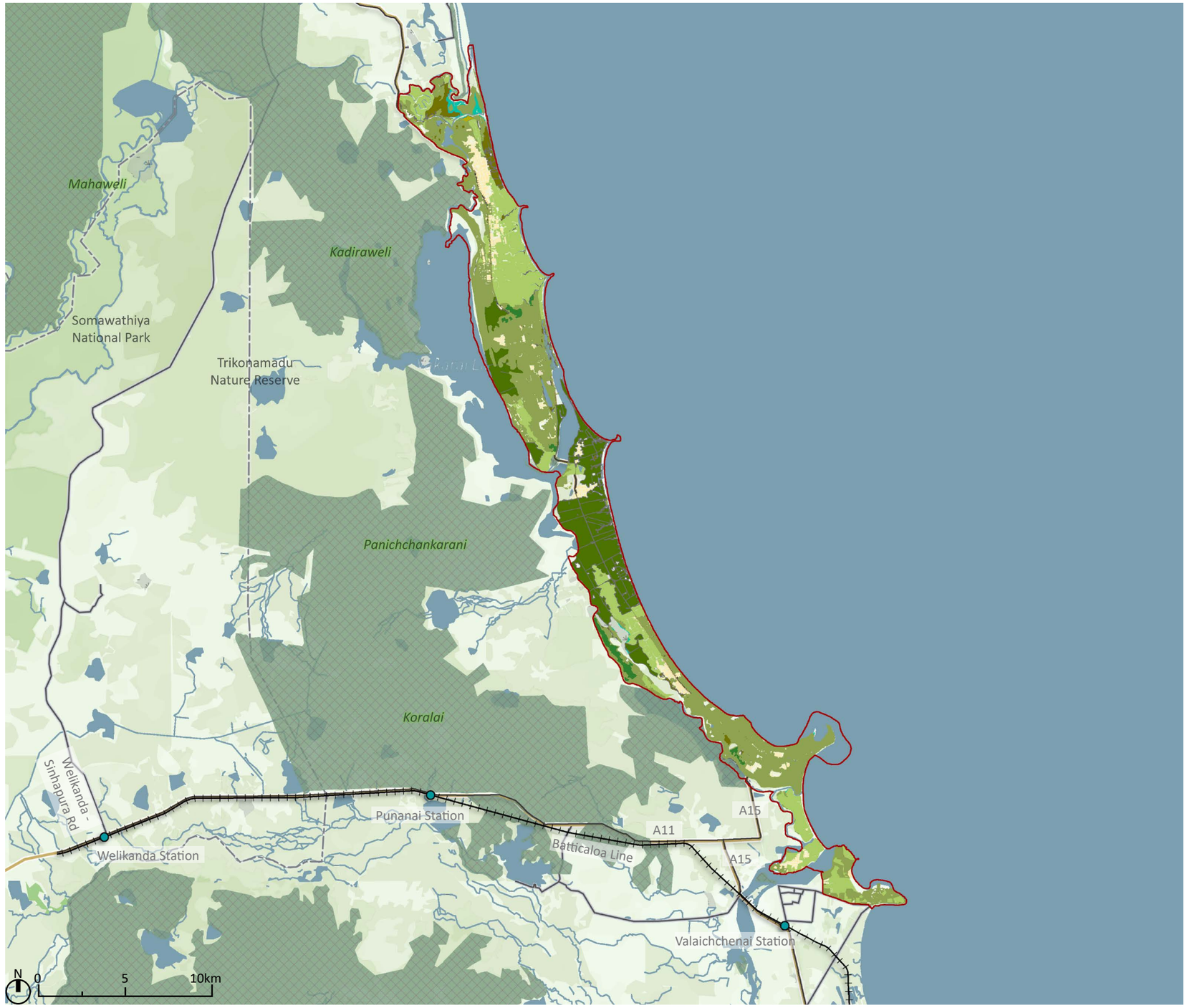


Figure 5.9 Overall Environmental Assessment

5.2.7 OVERALL SOCIAL ASSESSMENT

- Pasikudah-Kalkudah bays are a major attraction in the Eastern Province among both local and foreign tourists as a growing coastal resort town.
- Due to 2004 Tsunami, both bay areas and the traditional Tamil communities settled there that added notable socio-cultural character to the sites were highly affected.
- Currently, Pasikudah and Kalkudah are both enjoyed by local and foreign visitors solely as coastal activities-oriented sites. However, they are lacking local community engagement that could have elevated the character of the sites as tourism destinations.
- Pasikudah Mariammam temple is one of the few cultural sites located in Pasikudah area.

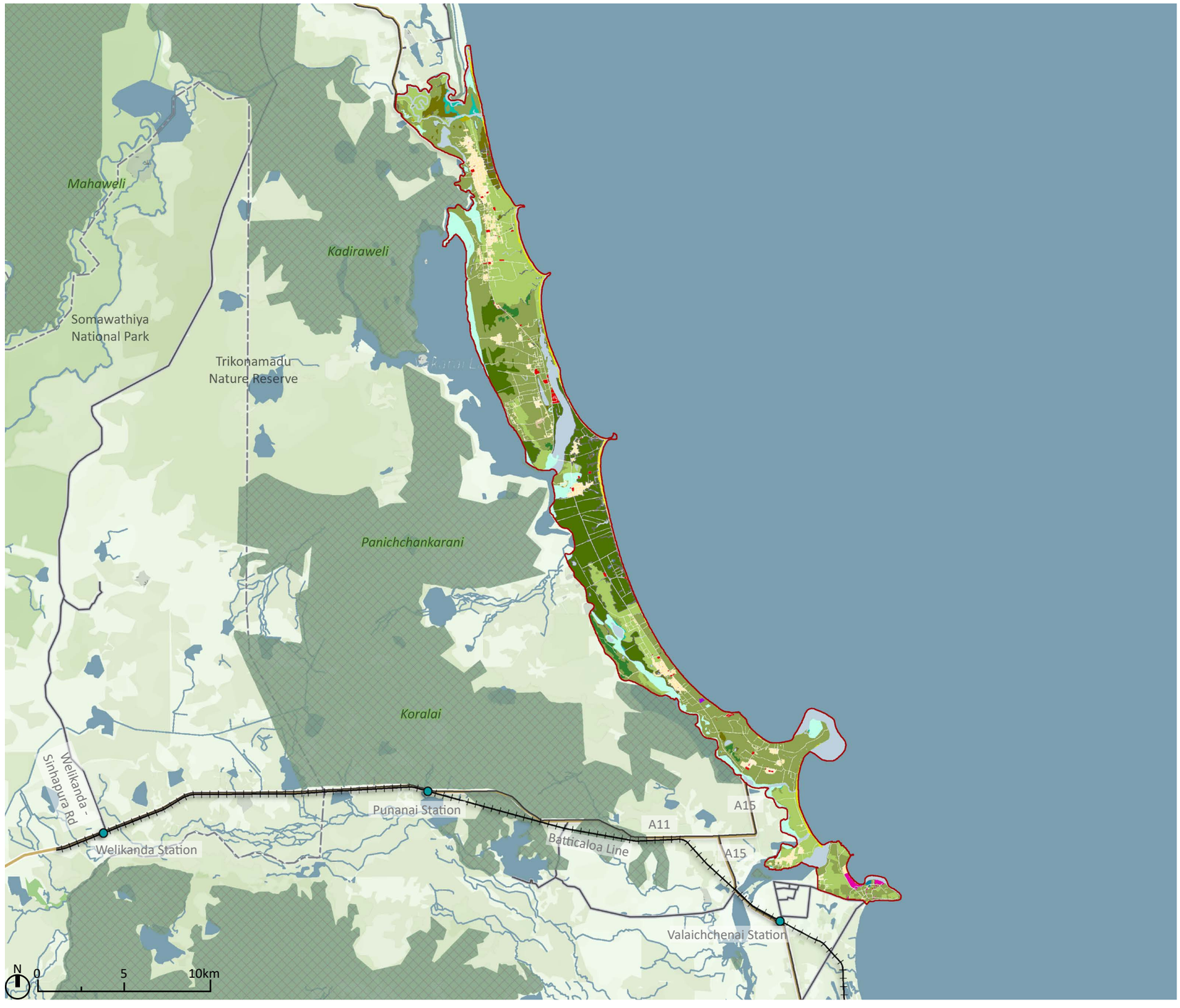


Figure 5.10 Overall Settlement Distribution

5.2.8 ENVIRONMENTAL ASSESSMENT

•Coastal Conservation and Coastal Resource Management Department has identified areas designated as both protected and conservation zones.

•The study area features two designated setback sections in accordance with the Coastal Conservation and Coastal Resource Management (CC & CRM) Act. Section A includes a 40-meter reservation zone, a 70-meter restricted area, and a total setback of 110 meters. Section B comprises a 45-meter reservation zone, an 80-meter restricted area, and a total setback of 125 meters.

•According to the The Permissible Development Intensity Index (PDII) ranges from 0.7 to 2. Figure 2 illustrates the recommended PDII across the selected study area.



Figure 5.11 Setback Map



Figure 5.12 Pasikudah - Key Settlement Distribution

PERMISSIBLE FLOOR AREA

- Total Permissible Floor Area means the maximum extent of the floor space that shall be permitted by the relevant Authority to be achieved in one or more levels of the development, excluding ancillary facilities
- Additional parking area provided within the development in excess of regulatory parking requirement shall be included in the Permissible Floor Area.
- The area of the roof terrace shall be included in the Permissible Floor Area if it is used for an activity other than for the ancillary facilities of the main activities of the development.

Permissible Total Floor Area= Zone Factor x [Land Extent^{a} + (Land Extend x 1 - % Plot Cover) + (1/2 (Road Frontage x Width of the Road))]

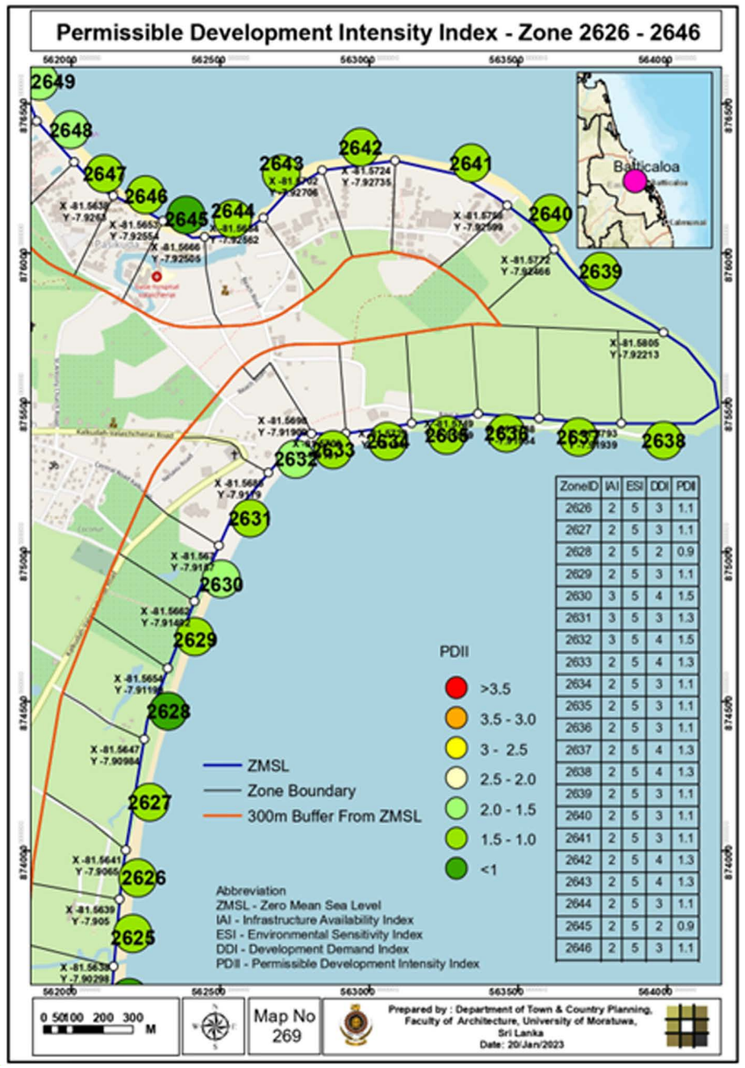
Zone Factor : To be decided according to the expected Development intensity, Likely Demand for Space, Availability of Road and Drainage Infrastructure

Road Frontage: The width of the Land at the point that directly abuts the access road. If there is more than one access roads, all such frontages shall be included)

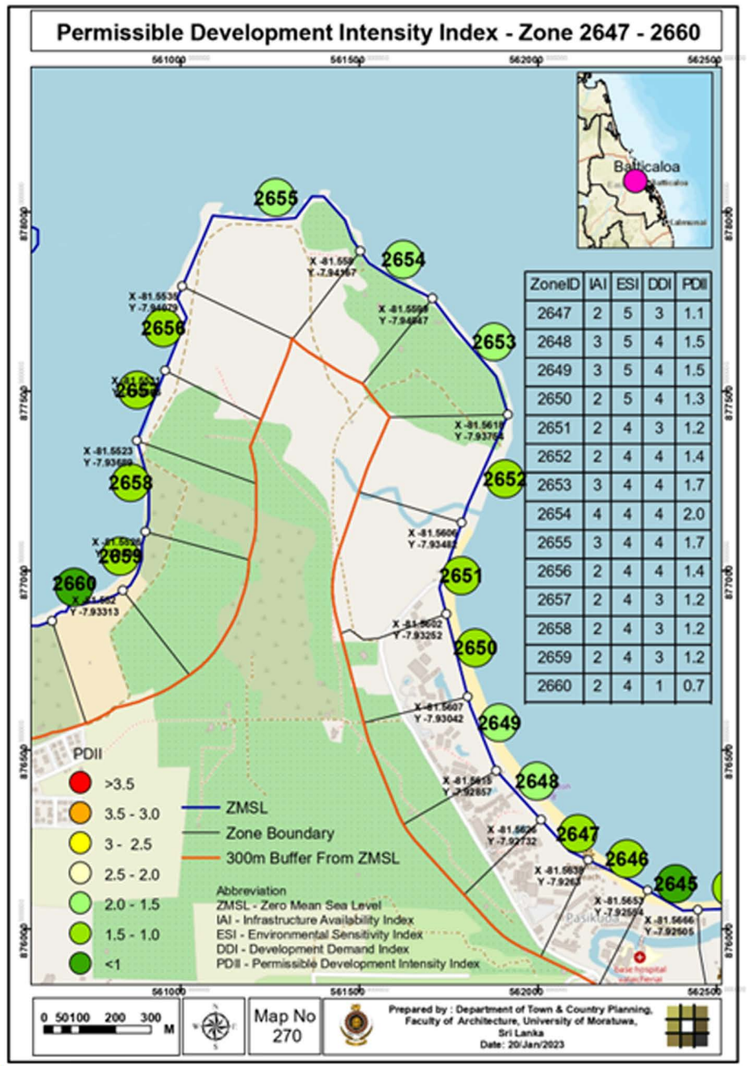
Width of the Road : The Street/Building Line Width of the Road

a : If the land extent is 1000 sq meters or less apply the value of and if the extent is more than 1000 sq meters apply figure 1.05 (√(1+Plot Size)/10,000)

Subject to the controls imposed by the other regulations in place



ZoneID	IAI	ESI	DDI	PDII
2626	2	5	3	1.1
2627	2	5	3	1.1
2628	2	5	2	0.9
2629	2	5	3	1.1
2630	3	5	4	1.5
2631	3	5	3	1.3
2632	3	5	4	1.5
2633	2	5	4	1.3
2634	2	5	3	1.1
2635	2	5	3	1.1
2636	2	5	3	1.1
2637	2	5	4	1.3
2638	2	5	4	1.3
2639	2	5	3	1.1
2640	2	5	3	1.1
2641	2	5	3	1.1
2642	2	5	4	1.3
2643	2	5	4	1.3
2644	2	5	3	1.1
2645	2	5	2	0.9
2646	2	5	3	1.1



ZoneID	IAI	ESI	DDI	PDII
2647	2	5	3	1.1
2648	3	5	4	1.5
2649	3	5	4	1.5
2650	2	5	4	1.3
2651	2	4	3	1.2
2652	2	4	4	1.4
2653	3	4	4	1.7
2654	4	4	4	2.0
2655	3	4	4	1.7
2656	2	4	4	1.4
2657	2	4	3	1.2
2658	2	4	3	1.2
2659	2	4	3	1.2
2660	2	4	1	0.7

Figure 5.13 Permissible Development Intensity Index

5.2.9 SOCIAL ASSESSMENT

•Pasikudah-Kalkudah bays are a major attraction in the Eastern Province among both local and foreign tourists as a growing coastal resort town.

•Due to 2004 Tsunami, both bay areas and the traditional Tamil communities had settled there that had added notable socio-cultural character to the sites were highly affected.

•Currently, Pasikudah and Kalkudah are both enjoyed by local and foreign visitors solely as coastal activities-oriented sites. However, they are lacking local community engagement that could have elevated the character of the sites as tourism destinations.

•Pasikudah Mariammam temple is one of the few cultural sites located in Pasikudah area.

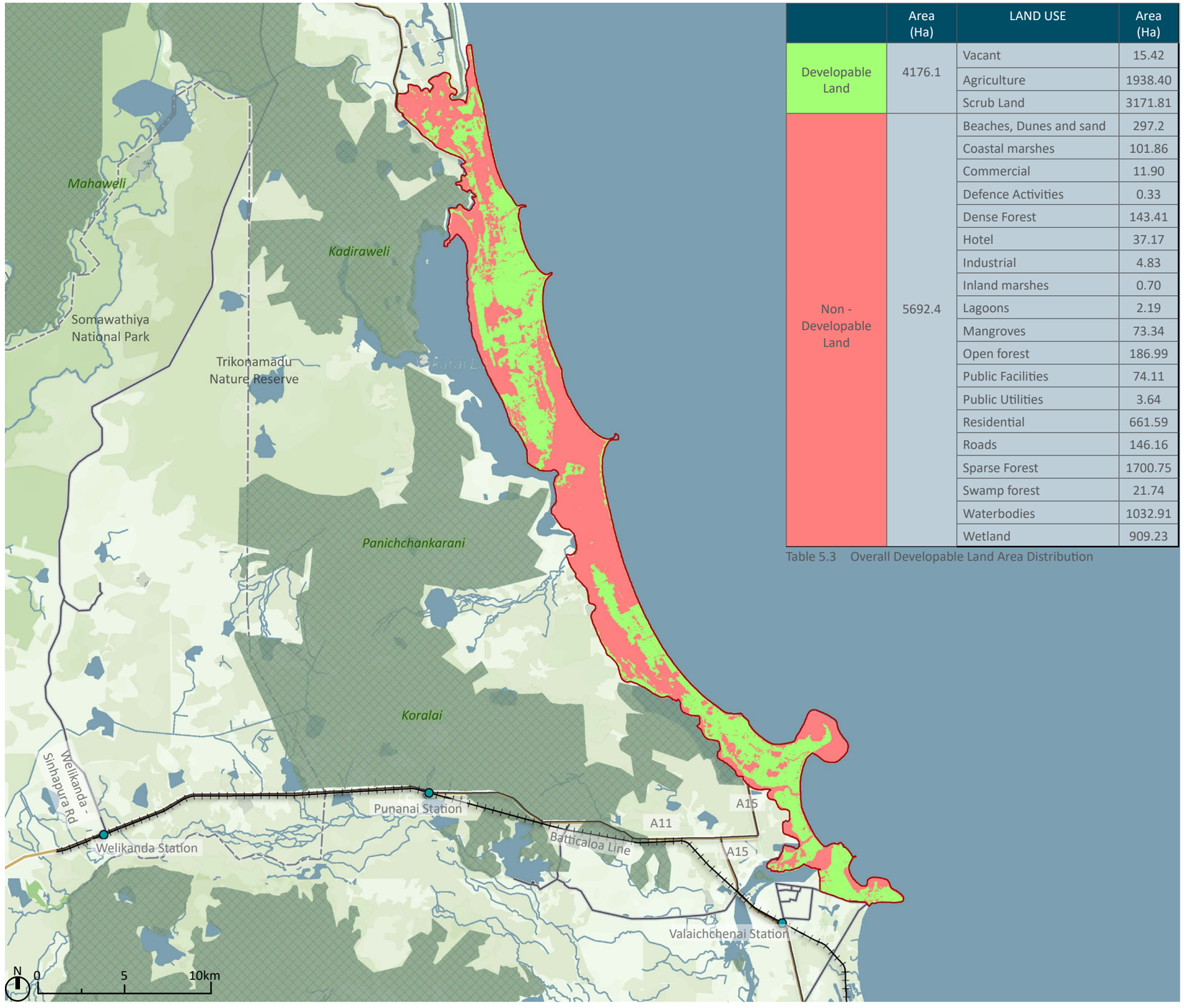


Figure 5.14 Social Assessment

5.2.10 OVERALL DEVELOPABLE LAND

The analysis of the existing land use plan indicates that the largest portion of land is occupied by scrubland, followed by agricultural land. These areas hold significant potential for development and can be considered as opportunities for future growth, given their current land use and characteristics. Proper planning and management of these lands can help meet the needs of urbanization and expansion while optimizing their value.

To support sustainable growth, areas classified as natural assets such as mangroves, various types of forests, and waterbodies are categorized as non-developable. Preserving these environmentally sensitive zones is critical to maintaining ecological balance and ensuring long-term environmental sustainability.



	Area (Ha)	LAND USE	Area (Ha)
Developable Land	4176.1	Vacant	15.42
		Agriculture	1938.40
		Scrub Land	3171.81
Non - Developable Land	5692.4	Beaches, Dunes and sand	297.2
		Coastal marshes	101.86
		Commercial	11.90
		Defence Activities	0.33
		Dense Forest	143.41
		Hotel	37.17
		Industrial	4.83
		Inland marshes	0.70
		Lagoons	2.19
		Mangroves	73.34
		Open forest	186.99
		Public Facilities	74.11
		Public Utilities	3.64
		Residential	661.59
		Roads	146.16
		Sparse Forest	1700.75
		Swamp forest	21.74
		Waterbodies	1032.91
		Wetland	909.23

Table 5.3 Overall Developable Land Area Distribution

Figure 5.15 Overall Developable Land

5.2.11 DEVELOPABLE LAND

The study area is predominantly characterized by scrub land and agricultural land, presenting promising prospects for commercial and tourism development.

Existing settlements and well-established resorts & hotels occupy prime oceanfront locations within the site area. Additionally, the vicinity adjacent to the junction of the existing Kalkudah-Valaichchenai roads (B185 and B184) holds significant potential for becoming the main commercial centre and service node, serving as a pivotal intervention area for initial development initiatives.

	LAND USE	Area (Ha)
Developable Land	Scrub Land	184.2
	Agriculture	170.6
	Beaches, Dunes and sand	3.5
Non - Developable Land	Commercial	5.2
	Residential	14.4
	Public Facilities	0.6
	Flooding Areas	50.8
	Hotel	33.6
	Waterbodies	5.8
	Roads	10.8

Table 5.4 Developable/Non Developable Land Area Distribution



Figure 5.16 Developable Land

5.2.12 KEY ENABLERS AND CHALLENGES

KEY ENABLERS

- Presence of deep-sea activity and the only glass bottom coral reef watching in the eastern region – **Potential to capitalise on the marine based activities**
- Established location for leisure tourism in Pasikudah with tourist footfalls – **Potential to capitalise on the footfall and boost tourism through other activities**
- Pasikudah has high no. of tourist with higher spending appetite – **Potential for luxury and high-end tourism activities**

CHALLENGES

- Connectivity to the region is **limited to road** which takes 8 – 10 hrs from Colombo city for foreign travellers
- Frequency and quality of **train** connectivity needs a huge improvement
- **Limited presence of social infrastructure** for Tourism in the region – hospitals, Information centers, Restaurants, Money exchange offices etc.

5.2.13 VISION FRAMEWORK



PRISTINE BEACH



DIVERSE NATURAL SITES



RICH CULTURAL HERITAGE



CONNECTIVITY & INFRASTRUCTURE

PASIKUDAH–VERUGAL

COASTAL JEWEL OF EAST

SANCTUARY FOR WELLNESS, TRANQUIL SEASCAPE AND ENRICHED CULTURE

Goal-1
EXCLUSIVE BEACH DESTINATION

Goal-2
HOLISTIC WELLNESS CENTER

Goal-3
THE 1st BLUE FLAG BEACH

5.2.14 GOALS & STRATEGIES

VERUGAL-PASIKUDAH: COASTAL JEWEL OF EAST

Goal-1
EXCLUSIVE BEACH DESTINATION

IMMEDIATE STRATEGIES

1. **Improve Air Connectivity** (target markets)
2. **Develop Exclusive Resort Cluster** including premium beachfront development comprising of beach and related facilities
3. **Develop Primary Tourist Services Centre** including vibrant pedestrian street with commercial activity
4. **Develop Water-related sports centre**, **Beachfront Commercial** and **Facilities for divers**.
5. **Develop Tertiary Facilities** such as Boardwalk and natural trails, Viewing Deck Wildlife trails and rest camps

ADVANCED PHASE

1. **Diver's organization** to standardize the facilities and safety
2. **Coral & Marine Habitat restoration and Wildlife Habitat Enhancement**
3. **Marina, Golf Course, Private Club House**

Goal-2
HOLISTIC WELLNESS CENTER

IMMEDIATE STRATEGIES

1. **Develop Wellness Cluster** including Meditation Centre, Educational Wellness yoga pavilions, Training Centre, Beachfront fitness ground, eco-lodging, culinary wellness experiences, Open Space and Parks

ADVANCED PHASE

1. **Wellness-related Diverse Leisure Facilities** including Aquatic wellness centre, Beachfront Boardwalk and natural trails
2. **Wellness Research Centre**
3. **Nutrition Centre** & camp

Goal-3
THE 1st BLUE FLAG BEACH

IMMEDIATE STRATEGIES

1. Develop **Local Hospitality School**
2. Develop **Integrated Eco-friendly Accommodations**
3. **Develop Sustainable Infrastructure** and implement renewable energy, waste and flood management infrastructure including sustainable last-mile- transport options such as shared bikes, E-bike charging stations, etc

ADVANCED PHASE

1. **Acquire Blue Flag Certification**

5.2.15 KEY PROGRAMMES

The key highlights of this destination include vibrant coral reefs, pristine beaches, and a serene environment perfect for wellness and relaxation. It also serves as an ideal location for destination weddings. By optimizing the influx of visitors, this location can significantly boost its leisure and wellness sectors. The primary visitor groups comprise high-spending domestic tourists, European leisure travelers, and MICE visitors. Key programs offered include spa and wellness retreats, meditation and spiritual centers, and comprehensive facilities for destination weddings.

KEY HIGHLIGHTS

Coral Reefs | Pristine Beaches | Leisure & Wellness

OPTIMISING VISITORS' FOOTFALL FOR LEISURE AND WELLNESS

Key Visitor group:

- High spending Domestic Tourists
- European leisure travellers
- MICE visitors (destination weddings)

WELLNESS PARADISE

KEY PROGRAMS

SPA & WELLNESS	MEDITATION & SPIRITUAL CENTRE	DESTINATION WEDDINGS



Figure 5.17 Key Programmes

5.3 CONCEPT MASTER PLAN

5.3.1 OVERALL CONCEPT STRUCTURE

The proposed concept plan designates Pasikudah beach study area as the primary hub for commercial and tourism activities, benefiting from its proximity to the Batticaloa district capital, adjacency to Kalkudah, and the existing established upscale resort cluster. A secondary hub, Central Commercial & Tourism Activities Node, is planned near Sallitheevu beach, capitalizing on its scenic oceanfront, lagoon, and existing infrastructure. To ensure accessibility and service coverage for existing settlements and visitors, smaller commercial nodes are strategically positioned every 5 to 6 kilometres.

New tourism facilities, comprising resort and hotel clusters, are strategically placed between commercial nodes, while eco tourism clusters surrounded by natural and agricultural areas. Manufacturing and industrial activities, like agro-processing and fishery-related manufacturing, are allocated near existing food processing plants, fishery ports along the oceanfront, and within lagoon area.

Investment residential clusters are strategically located to maximize natural beauty, ocean views, proximity to existing settlements, future expansion areas, and essential services.

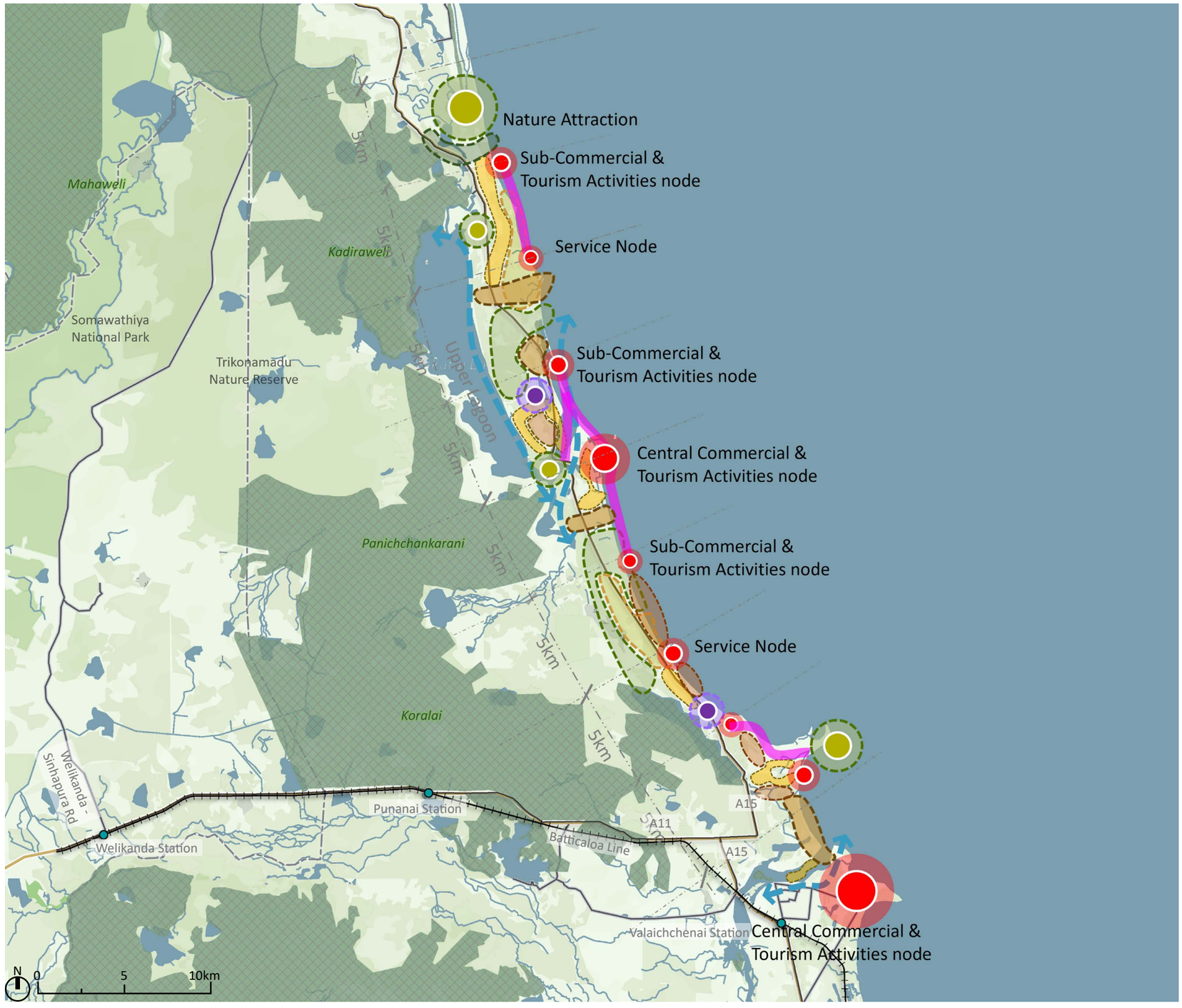
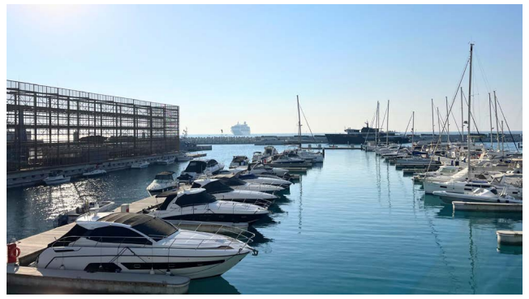


Figure 5.18 Overall Concept Structure

5.3.2 PASIKUDAH CONCEPT STRUCTURE









Commercial and Facility Nodes

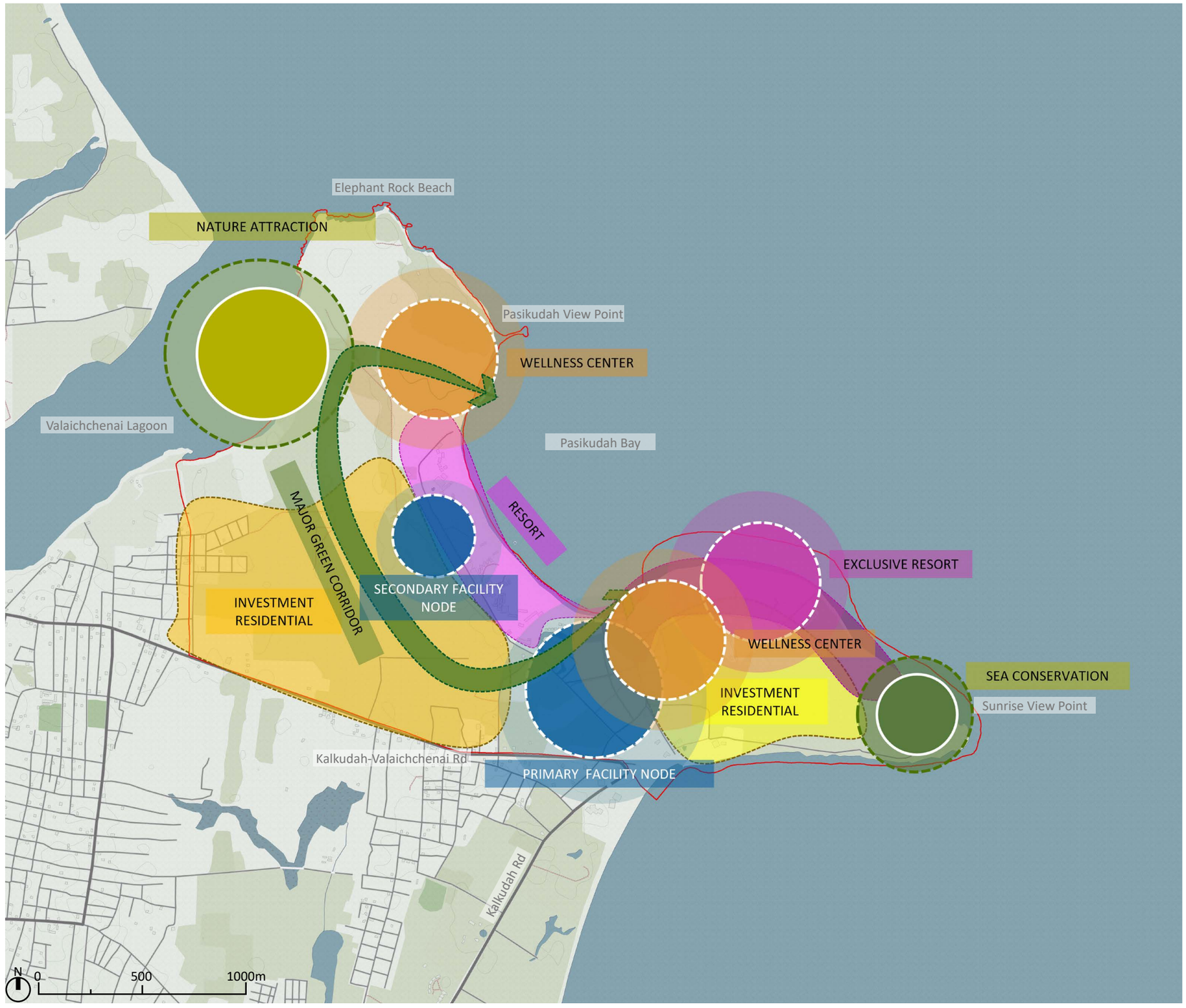


Figure 5.19 Pasikudah Concept Structure

COMMERCIAL AND FACILITY NODES

The integrated primary node, strategically positioned at the main entrance from B184 and B185 roads, features a range of commercial and service facilities. Leveraging the proximity to the existing luxury resort cluster, it enhances visibility and accessibility. Meanwhile, the secondary commercial node is tailored to meet the daily needs of the residential community cluster and visitors, enriching the overall liveability of the area.

WELLNESS CENTRE

By positioning two clusters of wellness facilities, it ensure that visitors have diverse options to choose. One cluster is designed to capture a vibrant and convenient atmosphere, likely appealing to those seeking energetic activities or social engagement. The other cluster, set in a tranquil natural setting with an oceanfront view, provides a serene environment ideal for relaxation and introspection. This approach allows for a comprehensive wellness experience that caters to a wide range of preferences and needs.

BEACH FRONT RESORT

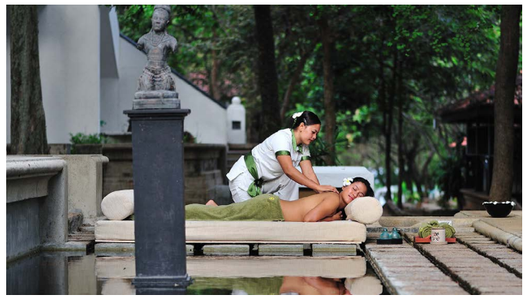
The plan is to expand the existing luxury resort cluster along the oceanfront, aiming to fully capitalize on its prime location and transform it into an exclusive tourism destination. By leveraging the natural beauty of the oceanfront, the cluster seeks to entice visitors to extend their stays and indulge in high-end experiences, ultimately leading to increased spending. With this expansion, the luxury resort cluster is positioned to play a pivotal role in driving tourism growth and economic prosperity in the area.

GREEN CORRIDOR AND NATURAL ATTRACTION NODES

A green corridor runs along the centre spine connecting key service and nature attraction nodes.

RESIDENTIAL VILLA

Two upscale residential villa clusters are being developed to attract both local and international investors, generating investment opportunities for developers to improve infrastructure and enhance overall liveability. These residences offer a lifestyle harmonized with nature, aiming to create an attractive environment for residents seeking a blend of luxury living and natural surroundings.



Wellness Center



Beach front Resort



Green Corridor and Natural Attraction Nodes



Residential Villa

5.3.3 PROPOSED LAND USE

The proposed land use plan for the Pasikudah area includes a significant increase in resort space, expanding from 35.7 hectares to 101.97 hectares to better accommodate more visitors. Additionally, commercial facilities will be enhanced by increasing the commercial use area to 8.4 hectares. To support both existing and new investments, the residential area will be expanded to 153.56 hectares, representing tenfold increase over the current residential space. Green areas and open spaces will also be added to seamlessly connect the entire area to the sea, enhancing the overall environment and appeal of the region.

	Proposed Land Use	Area (Ha)	%
	Beach Area	21.01	4.4%
	Commercial	3.70	0.8%
	Commercial Entertainment	2.47	0.5%
	Commercial Night Market	1.53	0.3%
	Eco Lodge	31.06	6.5%
	Exclusive Eco Lodge	37.13	7.7%
	Hotel	1.23	0.3%
	Resort	30.99	6.5%
	Exclusive Resort	31.59	6.6%
	Wellness Center	15.21	3.2%
	Green Open Space	42.60	8.9%
	Mixed Use	88.93	18.5%
	Investment Residential	34.10	7.1%
	Residential Low Density	4.51	0.9%
	Residential Mid Density	12.77	2.7%
	Neighborhood Center	20.83	4.3%
	Public Facilities	0.78	0.2%
	Public Utilities	13.96	2.9%
	Road	4.26	0.9%
	Visitor Center	45.77	9.5%
	Waterbodies	35.27	7.4%
	Total	479.71	

Table 5.5 Proposed Land Use Area Distribution

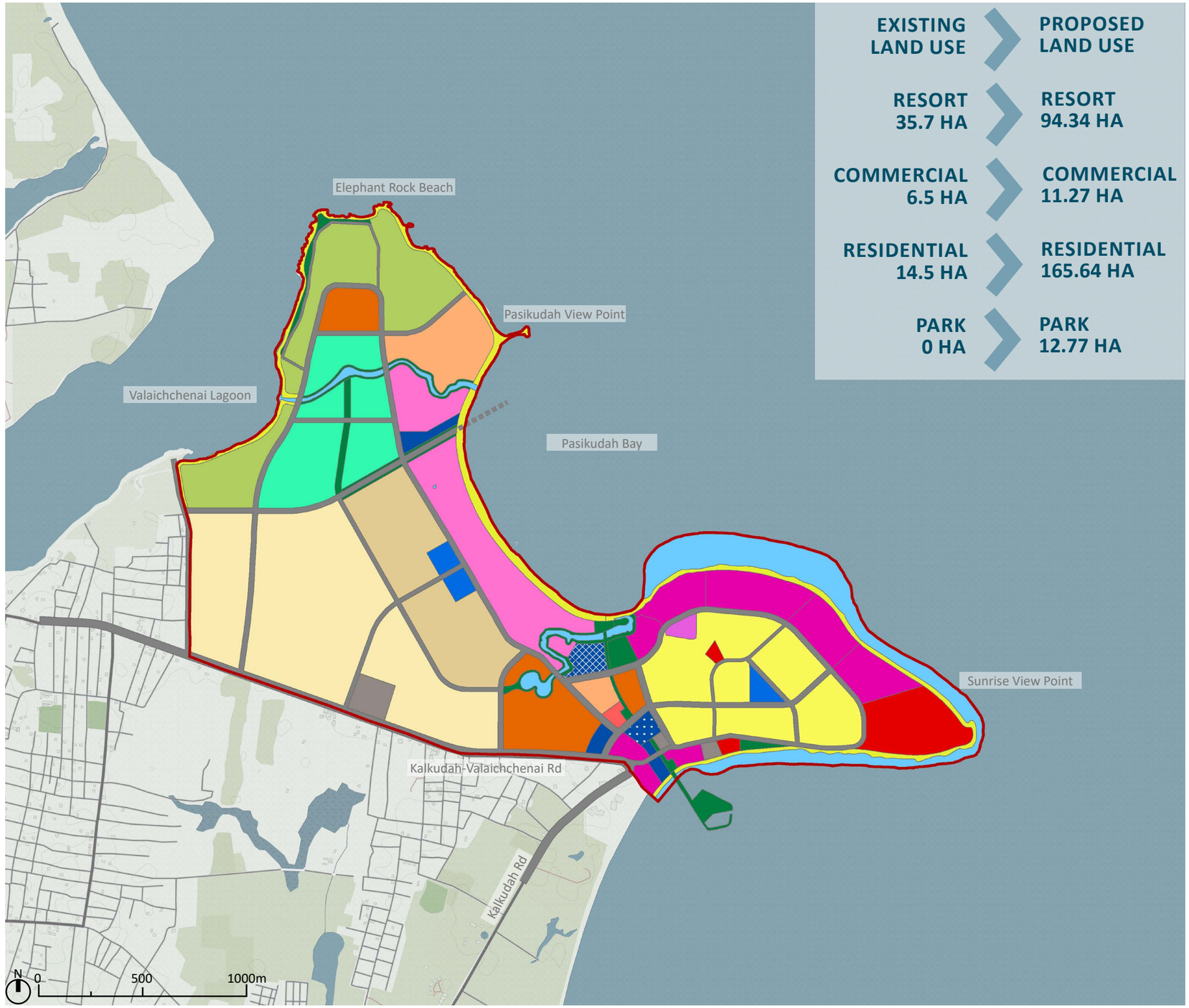


Figure 5.20 Proposed Land Use Plan

5.3.4 OPEN SPACE AND ATTRACTION POINTS

The proposed Pasikudah planning area envisions an expansive 12.77 hectares of lush open space, intricately woven throughout the landscape and seamlessly linking its major attractions. This green connectivity not only enhances the area's natural beauty but also promotes a walkable neighborhood, inviting both locals and tourists to explore at a leisurely pace. Visitors can traverse this vibrant expanse, enjoying an alternative mode of exploration that encourages walking or biking through the scenic surroundings.

The green connectivity extend from the tranquil shores of Elephant Rock Beach to the captivating Sunset View Point in the east-west direction, while in the north-south direction, they connect the bustling beach front plaza to the yacht berth, creating a harmonious blend of nature and leisure that enriches the entire community.

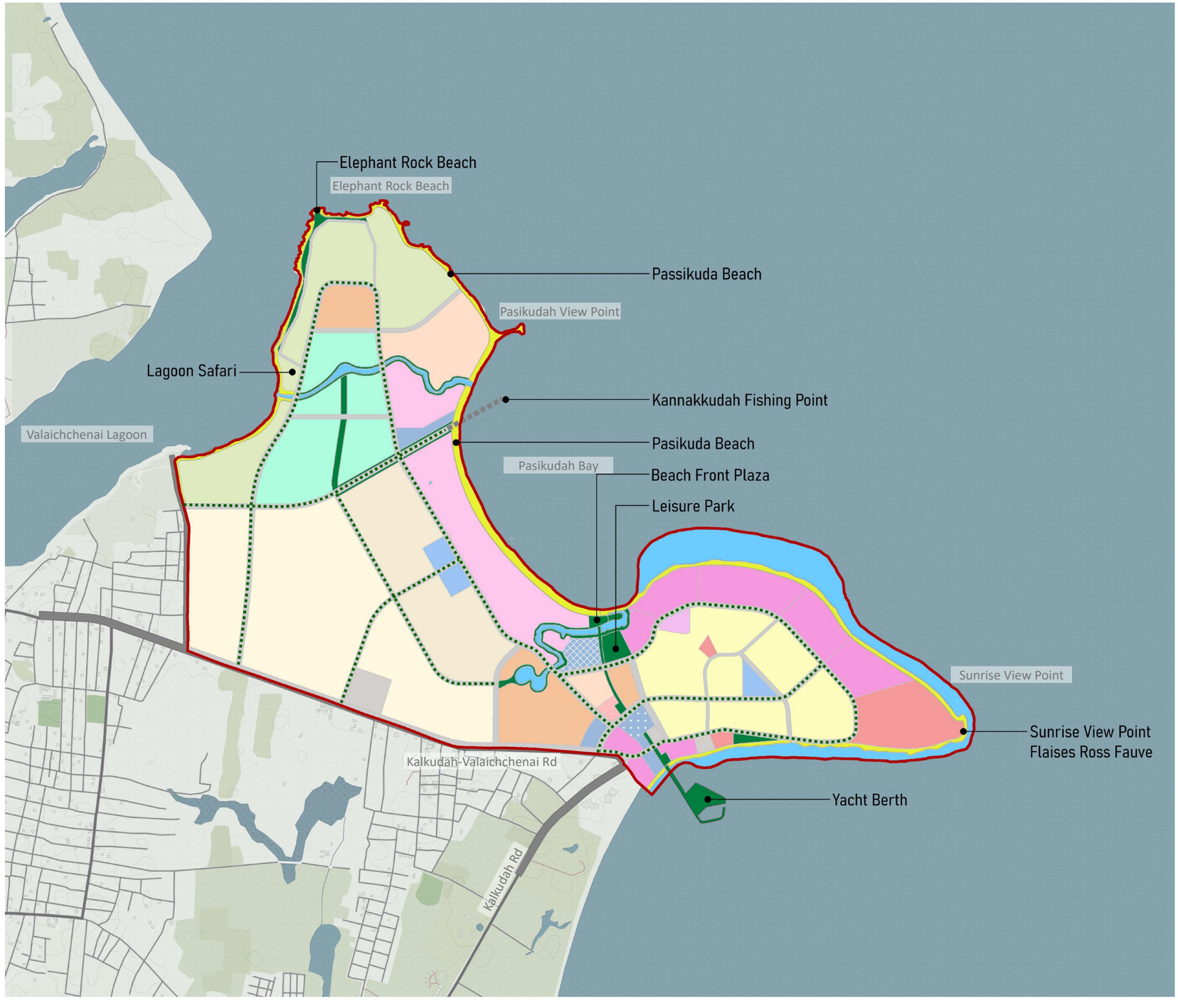


Figure 5.21 Open Space and Attraction Points (Pasikudah)

5.3.5 PROPOSED TRANSPORT PLAN

Road Network Hierarchy - Pasikudah

The road network hierarchy in Pasikudah is strategically designed to support the area's development as a premier tourist destination while accommodating local residential needs. This hierarchical setup includes primary arterial roads, secondary arterial roads, and collector roads, each serving distinct functions:

Primary Arterial Roads:

The primary arterial road in Pasikudah is designed to ensure efficient regional connectivity, linking directly to major highways such as the AB38 and A15 to Batticaloa. This connection is crucial for facilitating high-speed and high-volume traffic flow, enabling easy access to and from Pasikudah for tourists and goods. The primary arterial's role is vital in integrating Pasikudah with larger economic centers and other parts of the country, making it essential for economic growth and accessibility.

Secondary Arterial Roads

Secondary arterial roads in Pasikudah cater to important local functions, connecting residential areas, eco-lodges, and resorts. These roads are designed to handle a significant amount of traffic but with more access points compared to primary arterials. The layout supports tourism-related activities by providing smoother access to accommodations and leisure destinations within the region, thus enhancing the overall visitor experience without compromising on traffic flow.

Collector Roads

Collector roads in Pasikudah are primarily focused on residential access. These roads are essential for local traffic, providing a network that supports daily commutes and access to essential services for residents. They collect traffic from local streets and distribute it to the broader arterial network, ensuring that residential areas are well-connected yet free from the congestion typically associated with primary and secondary arterials.

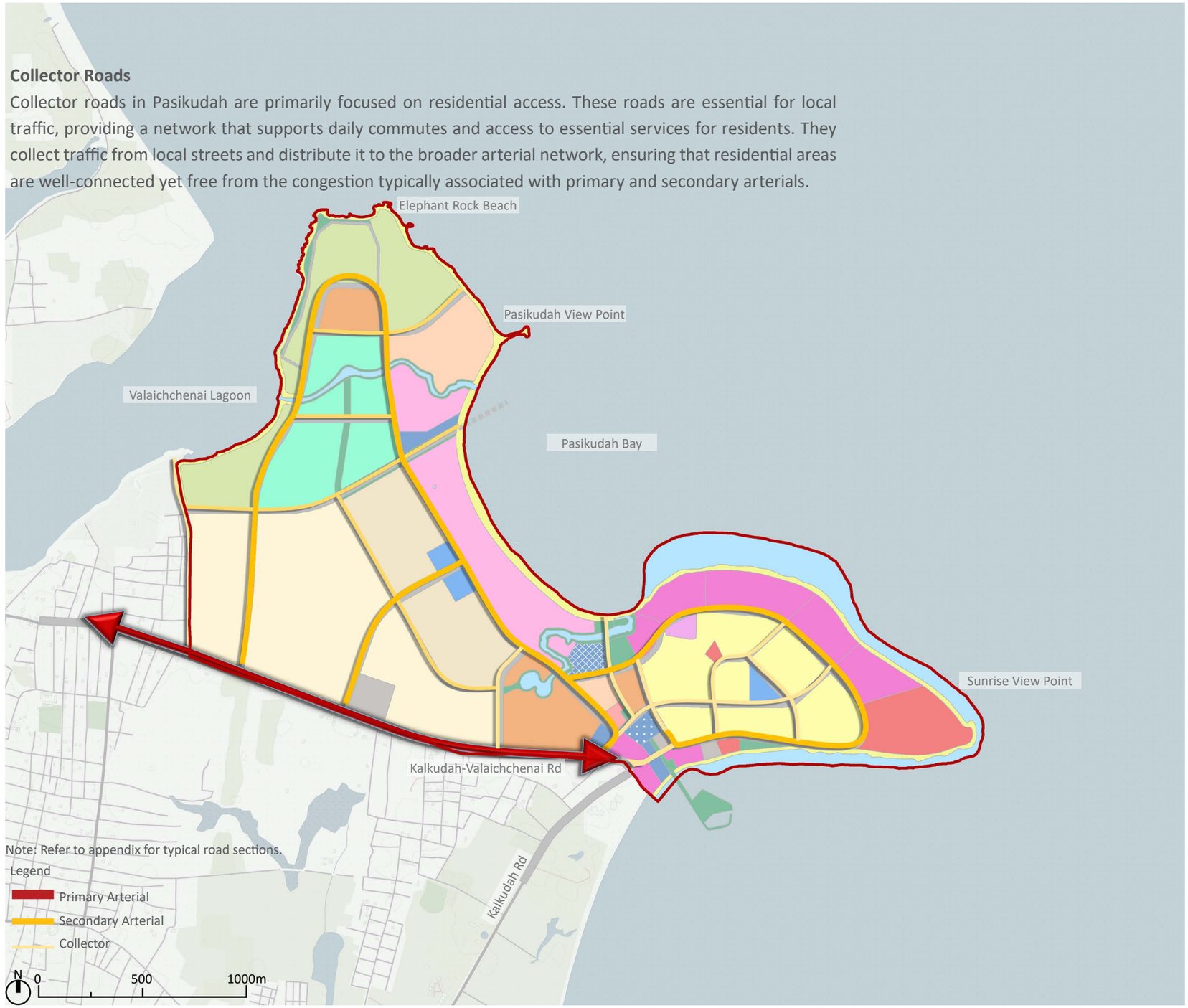


Figure 5.22 Proposed Transport Plan

5.3.6 PROPOSED INFRASTRUCTURE

TRAFFIC DEMAND FORECASTING

This section provides a detailed analysis of the traffic demand for the Pasikudah study area, considering various land use types, their respective areas, plot ratios, total gross floor area (GFA), and trip generation values.

The proposed land use area for Pasikudah covers a total of 479.7 hectares. The land use distribution includes commercial areas, residential zones, resorts & hotels, public parks, and other facilities such as community centers. This diverse mix of land uses is expected to generate substantial traffic, necessitating thorough planning and strategic management to ensure efficient traffic flow and minimize congestion.

Analysis and Observations

The traffic demand forecast for the Pasikudah study area reveals significant variations in trip generation across different land use types, reflecting the distinct characteristics and activities associated with each type.

Commercial Areas: The commercial night market and general commercial areas generate considerable traffic, especially during the evening hours. This is indicative of the vibrant retail activity that attracts visitors towards the end of the business day. The commercial night market, with its mix of retail and entertainment options, is a major draw for both locals and tourists, contributing to high traffic volumes during the PM peak periods.

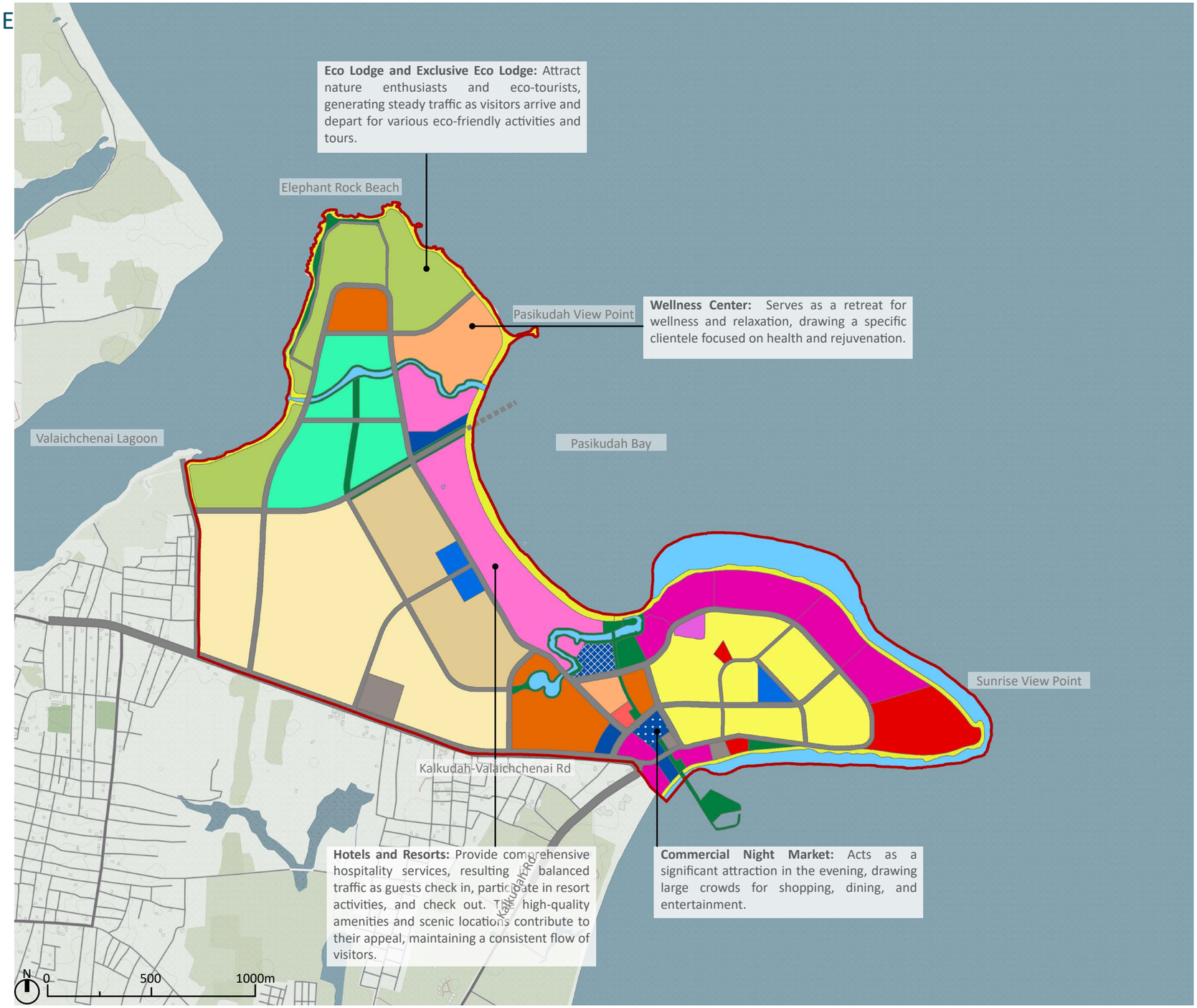


Figure 5.23 Traffic Demand Forecasting

Resorts & Hotels: The various resort and hotel facilities exhibit balanced traffic patterns throughout the day, aligning with typical check-in and check-out times. These areas are designed to cater to both short-term visitors and long-term guests, offering a range of amenities and activities that maintain consistent traffic levels.

Residential Areas: The residential zones, including investment residential, low-density, and mid-density areas, display typical commuting patterns with higher outbound trips in the morning and higher inbound trips in the evening. These areas are characterized by their family-friendly environments and community-focused amenities.

Community and Other Facilities: The neighborhood center and visitor center act as local hubs, supporting a range of activities that generate significant traffic. These centers are essential for community engagement, providing spaces for social, recreational, and educational activities.

	Proposed Land Use	Total GFA (sqm)	Trip Gen (veh)			
			AM In	Am Out	PM In	Pm Out
	Commercial Night Market	15,294	67	41	211	228
	Commercial Entertainment	24,730	109	66	341	369
	Eco Lodge	155,305	214	84	168	214
	Exclusive Eco Lodge	74,258	102	40	80	102
	Hotel	12,291	18	7	14	18
	Resort	154,931	232	91	181	232
	Exclusive Resort	157,965	218	85	171	218
	Wellness Center	76,037	105	41	82	105
	Mixed Use	312,517	260	170	210	240
	Investment Residential	340,806	38	126	121	75
	Residential Low Density	444,673	122	389	389	233
	Residential Mid Density	613,818	83	272	262	161
	Neighborhood Center	45,082	564	289	527	595
	Visitor Center	7,839	98	50	92	103
	Total		**2,394**	**1,848**	**3,360**	**3,446**

Table 5.6 Trip Generation Projection

Peak Hour Calculation

To determine the required number of lanes, we calculate the peak hour traffic volume:

Total Peak Hour Volume (Inbound) = 3,360 vehicles/hour
Total Peak Hour Volume (Outbound) = 3,446 vehicles/hour

Since the site has three access points, the traffic will be divided among these accesses:

Peak Hour Volume per Access (Inbound) = 3,360 / 3 ≈ 1,120 vehicles/hour

Peak Hour Volume per Access (Outbound) = 3,446 / 3 ≈ 1,149 vehicles/hour

Lane Capacity

Assuming a lane capacity of 1,100 vehicles per hour per lane:

Number of Lanes= Peak Hour Volume/Lane Capacity

Inbound Lanes Calculation per Access

Number of Inbound Lanes= 1,120 / 1,100 ≈ 1.02 ≈ 1 lane (rounded up)

Outbound Lanes Calculation per Access

Number of Outbound Lanes= 1,149 / 1,100 ≈ 1.04 ≈ 1 lane (rounded up)

Conclusion

Given the peak hour traffic volumes distributed across three access points, each access will require approximately 1 lane for both inbound and outbound traffic to ensure smooth traffic flow and avoid congestion, especially during peak hours. The proposed right-of-way (ROW) for the entire development provides sufficient capacity to handle the traffic at each access, considering potential future traffic growth.

PHASE 1 (HIGH CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	2.02	20,241	6.4	89	54	279	302
Commercial Night Market	1.53	15,294	4.8	67	41	211	228
Commercial Entertainment	2.47	24,730	7.8	109	66	341	369
Executive Resort	14.39	143,921	45.5	99	39	78	99
Wellness Center	2.34	23,399	7.4	16	6	13	16
Mixed Use	2.02	20,212	6.4	25	16	20	23
Investment Residential	3.81	38,142	12.1	4	13	13	8
Yacht Berth + Marina	2.3	22,650	7.2	2	2	14	11
Visitor Center	0.78	7,839	2.5	98	50	92	103
TOTAL	**25.28**	**252,769**		**450**	**242**	**893**	**984**

Table 5.7 Traffic Demand for Phase 1 (High Case)

PHASE 1 (LOW CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	0.97	9,662	3.1	43	26	133	144
Commercial Night Market	1.53	15,294	4.8	67	41	211	228
Commercial Entertainment	2.47	24,730	9.8	109	66	341	369
Executive Resort	14.39	143,921	45.5	99	39	78	99
Wellness Center	0.85	8,461	2.7	6	2	5	6
Mixed Use	2.02	20,212	6.4	25	16	20	23
Yacht Berth + Marina	2.3	22,650	9	2	2	14	11
Visitor Center	0.78	7,839	2.5	98	50	92	103
TOTAL	**25.28**	**252,769**		**450**	**242**	**893**	**984**

Table 5.8 Traffic Demand for Phase 1 (Low Case)

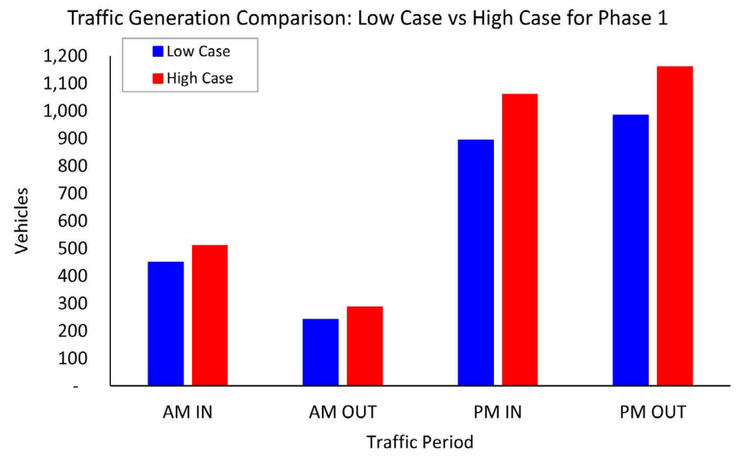


Figure 5.24 Traffic Demand for Phase 1: Comparing High Case and Low Case Scenario

Impact Analysis:

Low Case Scenario Impact:

- **Traffic Volume:** The low case scenario generates significantly lower traffic volumes compared to the high case scenario.
- **Infrastructure Requirements:** Requires fewer infrastructure upgrades. Each access point will need approximately 1 lane for both inbound and outbound traffic.
- **Congestion Levels:** Lower traffic volumes will result in less congestion, easier traffic management, and lower infrastructure costs.
- **Suitability:** Suitable for gradual development and easier to manage within the short-term planning horizon (0-5 years).

High Case Scenario Impact:

- **Traffic Volume:** The high case scenario generates substantially higher traffic volumes.
- **Infrastructure Requirements:** Requires more robust infrastructure. Minimum of 1 lane remain sufficient to provide for both inbound and outbound traffic.
- **Congestion Levels:** Higher traffic volumes may lead to more congestion, requiring advanced traffic management strategies and higher infrastructure investment.
- **Suitability:** Suitable for more aggressive development, aiming for higher economic activity but necessitates careful planning and investment in traffic management and infrastructure.

Specific Impacts Due to High Case Scenario:

- **Increased Traffic Congestion:** This increase will lead to higher congestion during peak hours, necessitating advanced traffic management systems to handle the increased load.
- **Higher Infrastructure Costs:** To accommodate the higher traffic volumes, additional infrastructure investments will be required. This includes widening roads, adding lanes, and improving intersections to ensure smooth traffic flow.
- **Enhanced Public Transport Needs:** With the higher traffic volumes, there will be a greater need for efficient public transport systems to reduce reliance on private vehicles. This includes increasing the frequency of buses, adding new routes, and potentially introducing new forms of public transport.
- **Environmental Impact:** Higher traffic volumes can lead to increased emissions and noise pollution. Sustainable transport solutions and green infrastructure will be necessary to mitigate these environmental impacts.
- **Economic Activity:** The high case scenario supports a higher level of economic activity due to the increased development intensity. This can attract more businesses and tourists, leading to greater economic benefits for the area.

TRANSPORT PROJECTS

To accommodate the projected increase in traffic volumes and ensure smooth traffic flow, the focus should be on upgrading and expanding the existing road infrastructure within Pasikudah. This includes widening roads, adding lanes, and integrating pedestrian spaces and green corridors to create a more sustainable and pleasant urban environment. The proposed right-of-way (ROW) will facilitate balanced development, catering to both vehicular and pedestrian needs.

1. **Upgrading of Existing Primary Arterial Road:** Enhance capacity and reduce congestion by expanding key arterial roads to dual-3 lanes. This plan will facilitate smoother traffic flow and accommodate higher vehicle volumes, especially during peak tourist seasons.

2. **Upgrading of Existing Secondary Arterial Road:** Improve traffic flow and connectivity by upgrading secondary arterial roads to dual-2 lanes. This enhancement will support better distribution of traffic and provide improved access to key areas within Pasikudah.

3. **Upgrading of Existing Collector Road:** Enhance local access and circulation within Pasikudah by upgrading collector roads. Improved collector roads will ensure efficient movement within neighborhoods and connect local traffic to the primary and secondary arterial roads.

PROPOSED ROAD NETWORK

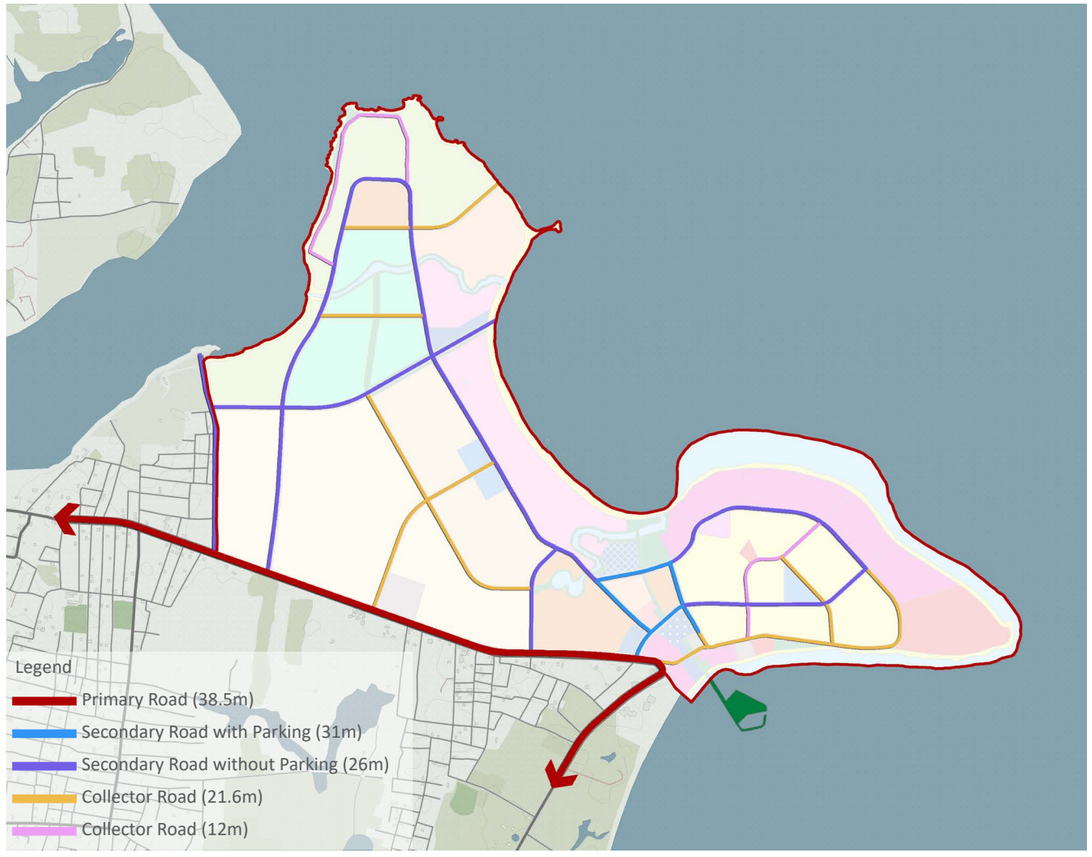


Figure 5.25 Road Network

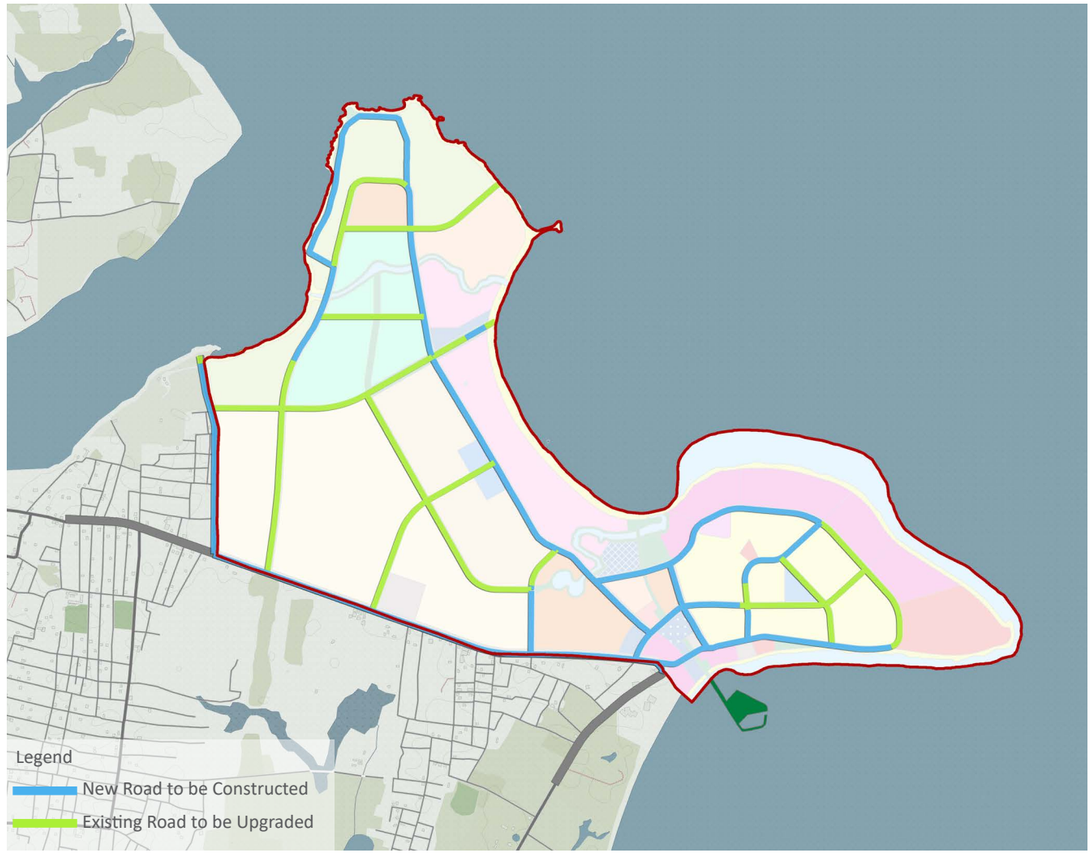


Figure 5.26 New and Upgrade Roads

STORM WATER DRAINAGE

- Storm water drainage is considered as basic infrastructure, which will not only reduce the flood damage, but also promote economic activities & improve the water environment.

- Being located along coastal line, developments are extremely vulnerable to the impact of sea level rise. This is especially serious when high tides coincide with heavy rain.

Measures to be considered:

- Coastline to be protected by sea walls / stone embankments that protect land and infrastructure from erosion and seawater intrusion.
- Structures such as dams and tidal gates & pumping stations where there are coastal reservoirs & outlet drains
- Optimal planning such as detention pond, open space, park, etc.
- Source control – treatment at source, such as rainwater harvesting system, and others can be considered for the purpose of:
  - minimise post development runoff
  - improve runoff water quality
  - provide landscaping & recreational space

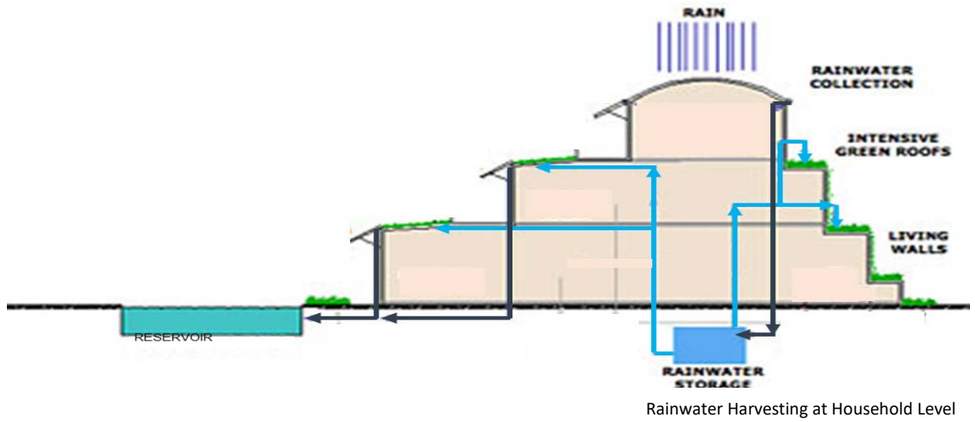
- The collection and convey system comprises the roadside drains and their main function is to collate all the surface runoff from the land plots and carriageway and release to the nearest water body. The size of the drains varies from about 1.2 to 2.0m approximately for various categories of roads. This can vary depending on sub-catchment of storm water discharge location and alignment.



Type of Green Roof/ Rooftop Greenery



Stormwater pond at Yishun (Source: Nparks, Singapore)



Rainwater Harvesting at Household Level

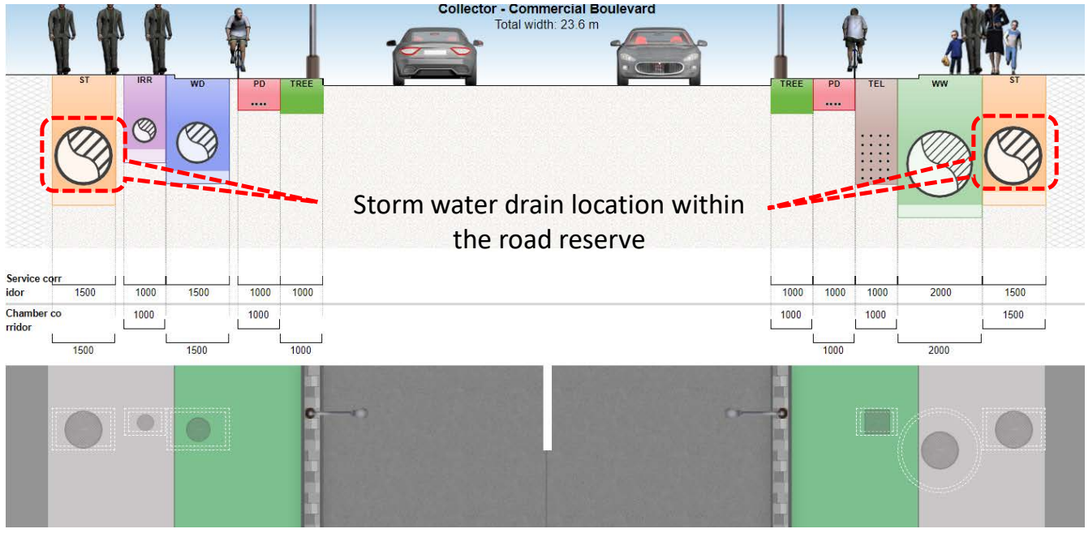


Figure 5.27 Typical Service Corridor Section

UNIT DEMAND (WATER, SOLID WASTE AND POWER)

- In deriving the projected utilities demand for the planning boundary, the unit demand of the various uses would need to be determined first, the table shows the unit utility (water, sewer, solid waste & power) demand used for Eastern Province. These figures are obtained from various sources including local standards and similar projects carried out by SJ in different countries.

- Based on the proposed unit demand, proposed land use distribution and projected population, the ultimate total average demand for various utilities has been worked out and shown in the following sections.

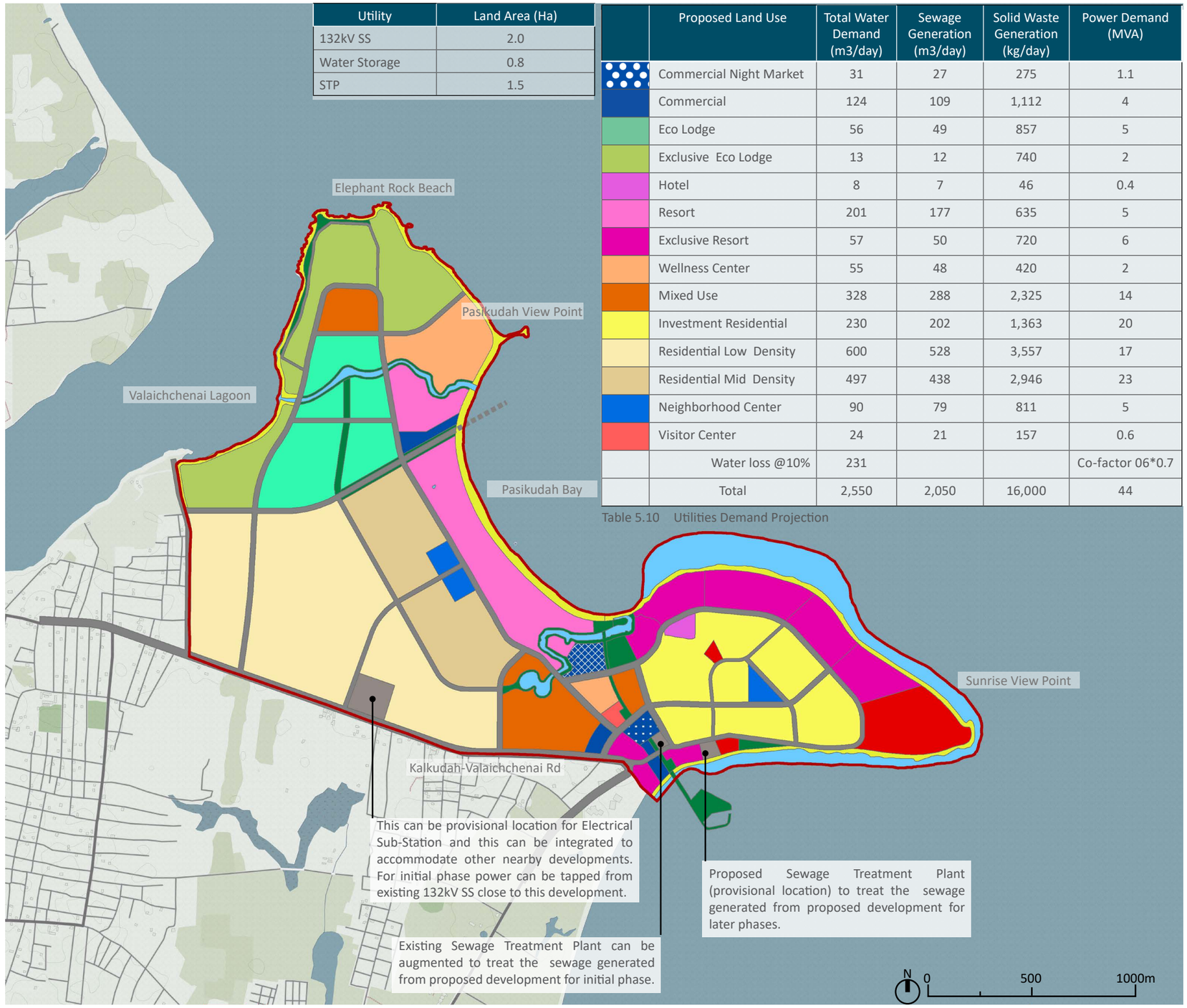
Sl No	Land Use	Unit Water Demand (m3/ha/d)/(lpcd)	Unit Solid Waste Generation (kg/ha/d), (room),(kg/d)	Unit Power Demand (VA/m2)
1	COMMERCIAL	15 - 25 m3/ha/d	160 - 200 kg/ha/d	90 - 110
2	ECO LODGE	250 - 350 l/room	1.6 kg/room	40 - 60
3	3*, 4* & 5* HOTEL	300 - 500 l/room	1.6 kg/room	70 - 90
4	OPEN SPACE/PARK	5 - 10 m3/ha/d		
5	INVESTMENT RESIDENTIAL	135 lpcd	0.8 kg/c/d	70 - 90
6	MID-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
7	LOW-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
8	MIXED USE	135 lpcd	0.8 kg/c/d	70 - 90
9	RESORT	500 - 700 l/room	1.6 kg/room	50 - 70
10	WELLNESS CENTER	500 - 700 l/room	1.6 kg/room	50 - 70
11	VISITOR CENTER	20 - 30 m3/ha/d	180 - 220 kg/ha/d	70 - 90

Table 5.9 Unit Demand (Water, Solid Waste and Power)

- lpcd = litre per capita per day
- Sewage; 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration.
- Recycle Water; The source for recycle water is from sewage treatment plant. The recycle water is treated to standards required for its various uses (i.e. made fit-for-purpose)

UTILITIES DEMAND PROJECTION (PASIKUDAH)

- The average water demand for the development is estimated by using unit water demand for each land use. Both potable water and recycle water shall serve the development. Water from local authority , Ground water, rainwater harvested, can be the main sources of raw water. The source for recycle water shall be from the proposed Sewage Treatment Plant (STP). The recycle water can be used for non-potable purposes.
- There are deficiency in water supply, NWSDB has proposed to implement the Valaichchenai water supply project with the capacity of 20,000 m3/day WTP to cater the drinking water demand of the areas starting as phase 1, if this project gets started, it may be sufficient for catering intervention area initially.
- 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration. Sewage generated from the commercial / residential activities shall be conveyed to sewage treatment plant.
- The solid waste generation is estimated based on population and land use within the proposed development. To treat the ultimate solid waste generated, about 5.5ha of engine landfill site is required, this has to be located outside the development. Alternately, existing landfill site can be augmented.
- Power demand is projected based on land use distribution, gross plot ratio, power demand density and coincidence factor. Generally, coincidence factor are applied in the power demand computation as consumers are unlikely to consume their peak demand simultaneously.



	Proposed Land Use	Total Water Demand (m3/day)	Sewage Generation (m3/day)	Solid Waste Generation (kg/day)	Power Demand (MVA)
	Commercial Night Market	31	27	275	1.1
	Commercial	124	109	1,112	4
	Eco Lodge	56	49	857	5
	Exclusive Eco Lodge	13	12	740	2
	Hotel	8	7	46	0.4
	Resort	201	177	635	5
	Exclusive Resort	57	50	720	6
	Wellness Center	55	48	420	2
	Mixed Use	328	288	2,325	14
	Investment Residential	230	202	1,363	20
	Residential Low Density	600	528	3,557	17
	Residential Mid Density	497	438	2,946	23
	Neighborhood Center	90	79	811	5
	Visitor Center	24	21	157	0.6
	Water loss @10%	231			Co-factor 06*0.7
	Total	2,550	2,050	16,000	44

Table 5.10 Utilities Demand Projection

Figure 5.28 Utilities Demand Projection (Pasikudah)

5.3.7 ENVIRONMENTAL STRATEGIES

- Pasikudah- Kalkudah Bays have been declared as Special Management Areas under the legal provisions of the CC&CRM Act.

- Punniyakudah Point to Outlet Near Pasikudah Fishery Landing Site, 65m setback is kept including 25m reservation as of CC & CRM Act. Outlet Near Pasikudah Fishery Landing Site to Nasivanthive Lagoon Mouth, 110m setback is kept including 40m reservation as of CC & CRM Act.



Figure 5.29 Environmental Strategies

5.3.8 SOCIAL STRATEGIES

COMMUNITY-BASED FISHERIES MANAGEMENT: Fishing has been a key economic activity along the eastern coastal areas, including Trincomalee, Pasikudah, and Arugam Bay, so promoting fisheries industry is important for local as well as national economic development. However, in order to minimise impacts on local communities, it is recommended to engage communities through participatory decision making in fisheries management.

INTEGRATION OF TRADITIONAL FISHING INDUSTRY WITH TOURISM: Traditional fishing is a great potential to promote tourism in the eastern coastal belt, particularly in Pasikudah area as it is emerging as a destination among local as well as international visitors.. Benefits can be leveraged to local fishing communities in Pasikudah by integrating fishing and tourism industries. Traditional fishing villages shall be preserved. However, value addition activities in fishing communities/ fishing areas shall be promoted. Local communities shall be provided with a mandatory quota for the employment opportunities generated through these value addition activities.

COMMUNITY-FOCUSED PHYSICAL DEVELOPMENT: Physical development may lead to community segregation through relocation that does not achieve the development targets or sustainability of proposed development activities. So, physical development shall focus on leveraging benefits to local communities rather than forcing them to be left out from development activities either through relocation or not letting them in the decision-making process.



Figure 5.30 Social Strategies

5.3.9 DEVELOPMENT PHASING (HIGH CASE SCENARIO)

Recommendation for short Terms of the development will lay the foundation for the project, encompassing a total land area of 35 hectares. This phase will see the establishment of a hospitality sector that includes 16 hectares dedicated to a five-star resort and eco-lodges, which are aimed at providing a luxurious and environmentally conscious accommodation option for visitors. Additionally, 13 hectares will be allocated for the construction of a four-star hotel, offering high-quality accommodations. Supporting these hospitality ventures, 3 hectares will be devoted to retail and tourist amenities, and 2 hectares will be used for a wellness center, serving as essential facilities to enhance the overall tourism experience.

Mid Terms recommended a substantial expansion, utilizing a total of 69 hectares of land. This phase will further develop the hospitality sector with the addition of 26 hectares for a five-star resort and eco-lodges, and 21 hectares for a four-star hotel, continuing to build on the luxury and premium accommodations established in Phase 1. A new element introduced in this phase is a 1-hectare area designated for a three-star hotel, broadening the range of accommodation options. To support these developments, 3 hectares will be dedicated to retail and tourist amenities, 4 hectares for an expanded wellness center, and 2 hectares will be set aside for a yacht berth and marina, enhancing the site's appeal as a premium tourist destination with diverse offerings.

Long Terms of the project phasing recommends the most extensive stage of the development, covering 105 hectares. In this phase, the hospitality sector will be further augmented with 37 hectares assigned to a five-star resort and eco-lodges, 30 hectares for a four-star hotel, and 1 hectare for a three-star hotel, continuing the trend of diverse accommodation options. To support these facilities, 7 hectares will be allocated for retail and tourist amenities, 8 hectares for a wellness center, and 2 hectares for a yacht berth and marina. Additionally, this phase introduces a significant investment in residential infrastructure with 12 hectares dedicated to luxury villas, offering high-end residential options within the development.

Looking to the future, the project has reserved 211 hectares of land for potential further development, ensuring ample space for expansion and adaptability to future market demands.

Positioning: HIGH END TO LUXURY

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Wellness Centre**	2	4	8	Meditation center, Yoga and Pilates center, Hydrotherapy, vitality pool, Male/female sauna and steam room, Yoga pavilion and Yoga bale, Consultation rooms, Springwater pools, Massage centers, Ayurvedic treatment centers
2	**5-star resorts & Eco-lodges**	16	26	37	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon and beach views – optimising the views for destination weddings & events
3	**4-star resorts/hotels**	13	21	30	
4	**3-star Hotels**	1	1	1	Beach view resorts/ hotels
5	**Yacht berth + Marina**	2	2	2	Yachts for rental as a day/ night activity hosting parties and leisure entertainment
6	**Retail + Tourist amenities**	3	3	7	Restaurants, cafes, F&B kiosks, Themed dining, departmental stores, retail stores, souvenir stores, entertainment etc. Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information center, visitors center etc
7	**Investment residential**	0	12	20	In next 15 years 2 to 3 projects can be proposed
	Total	**37**	**69**	**105**	Total land area requirement (A+B+C) – **211 hectares**

Table 5.11 Development Phasing (High Case Scenario)

PHASE-1 (0-5 YEAR)

COMMERCIAL: Develop a vibrant mixed-use tourism zone that includes a night market, retail shops, and a yacht marina.

RESORTS & HOTELS: Develop a range of luxury accommodations along the beach and 3 to 4-star hotels facing the lagoon.

WELLNESS: Establish a wellness center situated along the main road and adjacent to the pedestrian spine.

PHASE-2 (5- 10 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels.

INVESTMENT RESIDENTIAL: Introducing investment residential

ECO TOURISM: Develop Exclusive Eco Lodge and Eco Lodge area

WELLNESS: Establish a wellness center

PHASE-3 (10- 15 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.

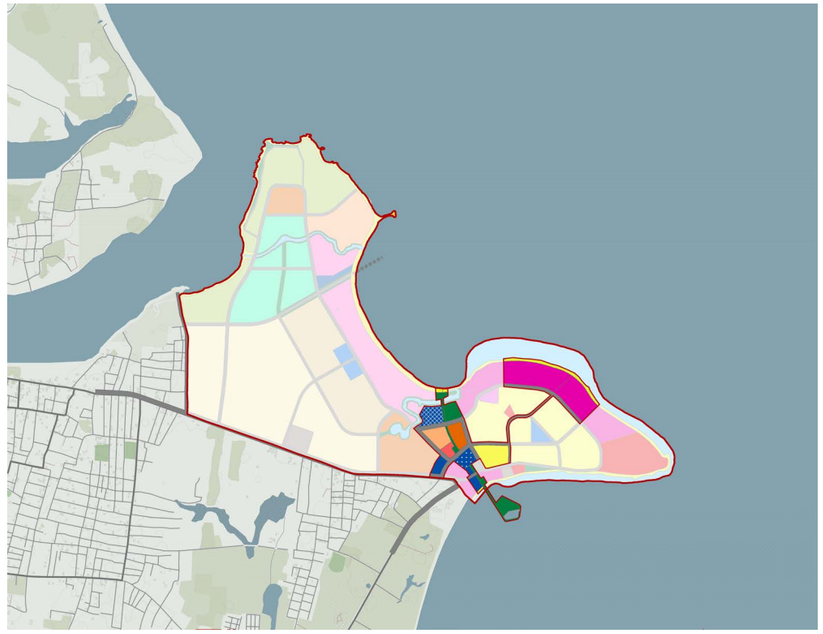
INVESTMENT RESIDENTIAL: Expansion of Investment Residential

COMMERCIAL: Establish fishing dock and commercial area for local fisherman.

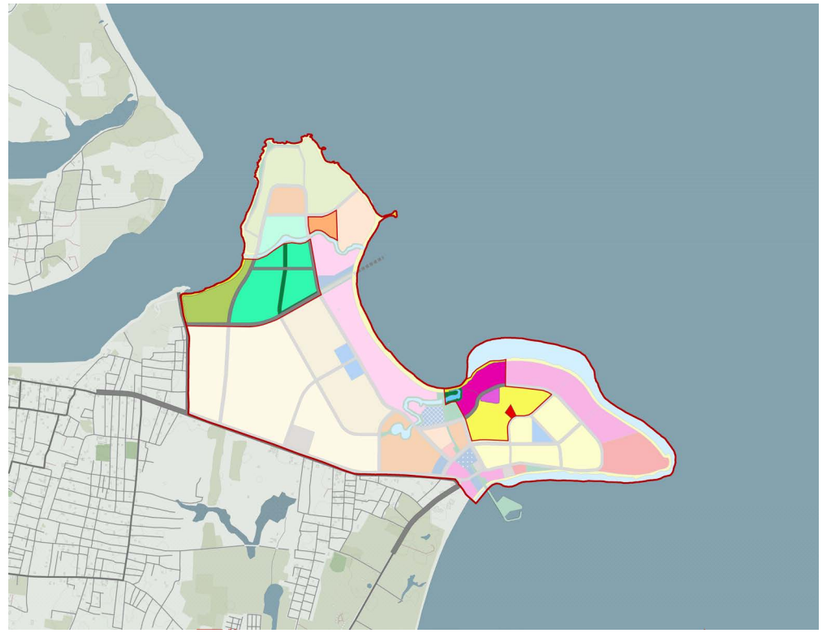
PHASE-4 (FUTURE)

MIXED USE: Establishment of gateway mixed use cluster

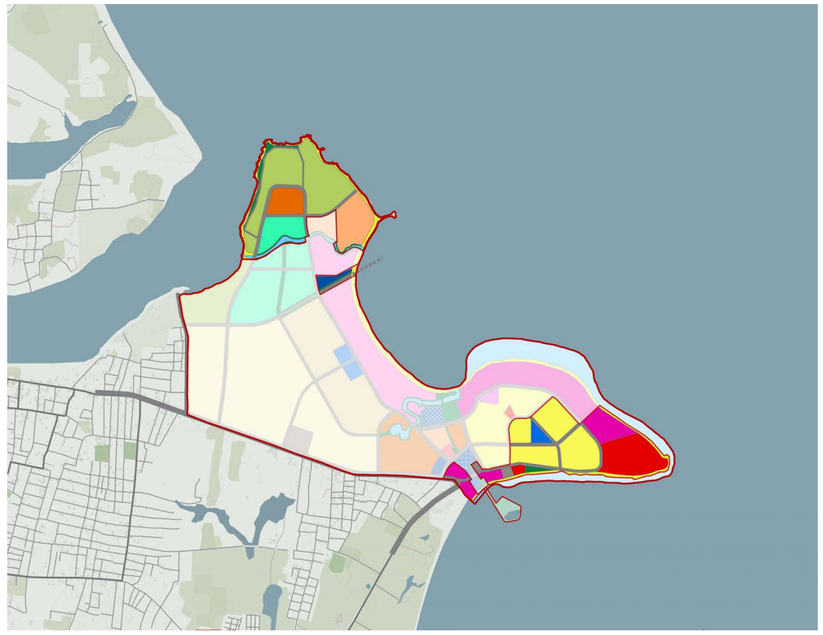
RESIDENTIAL: Low to Mid density residential to support future settlement.



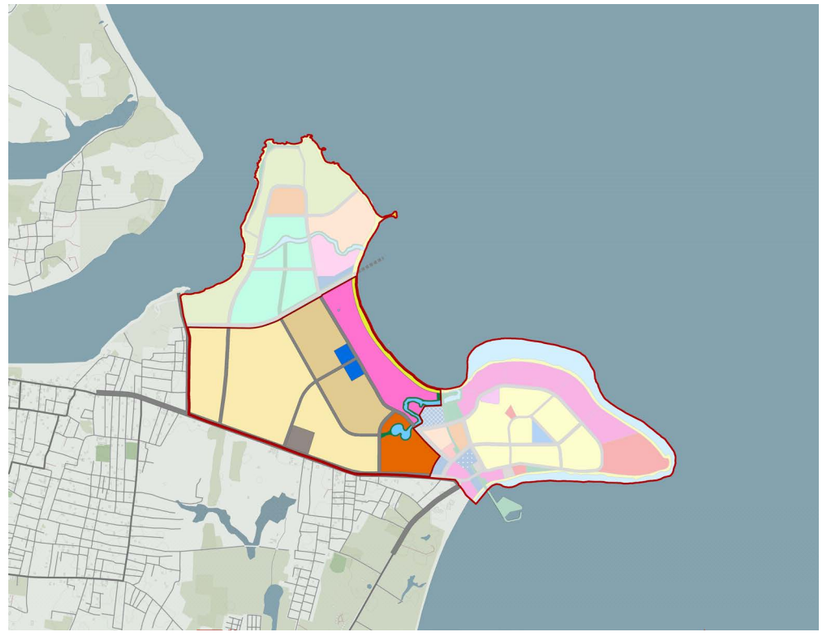
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 5.31 Phasing Strategies (High Case Scenario)

5.3.10 DEVELOPMENT PHASING (LOW CASE SCENARIO)

Recommendation for short Terms of the development will lay the foundation for the project, encompassing a total land area of 26 hectares. This phase will see the establishment of a hospitality sector that includes 11 hectares dedicated to a five-star resort and eco-lodges, which are aimed at providing a luxurious and environmentally conscious accommodation option for visitors. Additionally, 10 hectares will be allocated for the construction of a four-star hotel, offering high-quality accommodations. Supporting these hospitality ventures, 2 hectares will be devoted to retail and tourist amenities, and 1 hectares will be used for a wellness center, serving as essential facilities to enhance the overall tourism experience.

Mid Terms recommended a substantial expansion, utilizing a total of 45 hectares of land. This phase will further develop the hospitality sector with the addition of 14 hectares for a five-star resort and eco-lodges, and 13 hectares for a four-star hotel, continuing to build on the luxury and premium accommodations established in Phase 1. A new element introduced in this phase is a 1-hectare area designated for a three-star hotel, broadening the range of accommodation options. To support these developments, 1 hectares will be dedicated to retail and tourist amenities, 2 hectares for an expanded wellness center, and 2 hectares will be set aside for a yacht berth and marina, enhancing the site's appeal as a premium tourist destination with diverse offerings.

Long Terms of the project phasing recommends the most extensive stage of the development, covering 58 hectares. In this phase, the hospitality sector will be further augmented with 15 hectares assigned to a five-star resort and eco-lodges, 14 hectares for a four-star hotel, and 1 hectare for a three-star hotel, continuing the trend of diverse accommodation options. To support these facilities, 2 hectares will be allocated for retail and tourist amenities, 4hectares for a wellness center, and 2 hectares for a yacht berth and marina. Additionally, this phase introduces a significant investment in residential infrastructure with 20 hectares dedicated to luxury villas, offering high-end residential options within the development.

Positioning: HIGH END TO LUXURY

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Wellness Centre**	1	2	4	Meditation center, Yoga and Pilates center, Hydrotherapy, vitality pool, Male/female sauna and steam room, Yoga pavilion and Yoga bale, Consultation rooms, Springwater pools, Massage centers, Ayurvedic treatment centers
2	**5-star resorts & Eco-lodges**	11	14	15	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon and beach views – optimising the views for destination weddings & events
3	**4-star resorts/hotels**	10	13	14	
4	**3-star Hotels**	0	1	1	Beach view resorts/ hotels
5	**Yacht berth + Marina**	2	2	2	Yachts for rental as a day/ night activity hosting parties and leisure entertainment
6	**Retail + Tourist amenities**	2	1	2	Restaurants, cafes, F&B kiosks, Themed dining, departmental stores, retail stores, souvenir stores, entertainment etc. Banking facilities, Currency exchange, Medical clinics, Telecom facilities, Tourist information center, visitors center etc
7	**Investment residential**	0	12	20	In next 15 years 2 to 3 projects can be proposed
	Total	**26**	**45**	**58**	Total land area requirement (A+B+C) – **129 hectares**

Table 5.12 Development Phasing (Low Case Scenario)

PHASE-1 (0-5 YEAR)

COMMERCIAL: Develop a vibrant mixed-use tourism zone that includes a night market, retail shops, and a yacht marina.

RESORTS & HOTELS: Develop a range of luxury accommodations along the beach and 3 to 4-star hotels facing the lagoon.

WELLNESS: Establish a wellness center situated along the main road and adjacent to the pedestrian spine.

PHASE-2 (5- 10 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels.

INVESTMENT RESIDENTIAL: Introducing investment residential

WELLNESS: Establish a wellness center

PHASE-3 (10- 15 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.

ECO TOURISM: Develop Exclusive Eco Lodge and Eco Lodge area

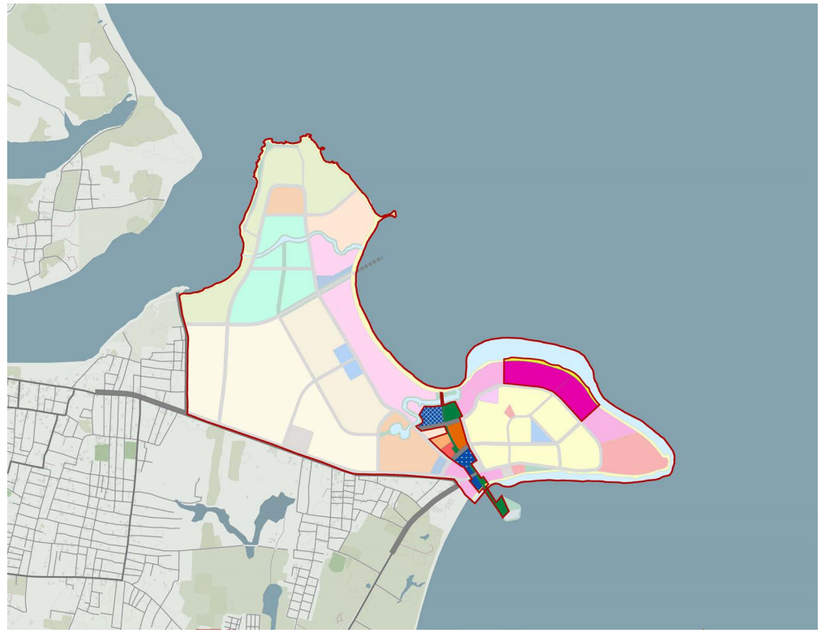
INVESTMENT RESIDENTIAL: Expansion of Investment Residential

PHASE-4 (FUTURE)

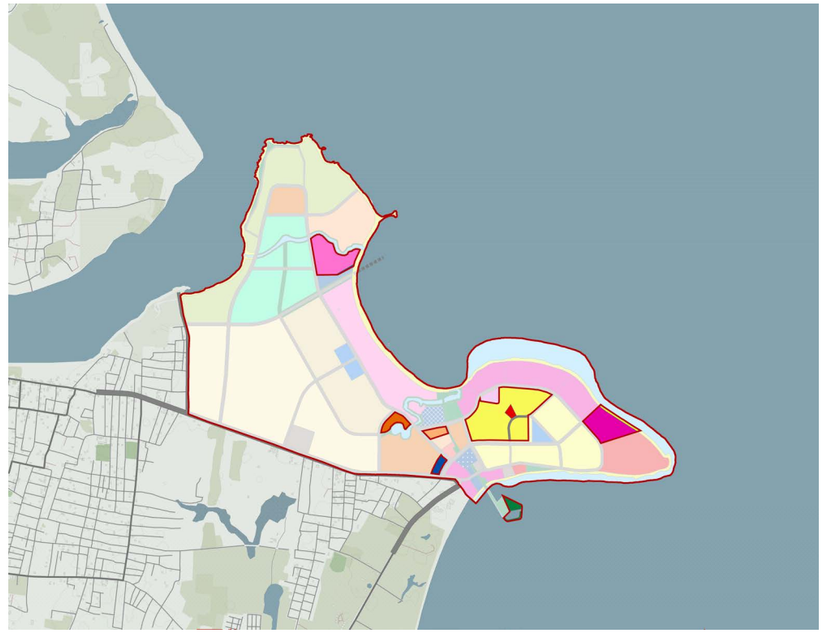
MIXED USE: Establishment of gateway mixed use cluster

RESIDENTIAL: Low to Mid density residential to support future settlement.

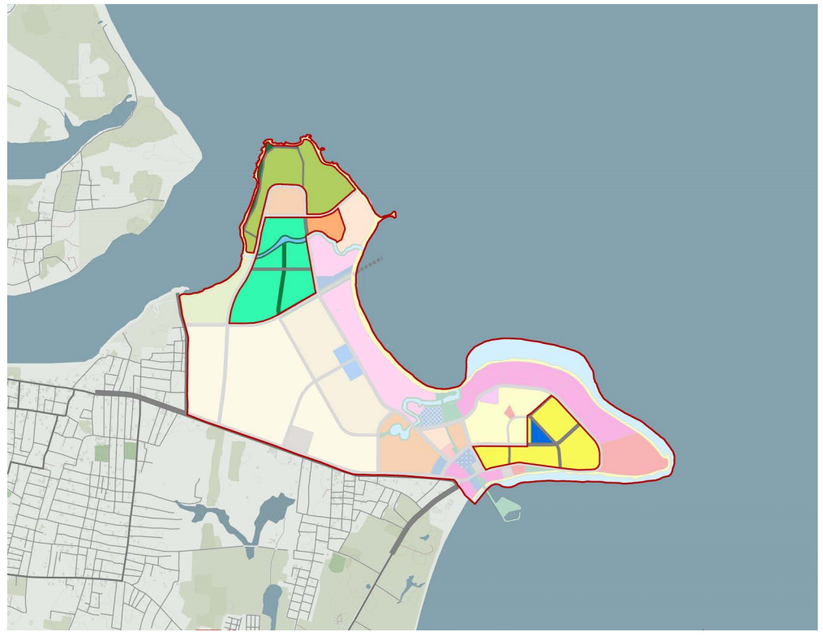
COMMERCIAL: Establish fishing dock and commercial area for local fisherman.



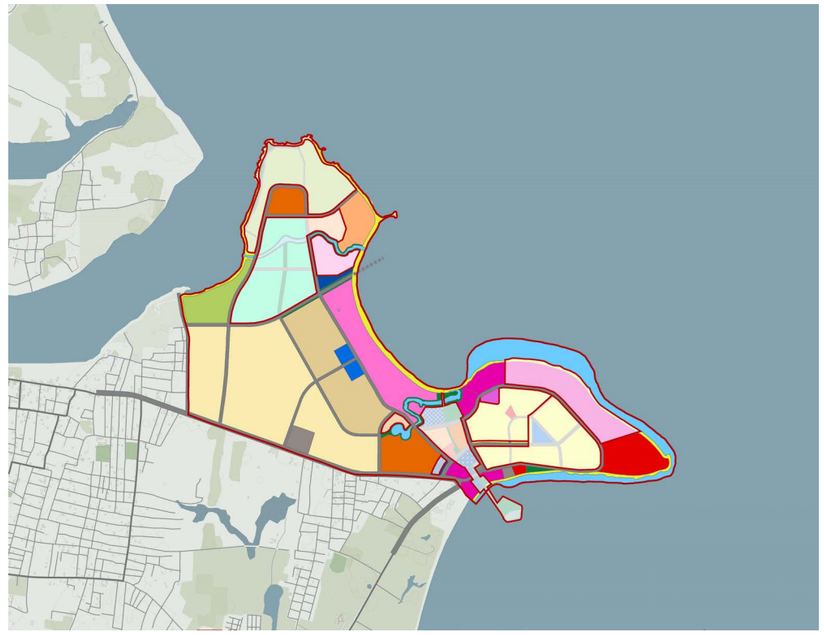
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 5.32 Phasing Strategies (Low Case Scenario)

PHASE WISE ROAD NETWORK

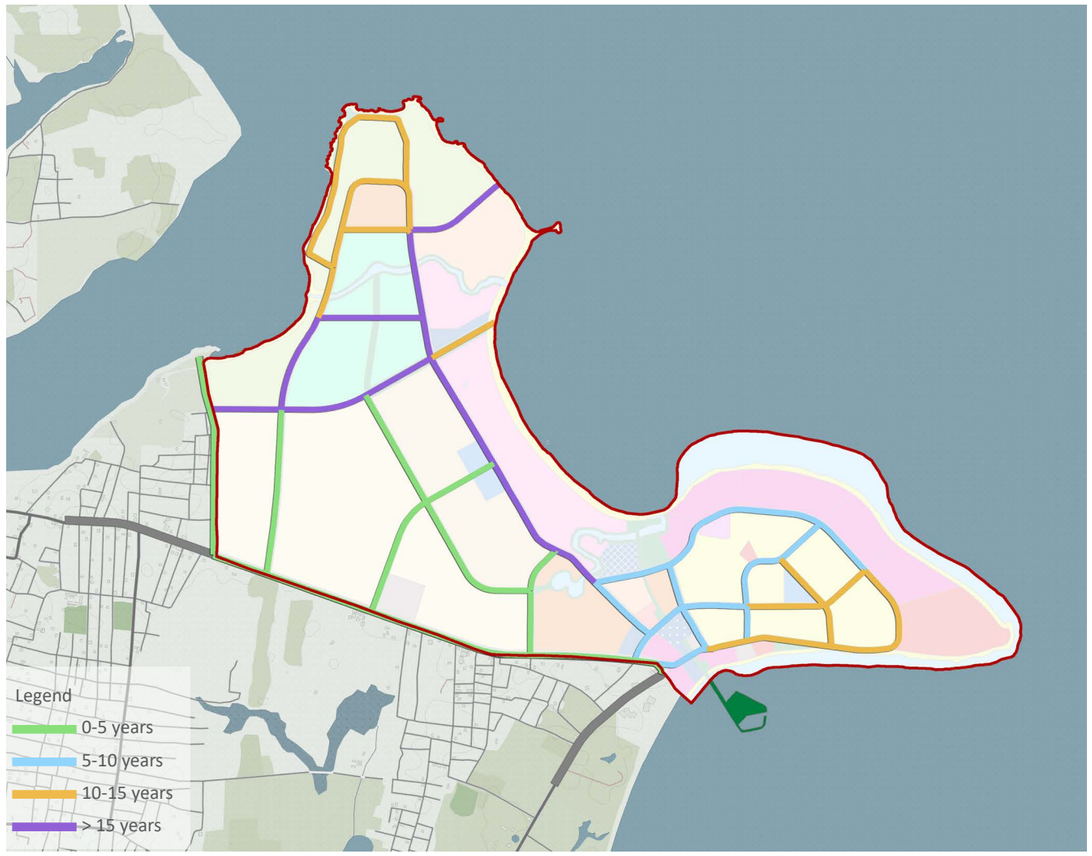


Figure 5.34 Phase wise Road Network (High Case)

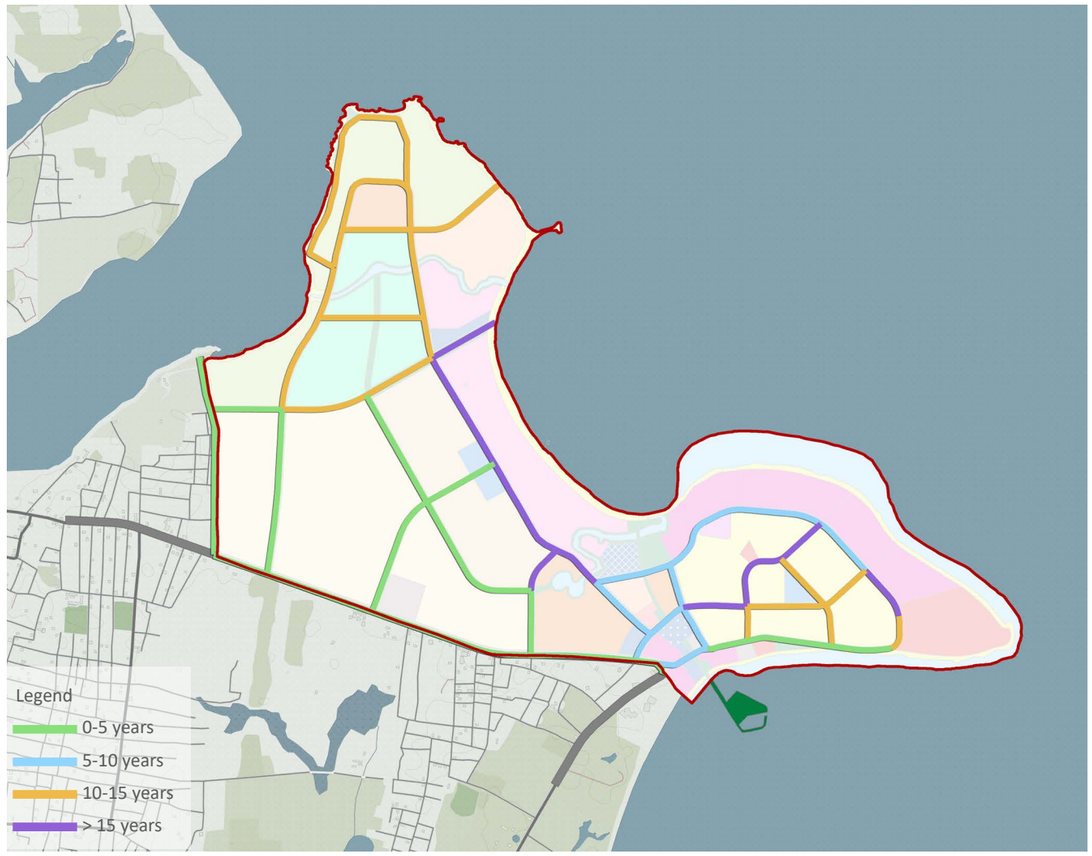


Figure 5.33 Phase wise Road Network (Low Case)

CRITICAL INFRASTRUCTURE PROJECTS

SUBSTATION – 2.0 HA
STP- 1.0 HA
WATER STORAGE- 0.4 HA
(Water storage will be distributed across multiple areas based on demand and ground level.)

Tapping of potable water (Valaichchenai water supply project), Augmentation of existing Sewage Treatment Plant and tapping of power supply from sub-station.

Note: Critical Infrastructure Projects are applicable for both High Case and Low Case Scenarios, module design will come under detailed engineering

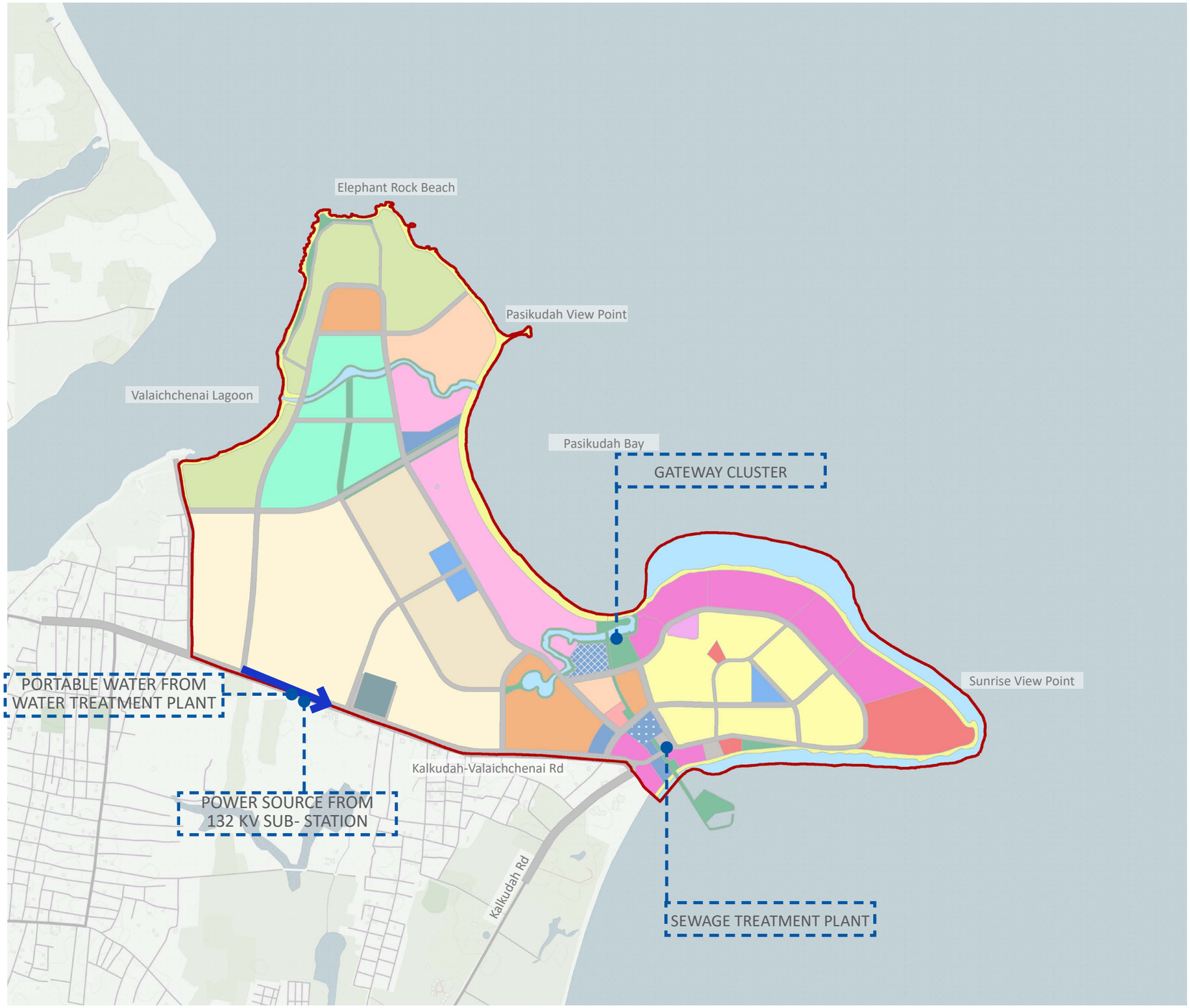
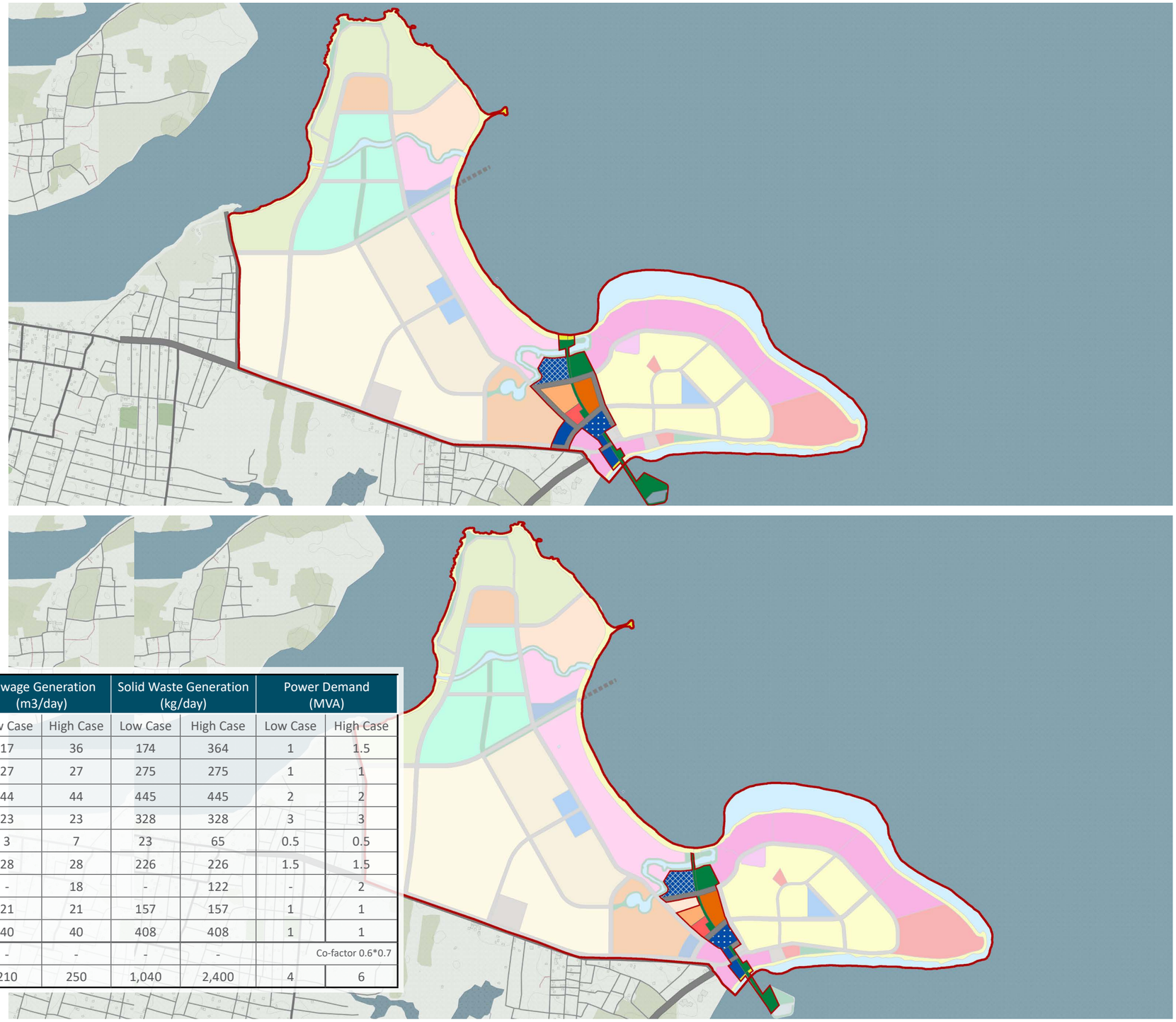


Figure 5.35 Critical Infrastructure Projects

UTILITIES DEMAND PROJECTION (PASIKUDAH)

- Utilities demand projection Phase 1 (Low Case & High Case Scenario) are estimated and shown in the table below.



Proposed Land Use		Total Water Demand (m3/day)		Sewage Generation (m3/day)		Solid Waste Generation (kg/day)		Power Demand (MVA)	
		Low Case	High Case	Low Case	High Case	Low Case	High Case	Low Case	High Case
	Commercial	19	41	17	36	174	364	1	1.5
	Commercial Night Market	31	31	27	27	275	275	1	1
	Commercial Entertainment	50	50	44	44	445	445	2	2
	Exclusive Resort	26	26	23	23	328	328	3	3
	Wellness Center	3	8	3	7	23	65	0.5	0.5
	Mixed Use	32	32	28	28	226	226	1.5	1.5
	Investment Residential	-	21	-	18	-	122	-	2
	Visitor Center	24	24	21	21	157	157	1	1
	Yatch Berth & Marina	45	45	40	40	408	408	1	1
	Water Loss @ 10%	23	28	-	-	-	-		Co-factor 0.6*0.7
	Total	260	310	210	250	1,040	2,400	4	6

5.3.11 ACTION PROJECTS

CATALYTIC PROJECTS

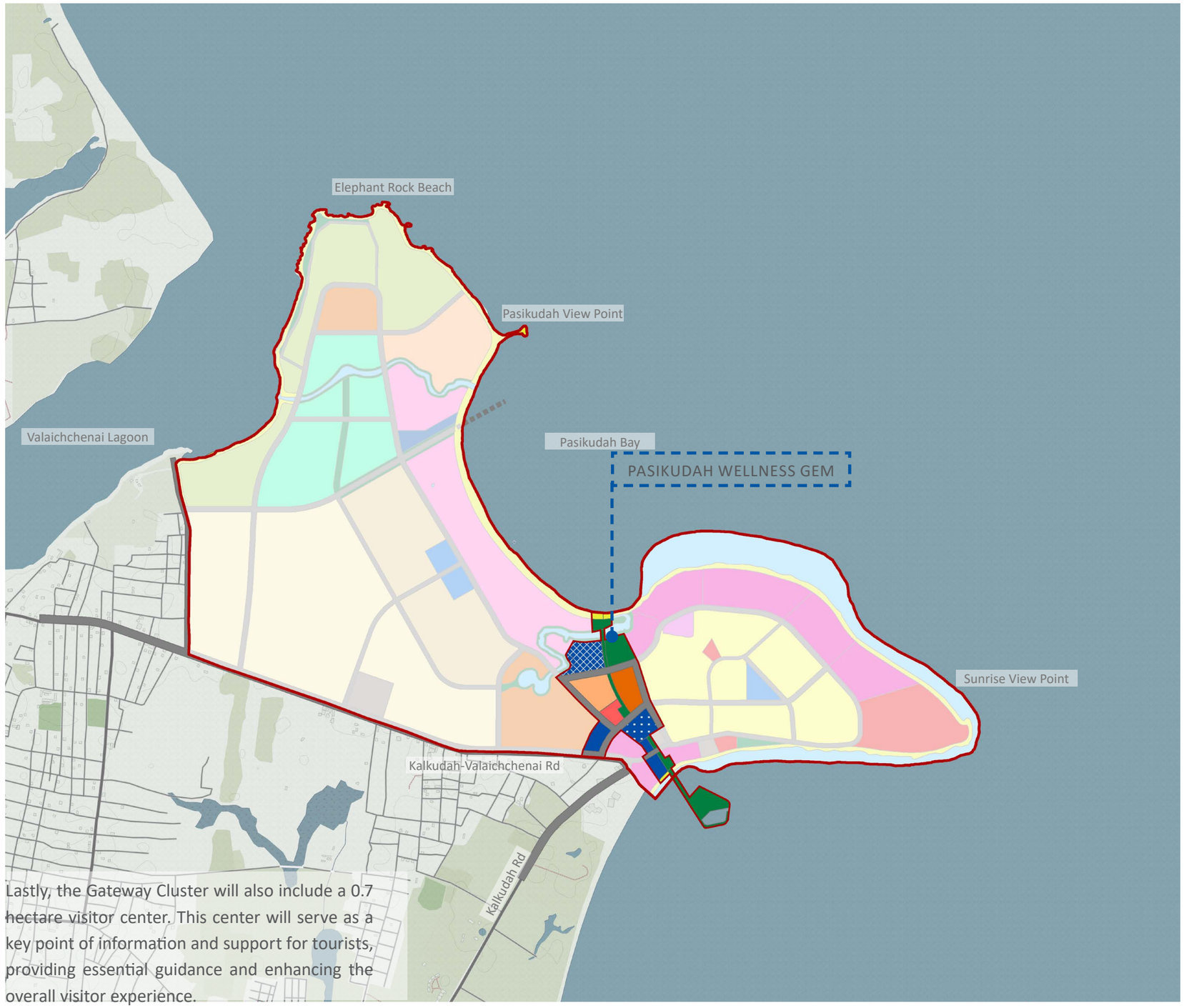
Pasikudah Wellness Gem is the key catalytic project proposed to realize the vision of making Pasikudah-Verugal the Coastal Jewel of the East. The catalytic project is identified as the Urban Design intervention area elaborated in subsequent sections.

The cluster has several priority projects aimed at enhancing its commercial and hospitality offerings. One of the key initiatives is the development of 1.25 hectares dedicated to commercial use, specifically targeting a food street and night market. This area is designed to become a vibrant hub for diverse culinary experiences and entertainment options, contributing to the cluster's appeal as a lively destination.

In addition to the food street and night market, the project encompasses 1.97 hectares allocated for service-related commercial activities. This segment is intended to support various services and amenities that complement the main commercial and hospitality features of the cluster.

The cluster also includes a substantial hotel development plan spanning 5.95 hectares. This project aims to introduce a range of hotels, from three-star to five-star accommodations, catering to different segments of travelers and ensuring a high standard of lodging options.

Additionally, a 2.34 hectare space is allocated for the establishment of a wellness center. This facility is designed to offer comprehensive health and relaxation services, contributing to the well-being of both visitors and residents.



Lastly, the Gateway Cluster will also include a 0.7 hectare visitor center. This center will serve as a key point of information and support for tourists, providing essential guidance and enhancing the overall visitor experience.

Figure 5.36 Catalytic Projects (High Case Scenario)

5.4 KEY INTERVENTION AREA

5.4.1 COASTAL JEWEL OF EAST



① View from B184 Road



② View from Main Road Inside Intervention Area



③ Lagoon and Beach front



④ View from Pasikudah Road

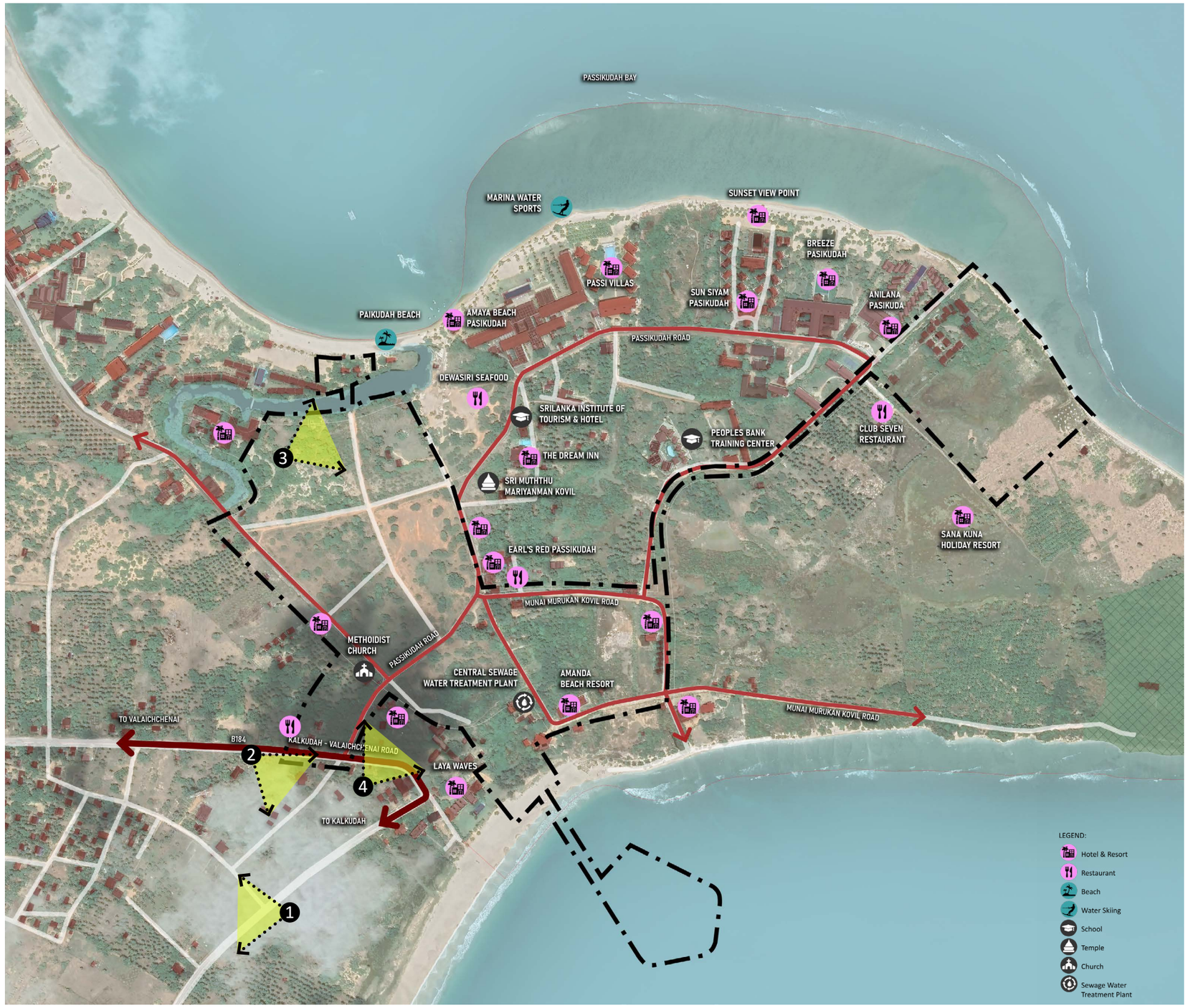


Figure 5.37 Intervention Area Context

LAND OWNERSHIP

Half of the land within the intervention area is owned by the tourism board, indicating significant control and potential influence over land use and development within this portion. However, for the remaining half of the intervention area and the overall study area, land ownership data is currently unavailable. This lack of information presents challenges, as it hinders a comprehensive understanding of ownership patterns and their implications, which are crucial for effective planning and implementation of the intervention.

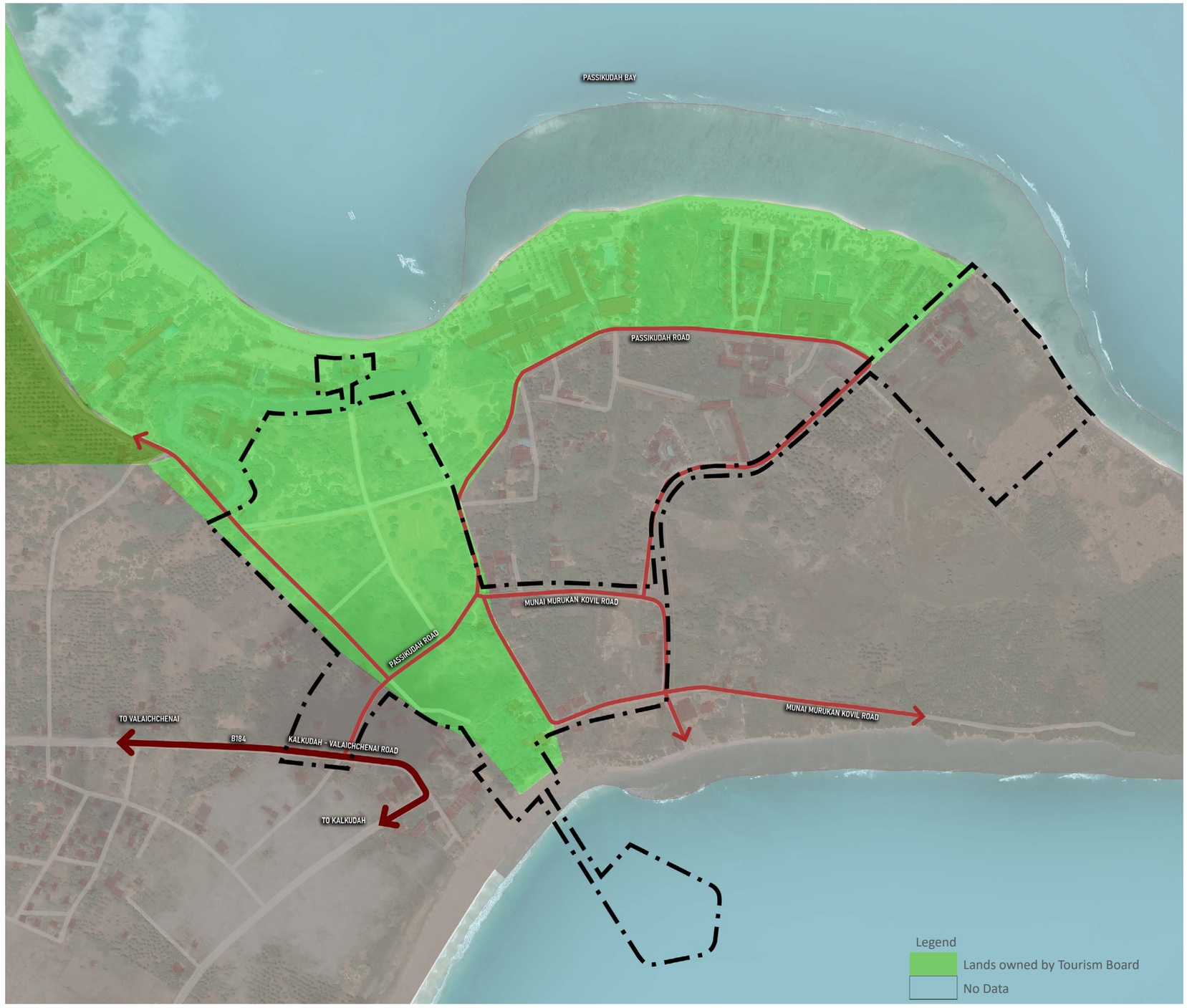


Figure 5.38 Intervention Area Land Ownership

5.4.2 PROPOSED LANDUSE PLAN

The Pasikudah site is envisioned as the Coastal Jewel of the East, aiming to offer an unparalleled experience for visitors. It will provide luxury accommodations designed for a comfortable and memorable stay, ensuring guests can indulge in world-class amenities. The development will feature top-tier wellness and spa facilities to promote overall well-being, creating a sanctuary for relaxation and rejuvenation. Furthermore, the site will include designated areas for yachts and private boats. The commercial facilities will be diverse and dynamic, incorporating various components to create a bustling active commercial environment, it will seamlessly integrate with a vibrant public realm, fostering a lively atmosphere that boosts the area's overall vitality.

	Proposed Land Use	Area (Ha)	%
	Beach Area	0.71	2%
	Commercial	2.02	6%
	Commercial Entertainment	2.47	7%
	Commercial Night Market	1.53	5%
	Exclusive Resort	5.82	17%
	Wellness Center	2.34	7%
	Green Open Space	3.84	11%
	Mixed Use	3.53	11%
	Visitor Center	2.02	6%
	Public Utilities	0.78	2%
	Road	0.38	1%
	Visitor Center	7.97	24%
	Total	33.42	

Table 5.13 Intervention Area Proposed Land Use Distribution

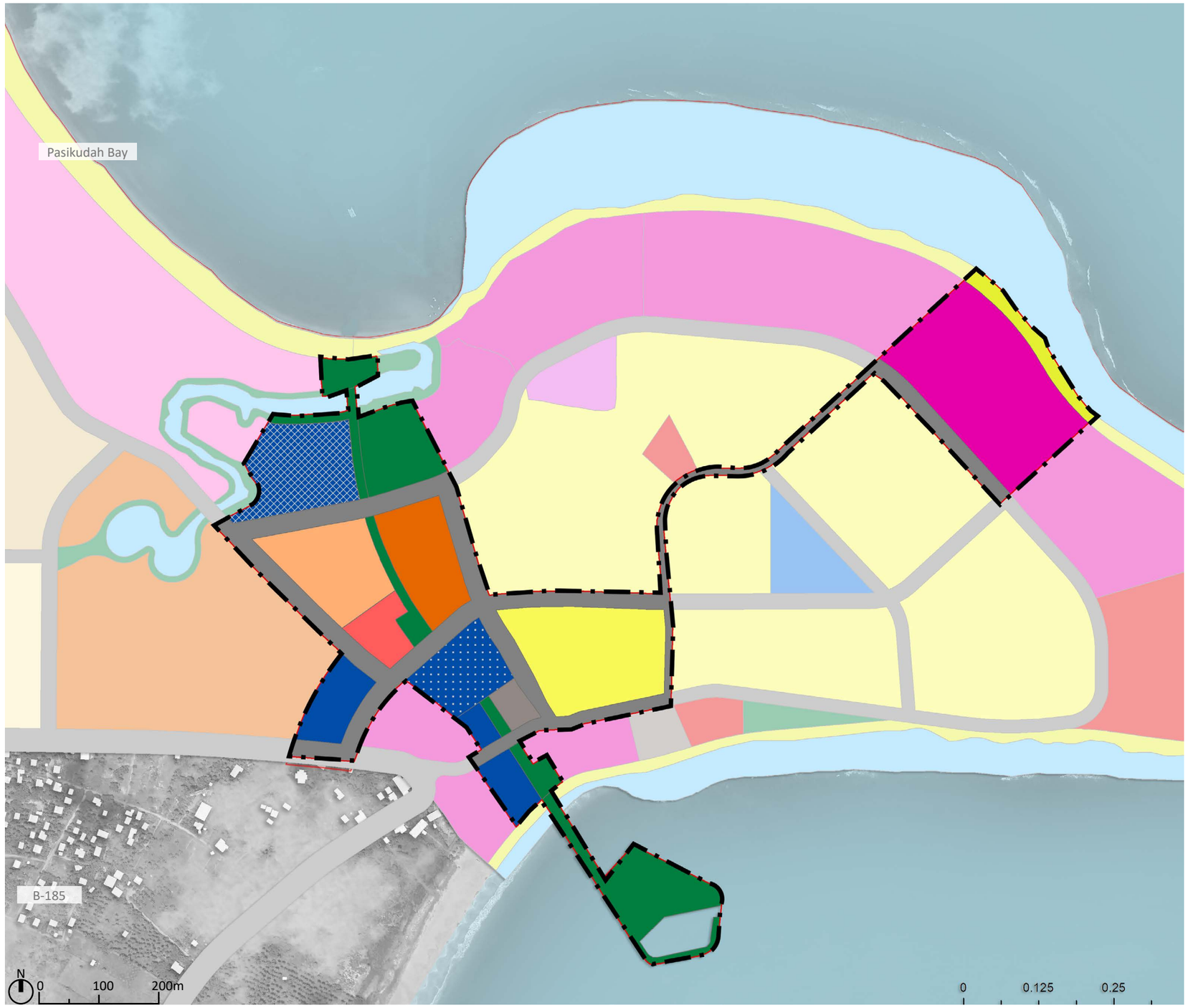


Figure 5.39 Intervention Area Proposed Land Use Plan

KEY FEATURES

The transformation program for the Pasikudah intervention area encompasses several key components designed to enhance its appeal and functionality. Central to this initiative is the development of a comprehensive wellness center. This center will feature a range of amenities, including a beach front fitness area, a dedicated meditation center, a state-of-the-art gym, and a holistic therapies center. Together, these facilities aim to provide a complete wellness experience, promoting physical health, mental relaxation, and overall well-being.

Another significant aspect of the transformation is the establishment of a core commercial area. This will include a tourist center designed to offer essential information and services to visitors. The waterfront commercial spaces will create a vibrant hub for retail and dining, while the viewing deck will provide scenic vistas of the surrounding landscape. Additionally, a lively pedestrian street will host various commercial activities, creating an engaging environment for both locals and tourists.

In addition, the program includes investment residential options, offering luxury villas with an associated clubhouse. These high-end properties are designed to cater to affluent residents and investors.

In terms of hospitality, the development plan includes a diverse range of hotels. This will encompass standard hotels, luxurious resorts, and exclusive resorts featuring fine dining restaurants and beach front fitness areas.

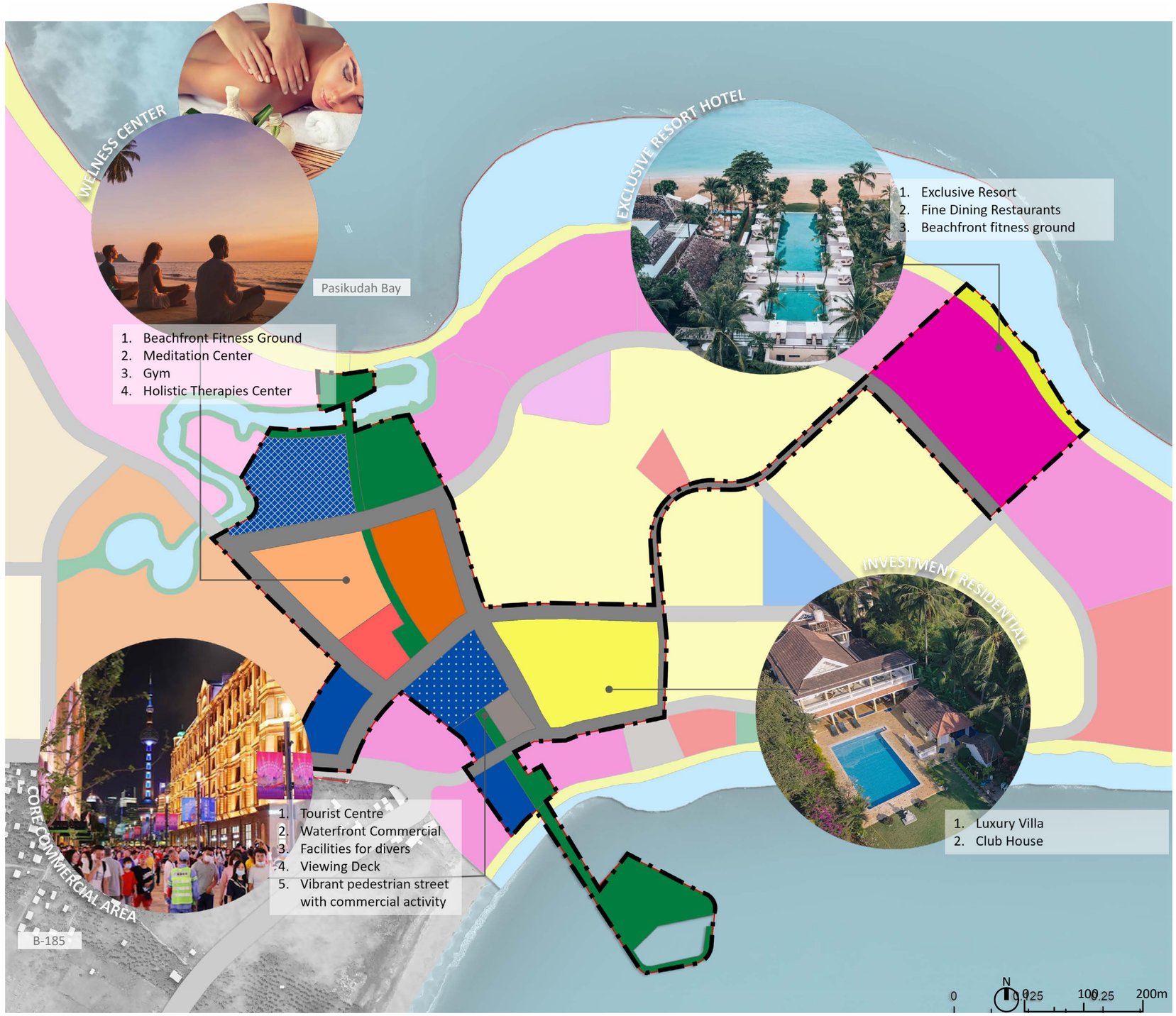


Figure 5.40 Intervention Area Key Programmes

5.4.3 ARTIST'S IMPRESSION



PASIKUDAH–VERUGAL: THE COASTAL JEWEL OF EAST
SANCTUARY FOR WELLNESS,TRANQUILLED SEASCAPE AND RICH CULTURE

The "Coastal Jewel of The East" is a haven for wellness, blending serene natural beauty with rich cultural experiences. Its pristine beaches and tranquil seascapes provide a soothing backdrop for relaxation and rejuvenation. Visitors can immerse themselves in local traditions, vibrant festivals, and historical landmarks that reflect a deep connection to heritage. Whether one seeks a peaceful retreat or a journey into the heart of cultural vibrancy, the "Coastal Jewel of The East" promises an unforgettable experience that nourishes the soul and ignites the spirit.



Figure 5.41 View-1 from Active Pedestrian Spine





Figure 5.42 View-2 Overlooking Wellness Center to the Beach

5.4.4 URBAN DESIGN CONCEPT

The primary focal points of development are the yacht berth and the night market, strategically situated at opposite ends of a prominent pedestrian thoroughfare. These iconic landmarks serve as major tourist attractions, drawing visitors from both land and sea. The pedestrian spine that links these two central nodes is vibrant with active commercial frontage, including cafes, bars, and various food and beverage establishments. This assortment of tourism-related commercial facilities significantly contributes to the dynamic atmosphere and liveliness of the area.

Extending from the main spine, the spine seamlessly transitions to the beach front, creating a continuous flow of connectivity along the shoreline. This extension reaches all the way to the yacht club, symbolically stretching into the infinite expanse of the sea. The integration of these elements enhances the accessibility and appeal of the beach front and also establishes a cohesive and inviting environment of the development.

Legend

- Oceanfront Landmark Plaza
- Landmark Building
- Major Open Space Node
- Beach Frontage
- Active Edge
- Plaza/ Open Space
- Active Green/ Pedestrian Connectivity
- Passive Green
- Major Public Space
- Beach front Visual Axis

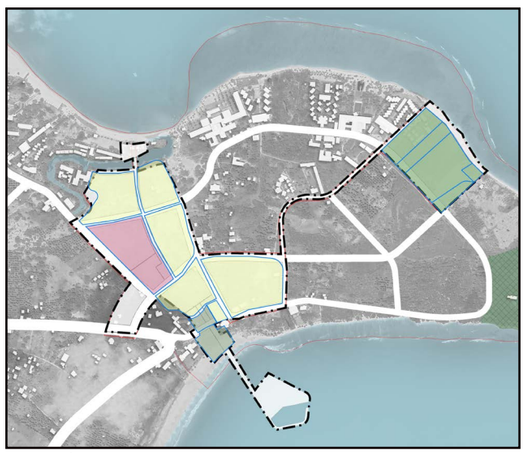


Figure 5.43 Urban Design Concept

5.4.5 PARCELLATION STRATEGIES

To optimize land utilization, a range of parcellation strategies are employed, including amalgamation, subdivision, and the use of parcels in their existing state when their size is compatible with development needs. Amalgamation involves merging smaller parcels to create larger, more versatile plots, thereby enhancing development potential and facilitating larger projects. Subdivision, on the other hand, breaks down larger plots into smaller, manageable sections to accommodate varied development plans and improve land accessibility. When existing parcel sizes align with development requirements, they are utilized as-is, ensuring efficient use of resources and streamlined implementation of development initiatives.





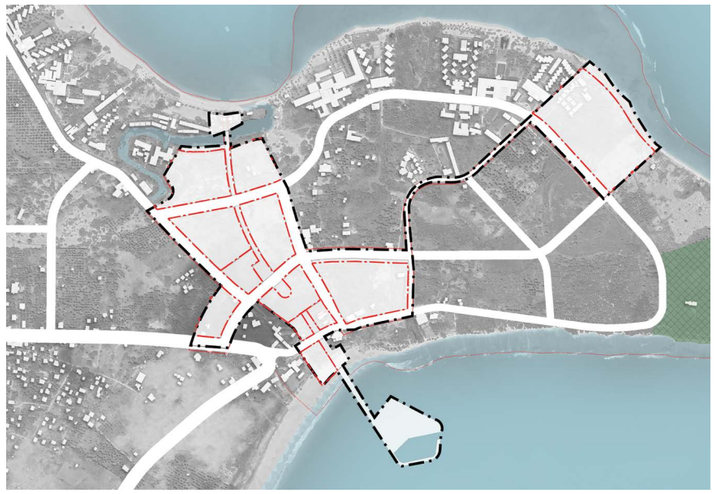
Legend

- Amalgamation of Existing Parcels
- Sub-division of Existing Parcel
- Existing Parcel developed as it is
- Proposed Parcel

Figure 5.44 Parcellation Strategies

5.4.6 URBAN DESIGN GUIDE PLANS

PARCEL & BUILDING USE



Legend

Proposed Parcel

LANDMARKS & NODES



Legend

Oceanfront Landmark Plaza

Landmark Building

VIEWS AND VISTAS



Legend

Oceanfront Landmark Plaza

Landmark Building

Oceanfront Landmark Plaza

View and Vista

BUILDING EDGE & ACTIVITY GENERATION USES

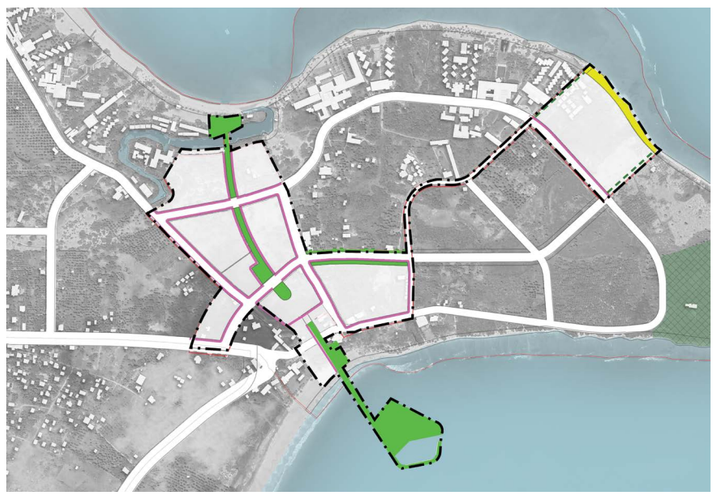


Legend

Active Edge

Plaza/ Open Space

PUBLIC OPEN SPACES

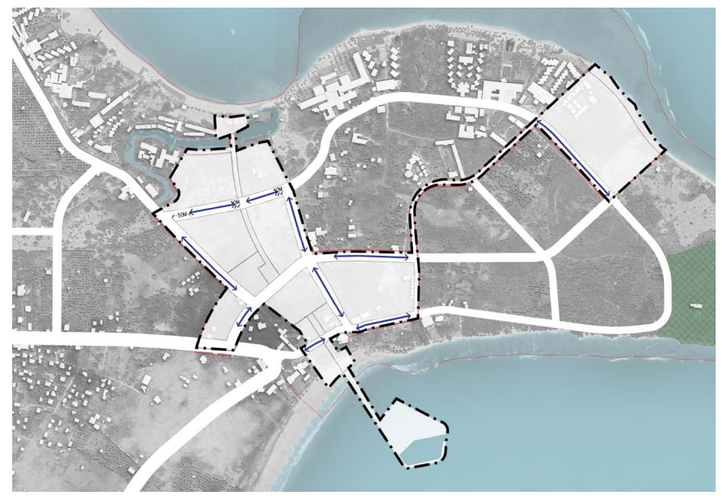


Legend

Active Edge

Plaza/ Open Space

ACCESS & CIRCULATION



Legend

Vehicular Entrances

Figure 5.45 Urban Design Guide Plans

SECTIONS

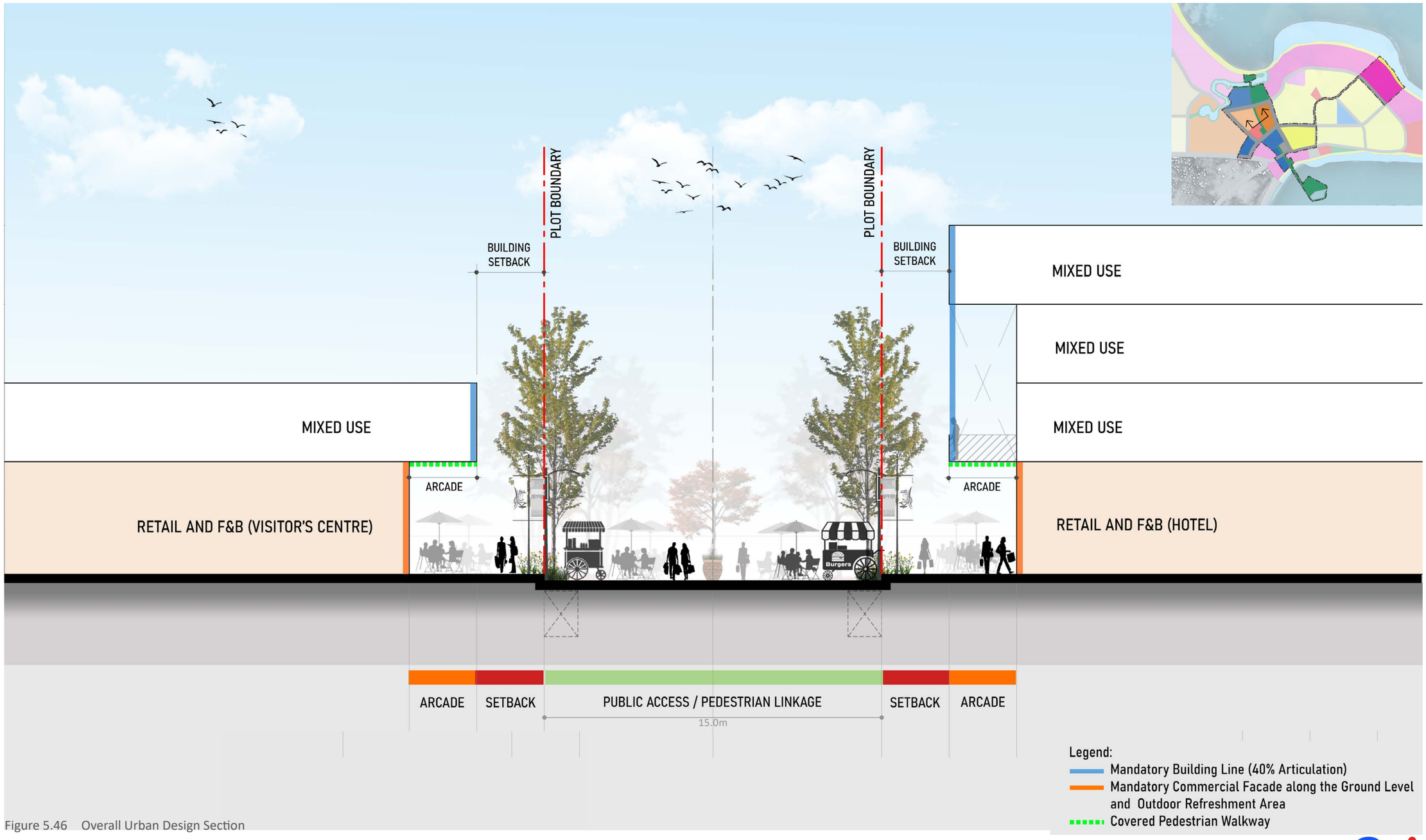


Figure 5.46 Overall Urban Design Section

5.4.7 PRIORITY PROJECTS

HIGH CASE SCENARIO

1. Wellness Centre
Site Area: 2.3Ha
Plot Ratio: 0.5
Bld Height: G+1

2. Visitor Centre
Site Area: 0.8Ha
Plot Ratio: 1.0
Bld Height: G+2

3. Retail & Night Market
Site Area: 1.5Ha
Plot Ratio: 1.0
Bld Height: G+1

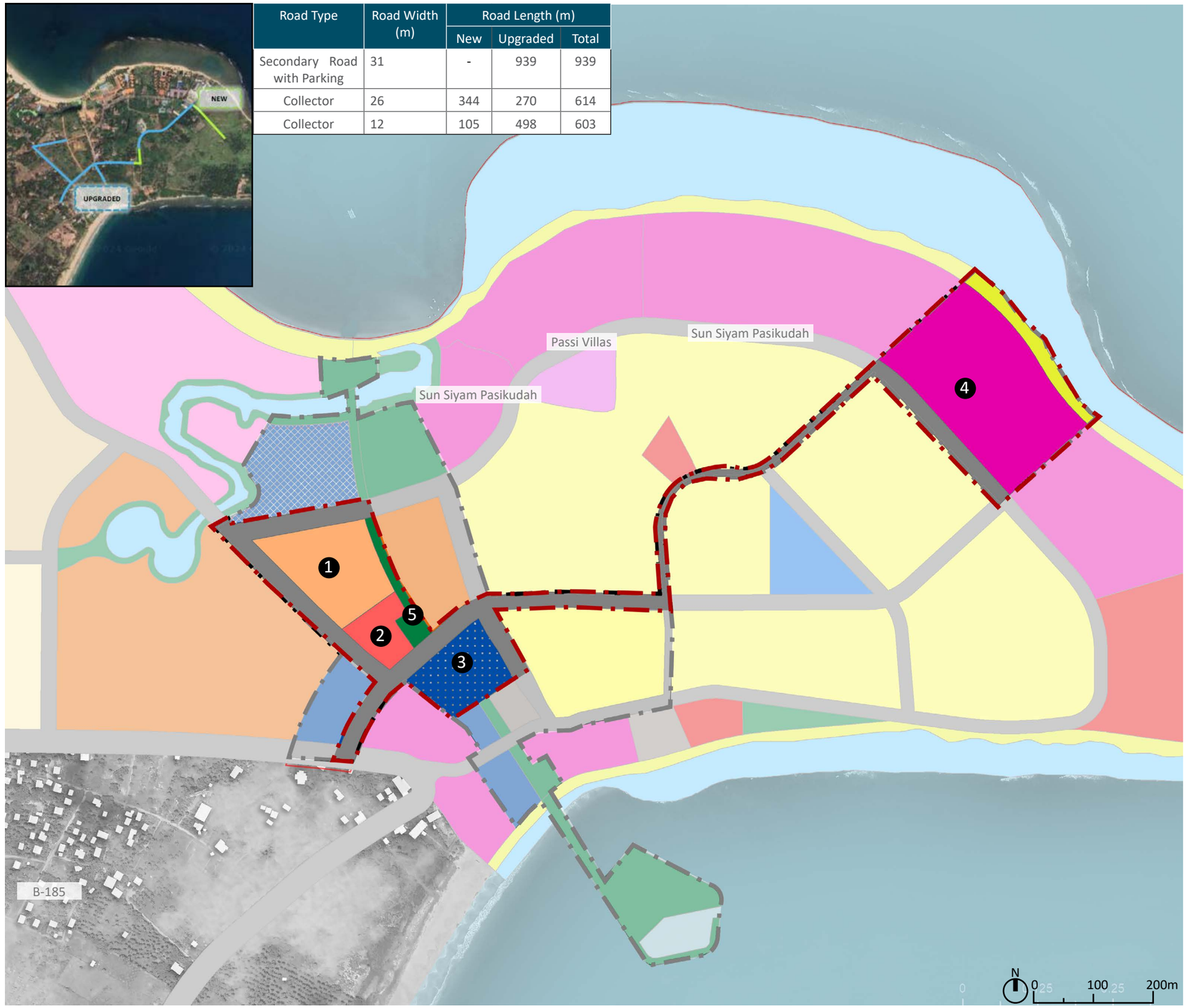
4. 4-5 Star Hotel
Site Area: 5.8Ha
Plot Ratio: 0.5
Bld Height: G+1

5. PEDESTRIAN SPINE
Distance: 1km

6. Road Enhancement
Secondary Road with Parking (31m)
Existing Road to be Upgraded- 939m

Secondary Road without Parking (26m)
New Road to be Constructed- 344m
Existing Road to be Upgraded- 270m

Collector Road (12m)
New Road to be Constructed- 105m
Existing Road to be Upgraded- 498m



Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	-	939	939
Collector	26	344	270	614
Collector	12	105	498	603

Figure 5.47 Priority Projects (High Case Scenario)

LOW CASE SCENARIO

1. Wellness Centre
1Ha to be developed in Phase-1
Site Area: 2.3Ha
Plot Ratio: 0.5
Bld Height: G+2

2. Visitor Centre
Site Area: 0.8Ha
Plot Ratio: 1.0
Bld Height: G+1

3. Retail & Night Market
Site Area: 1.5Ha
Plot Ratio: 1.0
Bld Height: G+2

4.4-5 Star Hotel
Site Area: 5.8Ha
Plot Ratio: 0.5
Bld Height: G+1

5. PEDESTRIAN SPINE
Distance: 0.8km

6. Road Enhancement
Secondary Road with Parking (31m)
Existing Road to be Upgraded- 594m

Secondary Road without Parking (26m)
New Road to be Constructed- 344m
Existing Road to be Upgraded- 270m

Collector Road (12m)
New Road to be Constructed- 105m
Existing Road to be Upgraded- 498m



Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	-	594	594
Collector	26	344	270	614
Collector	12	105	498	603

Figure 5.48 Priority Projects (Low Case Scenario)

CIP TRANSPORT PROJECTS (INTERVENTION AREA)

The Wellness Gem @ Pasikudah development includes a series of transport facility improvements to enhance connectivity, safety, and sustainability within the designated area.

The primary focus is on upgrading 1,110 meters of existing roads to improve traffic flow, accessibility, and safety. These upgrades support the area's development by providing better infrastructure for key projects, including wellness centers, hotels, visitor centers, and retail/night markets. Enhanced road surfaces, widened lanes, improved signage, and better lighting and drainage systems will ensure a safer and more efficient transport network for residents and visitors.

ROAD LENGTH (IN METRES)	
Road Type	**Pasikudah**
New Roads	**470**
Collector	126
Secondary	344
Upgraded Roads	**2,889**
Collector	1,187
Secondary	1,702
Grand Total	**3,359**

Sl No	Land Use	Total Water Demand (m3/d)	Sewage Generation (m3/d)	Solid Waste Generation (kg/d)	Power Demand (MVA)
1	COMMERCIAL NIGHT MARKET	31	27	275	1.1
2	COMMERCIAL ENTERTAINMENT	49	44	445	1.7
3	COMMERCIAL	40	36	364	1.4
4	EXCLUSIVE RESORT	10	9	133	1.0
5	WELLNESS CENTER	8	7	65	0.4
6	MIXED USE	62	55	498	2.6
7	INVESTMENT RESIDENTIAL	21	18	123	2
8	VISITOR CENTER	24	21	157	0.6
	Water Loss @ 10%	25			Co-factor 0.6 * 0.7
	TOTAL	300	250	2,050	4

Table 5.14 Unit Demand (Water, Solid Waste and Power)

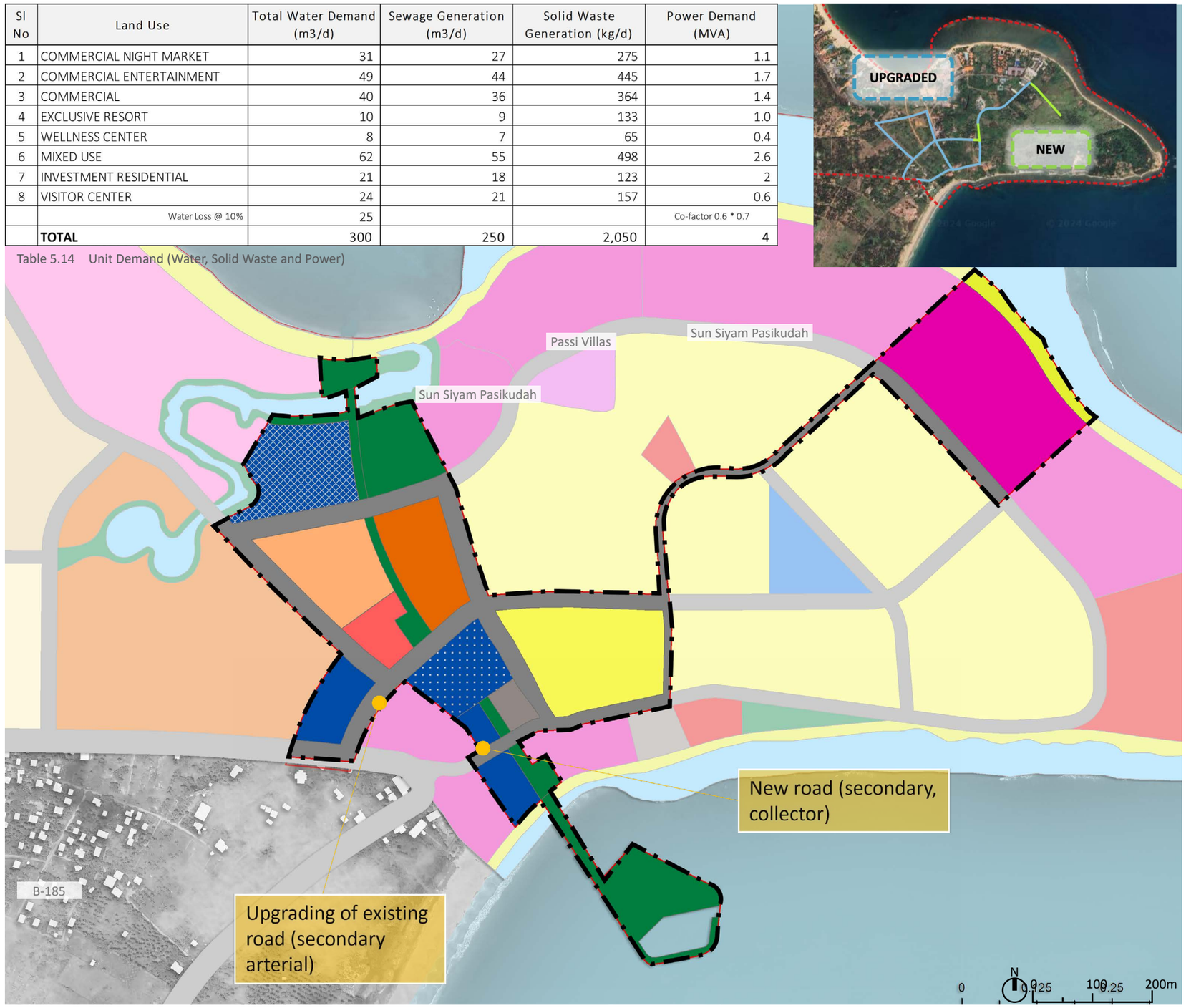


Figure 5.59 CIP Transport Projects

5.4.8 PRIORITY PROJECT DESIGN BRIEF GUIDELINES

Note: The proposed land use plan (PLU) is based on a high-case scenario to maximize opportunities for both the community and the region. Accordingly, project-level guidelines for priority initiatives have been developed in alignment with the PLU and the high-case scenario framework.



PROJECT BRIEF: OVERALL PASIKUDAH

RATIONALE OF PROJECT

What is the problem, need or the existing gap/ deficiency?

The Eastern Province of Sri Lanka, despite its rich natural resources and pristine beaches, is witnessing a decline in tourist visits. There is a pressing need to leverage these resources to boost tourism in the region and enhance its economic status.

What are the root-causes, underline causes and immediate causes that contribute for the problem or the need that the project intents to address?

The primary issue is the limited connectivity to the Eastern Province, as foreign tourists must first land in Colombo - the only location with an international airport in Sri Lanka. From there, it takes 8-10 hours to reach the Eastern Province by road. Other challenges include:

- The absence of tourist facilities such as banks, exchange offices, and visitor centers.
- The requirement of a marketing strategy to promote the region.
- The static tourist landmarks that do not attract much tourist attention.
- Low tourist spending due to limited opportunities except for accommodations.
- Insufficient tourist amenities like waiting areas, shower and changing rooms, restaurants, and retail outlets.

How does this project contribute to fulfill the existing gap in the sector?

The project is designed to address the difficulties and challenges encountered by tourists in the Eastern Province and to adapt to the economic conditions and current situation in Sri Lanka. Tourism initiatives are planned for each area based on existing developments and proposed tourism concepts. These initiatives are expected to drive the tourist inflow into the region and enhance the tourist experience

What is the mode of intervention of this project in addressing the gap?

- Pasikudah is centered around a Wellness concept, with a Wellness center serving the luxury and premium developments in the area.
- Besides the central elements in each area, tourist facilities such as visitor centers, retail, restaurants, parks, etc. are suggested to enhance the tourist experience.

1	Project Location	Pasikudah Beach, Batticaloa District, Eastern Province
2.	Rationale of Project	**Mode of Intervention** Pasikudah is centered around a Wellness concept, with a Wellness center serving the luxury and premium developments in the area.
3.	Cost Breakdown (Construction/ Establishment)	USD 17.4 Mn (for intervention projects)
4.	Revenue Forecast	11.6 USD Mn (Year 1 – 5)
		54.2 USD Mn (Year 6 – 10)
		78.7 USD Mn (Year 11 – 15)
		144.5 USD Mn (Total)
5.	Findings of the Economic and Financial Analysis	14 – 15% avg: IRR in avg: 10 years payback period

1. WELLNESS CENTRE

SITE CONTEXT

Plot W-01, spanning 2.3 Ha, is designated for a wellness center. Positioned between a secondary road and the main pedestrian spine, it is adjacent to the visitor center and centrally located within the development.

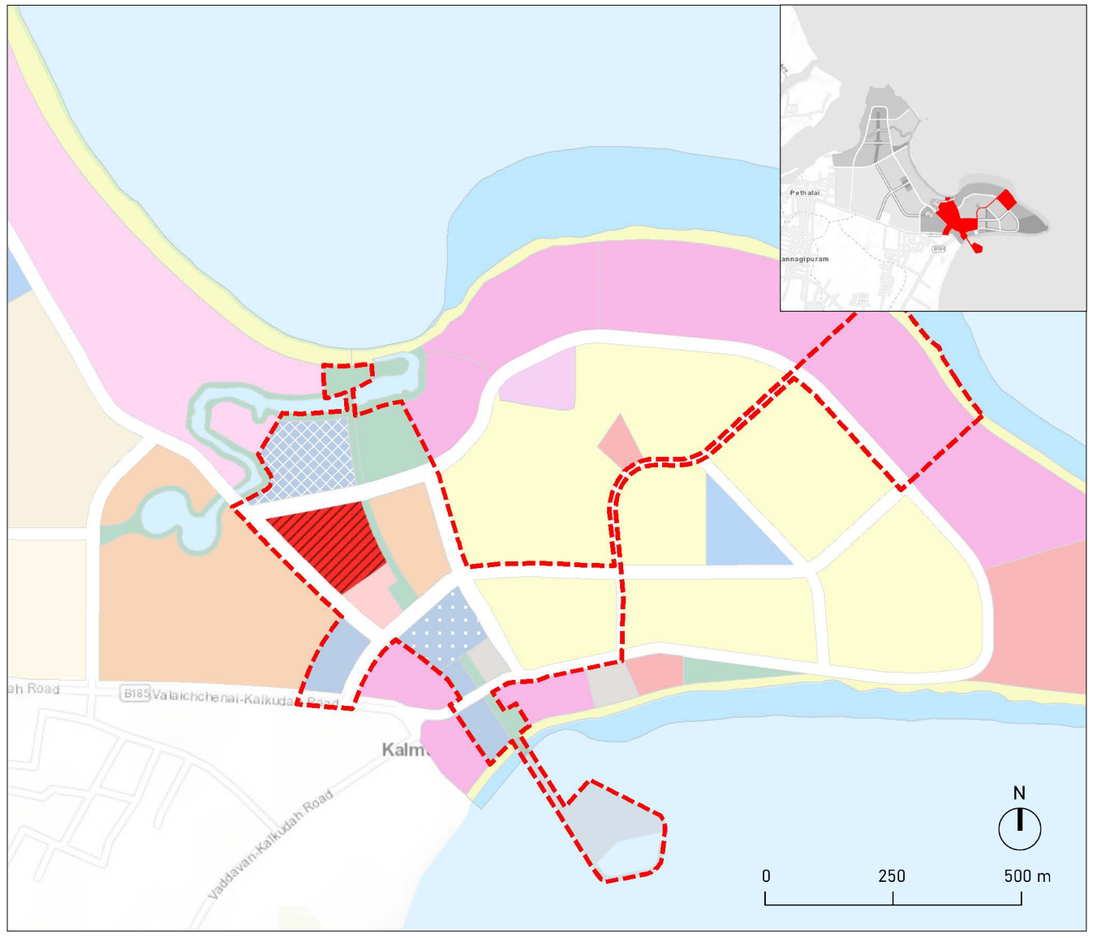
OBJECTIVE

Given its prime location and designation for wellness center activities, the plot will feature architecture that seamlessly blends with resort-style tropical aesthetics, enhancing the overall ambience and appeal of its original use.

DEVELOPMENT PROGRAMME

The plot will feature wellness-related components, along with commercial spaces and F&B establishments along the pedestrian spine.

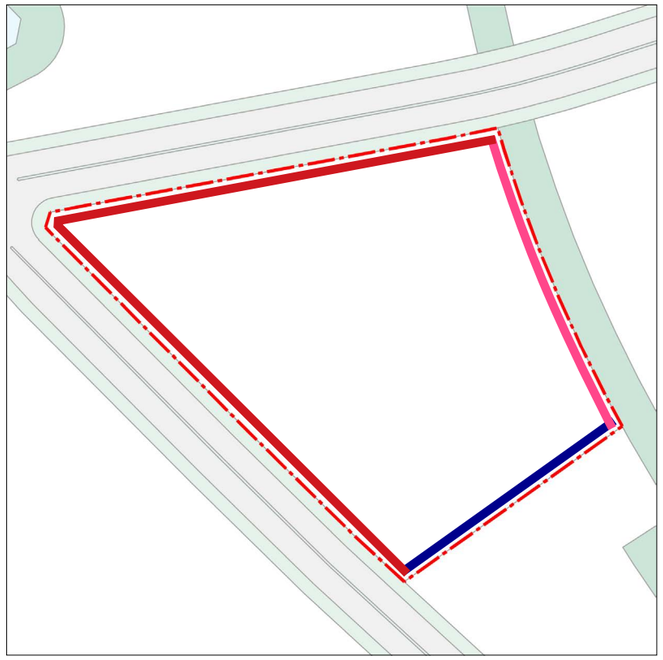
PLANNING PARAMETERS	
PLOT NUMBER	W-01
ALLOWABLE USE	WELLNESS CENTER
PLOT AREA	2.3 HA
PLOT RATIO	0.5
BUILDING HEIGHT	G+1





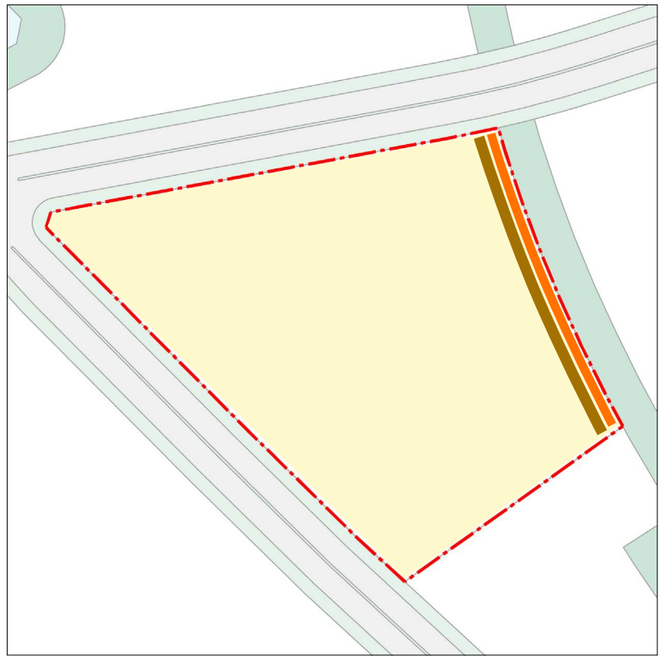
PLOT REGULATION

BUILDING SETBACK



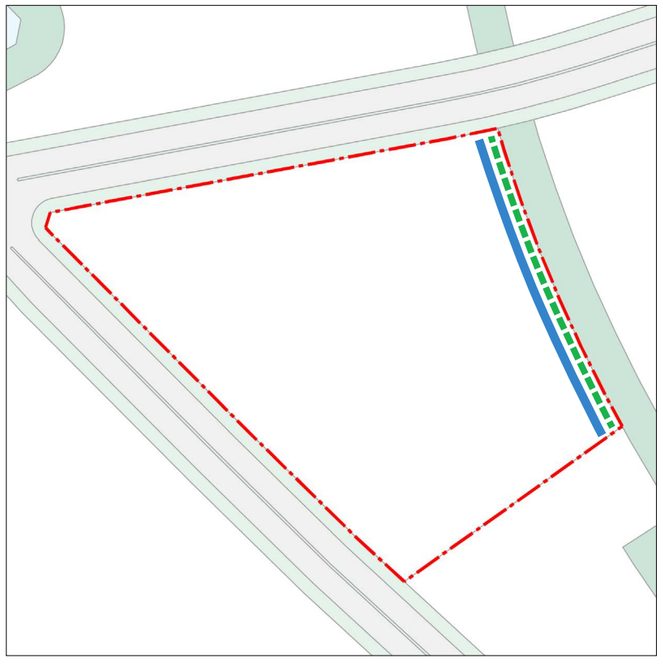
- Planning Area Boundary
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



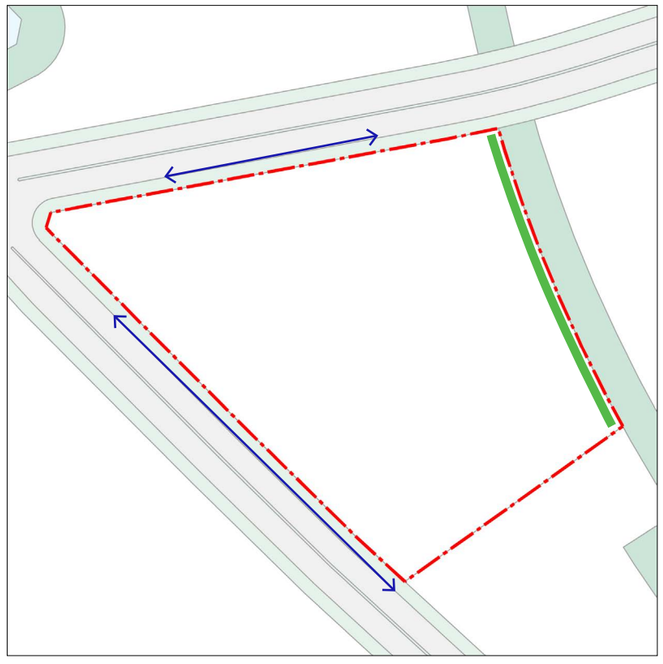
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



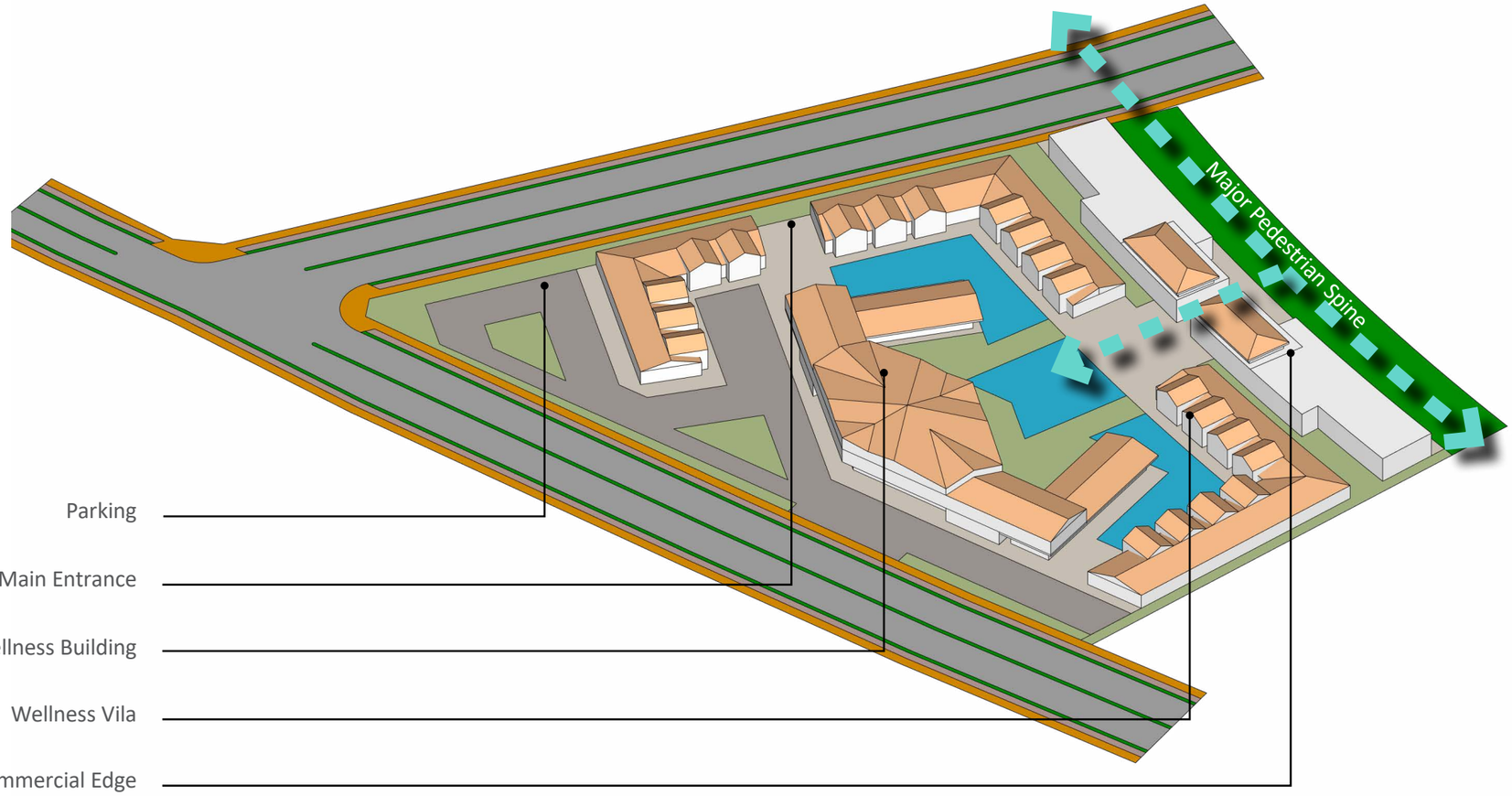
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Wellness Parcel- 01
2.	Project Location	Pasikudah Beach, Batticaloa District, Eastern Province
3.	Land Requirement for the Project	2.3Ha
4.	Location of the Land	Located at UD intervention area of Pasikudah Beach
5.	Ownership Detail of the Land	Land Own by Tourism Board
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Revenue Share
15.	Project Objectives	Objective 1 **Enhancing Quality of Life:** A wellness center can provide residents and visitors with access to fitness facilities, relaxation areas, and health services, promoting a healthier lifestyle and overall well-being. This can contribute to a more vibrant and engaged community. Objective 2 **Attracting and Retaining Residents and Tourists:** A well-designed wellness center can be a significant draw for both residents and tourists seeking a holistic lifestyle experience. This can boost the attractiveness of the beach front development, encouraging more people to visit or relocate. Objective 3 **Enhancing Property Value and Marketability:** Incorporating a wellness center can increase the appeal and marketability of the beach front development, potentially raising property values. It demonstrates a commitment to providing high-quality amenities and can differentiate the development from others in the area.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period

19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.3Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	1.3 USD Mn
22.	Total Development cost	4.6 USD Mn
23.	Revenue (30 years)	19.3 USD Mn
24.	IRR for 30 years	14%
25.	IRR for 30 years without land cost	18%
26.	Break even (year)	9 years
27.	Stabilisation period(year)	4 years
28.	Project Outputs	Result/ Benefit for communities • Attraction for Tourists: Enhances the destination's appeal by offering wellness-focused amenities and services. • Economic Revenue: Generates revenue for local businesses and creates jobs in the wellness and hospitality sectors. • Enhanced Tourist Experience: Provides tourists with opportunities for relaxation, health, and wellness activities. • Extended Stay: Encourages longer stays and repeat visits by offering unique wellness experiences. • Local Collaboration: Fosters partnerships between wellness centers and other local attractions or services. • Cultural Exchange: Promotes cultural and wellness practices that can enrich tourists' experiences. • Community Health Improvement: Benefits local residents through improved access to wellness facilities and programs.
29.	Planned Activities in Achieving Outputs	• Service Offering: Develop a range of wellness services, such as spa treatments, fitness classes, and holistic therapies. • Partnerships: Establish collaborations with local businesses, tourism operators, and health professionals. • Marketing and Promotion: Create and execute marketing strategies to attract tourists and promote wellness offerings. • Program Development: Design wellness programs and packages tailored to tourists' needs and preferences. • Staff Training: Hire and train staff in wellness practices, customer service, and hospitality. • Community Integration: Engage with the local community to incorporate local wellness traditions and practices. • Feedback and Improvement: Collect visitor feedback to continuously enhance services and adapt offerings.

30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

2. VISITOR CENTER PARCEL

SITE CONTEXT

Plot V-01, encompassing 0.8 Ha, is designated for a visitor center. Located at the heart of the intervention area, it sits at the junction of two secondary roads. Adjacent to this plot is a plaza that serves as the starting point of the main pedestrian spine, providing a direct connection to the yacht berth and extending towards the sea.

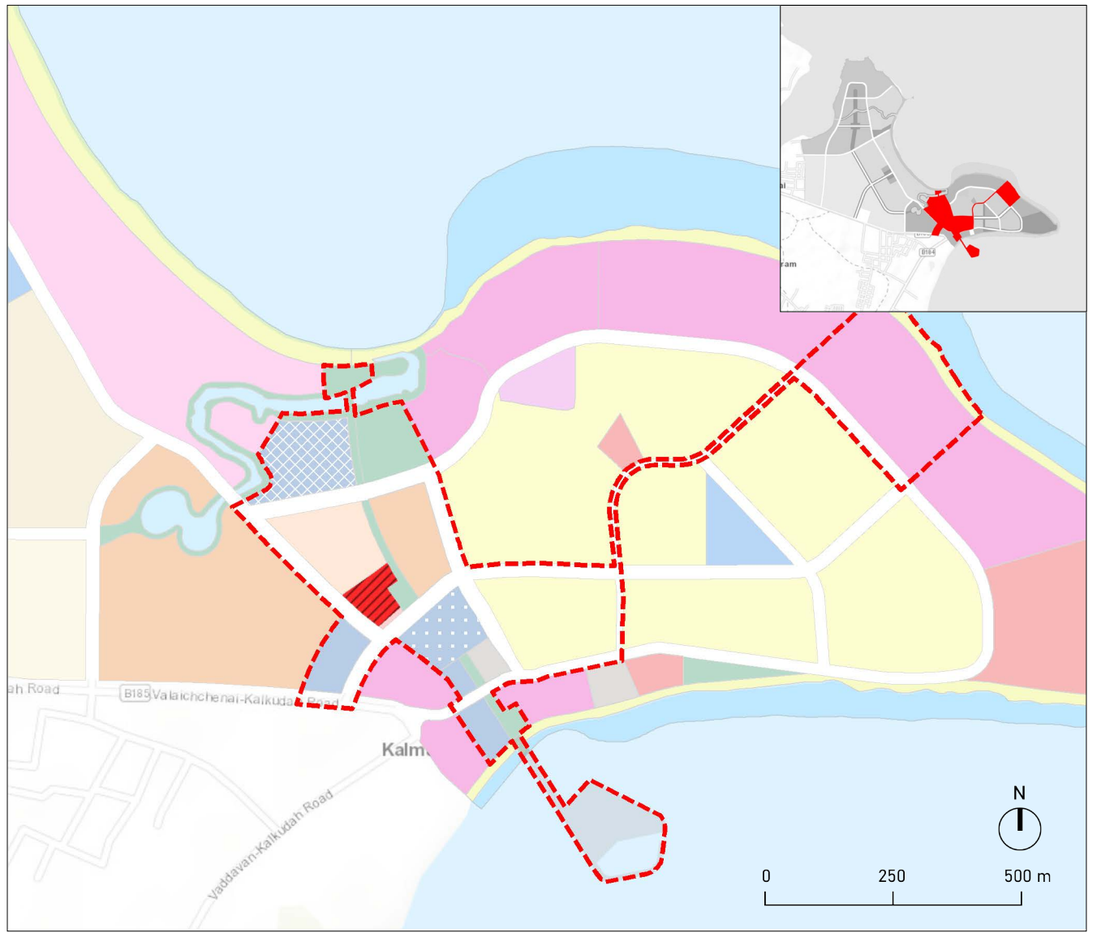
OBJECTIVE

As a major facility node within the intervention area, the visitor center will feature iconic architecture, serving as a key focal point and enhancing the overall aesthetic and functional appeal of the development.

DEVELOPMENT PROGRAMME

The visitor center will host crucial facilities for visitors, including information services, rest areas, and retail options.

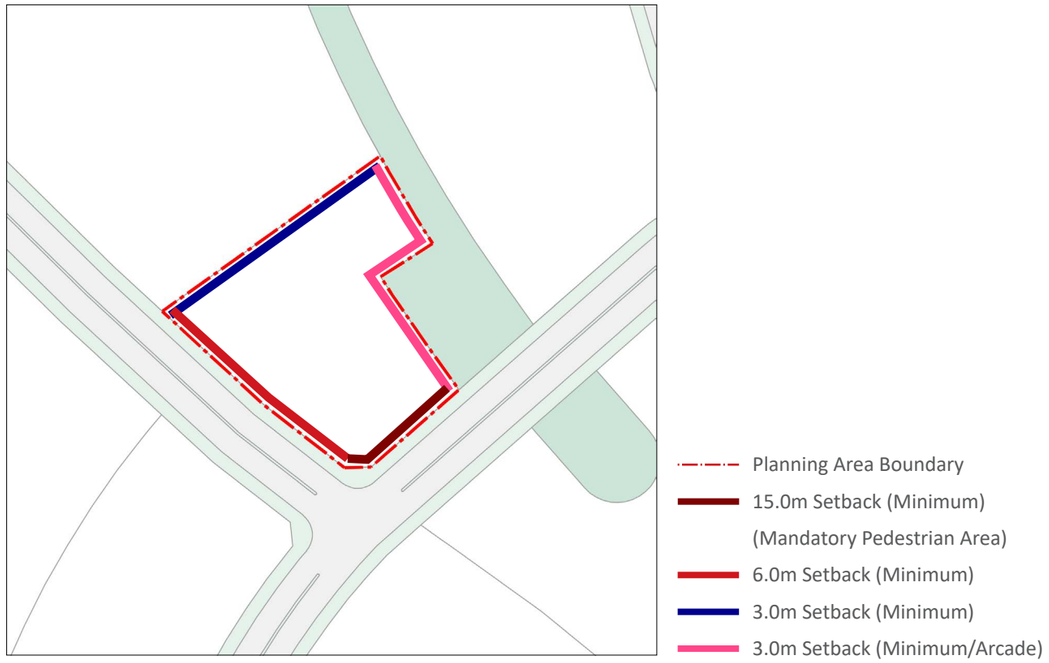
PLANNING PARAMETERS	
PLOT NUMBER	V-01
ALLOWABLE USE	VISITOR CENTER
PLOT AREA	0.8 HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2



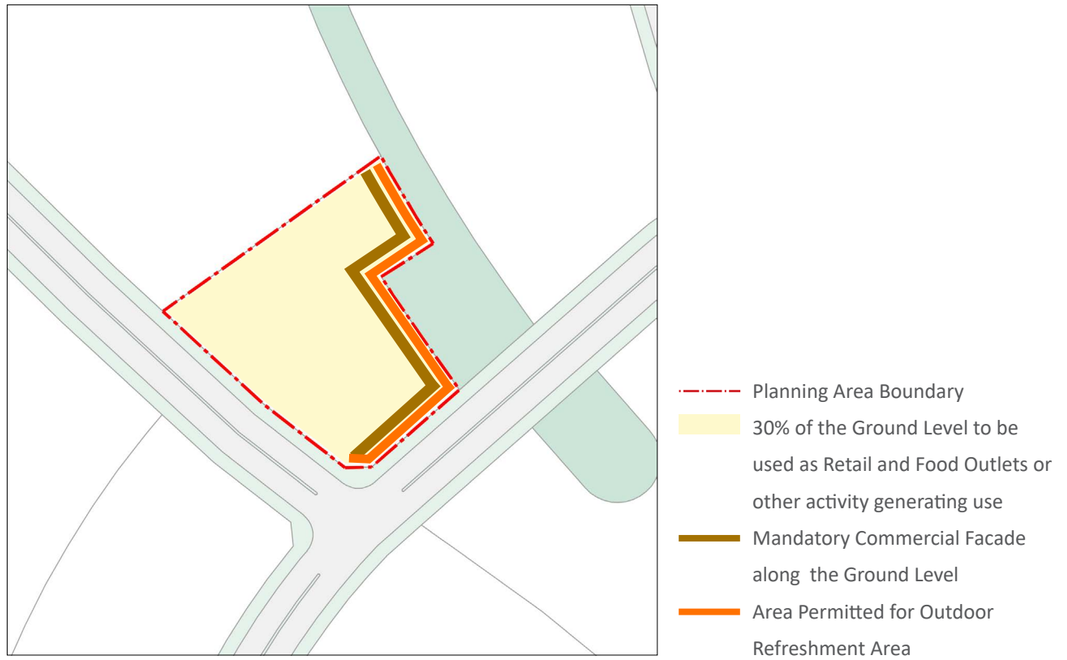


PLOT REGULATION

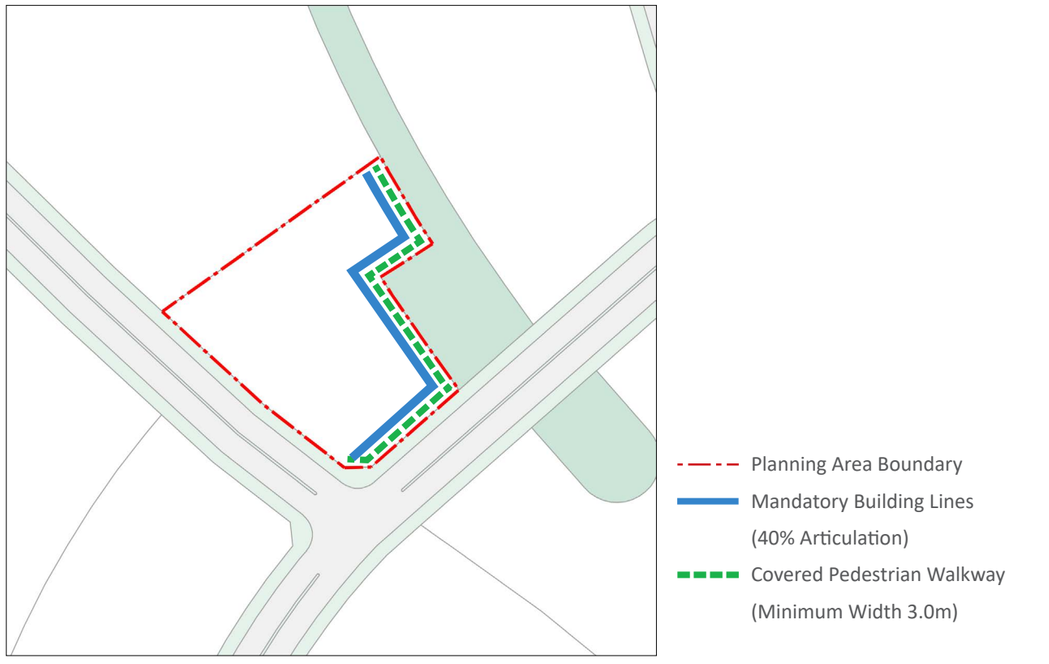
BUILDING SETBACK



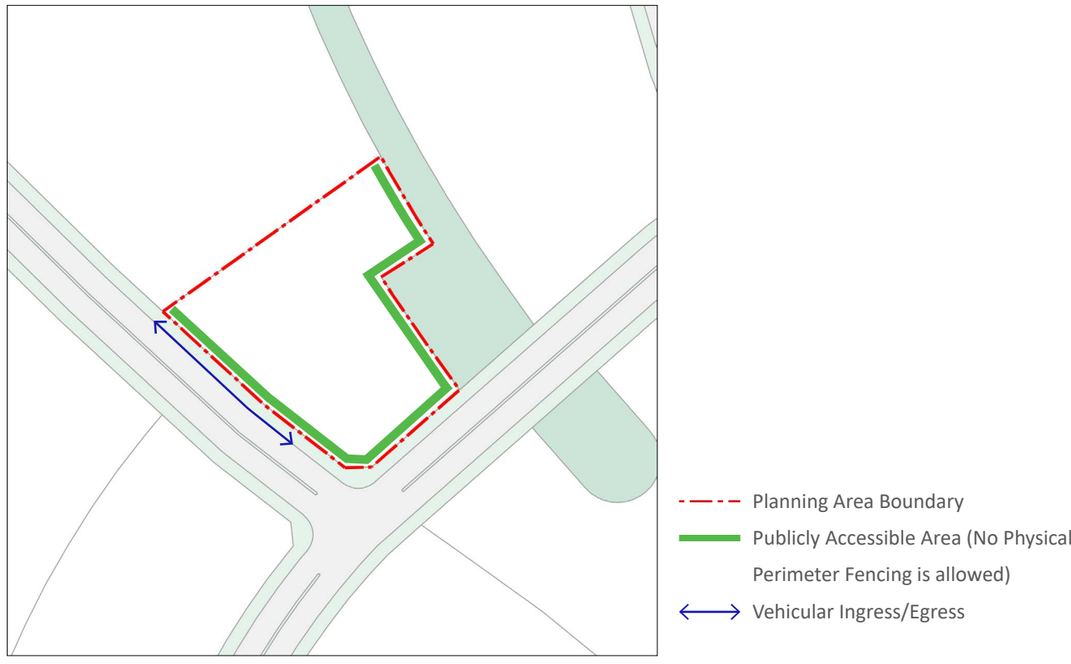
BUILDING USE



BUILDING EDGE & COVERED WALKWAY



PUBLIC AND VEHICULAR ACCESS

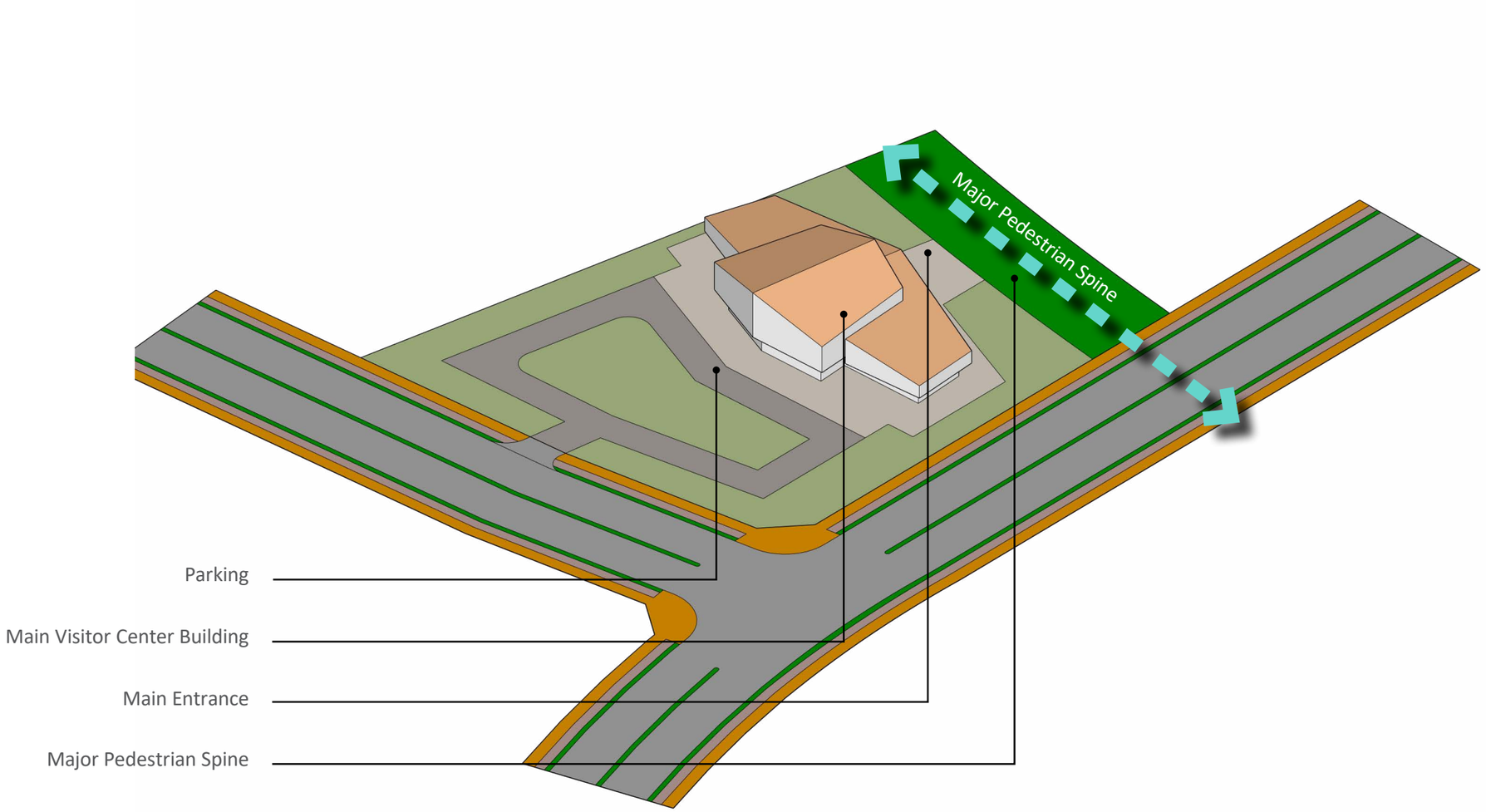


PROJECT BRIEF

1.	Project Title	Visitor Center Parcel- 01
2.	Project Location	Pasikudah Beach, Batticaloa District, Eastern Province
3.	Land Requirement for the Project	0.8 Ha
4.	Location of the Land	Located at UD intervention area of Pasikudah Beach
5.	Ownership Detail of the Land	Land Own by Tourism Board
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Annual Concession Fee (ACF)
15.	Project Objectives	Objective 1 **Improving Visitor Experience:** A visitor center can provide essential information and services, such as maps, guides, and local attraction details. This enhances the overall visitor experience by helping them navigate the area, access amenities, and plan their activities more effectively. Objective 2 **Promoting Local Attractions and Businesses:** The center can serve as a promotional hub for local attractions, restaurants, shops, and cultural events. By showcasing these offerings, it can drive traffic to local businesses and boost the economic activity within the beach front development. Objective 3 **Facilitating Community Engagement and Events:** The visitor center can host events, educational programs, and community activities, creating a space for locals and tourists to engage with each other. This fosters a sense of community and strengthens the connection between residents and visitors.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period

15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 0.8 Ha 2. Phasing Targets: 0-5 years
17.	Land Cost	0.5 USD Mn
18.	Total Development cost	3.5 USD Mn
19.	Revenue (30 years)	26 USD Mn
20.	IRR for 30 years	15%
21.	IRR for 30 years without land cost	17%
22.	Break even (year)	9 years
23.	Stabilisation period (year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Tourist Attraction: Draws visitors to the area, boosting tourism and local economy. • Information Hub: Provides essential information and resources for tourists, enhancing their experience. • Local Promotion: Showcases local culture, attractions, and businesses. • Economic Impact: Generates revenue and creates jobs in the tourism sector. • Community Engagement: Offers educational programs and events for both tourists and residents. • Enhanced Visitor Experience: Improves visitor satisfaction and length of stay. • Sustainable Tourism: Promotes responsible tourism practices and environmental awareness.
25.	Planned Activities in Achieving Outputs	• Improve Infrastructure: Upgrade roads, utilities, and public services. • Information and Exhibits: Curate and install informative displays, maps, and interactive exhibits about local attractions. • Staff Recruitment: Hire and train staff to provide visitor information and support. • Marketing Campaign: Implement strategies to promote the visitor center and attract tourists. • Partnerships: Collaborate with local businesses and tourism operators for mutual promotion. • Program Development: Create events, tours, and workshops to engage visitors and enhance their experience. • Visitor Feedback: Collect and analyze feedback to improve services and facilities. • Maintenance Plan: Establish a routine for the upkeep and maintenance of the center.

30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



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3. COMMERCIAL PARCEL

SITE CONTEXT

Plot C-01 is a 1.3 Ha commercial plot strategically situated at the focal point of the major pedestrian spine and surrounded by secondary roads. This prime location makes it a central hub within the development, adjacent to key facilities such as the visitor center and hotel. Its proximity to these nodes enhances its commercial potential, making it ideal for retail, dining, and entertainment establishments.

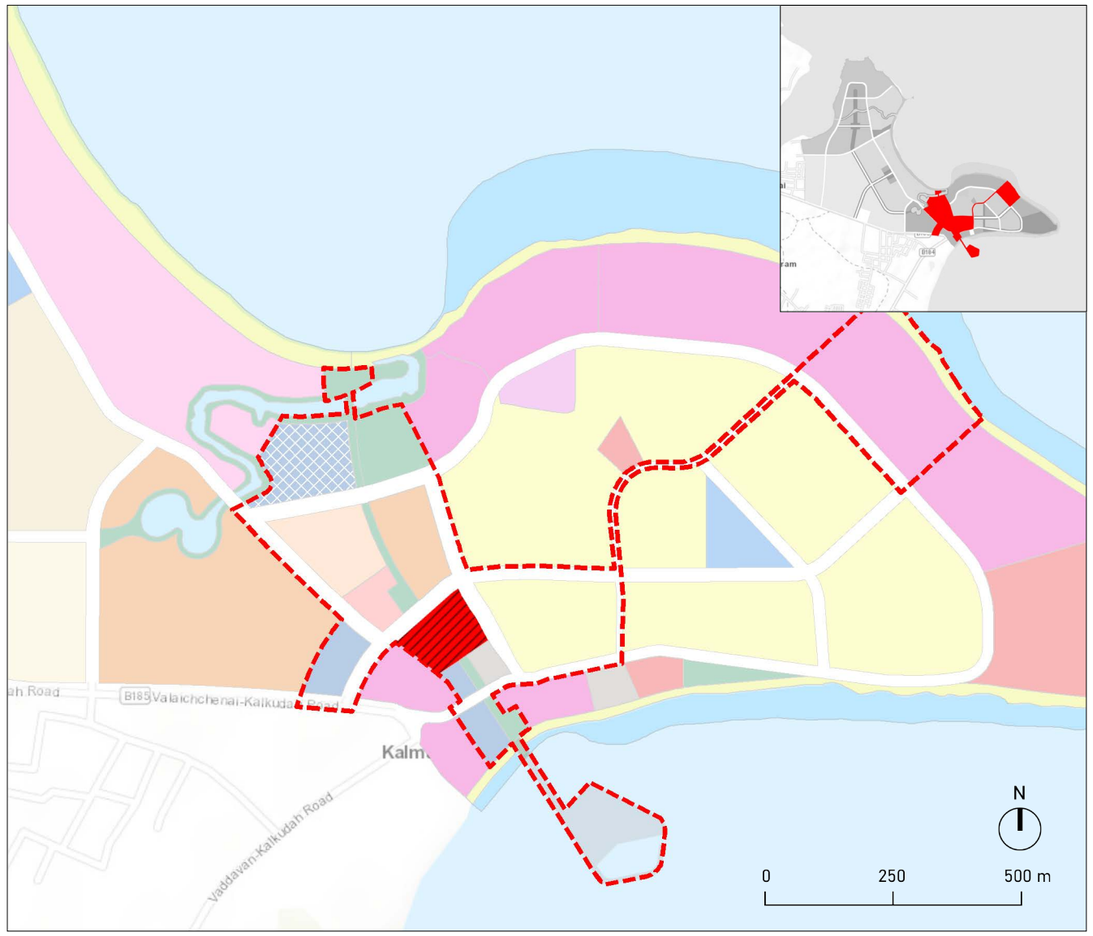
OBJECTIVE

Situated at a key vantage point and serving as a major visual landmark, Plot C-01 will feature iconic architecture to enhance the area's identity and character.

DEVELOPMENT PROGRAMME

The program for Plot C-01 will include cafes, bars, various food and beverage establishments, retail shops, and other tourist-related commercial activities

PLANNING PARAMETERS	
PLOT NUMBER	C-01
ALLOWABLE USE	COMMERCIAL
PLOT AREA	1.3HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2





PLOT REGULATION

Building Setback



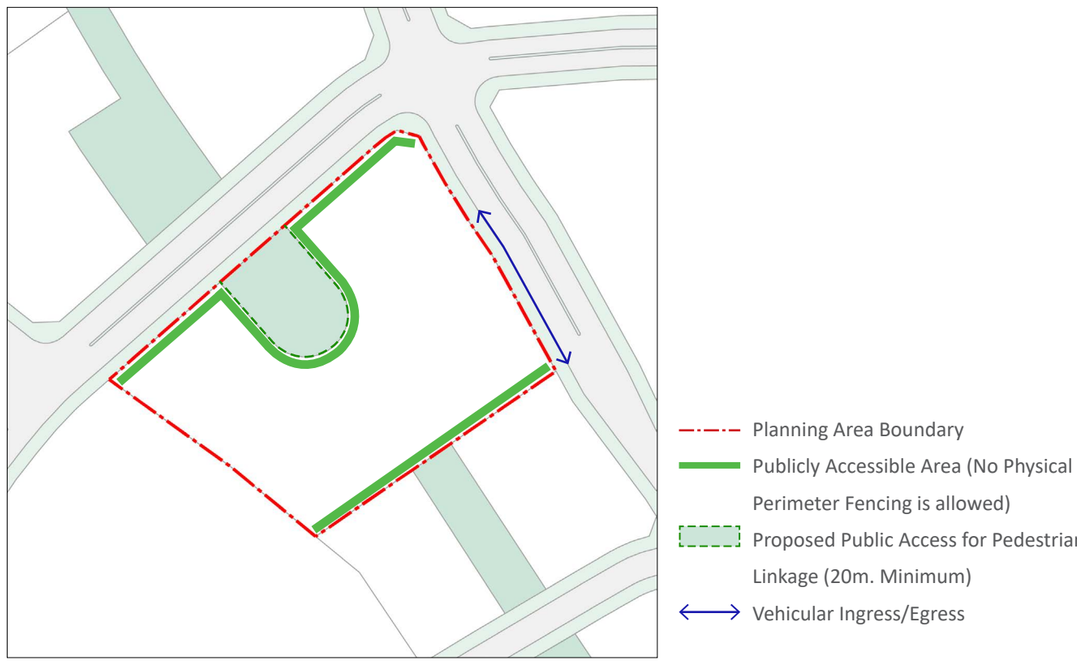
Building Use



Building Edge & Covered Walkway



Public And Vehicular Access

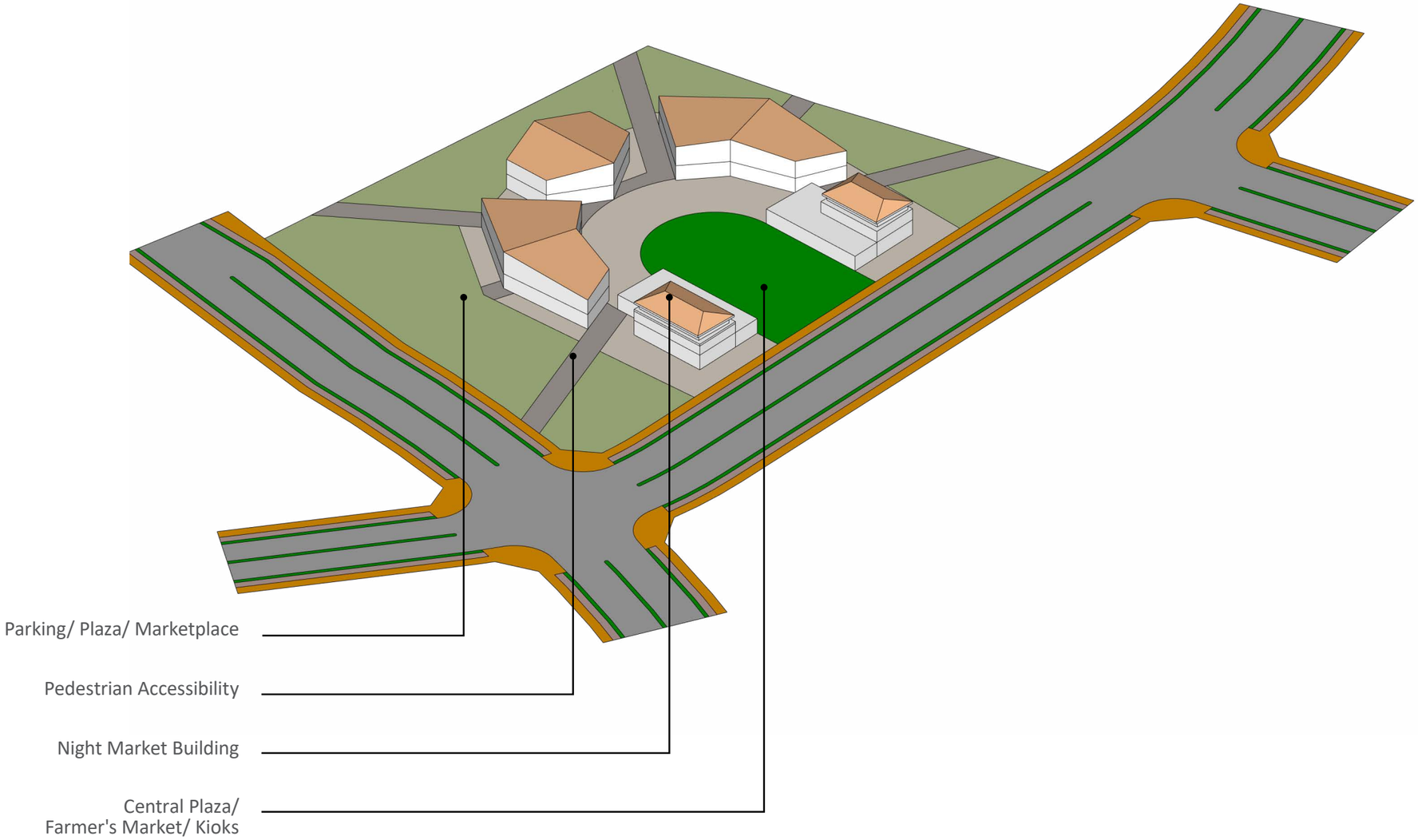


PROJECT BRIEF

1.	Project Title	Commercial Parcel- 01 (Retail/ Nigh Market)
2.	Project Location	Pasikudah Beach, Batticaloa District, Eastern Province
3.	Land Requirement for the Project	1.3 Ha
4.	Location of the Land	Located at UD intervention area of Pasikudah Beach
5.	Ownership Detail of the Land	Land Own by Tourism Board
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Annual Concession Fee (ACF)
15.	Project Objectives	Objective 1 **Enhance Revenue Generation:** Optimize tenant mix, retail space allocation, and customer experience to ensure high foot traffic, increased sales, and long-term profitability for retailers and property owners. Objective 2 **Enhance Customer Experience and Attraction:** Create an attractive, modern, and accessible retail environment with amenities, services, and entertainment options to increase customer engagement, encourage repeat visits, and build brand loyalty. Objective 3 **Sustainability and Long-Term Viability:** Integrate sustainable building practices, energy-efficient systems, and flexible design to accommodate future growth, reduce environmental impact, and ensure the development remains relevant and resilient over time.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of commercial activities 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects Annual Concession Fee (ACF) from the partner

18.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period
15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Implement eco-friendly design, Eco-Tourism Promotion 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Land Area: 1 Ha 2. Phasing Targets: 0-5 years
17.	Land Cost	1.3 USD Mn
18.	Total Development cost	5.4 USD Mn
19.	Revenue (30 years)	20.5 USD Mn
20.	IRR for 30 years	17%
21.	IRR for 30 years without land cost	20%
22.	Break even (year)	8 years
23.	Stabilisation period (year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Increased Property Values: Raises value of nearby properties. • Promote Tourism: Transforms the surroundings and Attracts visitors through enhanced retail, dining, and entertainment options. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
25.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.

30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

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4. HOTEL PARCEL

Site Context

Plot C-02 is a 5.8Ha commercial plot strategically situated at the development's entrance. Located at the junction of a major road and a secondary road, it functions as a prominent gateway to the area.

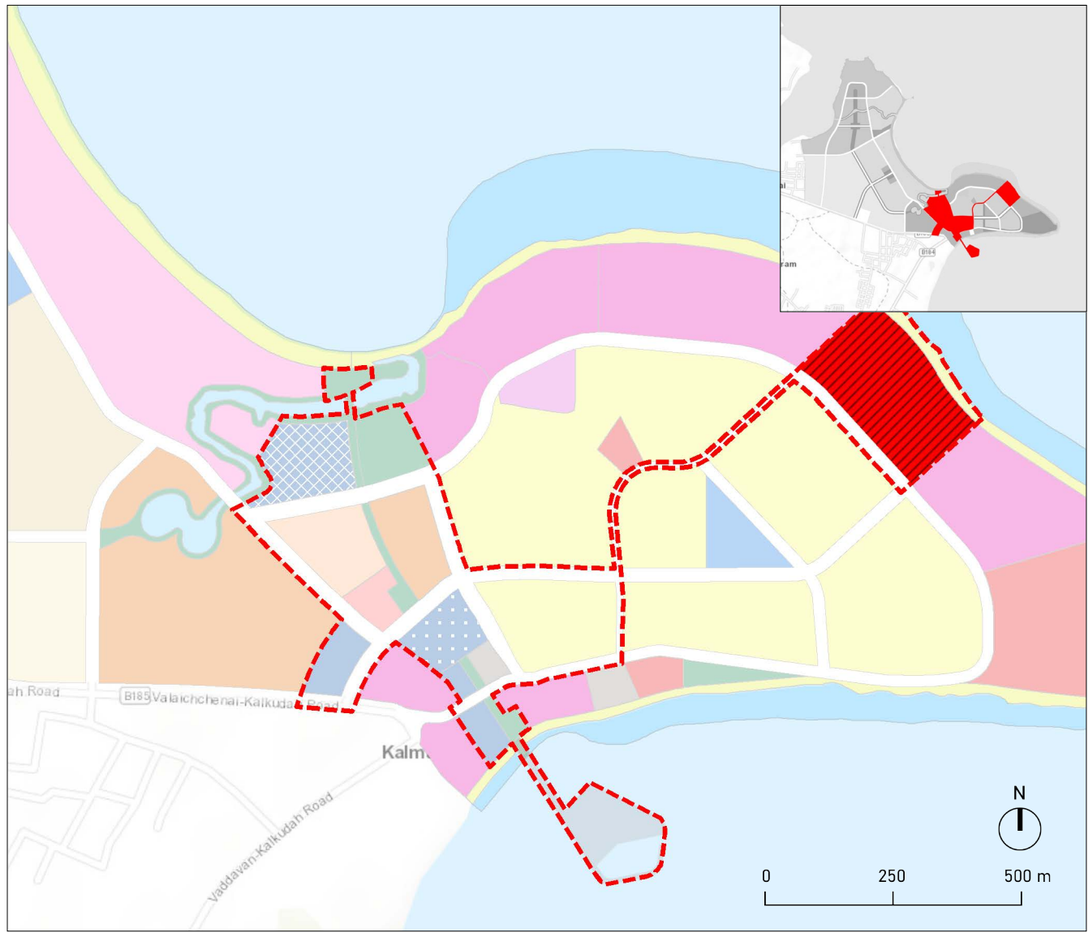
OBJECTIVE

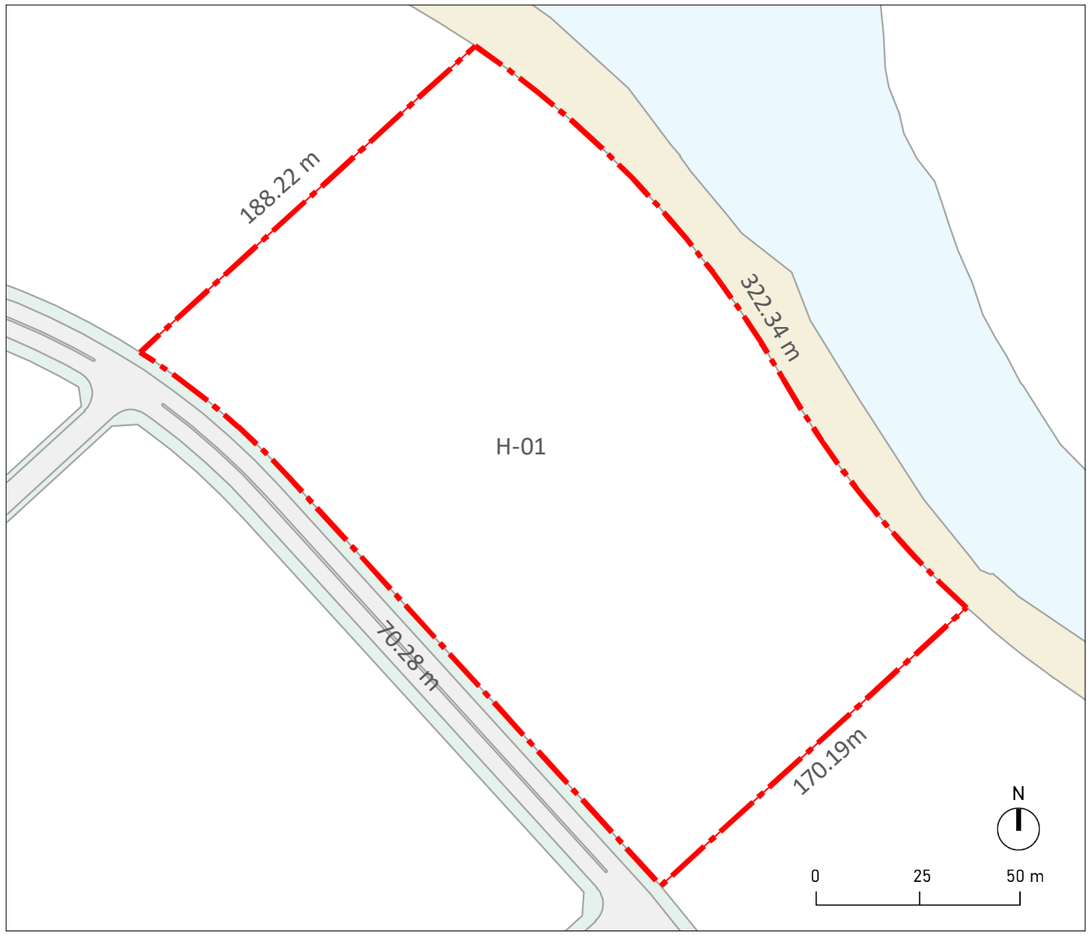
As Plot C-02 is located at the entrance of the development, its architecture will be iconic to enhance the area's character. This distinctive design will complement and support the landmark night market, creating a cohesive gateway

DEVELOPMENT PROGRAMME

The program for Plot C-02 will include essential facilities such as a clinic and financial services, enhancing the development's functionality.

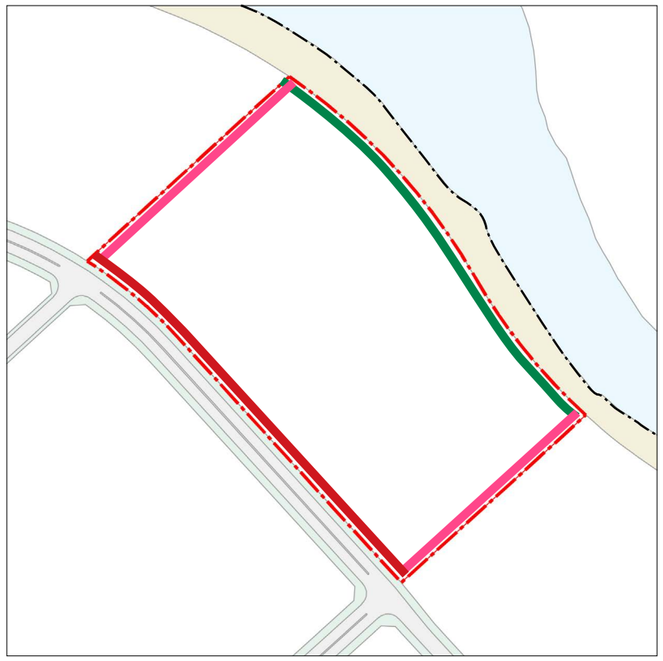
PLANNING PARAMETERS	
PLOT NUMBER	H-01
ALLOWABLE USE	HOTEL
PLOT AREA	5.8HA
PLOT RATIO	0.5
BUILDING HEIGHT	G+1





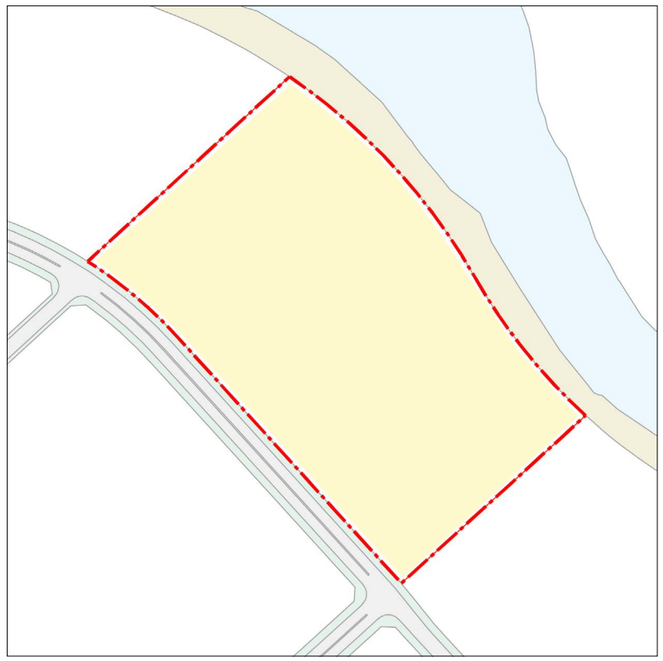
PLOT REGULATION

Building Setback



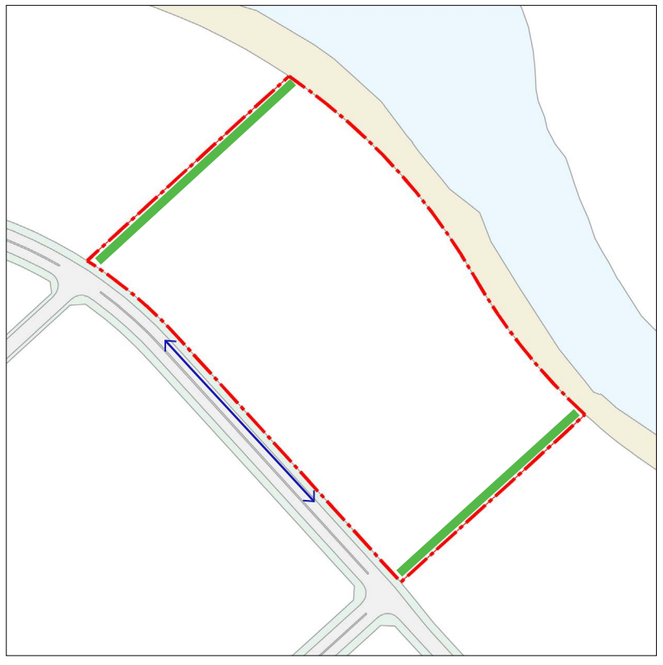
- Planning Area Boundary
- Indicative PVL
- 45.0m Setback from Indicative PVL Line (Subject to CCD Approval)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

Building Use



- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use

Public And Vehicular Access



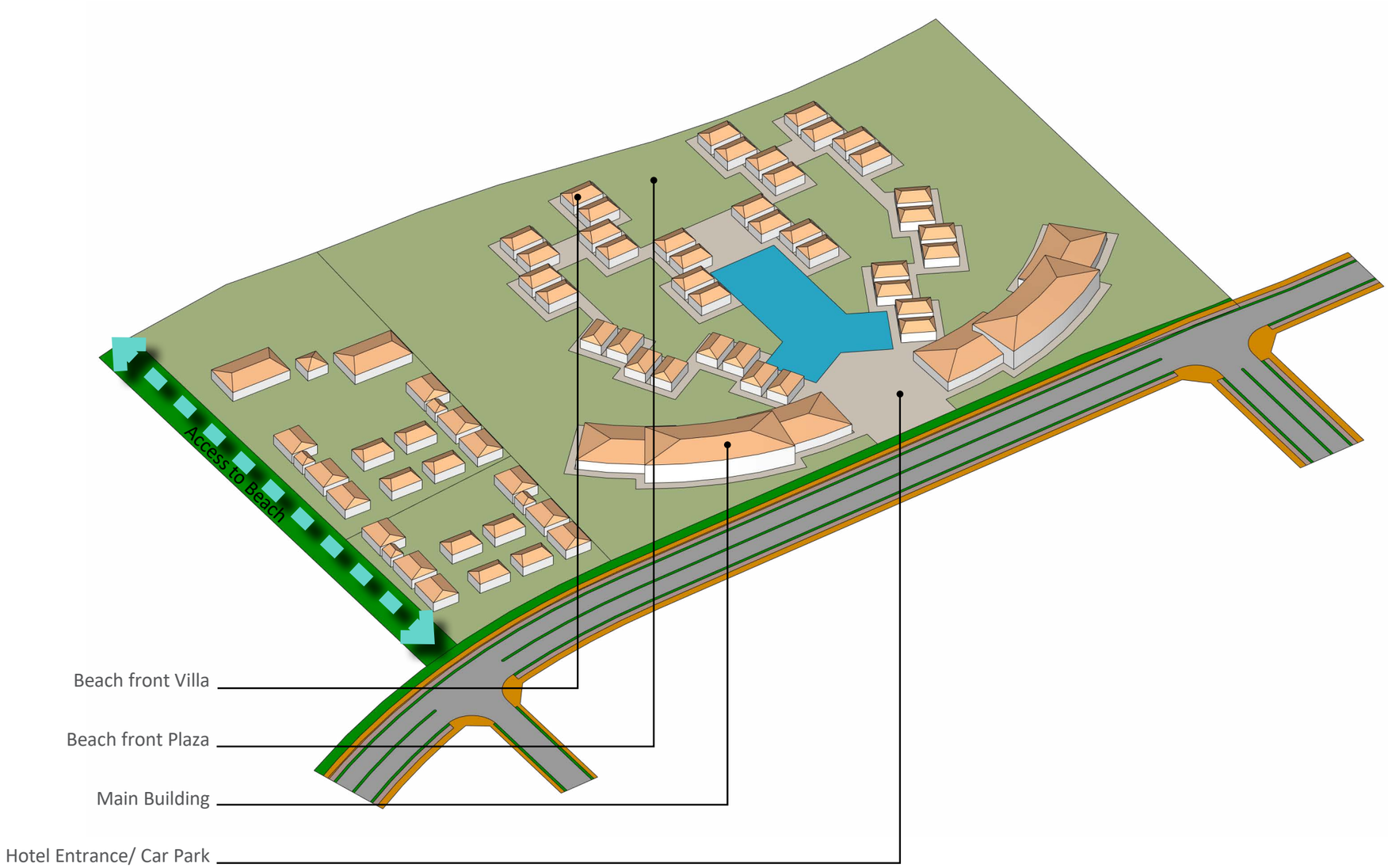
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Hotel Parcel- 01
2.	Project Location	Pasikudah Beach, Batticaloa District, Eastern Province
3.	Land Requirement for the Project	5.8 Ha
4.	Location of the Land	Located at UD intervention area of Pasikudah Beach
5.	Ownership Detail of the Land	Land Own by Tourism Board
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Revenue Share
15.	Project Objectives	Objective 1 **Enhance Guest Experience:** Provide high-quality accommodations and services that cater to both leisure and business travelers, ensuring a memorable and comfortable stay. Objective 2 **Increase Revenue Generation:** Capitalize on the high foot traffic and demand in the core tourism area to drive consistent occupancy rates and maximize profitability. Objective 3 **Contribute to Local Economic Growth:** Support the local economy by creating jobs, promoting local businesses, and attracting higher-spending tourists to the area.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period

15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Implement eco-friendly design, Eco-Tourism Promotion 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 5.8 Ha 2. Phasing Targets: 0-5 years
17.	No. of Rooms	180-200 Rooms
18.	Land Cost	5.9 USD Mn
19.	Total Development Cost	13.1 USD Mn
20.	Revenue (30 years)	403 USD Mn
21.	IRR for 30 years	15%
22.	IRR for 30 years without land cost	19%
23.	Stabilisation period (year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Tourist Attraction: Draws visitors to the area, boosting tourism and local economy. • Information Hub: Provides essential information and resources for tourists, enhancing their experience. • Local Promotion: Showcases local culture, attractions, and businesses. • Economic Impact: Generates revenue and creates jobs in the tourism sector. • Community Engagement: Offers educational programs and events for both tourists and residents. • Enhanced Visitor Experience: Improves visitor satisfaction and length of stay. • Sustainable Tourism: Promotes responsible tourism practices and environmental awareness.
25.	Planned Activities in Achieving Outputs	• Improve Infrastructure: Upgrade roads, utilities, and public services. • Information and Exhibits: Curate and install informative displays, maps, and interactive exhibits about local attractions. • Staff Recruitment: Hire and train staff to provide visitor information and support. • Marketing Campaign: Implement strategies to promote the visitor center and attract tourists. • Partnerships: Collaborate with local businesses and tourism operators for mutual promotion. • Program Development: Create events, tours, and workshops to engage visitors and enhance their experience. • Visitor Feedback: Collect and analyze feedback to improve services and facilities. • Maintenance Plan: Establish a routine for the upkeep and maintenance of the center.

30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

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5.5 FINANCIAL AND PROJECT IMPLEMENTATION MODEL

5.5.1 CASE SCENARIO (PASIKUDAH)

FINANCIAL ANALYSIS – HIGH CASE SCENARIO

The estimated cost of land acquisition for the project is anticipated to range between 0.7 to 1.1 million USD per hectare. This wide range reflects variations in land prices depending on location, availability, and other market factors.

Regarding revenue assumptions, the Wellness Center is projected to generate an average expense per person of approximately 190 to 220 USD. This estimation takes into account the comprehensive services offered, including health and wellness treatments, fitness facilities, and other amenities that contribute to the overall guest experience.

For the 5-star hotel component of the project, the expected average room rent is estimated to be between 130 to 140 USD per night. This figure is based on market analysis of similar high-end accommodations, reflecting the luxurious amenities, service standards, and exclusivity that are anticipated to attract guests.

Additionally, revenue from retail spaces and the visitor's center, which includes rental of shops, is projected to be in the range of 8 to 10 USD per square meter per month. This estimation is derived from current market rates for commercial rental spaces in comparable tourist destinations and takes into consideration the potential foot traffic generated by the Wellness Center and hotel.

Cost of Land **0.7 – 1.1 Mn USD/ hectare**	**Revenue Assumptions**		
	Wellness Center (per person expense)	**5 star resort** (Average Room Rent)	**Rentals** – Retail, visitor's center (per sqm per month)
	190 – 220 USD	**130 – 140 USD**	**8 – 12 USD**

Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even (year)	Stabilisation period (year)
WELLNESS CENTER – wellness and treatment rooms, accommodation facility	2.0	1.3	4.6	19.3	**14%**	**18%**	9	4
5 STAR RESORT (180 – 200 rooms)	5.8	5.9	13.1	403	**15%**	**19%**	10	6
RETAIL/ NIGHT MARKET (retail shops, amenities)	1.3	1.3	5.4	20.5	**17%**	**20%**	8	5
VISITORS CENTER (Exchange offices, banks, Booking offices, Courier facility, medical facility)	0.8	0.5	3.5	26	**15%**	**17%**	9	5
TOTAL	**9.9**	**9.0**	**26.6**	**470**	**15%**	**19%**		

Table 5.15 Financial Analysis - High Case Scenario

Note:

- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
WELLNESS CENTER – wellness and treatment rooms, accommodation facility	**2,000**	50%	50%			
5 STAR RESORT (180 – 200 rooms)	**8,700**	50%	50%			
RETAIL/ NIGHT MARKET (retail shops, amenities)	**6,500**	100%				
VISITORS CENTER (Exchange offices, banks, Booking offices, Courier facility, medical facility)	**4,000**	100%				

Table 5.16 Construction Phasing High Case

FINANCIAL ANALYSIS – LOW CASE SCENARIO

Similarly, for the low-case scenario, the table 5.16 presents the required land area, land cost, total development cost, 30-year revenue estimates, 30-year IRR projections, as well as the estimated break-even point and stabilization period.

Cost of Land
0.7 – 1.1 Mn USD/ hectare

Revenue Assumptions		
Wellness Center (per person expense)	**5 star resort** (Average Room Rent)	**Rentals** – Retail, visitor's center (per sqm per month)
190 – 220 USD	**130 – 140 USD**	**8 – 12 USD**

Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even	Stabilisation period
WELLNESS CENTER – wellness and treatment rooms, accommodation facility	1.0	0.7	1	5.8	**14%**	**18%**	9	6
5 STAR RESORT (130 – 150 rooms)	5.8	5.85	13.1	416	**15%**	**19%**	10	6
RETAIL/ NIGHT MARKET (retail shops, amenities)	1.0	1	4.2	18	**17%**	**20%**	8	5
VISITORS CENTER (Exchange offices, banks, Booking offices, Courier facility, medical facility)	0.8	0.5	3.5	26	**15%**	**17%**	9	5
TOTAL	**8.6**	**8**	**22**	**465**	**15%**	**19%**		

Table 5.17 Financial Analysis - Low Case Scenario

Note:

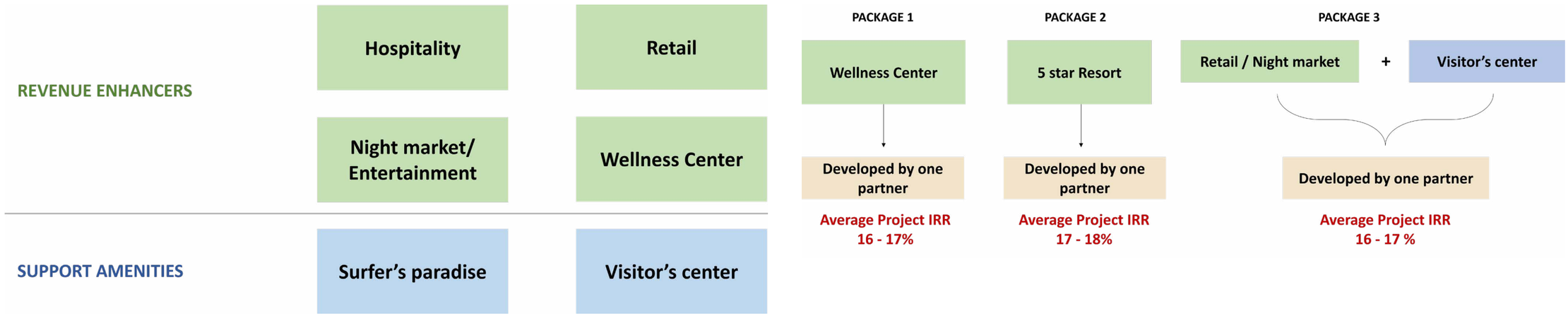
- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
WELLNESS CENTER – wellness and treatment rooms, accommodation facility	**1,000**	50%	50%			
5 STAR RESORT (130 – 150 rooms)	**8,700**	50%	50%			
RETAIL/ NIGHT MARKET (retail shops, amenities)	**5,000**	100%				
VISITORS CENTER (Exchange offices, banks, Booking offices, Courier facility, medical facility)	**4,000**	100%				

Table 5.18 Construction Phasing Low Case

5.5.2 IMPLEMENTATION MODEL OF PROJECTS

The IRR for Support components have lower IRR compared to revenue enhancers as they are non-revenue generating and the main source of revenue is through rentals of the stores. Though they are non- revenue generators, they are critical as they form a part of essential tourist amenities and enhance the experience of the tourists.



- Option 2: For self development of the projects by the Authorities, the project IRR without land cost can be considered for returns.

Components	Category of project	Development model	Category of project	
WELLNESS CENTER				
5 STAR RESORT	Revenue enhancer	Long term lease with Revenue Share	• **Land ownership** lies with the government • **Collects revenue share** from Partner	• **Design, build, fund and operate and generates revenue** until the concession period • **Provides revenue share** to the Government • **Returns the land** and building to UDA after concession period
RETAIL/ NIGHT MARKET	Revenue enhancer	Long term lease with Revenue Share	• **Land ownership** lies with the government • **Collects Annual Concession Fee (ACF)** from the partner	• **Design, build, Fund and Operate** the development until the concession • **Generates revenue** through rentals until the concession period • **Returns the land** and building to UDA after concession period
BEACH FRONT PARK & RETAIL				

Table 5.19 Implementation Model of Projects (Pasikudah)

GENERAL ASSUMPTIONS (HIGH CASE)

	VISITOR CENTRE	RETAIL & NIGHT MARKET
General Assumptions		
Land Area (Ha)	0.8	1.3
Cost Assumptions		
Base Cost of Construction (USD per sqm)	695	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0%
Escalation in Cost of Construction (per annum)	5.0%	5.0%
Revenue Assumptions		
Escalation in Revenues (per annum)	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%

Table 5.20 General Assumptions (High Case)

WELLNESS CENTER		
Expense Assumptions		
Cost of Construction	USD/ sqm	1,997.78
Admin & Salaries Cost	% of revenues	25%
Maintenance Expense	% of revenues	8%
Power and Fuel Expenditure	% of revenues	10%
Marketing Expenditure	% of revenues	15%
Cost Escalation	Y-o-y% on base cost	2.5%
Contingencies	% of total cost	10%

Event Pricing

Unit	Type of Event	Entrance fee per head	Pricing Escalation (Y-o-Y)
USD	Wellness Fee	244.44	2.5%

GENERAL ASSUMPTIONS (LOW CASE)

	VISITOR CENTRE	RETAIL & NIGHT MARKET
General Assumptions		
Land Area (Ha)	0.8	1.0
Cost Assumptions		
Base Cost of Construction (USD per sqm)	695	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0%
Escalation in Cost of Construction (per annum)	5.0%	5.0%
Revenue Assumptions		
Escalation in Revenues (per annum)	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%

WELLNESS CENTER		
Expense Assumptions		
Cost of Construction	USD/ sqm	1,997.78
Admin & Salaries Cost	% of revenues	25%
Maintenance Expense	% of revenues	8%
Power and Fuel Expenditure	% of revenues	10%
Marketing Expenditure	% of revenues	15%
Cost Escalation	Y-o-y% on base cost	2.5%
Contingencies	% of total cost	10%

Event Pricing

Unit	Type of Event	Entrance fee per head	Pricing Escalation (Y-o-Y)
USD	Wellness Fee	244.44	2.5%

Table 5.21 General Assumptions (Low Case)

5.5.3 FINANCIAL IMPLICATIONS

HIGH CASE

REVENUE SHARE MODEL

Components	Built up area (sqm)	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
WELLNESS CENTER	2,000	7%	5	6%	5	30	14%	16%	16%	17%
5 STAR RESORT	8,700	7%	5	5%	5	30	13%	16%	17%	18%
RETAIL/ NIGHT MARKET	6,500	7%	5	5%	5	30	15%	17%	18%	19%

ANNUAL CONCESSION FEE (ACF) MODEL

Components	Built up area (sqm)	Annual Concession Fee (ACF)	Escalation in ACF (%)	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
VISITORS CENTER	4,000	0.1	5%	3	30	8%	11%	13%	14%

Table 5.22 Plot wise Financial Implementation High Case (Pasikudah)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• Wellness center	14%	16%	16%	17%
Package 2	• 5 star resort	13%	16%	17%	18%
Package 3	• Retail/ Nigh market • Visitor's center	12%	15%	16%	17%

REVENUE TO AUTHORITY				
Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	0%	5%	8%	9%
Total revenue to Authority (ACF+RS) (USD Mn)	9	18.5	33	50

Table 5.23 Package wise Financial Implementation and Revenue to Authority High Case (Pasikudah)

LOW CASE

REVENUE SHARE MODEL

Components	Built up area (sqm)	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
WELLNESS CENTER	1,000	5%	5	3%	5	30	13%	15%	16%	17%
5 STAR RESORT	8,700	5%	5	3%	5	30	13%	16%	18%	18%
RETAIL/ NIGHT MARKET	5,000	5%	5	3%	5	30	16%	19%	19%	20%

ANNUAL CONCESSION FEE (ACF) MODEL

Components	Annual Concession Fee (ACF)	Escalation in ACF (%)	Frequency (years)	Concession period (years)	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
VISITORS CENTER	0.1	5%	3	30	8%	11%	13%	14%

Table 5.24 Plot wise Financial Implementation Low Case (Pasikudah)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• Wellness center	13%	15%	16%	17%
Package 2	• 5 star resort	13%	16%	18%	18%
Package 3	• Retail/ Nigh market • Visitor's center	13%	15%	17%	17%

REVENUE TO AUTHORITY

Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	2%	8%	10%	12%
Total revenue to Authority (ACF+RS) (USD Mn)	7.5	15	26	39

Table 5.25 Package wise Financial Implementation and Revenue to Authority Low Case (Pasikudah)

HIGH CASE

REVENUE TO AUTHORITY THROUGH REVENUE SHARE (USD Mn)

Components	15 years	20 years	25 years	30 years
WELLNESS CENTER	2	4	7.8	12.4
5 STAR RESORT	4	8.8	16.2	25
RETAIL/ NIGHT MARKET	1.6	3.3	6	9.5

REVENUE TO AUTHORITY THROUGH ACF (USD Mn)

Components	15 years	20 years	25 years	30 years
VISITORS CENTER	1.5	2.2	2.9	3.6

The **Wellness center, 5 star resort, retail/ Night market** are categorized under a **revenue-sharing model** due to their higher project IRRs. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 7% is proposed to achieve the Partners' IRRs of 17-19%, which is expected to attract global investors to Sri Lanka.

In contrast, **Visitor's center** serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an **Annual Concession Fee** model of USD 0.1 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.

Table 5.26 Project Wise Detail Revenue to Authority High Case (Pasikudah)

LOW CASE

REVENUE TO AUTHORITY THROUGH REVENUE SHARE (USD Mn)

Components	15 years	20 years	25 years	30 years
WELLNESS CENTER	0.8	1.4	2.3	3
5 STAR RESORT	4	8.8	16	25
RETAIL/ NIGHT MARKET	1.2	2.6	4.7	7.3

REVENUE TO AUTHORITY THROUGH ACF (USD Mn)

Components	15 years	20 years	25 years	30 years
VISITORS CENTER	1.5	2.2	2.9	3.6

The **Wellness center, 5 star resort, retail/ Night market** are categorized under a **revenue-sharing model** due to their higher project IRRs. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 5% is proposed to achieve the Partners' IRRs of 17-20%, which is expected to attract global investors to Sri Lanka.

In contrast, **Visitor's center** serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an **Annual Concession Fee** model of USD 0.1 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.

Table 5.27 Project Wise Detail Revenue to Authority Low Case (Pasikudah)

5.5.4 NET PRESENT VALUE FOR PROJECTS

WACC Calculation	Cost	Proportion
Debt	17%	60%
Equity	20%	40%
WACC Rate / Discount rate		**18%**
Date of valuation	20th Nov 2024	
Capitalisation year	10th year	

	High case scenario			Low case scenario		
Projects	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**
5 star resort	6	34	6	6	34	6
Wellness Center	1.5	8	4	0.7	4	4
Retail/ Night market	1.3	64	49	1	49	49
Visitor center	0.5	28	35	0.5	28	35
The NPV is higher than the total cost of the land, hence the projects are feasible						

Table 5.28 Net Present Value High and Low Case (Pasikudah)

5.5.5 ROAD COST ESTIMATION

SCENARIOS	ROAD TYPE	ROAD WIDTH (M)	ROAD LENGTH (M)			COST IN SKR MN			COST IN USD MN		
			NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL
PRIORITY PROJECTS (HIGH CASE SCENARIO)	Secondary road with parking	31	-	939	939	-	307	307	-	1.0	1.0
	Secondary road without parking	21.6	344	270	614	205	74	279	0.7	0.3	0.9
	Collector road	12	105	498	603	29	63	92	0.1	0.2	0.3
PRIORITY PROJECTS (LOW CASE SCENARIO)	Secondary road with parking	31	-	594	594	-	194	194	-	0.7	0.7
	Secondary road without parking	21.6	344	270	614	205	74	279	0.7	0.3	0.9
	Collector road	12	105	498	603	29	63	92	0.1	0.2	0.3

The basic data is received from Highway Authority of Sri Lanka.

Table 5.29 Road Cost Estimation

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6 AMPARA

6.1 AMPARA SITE CONTEXT
6.2 SITE ANALYSIS
6.3 CONCEPT MASTER PLAN (WHISKY POINT)
6.4 CONCEPT MASTER PLAN (ARUGAM BAY)
6.6 ACTION PROJECTS (WHISKY POINT)
6.7 ACTION PROJECTS (ARUGAM BAY)
6.8 KEY INTERVENTION AREA (WHISKY POINT)
6.9 KEY INTERVENTION AREA (ARUGAM BAY)

6.1 AMPARA SITE CONTEXT

6.1.1 TOURIST ATTRACTIONS

Pottuvil and surrounding area is rich in cultural heritage and natural attraction sites. The significant nature and culture tourist attractions are listed in below:

1. Namaluwa Natabun Viharaya
2. Maninaga Pabbatha Viharaya
3. Muhudu Maha Viharaya
4. Kudumbigala Monastery Complex
5. Sangamankanda Point
6. Lagoon Safari,Pottuvil
7. Kotukkal Beach
8. Sand Hill Beach
9. Sala Surf Camp
10. Surfer's Rock - Elephant Rock
11. Panama - Kudumbigala Wildlife Sanctuary
12. Kudumbigala Sanctuary – Park
13. Kumana National Park

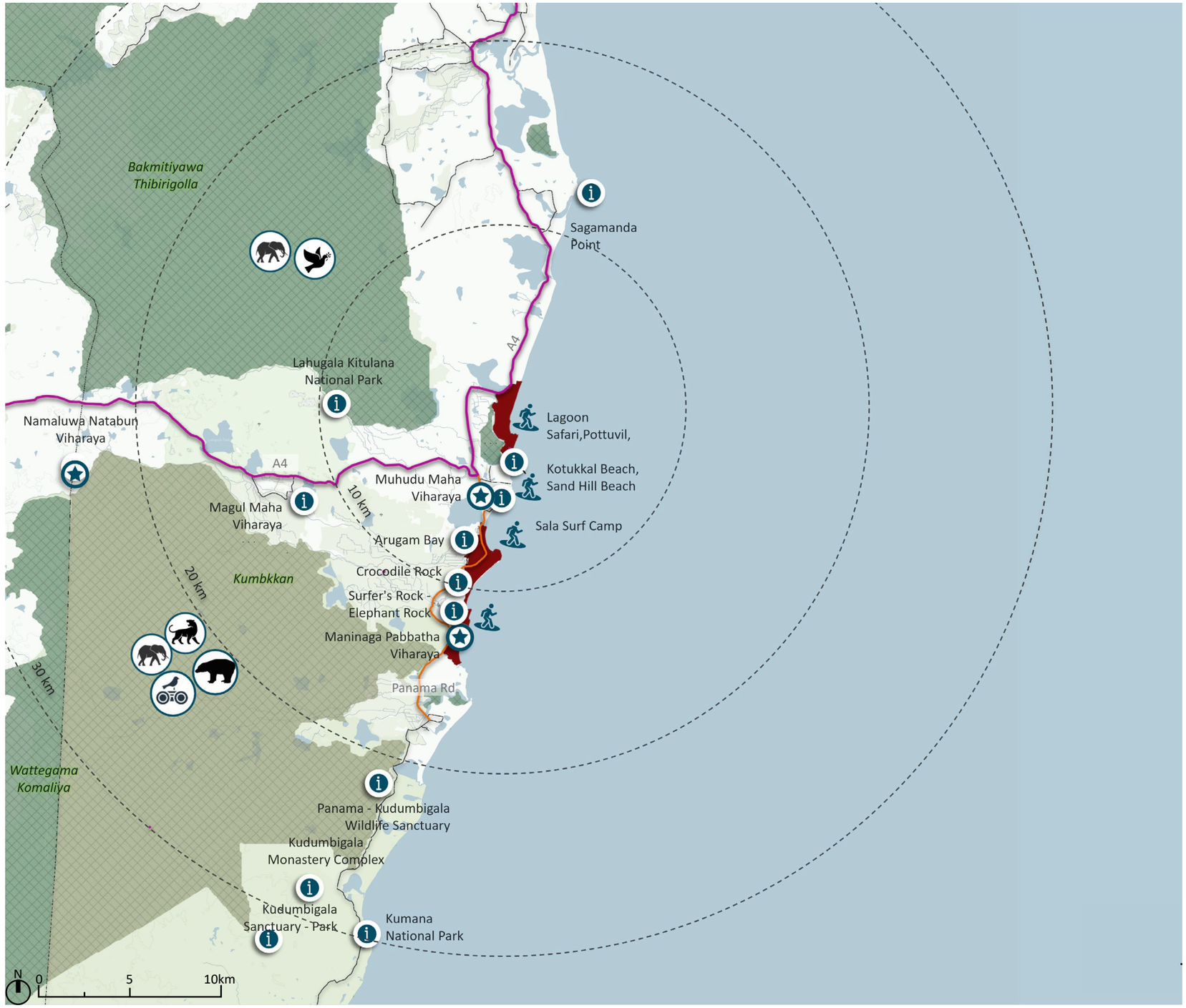


Figure 6.1 Tourist Attractions





③ Kumana National Park



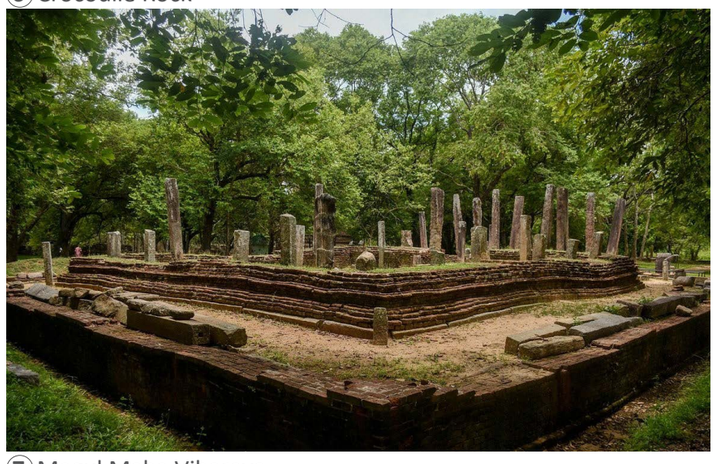
⑥ Crocodile Rock



① Sangamankanda Lighthouse



④ Lahugala Kitulana National Park



⑦ Magul Maha Viharaya



② Komari Beach



⑤ Elephant Rock



⑧ Peanut Farm Beach

6.1.2 EXISTING ACCOMMODATION

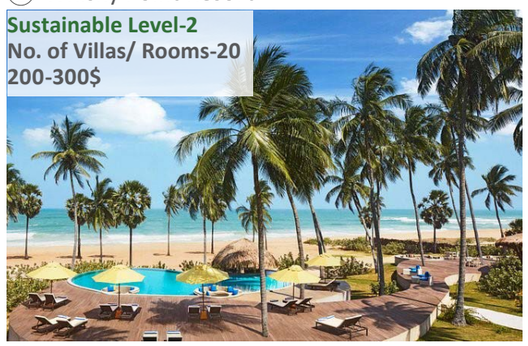
Existing accommodation facilities are analysed based on development size, number of rooms availability, quality of service, diversity of pricing options, and sustainability infrastructure provision.

The selected accommodations, such as resorts, hotels, and villas, are listed below:

ARUGAM BAY HAS A SIGNIFICANT NUMBER OF BUDGET ACCOMMODATIONS FOR BACKPACKERS, WITH STAR-RATED DEVELOPMENTS HOLDING A SMALLER SHARE.



① Whisky Point Resort



② Jetwing Surf

③ Oruwa Boutique Villas

④ Star Rest Beach Hotel

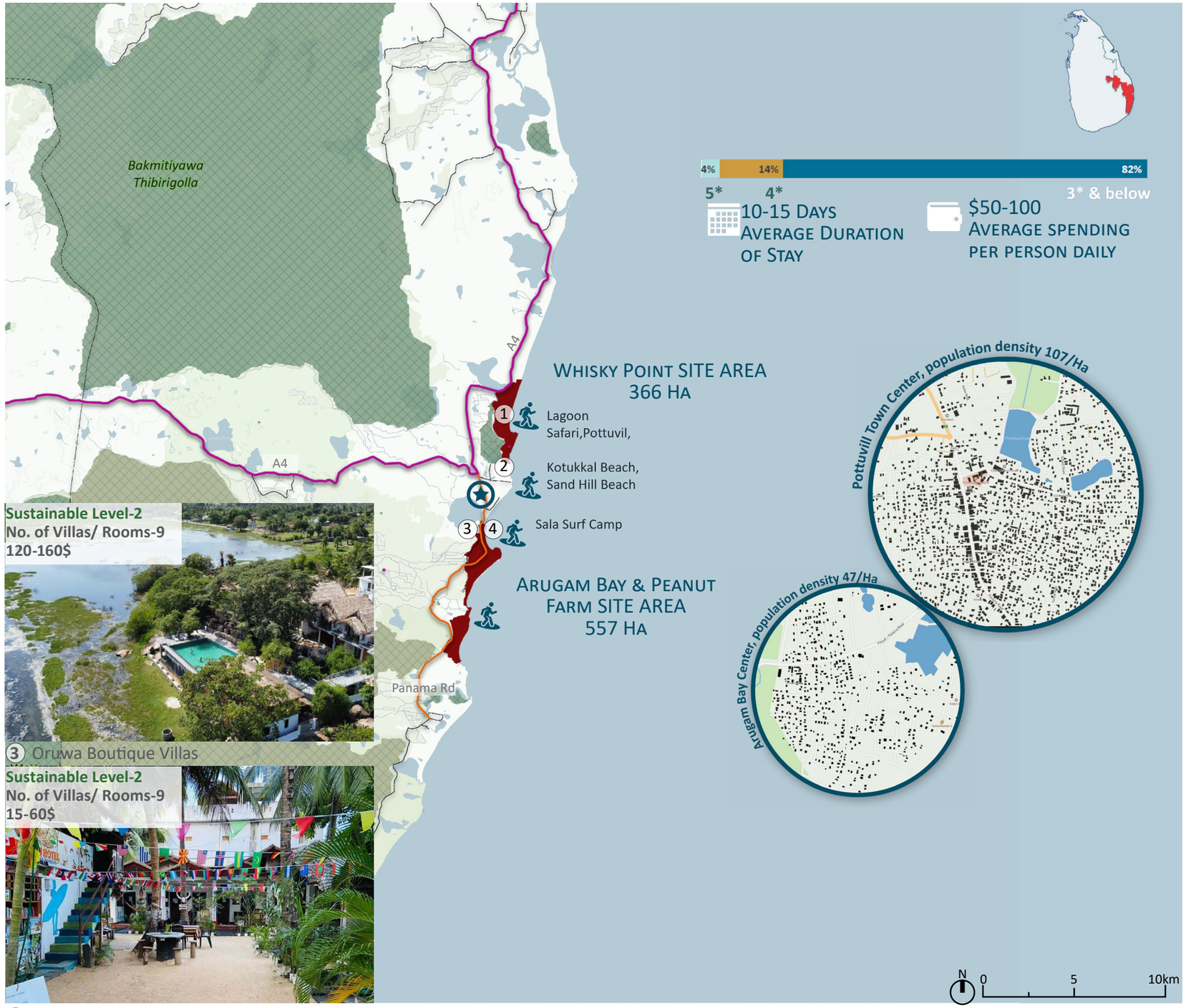


Figure 6.2 Existing Accommodation

6.1.3 EXISTING FACILITIES

Existing tourism supporting facilities includes transport node/bus station or transport network, hospital / emergency healthcare facilities, surfing equipment services and facilities and camping sites and religious sites.

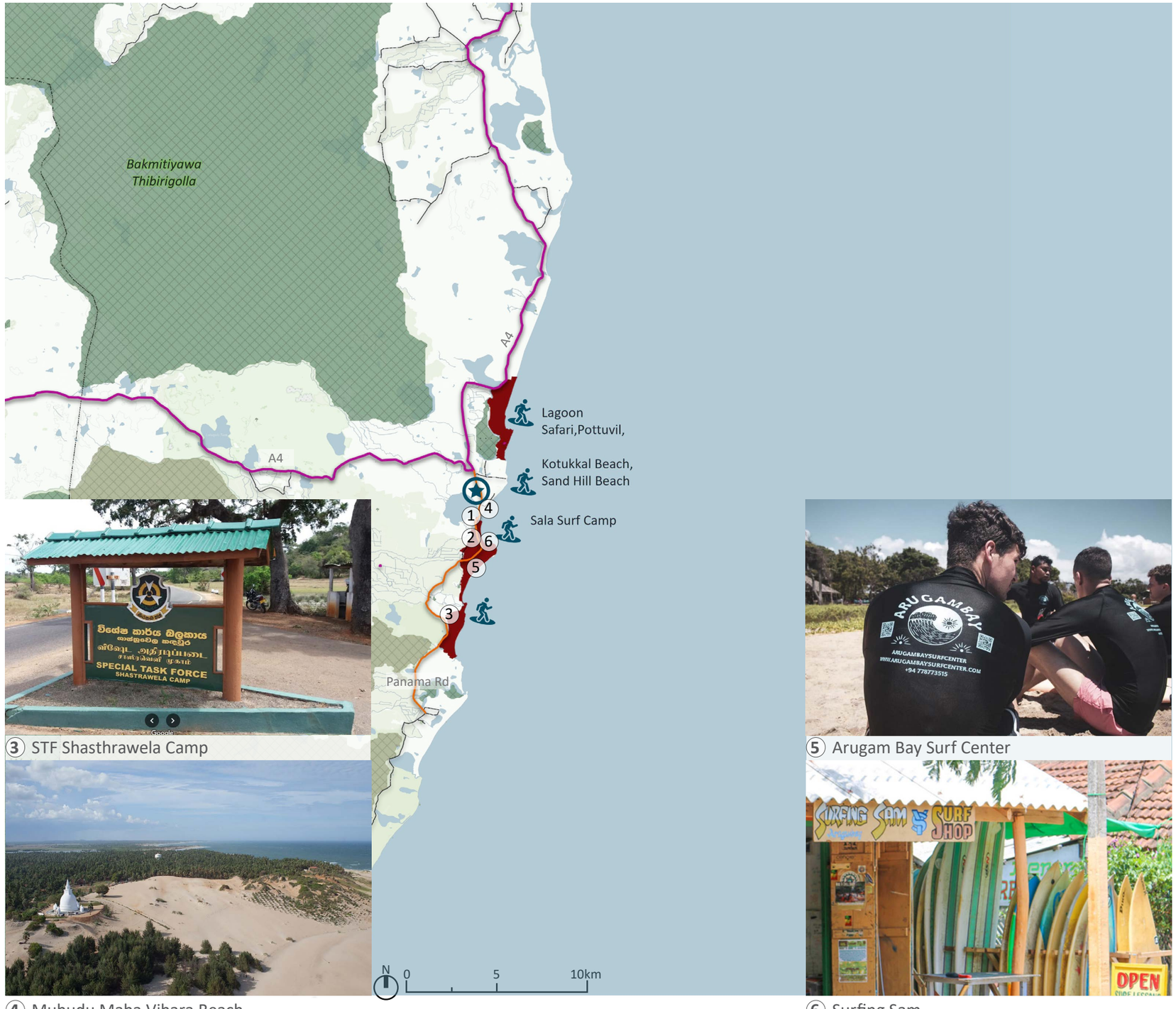
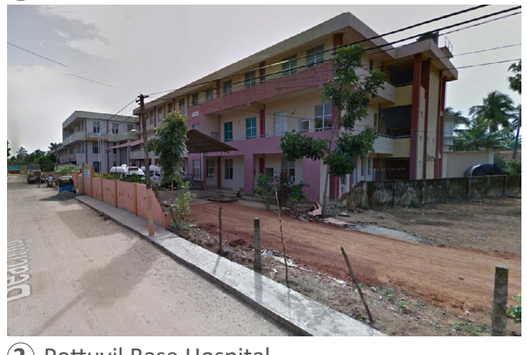


Figure 6.3 Existing Facilities



① Pottuvil Bus Stand



② Pottuvil Base Hospital

③ STF Shasthrawela Camp

④ Muhudu Maha Vihara Beach

⑤ Arugam Bay Surf Center

⑥ Surfing Sam

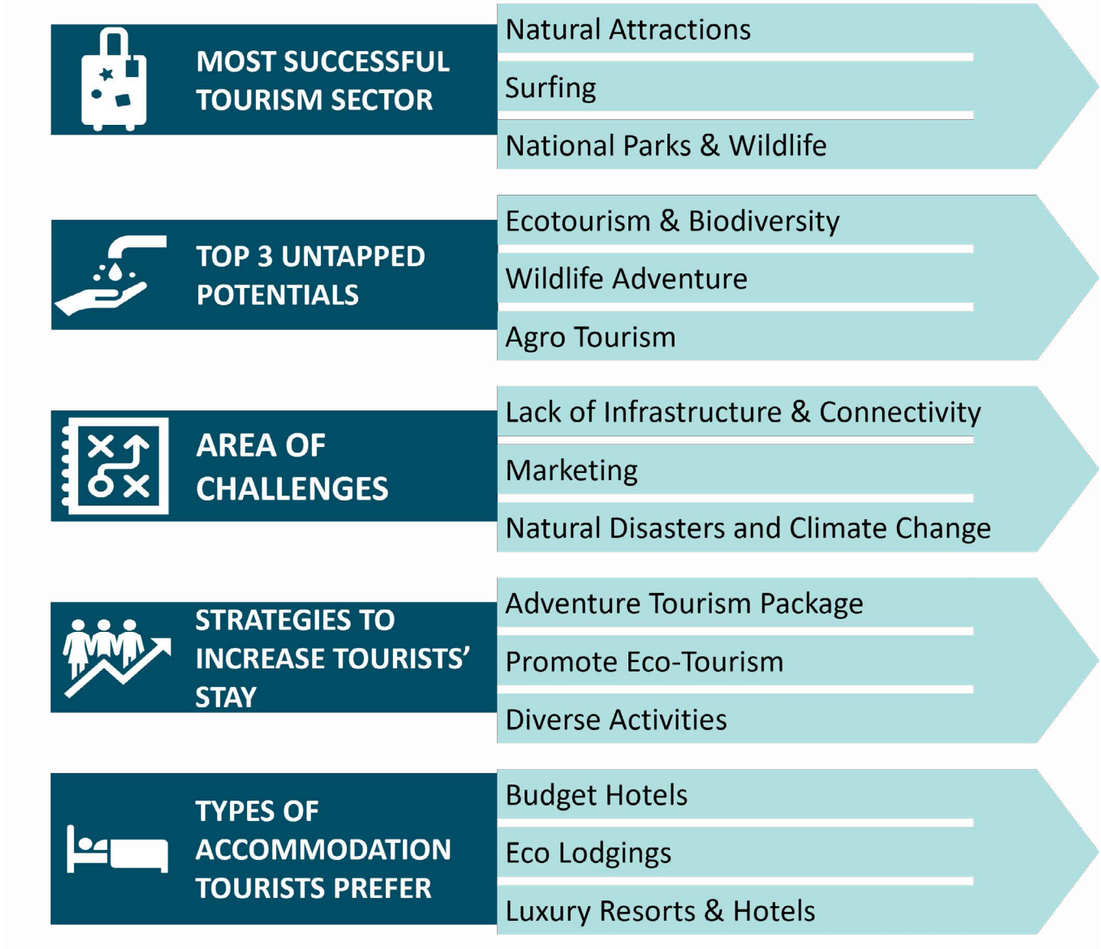
6.1.4 SUMMARY OF STAKEHOLDERS' INPUTS

Stakeholder discussions have been instrumental in gathering valuable insights regarding various aspects of tourism development aimed at optimising the potential of Whisky Point, Arugam Bay-peanut Farm sites in Ampara district. The inputs obtained from these discussions have been categorised into several key areas for thorough analysis. The summary of these inputs is presented in the Fig.

Moreover, the analysis delves into the assessment of natural and heritage attractions based on activity types, diversity, and the richness of natural assets present in the surroundings of the study area. Additionally, the analysis examines the provision of infrastructure and evaluates the quality of existing tourism facilities, including accommodation choices.

The insights gathered from stakeholder discussions and subsequent analysis provide a solid foundation for strategic planning and decision-making to harness the full potential of the Whisky Point, Arugam Bay-peanut Farm sites while addressing the challenges.

Natural & Heritage Attractions	Surfing	
	Heritage Sites	
	Ecological Sites (Forest & Wildlife)	
	Ecological Sites (Coral Reef)	
Infrastructure Provision	Connectivity (Road)	
	Connectivity (Rail)	
	Connectivity (Air)	
Quality of Accommodations	Quality Of Existing Accommodation (Non-Budget)	
	Quality Of Existing Accommodation (Budget)	



6.2 SITE ANALYSIS

6.2.1 SITE CONTEXT: WHISKY POINT

Assessments on the location of Whisky Point is as follows:

- The site is enveloped by a picturesque natural landscape, boasting a serene lagoon, lush vegetation, and agricultural fields.
- Towards the south, the site is complemented by the presence of the vibrant urban settlement of Pottuvil, which significantly enhances the overall dynamism and vitality of the area.
- The pristine beach front along the ocean remains largely untouched, preserving its natural beauty and allure visitors seeking unspoiled coastal experiences.
- The current residential area and the natural lagoon are separated by a buffer zone ranging from 70 to 300 meters of agricultural land and dense vegetation, which enhances the existing environment and fosters the upcoming natural conservation of the site and it's surrounding area.
- The A4 road serves as the main transportation route, with two entrances leading to the northern part of the site and access to the southern part through Pottuvil town. However, natural topography, specifically the Pottuvil Viewpoint, creates a physical barrier, preventing direct connectivity between the northern and southern sections of the site.



Figure 6.4 Site Context (Whisky Point)

6.2.2 SITE CONTEXT: ARUGAM BAY

Assessment on the location of Arugam Bay and Peanut Farm are as follows:

- Arugam Bay pulsates with vibrant activity, drawing surfers from across the globe to its renowned shores.
- The site delineates into three distinct zones, each characterised by its unique natural features: the Active Bay area, bustling with international surfers albeit with limited facilities and amenities; Pasarichenai Beach, offering a sizable stretch of shoreline ideal for potential beach front development; and the Peanut Farm, an environmentally sensitive area featuring scenic ecological trails for exploration and conservation.
- The landscape features flat terrain, offering convenient accessibility and promising potential for a range of development initiatives.
- The site's proximity to the lagoon, natural reserves, and archaeological sites presents a prime opportunity for the development of an integrated tourism hub. Leveraging these natural and historical assets can enhance the appeal of the area, offering visitors a multifaceted experience that combines leisure, exploration, and cultural enrichment.
- Panama Road serves as the primary transport network, linking the site with its surroundings. This thoroughfare traverses through the heart of the Arugam Bay area and along the periphery of the Peanut Farm zone, facilitating access to both regions. However, notably absent is a direct vehicular connection between the bustling Arugam Bay and the serene Peanut Farm, presenting a distinctive feature of the site's transport infrastructure.



Figure 6.5 Site Context (Arugam Bay)

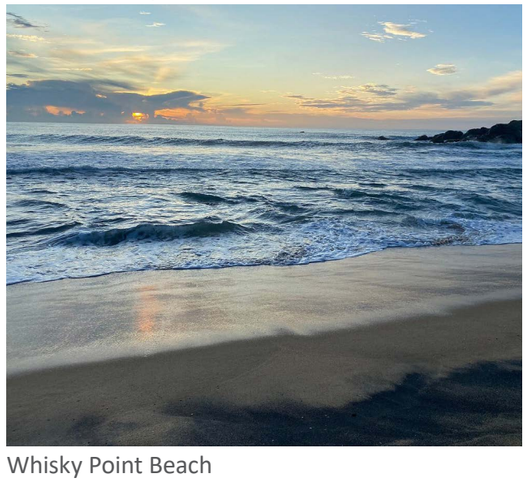
6.2.3 SITE STRENGTH: WHISKY POINT



Pottuvil Lagoon



Pottuvil Viewpoint



Whisky Point Beach

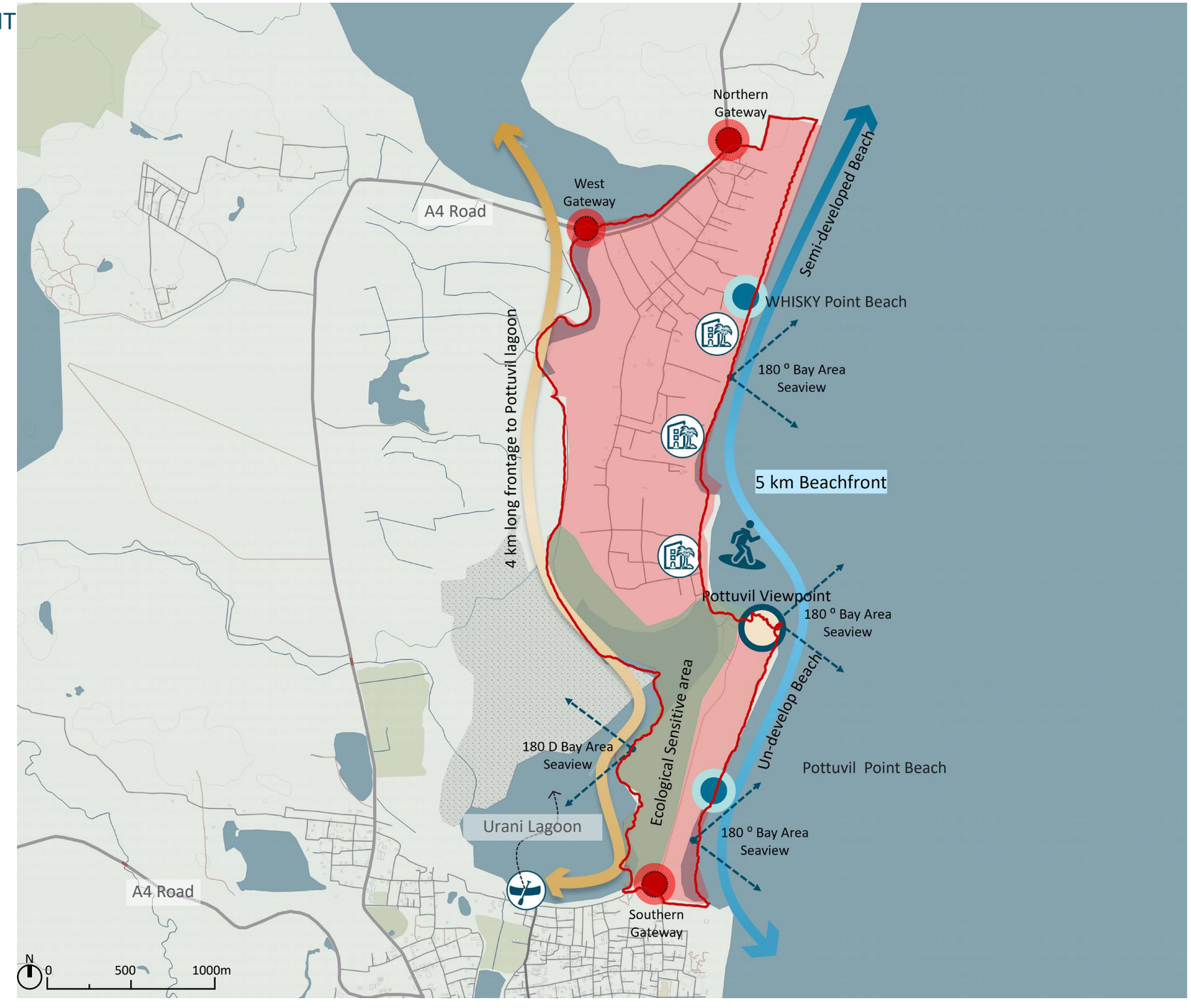


Figure 6.6 Site Strength (Whisky Point)

The study area of Whisky Point presents significant potential and strengths, including:

Available Green Field Land

Positioned between the vast expanse of the ocean and the tranquil embrace of the lagoon, green field land presents abundant opportunities for a range of development projects and tourism endeavors.

Expansive Beach front

Stretching over 5 kilometers, the beach front of Whisky Point offers an expansive shoreline, ideal for a myriad of recreational activities. Moreover, it presents a promising opportunity for residential investment, particularly at the scenic Pottuvil Point Beach area.

Established Resorts and Semi-Developed Beach front

With existing resorts and semi-developed beach front properties, the area already possesses infrastructure and amenities to cater to visitors, laying a foundation for further development and enhancement.

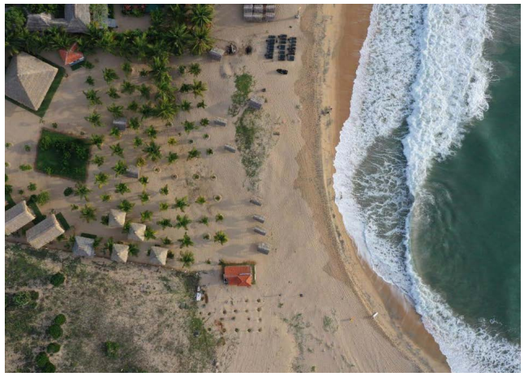
Natural Viewpoints and Assets

Within the study area, existing viewpoints and natural assets offer scenic vistas and recreational opportunities, contributing to the overall attractiveness as an upscale tourism destination.

The site's key potential and strengths provide a solid foundation for strategic planning and development initiatives aimed at harnessing its full tourism potential while preserving its natural beauty and ecological integrity.







6.2.4 SITE STRENGTH: ARUGAM BAY



Black Sand Beach



Crocodile Rock and Mangrove Area



Peanut Farm Camp Site

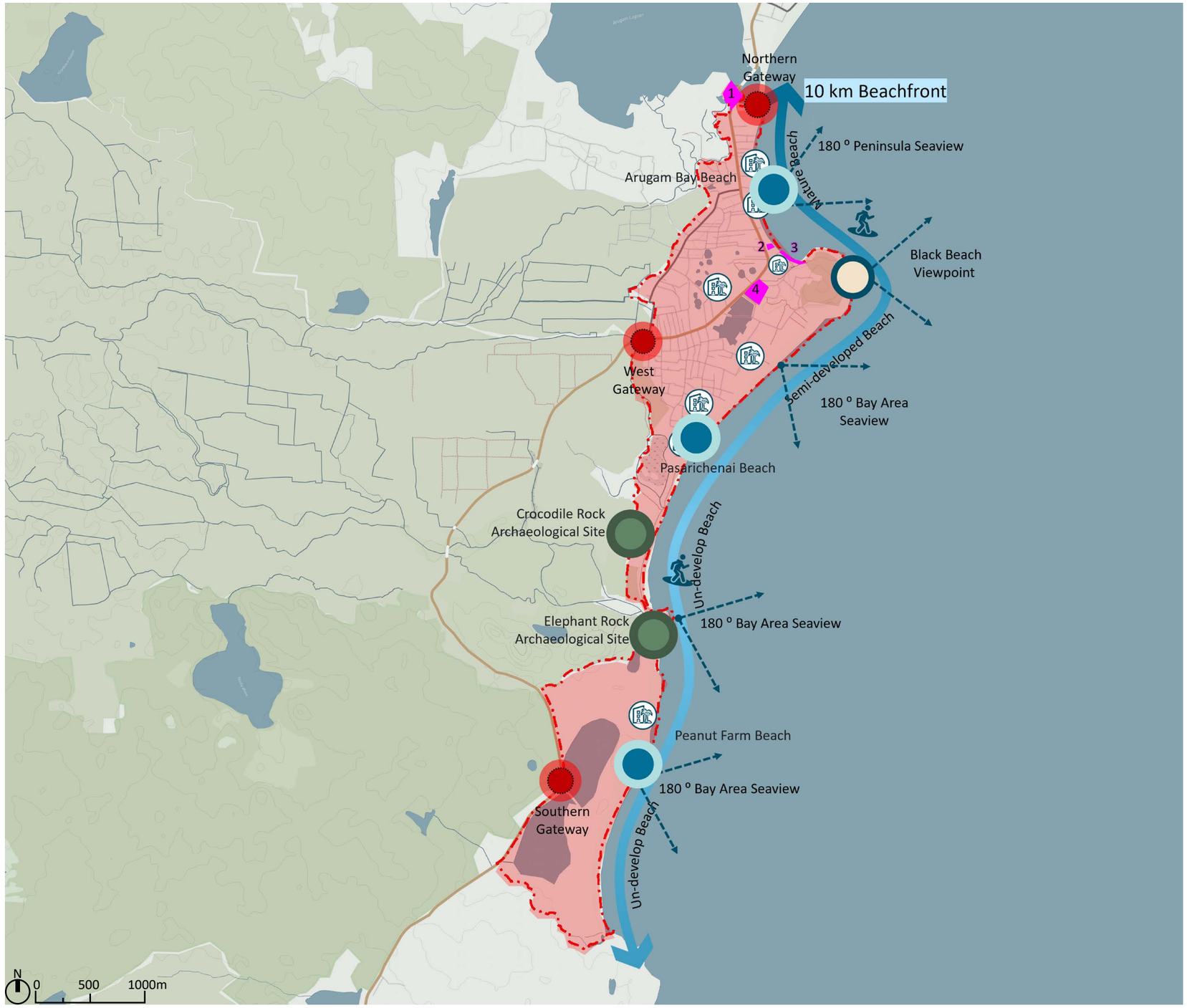


Figure 6.7 Site Strength (Arugam Bay)

The study area of Arugam Bay and Peanut Farm presents significant potential and strengths, including:

Commercial node and surfer paradise

With its thriving surfing culture, there exists an opportunity to cultivate a dedicated surfer's enclave that not only provides top-tier amenities but also incorporates essential features such as a visitor centre and a vibrant commercial hub, strategically positioned near the Panama road.

Changes of land uses

With its well-established beach front development of Arugam Bay, there lies significant potential to elevate the current land usage through strategic enhancements, fostering a cohesive and structured network of zonal connectivity.

Rich Natural and Wildlife

Arugam Bay finds itself nestled with pristine natural landscapes and wildlife sanctuaries, including national parks and conservation forests. The elephant trail, leopard watch, and a myriad of other wildlife-centric activities can seamlessly intertwine with beach front activities, offering visitors a holistic and immersive tourism experience. This integration holds the promise of fostering an interconnected tourism hub.

Natural Viewpoints and Assets

Within the study area, existing viewpoints and natural assets offer scenic vistas and recreational opportunities, contributing to the overall attractiveness as an integrated tourism destination.

These key potential and strengths of the site provide a solid foundation for strategic planning and development initiatives aimed at harnessing its full tourism potential while preserving its natural beauty and ecological integrity.













6.2.5 EXISTING LAND USE: WHISKY POINT

Whisky Point covers a total area of 366 hectares. Among this land, 123 hectares are currently vacant, ready for future development. The tourism area is 15 hectares, attracting visitors to enjoy the beautiful surroundings. Residential settlements occupy 45 hectares, providing homes for local families.

However, the area has few commercial spaces and limited public facilities. This highlights that, while Whisky Point boasts plenty of open space and natural beauty, there is a clear need for further development to improve services and foster both local community and tourism growth.

	Land Use	Area (Ha)	%
	Agriculture	67.14	18%
	Beaches and sand	28.17	8%
	Commercial	0.32	0%
	Public Facilities	2.11	1%
	Public Utilities	0.02	0%
	Residential	45.40	12%
	Roads	6.09	2%
	Scrub Land	0.01	0%
	Tourism	15.40	4%
	Unclassified	5.69	2%
	Vacant	123.21	34%
	Waterbodies	67.39	18%
	Wetland	5.10	1%
	Total	366.04	

Table 6.1 Existing Land Use Distribution (Whisky Point)

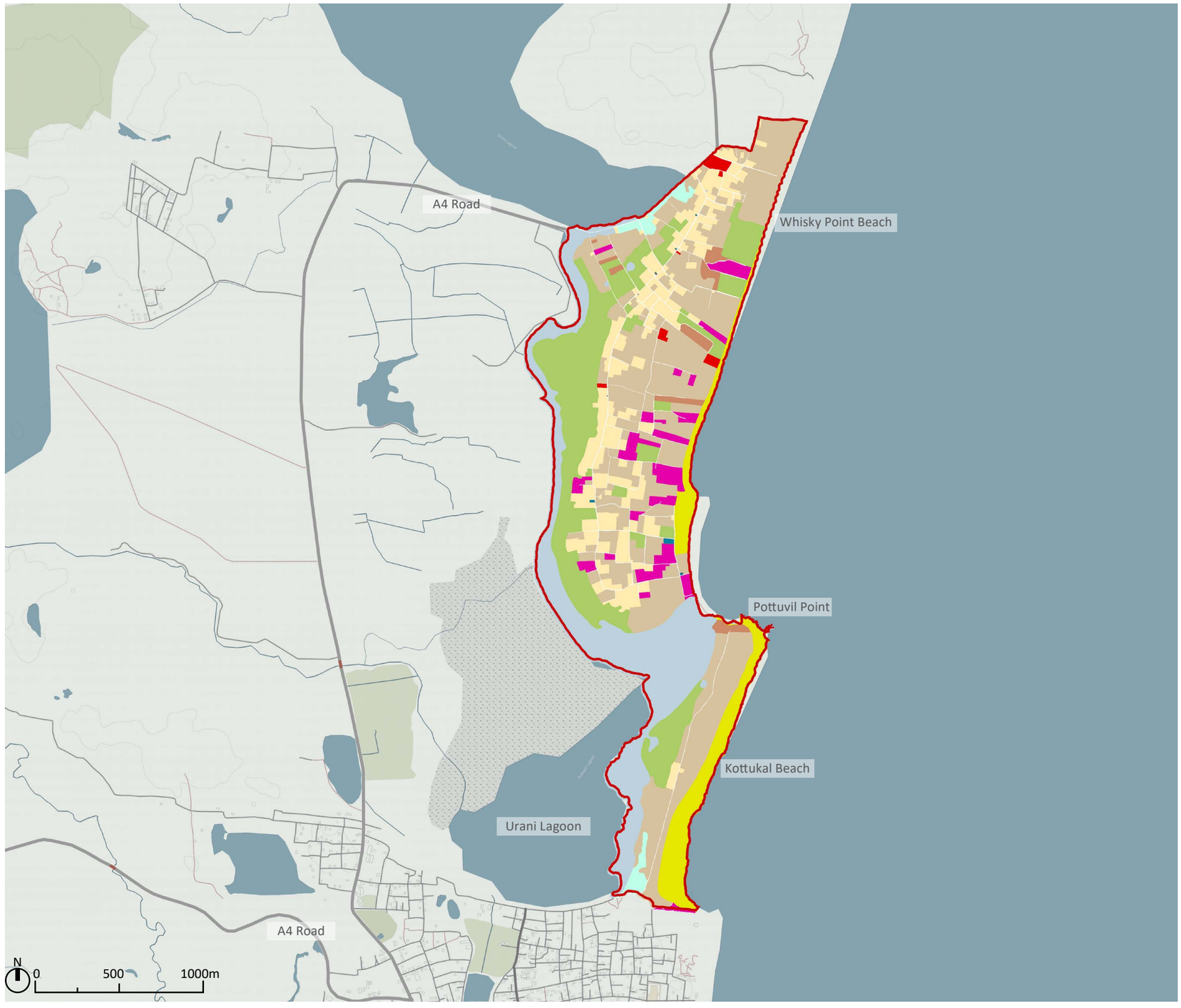


Figure 6.8 Existing Land Use (Whisky Point)

6.2.6 EXISTING LAND USE: ARUGAM BAY

While Arugam Bay area is thriving as a hub of beach front activities, its inland areas are characterised by approximately 130 hectares of vacant land that is flexible for development. Conversely, the developed zones comprise a mix of tourism, commercial, and residential uses, contributing to the area's urban vitality. Notably, amidst this development, environmentally sensitive areas, including mangroves can be found along the Peanut Farm and lagoon area.

Arugam Bay presents a dichotomy of bustling activity along its shores and untapped potential within its inland area. It is imperative to prioritise sustainable practices that balance economic growth with environmental conservation, ensuring the long-term resilience and prosperity of the region.

	Land Use	Area (Ha)	%
	Agriculture	36.50	7%
	Beaches and sand	47.75	9%
	Commercial	40.86	7%
	Defence Activities	30.23	5%
	Mangroves	8.94	2%
	Mixed Use	0.42	0%
	Public Facilities	6.88	1%
	Public Utilities	0.01	0%
	Residential	102.20	18%
	Roads	14.78	3%
	Scrub Land	18.87	3%
	Sports Facilities	0.08	0%
	Tourism	26.37	5%
	Unclassified	9.75	2%
	Vacant	130.66	23%
	Waterbodies	70.67	13%
	Wetland	12.03	2%
	Total	557.01	100%

Table 6.2 Existing Land Use Distribution (Arugam Bay)

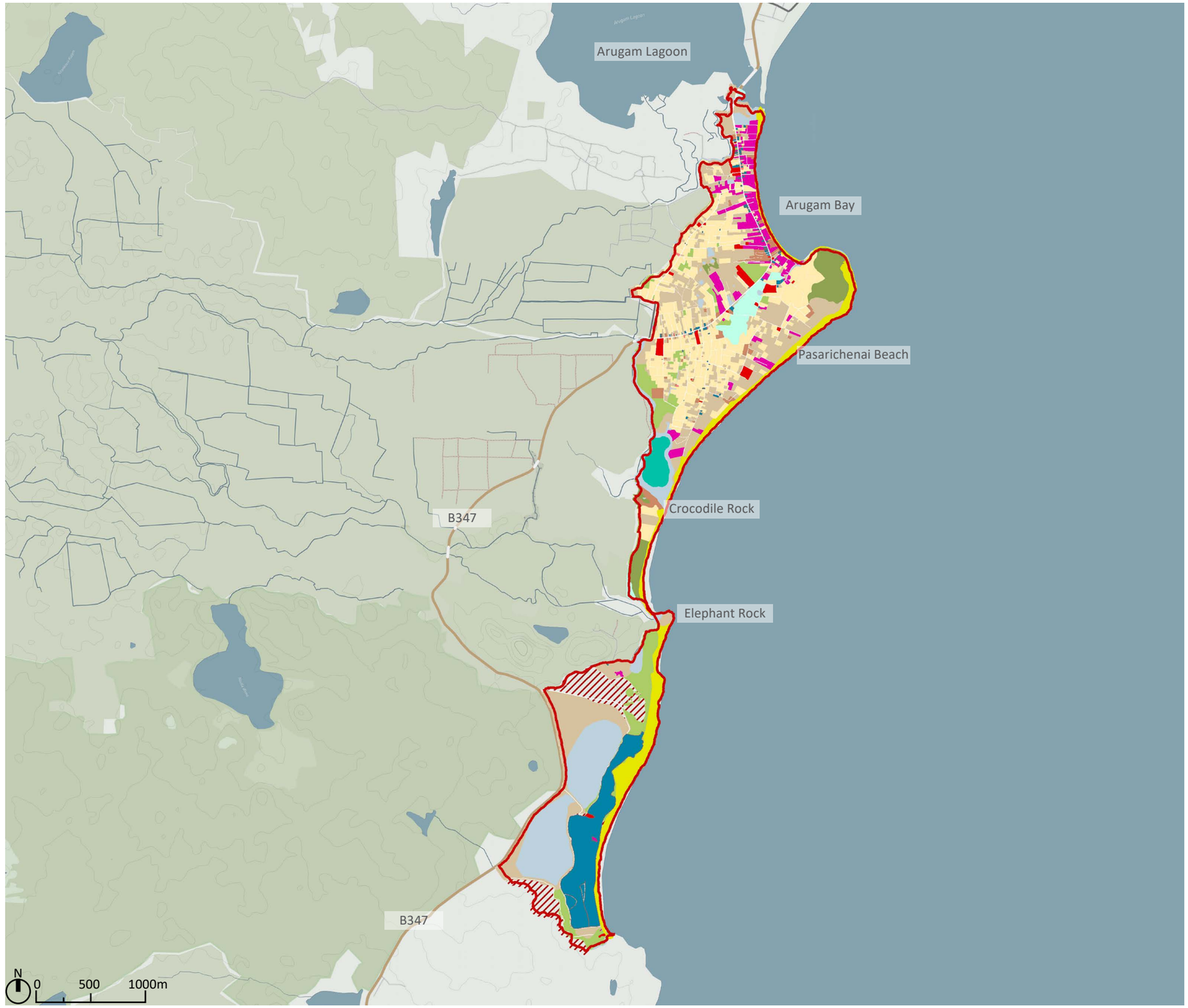


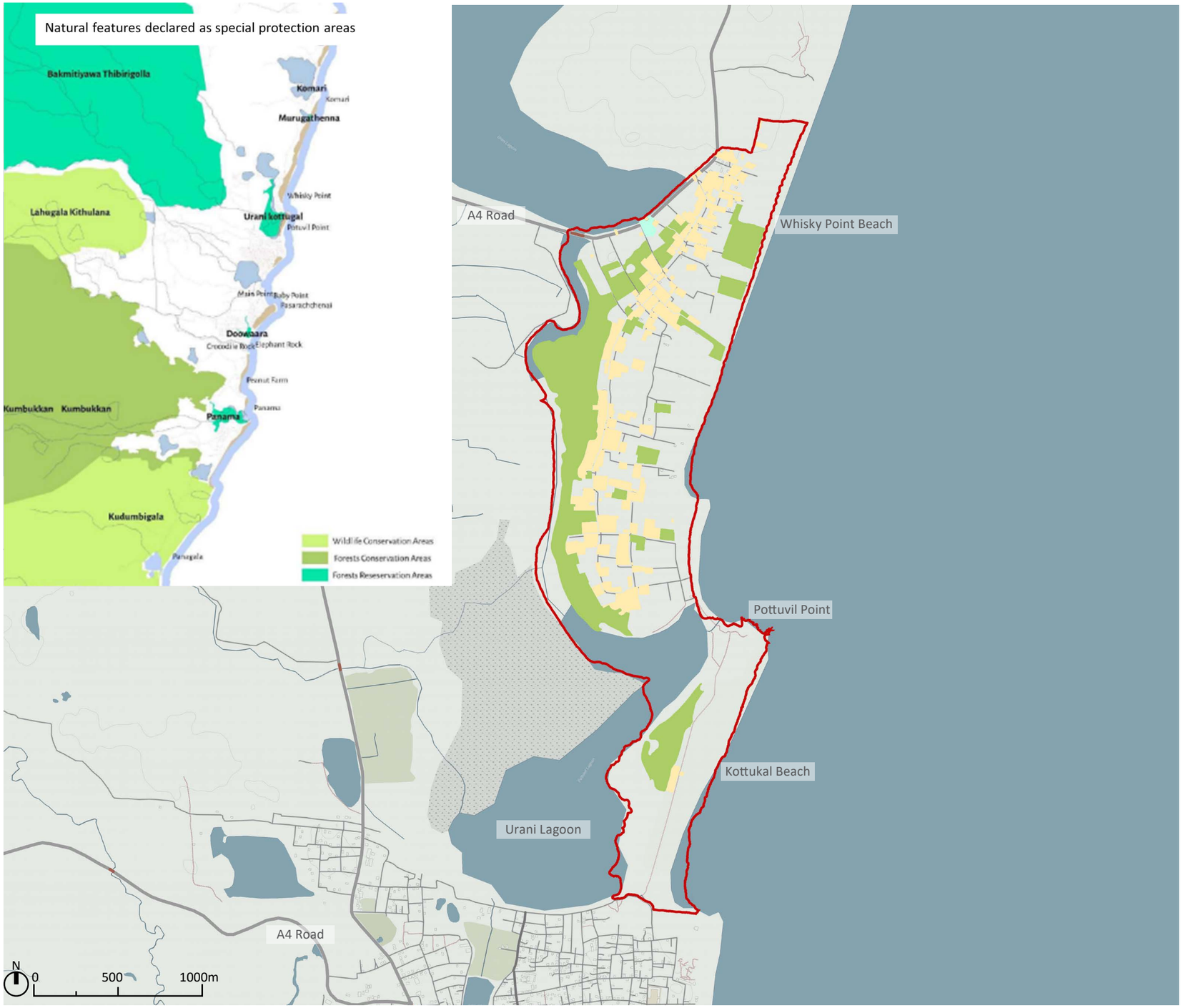
Figure 6.9 Existing Land Use (Arugam Bay)

6.2.7 ENVIRONMENTAL ASSESSMENT: WHISKY POINT

- The study area includes designated setback zones as defined by the Coastal Conservation and Coastal Resource Management (CC & CRM) Act. This includes a 45-meter reservation zone, an 80-meter restricted area, and a total setback of 125 meters. Additionally, the CC & CRM has identified the Pothuvil Beach area as a highly vulnerable region.

- According to the Permissible Development Intensity Index (PDII), values range from 0.4 to 9. Figure 3 illustrates the recommended PDII across the selected study area. The Sri Lanka Tourism Development Authority is the authorised agency overseeing the PDII.

- According to the Arugam Bay Master Plan 2020–2030, developed by the Urban Development Authority, natural features within both the Arugam Bay and Pothuvil coastal zones have been designated as special protection areas, as indicated on the map. Additionally, reservation areas have been designated for all rivers within the Pothuvil and Arugam Bay regions. The following table provides detailed information on these designated reservation areas.



Source: Master plan https://shorturl.at/45Ez4

Figure 6.10 Environmental Assessment (Whisky Point)

PERMISSIBLE FLOOR AREA

- Total Permissible Floor Area' means the maximum extent of the floor space that shall be permitted by the relevant Authority to be achieved in one or more levels of the development, excluding ancillary facilities
- Additional parking area provided within the development in excess of regulatory parking requirement shall be included in the Permissible Floor Area.
- The area of the roof terrace shall be included in the Permissible Floor Area if it is used for an activity other than for the ancillary facilities of the main activities of the development.

Permissible Total Floor Area= Zone Factor x [Land Extent[a] + (Land Extend x 1 - % Plot Cover) + (1/2 (Road Frontage x Width of the Road))]

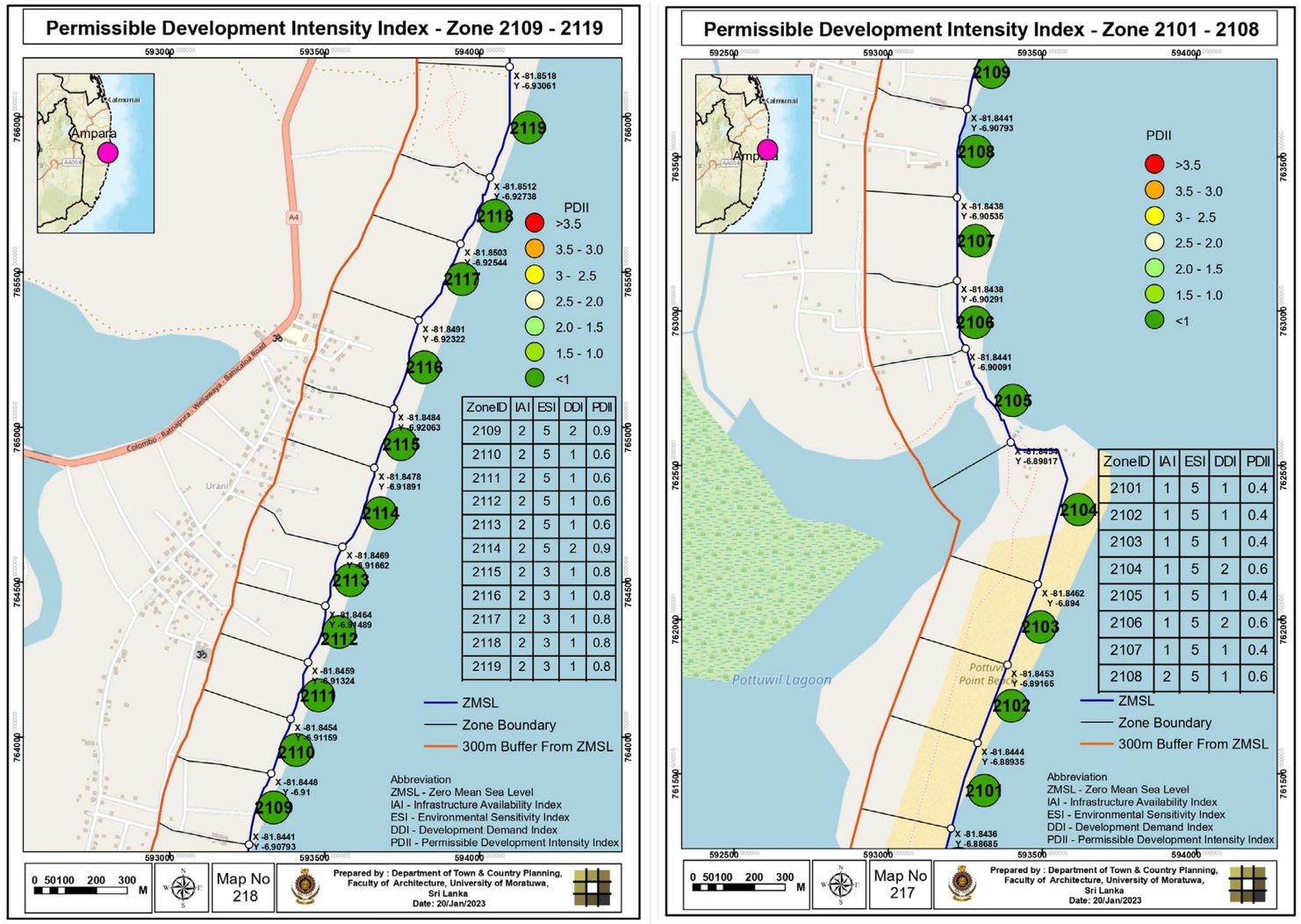
Zone Factor : To be decided according to the expected Development intensity, Likely Demand for Space, Availability of Road and Drainage Infrastructure

Road Frontage: The width of the Land at the point that directly abuts the access road. If there is more than one access roads, all such frontages shall be included)

Width of the Road : The Street/Building Line Width of the Road

A : If the land extent is 1000 sq meters or less apply the value of and if the extent is more than 1000 sq meters apply figure 1.05 (√(1+Plot Size)/10,000)

Subject to the controls imposed by the other regulations in place



ZoneID	IAI	ESI	DDI	PDII
2109	2	5	2	0.9
2110	2	5	1	0.6
2111	2	5	1	0.6
2112	2	5	1	0.6
2113	2	5	1	0.6
2114	2	5	2	0.9
2115	2	3	1	0.8
2116	2	3	1	0.8
2117	2	3	1	0.8
2118	2	3	1	0.8
2119	2	3	1	0.8

ZoneID	IAI	ESI	DDI	PDII
2101	1	5	1	0.4
2102	1	5	1	0.4
2103	1	5	1	0.4
2104	1	5	2	0.6
2105	1	5	1	0.4
2106	1	5	2	0.6
2107	1	5	1	0.4
2108	2	5	1	0.6

Figure 6.11 Permissible Development Intensity Index (Whisky Point)

ARUGAM BAY

- The Arugam Bay Beach area is delineated into four designated setback sections in accordance with the Coastal Conservation and Coastal Resource Management (CC & CRM) Act:
  - Section A: Features a 45-meter reservation zone, an 80-meter restricted area, and a total setback of 125 meters. This section is designated as a high vulnerability zone.
  - Section B: Comprises a 20-meter reservation zone, a 30-meter restricted area, and a total setback of 50 meters. This section is identified as a low vulnerability coastal zone.
  - Section C: Includes a 45-meter reservation zone, an 80-meter restricted area, and a total setback of 125 meters. This section is recognised as a highly vulnerable coastal zone.
  - Section D: Consists of a 35-meter reservation zone, a 60-meter restricted area, and a total setback of 95 meters. This section is classified as a medium vulnerability zone.

- The Permissible Development Intensity Index (PDII) ranges from 0.6 to 2.4. Figure 4 depicts the recommended PDII values for the selected study area. The Sri Lanka Tourism Development Authority is responsible for regulating and overseeing the PDII. There is a separate master plan for 2020 – 2023.

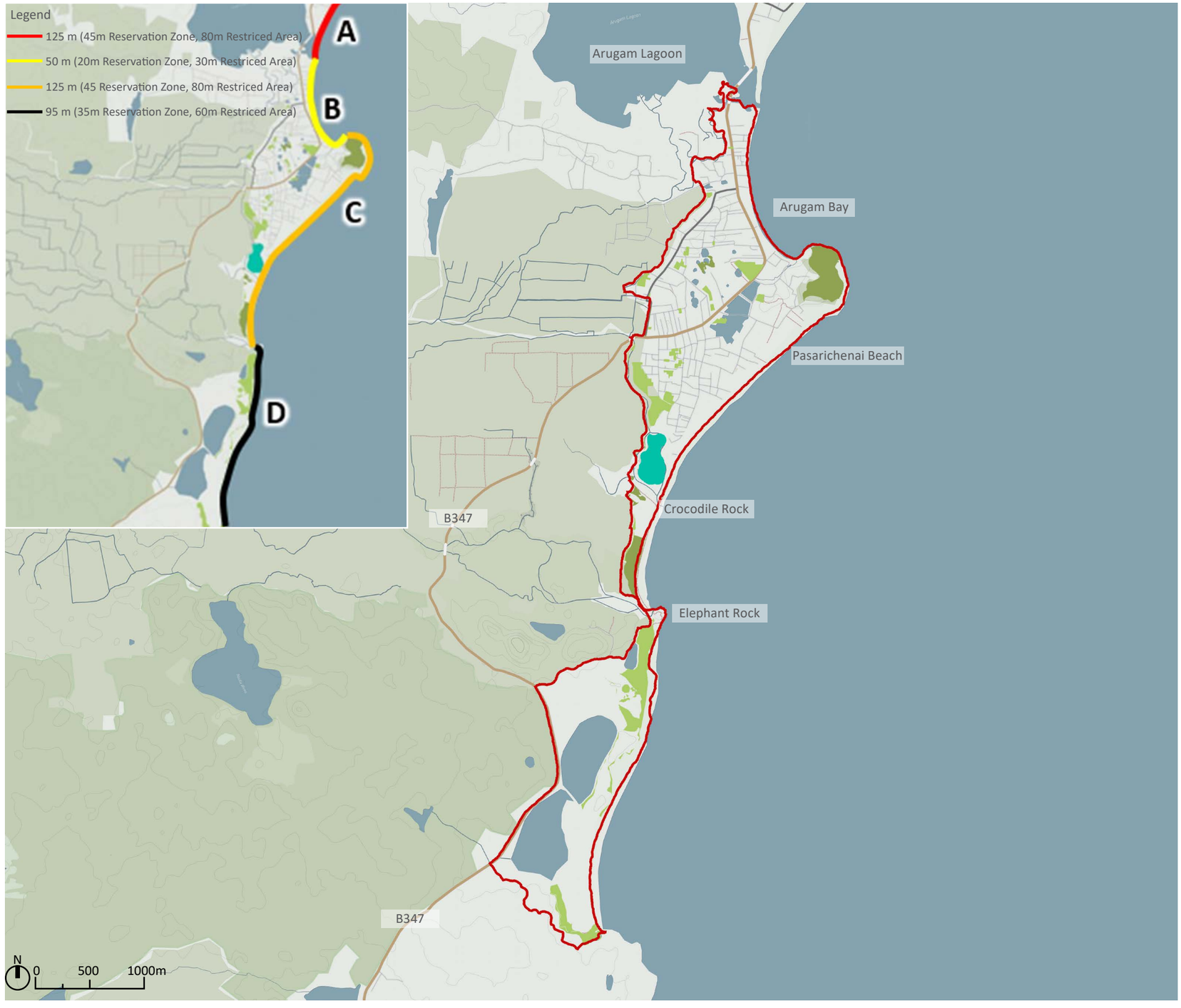


Figure 6.12 Environmental Assessment (Arugam Bay)

PERMISSIBLE FLOOR AREA

- Total Permissible Floor Area' means the maximum extent of the floor space that shall be permitted by the relevant Authority to be achieved in one or more levels of the development, excluding ancillary facilities
- Additional parking area provided within the development in excess of regulatory parking requirement shall be included in the Permissible Floor Area.
- The area of the roof terrace shall be included in the Permissible Floor Area if it is used for an activity other than for the ancillary facilities of the main activities of the development.

Permissible Total Floor Area= Zone Factor x [Land Extent^a + (Land Extend x 1 - % Plot Cover) + (1/2 (Road Frontage x Width of the Road))]

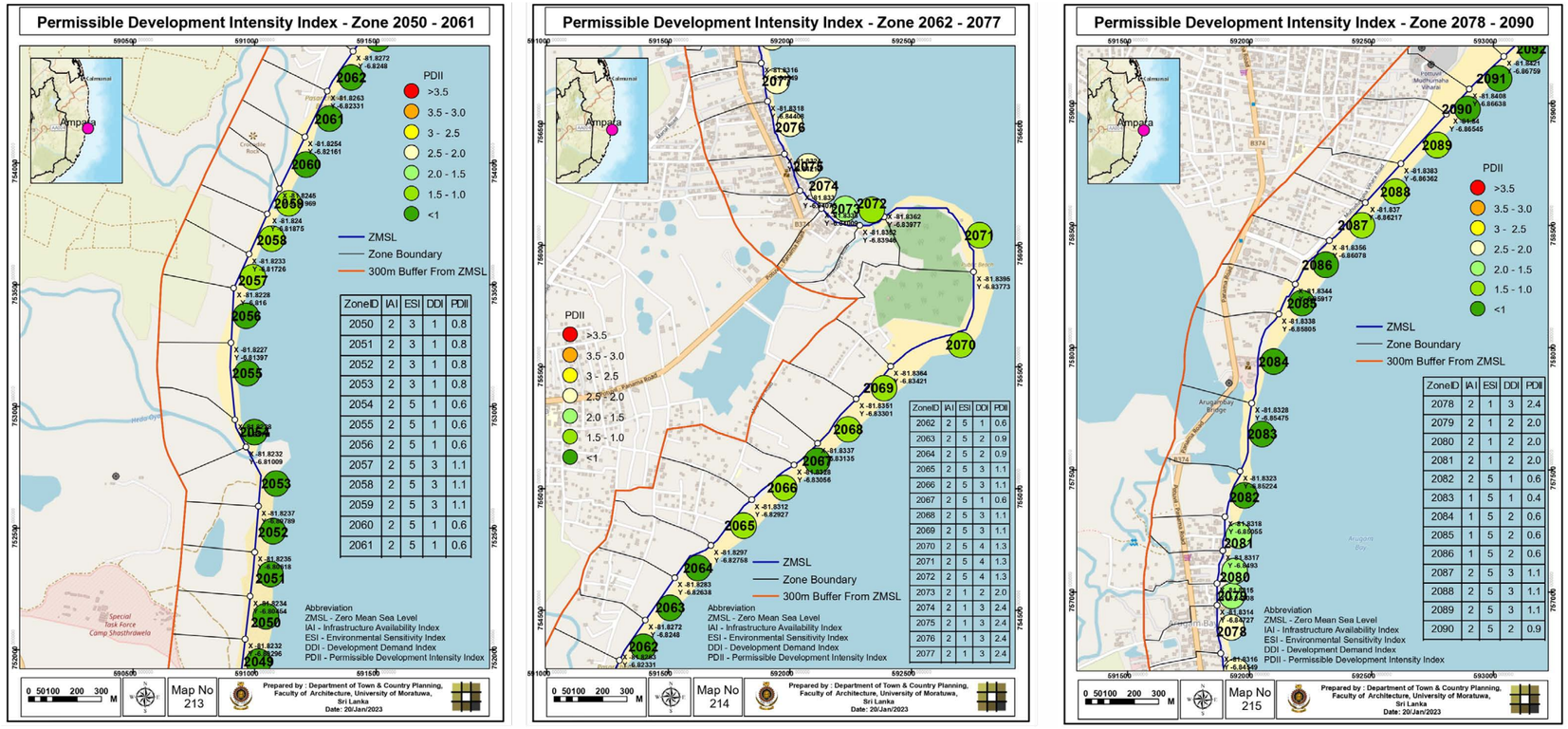
Zone Factor : To be decided according to the expected Development intensity, Likely Demand for Space, Availability of Road and Drainage Infrastructure

Road Frontage: The width of the Land at the point that directly abuts the access road. If there is more than one access roads, all such frontages shall be included)

Width of the Road : The Street/Building Line Width of the Road

A : If the land extent is 1000 sq meters or less apply the value of and if the extent is more than 1000 sq meters apply figure 1.05 (√(1+Plot Size)/10,000)

Subject to the controls imposed by the other regulations in place



ZoneID	IAI	ESI	DDI	PDII
2050	2	3	1	0.8
2051	2	3	1	0.8
2052	2	3	1	0.8
2053	2	3	1	0.8
2054	2	5	1	0.6
2055	2	5	1	0.6
2056	2	5	1	0.6
2057	2	5	3	1.1
2058	2	5	3	1.1
2059	2	5	3	1.1
2060	2	5	1	0.6
2061	2	5	1	0.6

ZoneID	IAI	ESI	DDI	PDII
2062	2	5	1	0.6
2063	2	5	2	0.9
2064	2	5	2	0.9
2065	2	5	3	1.1
2066	2	5	3	1.1
2067	2	5	1	0.6
2068	2	5	3	1.1
2069	2	5	3	1.1
2070	2	5	4	1.3
2071	2	5	4	1.3
2072	2	5	4	1.3
2073	2	1	2	2.0
2074	2	1	3	2.4
2075	2	1	3	2.4
2076	2	1	3	2.4
2077	2	1	3	2.4

ZoneID	IAI	ESI	DDI	PDII
2078	2	1	3	2.4
2079	2	1	2	2.0
2080	2	1	2	2.0
2081	2	1	2	2.0
2082	2	5	1	0.6
2083	1	5	1	0.4
2084	1	5	2	0.6
2085	1	5	2	0.6
2086	1	5	2	0.6
2087	2	5	3	1.1
2088	2	5	3	1.1
2089	2	5	3	1.1
2090	2	5	2	0.9

Figure 6.13 Permissible Development Intensity Index (Arugam Bay)

6.2.8 SOCIAL ASSESSMENT

- Arugam bay is another notable tourist attraction in the Eastern Province of Sri Lanka, particularly among foreign tourists as a surfing paradise.

- Unlike Pasikudah and Kalkudah, communities settled in the Arugam bay area involve in tourism related activities. Arugam bay has rapidly developed into a resort town and is home for many tourist hotels and restaurants which are served by local communities.

- The area is predominantly occupied by Muslim communities and a notable conflict is evident between the development of the tourism industry and the local community values. Sinhalese and Tamil people are also living these serving the tourism industry.

- Traditional fishing industry is taking place in the area and is a potential for future tourism development. However, conflicts have been recorded between fishing community and the hoteliers.

- Kudumbigala and Muhudu Maha Viharaya are two of the prominent heritage sites located close to the Arugam bay.

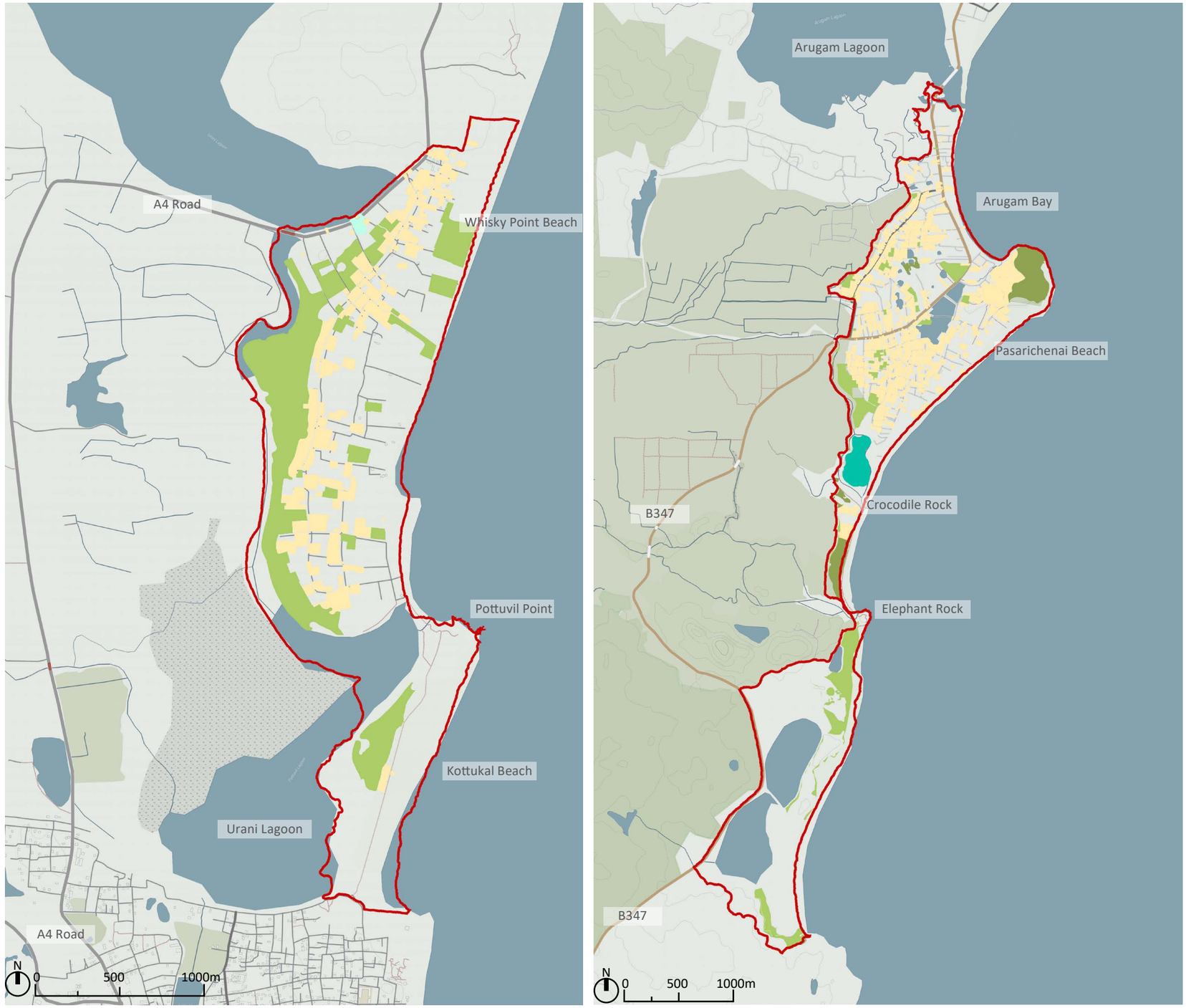


Figure 6.14 Settlement Distribution (Whisky Point & Arugam Bay)

6.2.9 DEVELOPABLE LAND: WHISKY POINT

The potential for development within the area primarily lies in vacant land, agricultural expanses, scrubland, and beaches. Existing residential neighborhoods and hotels are nestled amidst these developable lands, presenting opportunities for strategic growth and integration.

Whisky Point presents a unique opportunity, boasting a substantial vacant land area along the main road where immediate development initiatives can be undertaken. This strategic location offers a promising starting point for leveraging the region's potential for growth and enhancement.

	Area (Ha)	Land Use	Area (Ha)
Developable Land	203.0	Agriculture	67.1
		Beaches, and sand	14.7
		Scrub Land	0.0
		Vacant	121.2
Non - Developable Land	163.0	Commercial	0.3
		Flooding Areas	34.1
		Public Facilities	2.1
		Public Utilities	0.0
		Residential	45.4
		Roads	6.1
		Sea	0.2
		Tourism	15.2
		Unclassified	5.3
		Waterbodies	49.2
		Wetland	5.1

Table 6.3 Developable/Non Developable Land Distribution (Whisky Point)

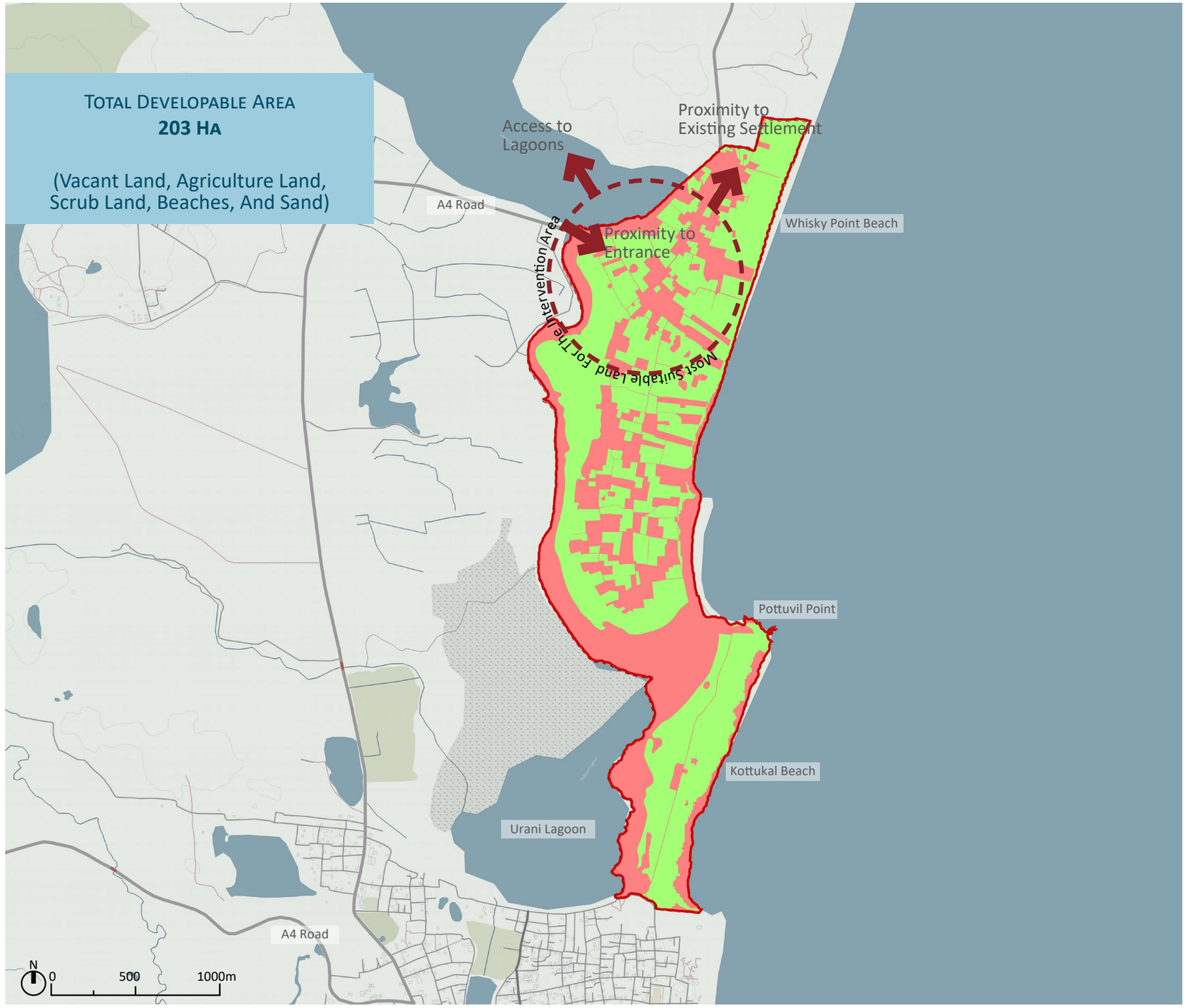


Figure 6.15 Developable Land (Whisky Point)

6.2.10 DEVELOPABLE LAND: ARUGAM BAY

In contrast to the it's site area, the developable area within Arugam Bay is relatively constrained. Furthermore, certain areas earmarked for development are in close proximity to ecologically sensitive zones, necessitating careful consideration and mitigation measures to ensure environmental sustainability.

This close proximity of development potential and ecological fragility highlights the importance of adopting a significant approach to land use planning, one that prioritises both economic advancement and environmental preservation.

	Area (Ha)	Land Use	Area (Ha)
Developable Land	191.6	Agriculture	36.4
		Beaches and sand	30.8
		Scrub Land	18.1
		Vacant	106.4
Non - Developable Land	365.4	Commercial	40.7
		Defence Activities	30.2
		Flooding Areas	108.4
		Mangroves	8.8
		Mixed Use	0.4
		Public Facilities	5.9
		Public Utilities	0.0
		Residential	93.7
		Roads	13.8
		Sea	0.0
		Sports Facilities	0.1
		Tourism	24.5
		Unclassified	8.6
		Waterbodies	18.4
		Wetland	11.9
		Mangroves	52.1
		Industrial	4.8
		Sparse Forest	1623.8
		Sea	58.5
		Wetland	520.9

Table 6.4 Developable/Non Developable Land Distribution (Arugam Bay)

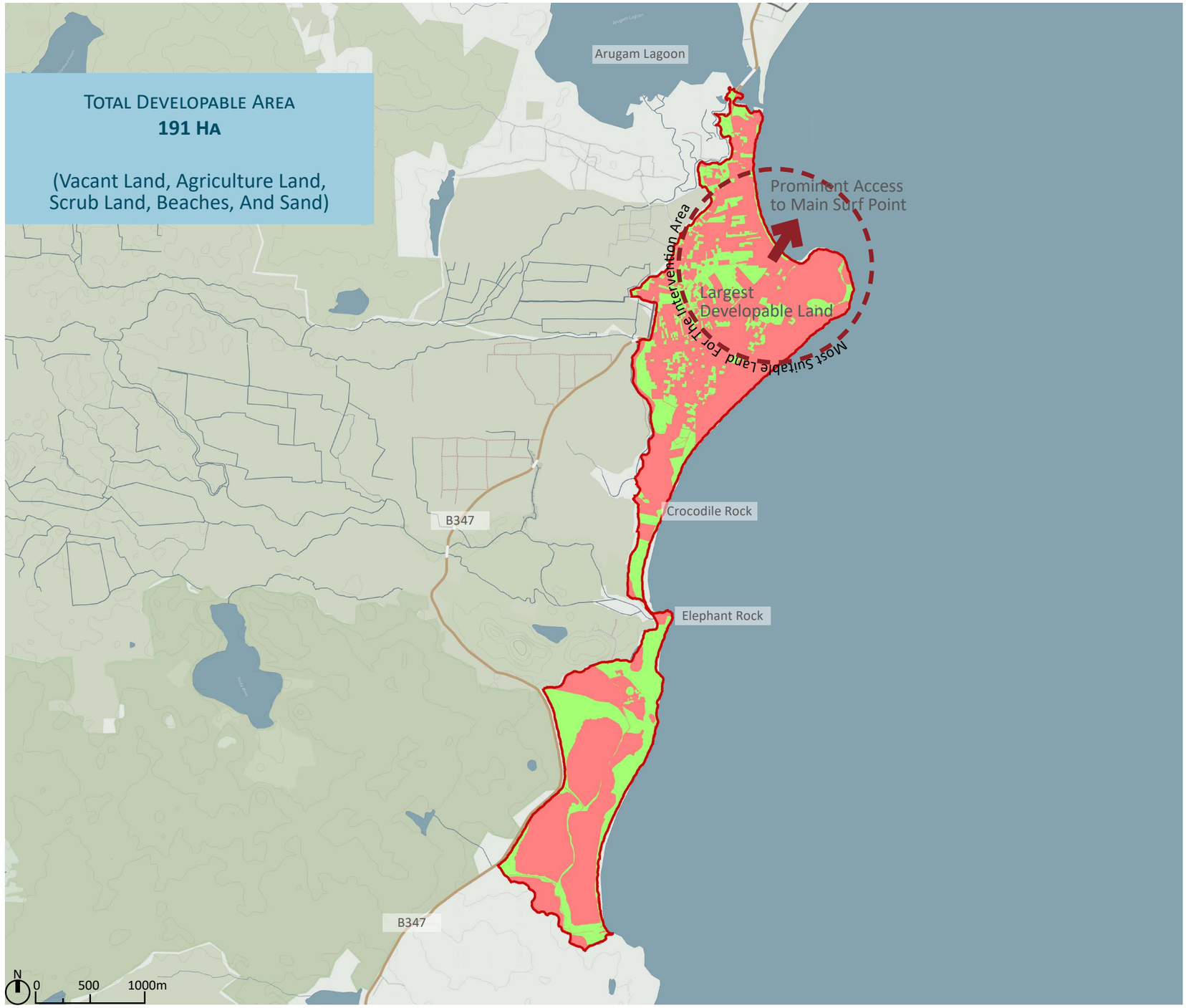


Figure 6.16 Developable Land (Arugam Bay)

6.2.11 KEY ENABLERS AND CHALLENGES

Key enablers

- Peanut farm is located in close proximity to Arugam bay– **Potential to capitalise on the footfall and promote other water-based activities**
- Preference of whiskey point as party hub by tourist due to location advantage - **Potential to capitalise on the interest of tourist and develop shacks and restorers along the beach shore**
- Presence of experienced and skilled surfers – **Potential to capitalise on the skill set and develop an authorised school and training infrastructure**
- Arugam bay & Whisky Point has the major economic activity as Farming – **Potential to leverage the region's strengths and develop agritourism opportunities**

Challenges

- Connectivity to the region is **limited to road and rail** which takes 8 – 10 hrs from Colombo city for foreign travellers
- **Limited presence of infrastructure** for Tourism in the region – hospitality developments, Information centers, Restaurants, Money exchange offices etc.
- Existing tourist activities are **limited to adults** and does not engage all age group of people

6.2.12 VISION FRAMEWORK



PRIME
SURF DESTINATIONS



DIVERSE
ARCHAEOLOGICAL SITES



RICH
NATURAL ASSET



CONNECTIVITY &
INFRASTRUCTURE

WHISKY POINT- ARUGAM BAY – PEANUT FARM

SURFING PARADISE OF THE EAST

Goal-1	*Goal-2*	*Goal-3*
WORLD-CLASS SURFING CITY	***DIVERSE TOURISM HUB***	***ECO-CENTRIC BEACH DESTINATION***

WHISKY POINT- ARUGAM BAY – PENUT FARM

Goal-1
WORLD-CLASS SURFING CITY

IMMEDIATE STRATEGIES

1. **Improve international air connectivity**
2. Develop a focal **Tourist Services Centre** (G)**and Vibrant Pedestrian Street** with commercial activity.
3. Develop **Surfing School** (A) and **Surfing Street, including all-in-one surfing-related commercial** (A)
4. Develop a **Vibrant Beachfront** including Entertainment & Nightlife (A,W), Beach facilities (G), Water-related sports centre (A), Seaside Amphitheatre (G), Sunrise Viewing Platforms (A); and **Quality Resorts and Homestay accommodations** (A,W)

ADVANCED STRATEGIES

1. **International Surf School** (G)
2. **Surfer's organization** for safey standards (A)
3. **Facilities to host international surf events** (A)
4. **Exclusive residential options** for surfer (G)

Goal-2
DIVERSE TOURISM HUB

IMMEDIATE STRATEGIES

1. Diversify tourism products **optimizing on nature, culture, urban and agro-tourism** opportunities.
2. Develop **necessary facilities** such as wildlife trails, **cultural centre, camping facilities, agro-tourism centres and training facilities** for tour guide training to promote diversification.
3. **Develop Art Estate** with Residence for Artists, Collaboration Studios and Art Related Commercial Area

ADVANCED STRATEGIES

1. **Wildlife** monitoring and research
2. Wildlife conservation-centric museum
3. Wildlife-friendly Infrastructure

Goal-3
ECO-CENTRIC BEACH DESTINATION

IMMEDIATE STRATEGIES

1. Develop **Eco-beachfront (P)** including Boardwalk and natural trails.
2. Develop Integrated **eco-friendly accommodations.**
3. Develop necessary **sustainable infrastructure** including public transport node (Bus terminal) and services, last-mile- transport options such as shared bikes, E-bike charging stations, etc, and implement renewable energy and waste management solutions.

ADVANCED STRATEGIES

1. **Acquire Blue Flag Certification**

Note : Potential Location – G: General, A – Arugam Bay, P – Peanut Farm, W – Whisky Point

6.2.14 KEY PROGRAMMES: WHISKY POINT

The coastal area, renowned for its vibrant surfing scene and lively nightlife, offers a thrilling blend of adventure and entertainment designed to captivate visitors. The main allure of this destination can be encapsulated in three captivating experiences: diving, surfing, and nightlife. These programs attracts a diverse mix of foreign backpackers, international surfers, and domestic tourists. The key programs that define this area include the exhilarating "Surfing Paradise," a variety of "Lagoon Front Activities," and the pulsating "Clubs & Pubs Entertainments," ensuring there is something for every adventure and nightlife.

KEY HIGHLIGHTS

Surfing | Night Life | Kayaking

DIVE, SURF AND SOAR TO EMBRACE THE WILD SIDE OF THE COAST

Key Visitor group:

- Foreign Backpackers (Europeans)
- International Surfers
- Domestic tourists

ADVENTURE PARADISE

KEY PROGRAMS

Surfing Paradise	Lagoon Front Activities	Clubs & Pubs Entertainments



Figure 6.17 Key Programmes (Whisky Point)

6.2.15 KEY PROGRAMMES: ARUGAM BAY

Arugam Bay is renowned for its vibrant surfing culture and exceptional beach and water sport facilities, making it a premier destination for aquatic adventures. The primary allure lies in its exceptional surfing conditions, catering to a diverse range of enthusiasts from beginners to seasoned professionals. Key visitor demographics include foreign backpackers, international surfers, and domestic tourists, all drawn by the bay's unique charm. Central to its appeal is the development of "Surfer's Paradise," an all-encompassing facility that offers everything a surfer could desire. Additionally, the lagoon's development aims to attract eco-travelers, while a variety of entertainment options ensure a memorable experience for all visitors.

KEY HIGHLIGHTS

Surfing | Night Life | Kayaking

DIVE, SURF AND SOAR TO EMBRACE THE WILD SIDE OF THE COAST

Key Visitor group:

- Foreign Backpackers (Europeans)
- International Surfers
- Domestic tourists

ADVENTURE PARADISE

KEY PROGRAMS

SURFING PARADISE	LAGOON FRONT ACTIVITIES	CLUBS & PUBS ENTERTAINMENTS



Figure 6.18 Key Programmes (Arugam Bay)

6.3 WHISKY POINT CONCEPT MASTER PLAN

6.3.1 CONCEPT STRUCTURE: WHISKY POINT







Central Facility Node and Marine Adventure Center

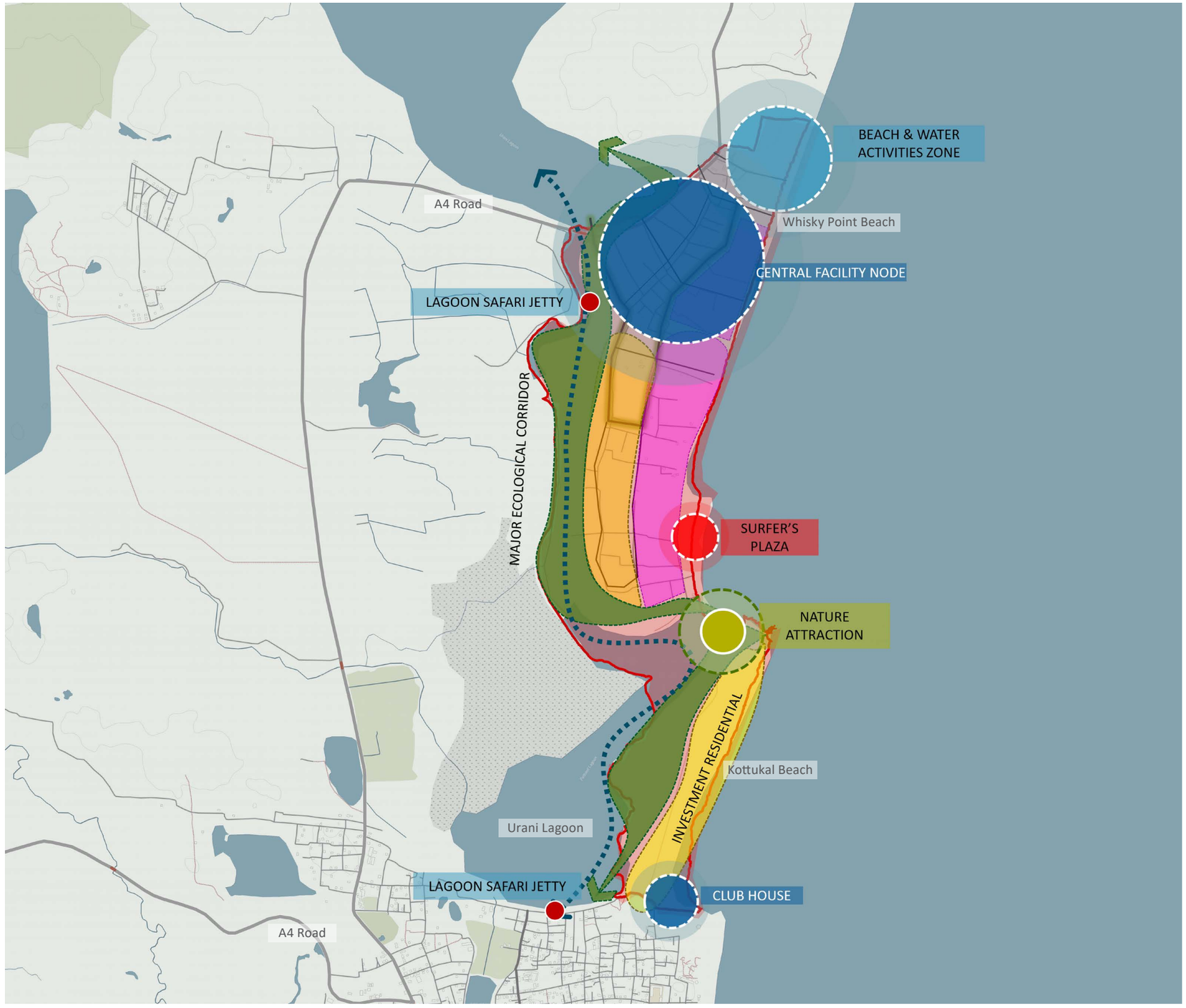


Figure 6.19 Vision Framework (Whisky Point)

Central Facility Node and Marine Adventure Centre:

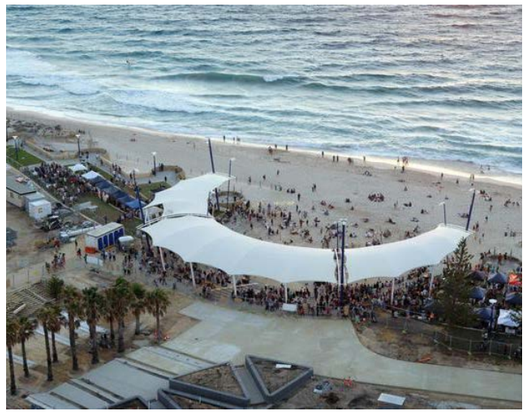
Located at the northern end of the development, the central facility node acts as a crucial gateway, seamlessly connecting entry points to the beach front for easy access. It serves as a bustling hub, fostering community interaction and enhancing functionality. With its strategic placement, it plays a pivotal role in shaping the site's identity and vibrancy.

Surfer's Plaza

Located at Whisky Point Beach, the Surfer Plaza is a bustling hub offering a range of commercial ventures, adventure activities, and essential services tailored to surf enthusiasts. From surf schools to rental shops and beach front facilities, it ensures a seamless surfing experience in the heart of Whisky Point.

Green Corridor and Natural Attraction Nodes

The green corridor enhances the ecologically sensitive area bordering the lagoon. This conservation effort preserves natural habitats and fosters biodiversity and ecological resilience. The nature attraction node is at the heart of this green corridor ode, strategically positioned at the junction where the lagoon meets the sea.











Surfer's Plaza



Green Corridor and Natural Attraction Nodes

6.3.2 PROPOSED LAND USE

Surrounded by natural wonders such as lagoons and mangroves, the predominant land use in the Whisky Point development focuses on open spaces and water bodies, complemented by resorts designed to boost visitor influx. The development plan includes significant commercial areas and mixed-use zones, ensuring a vibrant economic landscape to support visitors. Additionally, eco-lodges and residential areas are strategically integrated to accommodate both existing and future communities, while a water park seamlessly blends into the environment. This blend of land utilisation fosters a harmonious balance, enhancing the overall appeal and sustainability of the area.

	Proposed Land Use	Area (Ha)	%
	Agriculture	38.89	10.6%
	Beach Area	25.23	6.9%
	Commercial	3.14	0.9%
	Commercial Entertainment	1.14	0.3%
	Commercial Night Market	1.05	0.3%
	Eco Lodge	12.47	3.4%
	Hotel	21.40	5.8%
	Resort	50.25	13.7%
	Investment Residential	12.81	3.5%
	Residential Low Density	8.67	2.4%
	Residential Mid Density	45.49	12.4%
	Green Open Space	28.68	7.8%
	Mixed Use	12.55	3.4%
	Public Facilities	0.96	0.3%
	Public Utilities	3.39	0.9%
	Water Park	7.48	2.0%
	Road	27.73	7.6%
	Waterbodies	64.71	17.7%
	Total	366.04	

Table 6.5 Propose Land Use Distribution (Whisky Point)

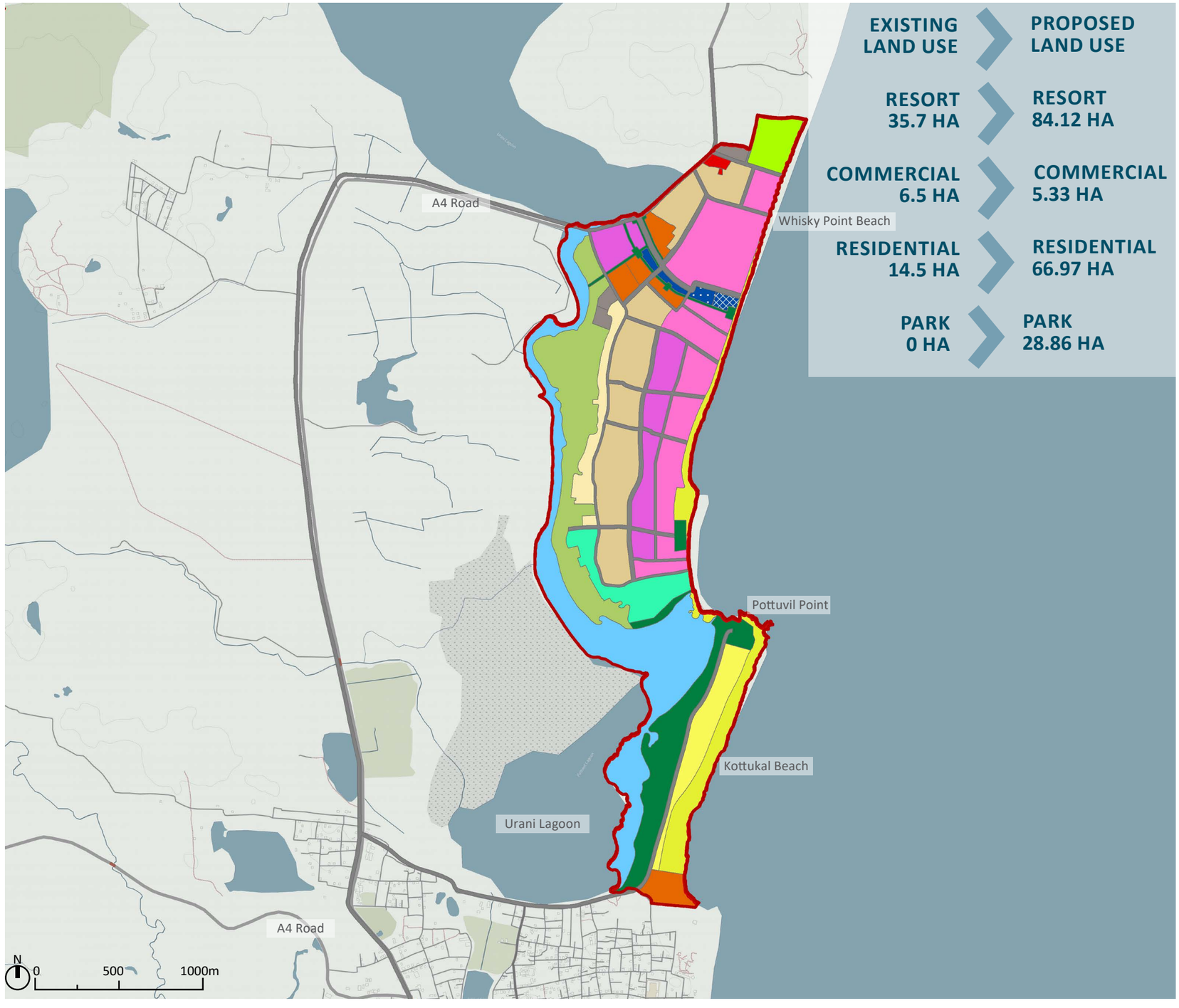


Figure 6.20 Proposed Land Use (Whisky Point)

6.3.3 OPEN SPACE AND ATTRACTION POINTS

The proposed Whisky Point planning area encompasses an impressive 28.86 hectares of vibrant green open space, thoughtfully interwoven throughout the landscape to connect its major attractions. This expansive greenery enhances the region's appeal while fostering a walkable neighborhood, inviting both locals and tourists to explore the area with ease. Visitors can navigate these serene spaces, which provide an alternative for wandering through the surroundings on foot or by bike.

The connectivity extend from the sea to the tranquil lagoon in an east-west direction, while they stretch from the lively theme park to the renowned Pottuvil Beach Surf Point in the north-south direction. This seamless integration of nature and recreation enriches the community, encouraging exploration and connection with the beautiful environment.

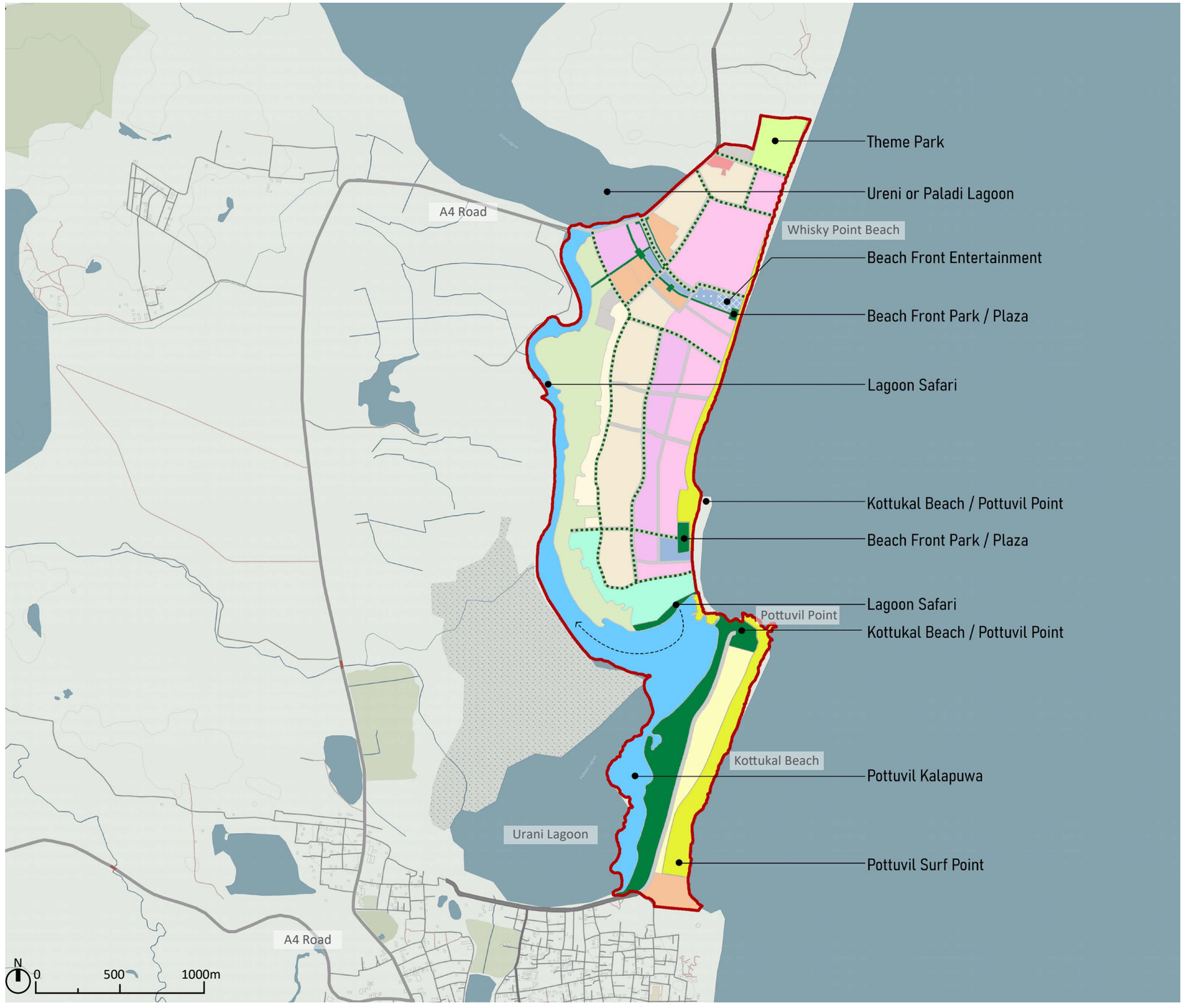


Figure 6.21 Open Space and Attraction Pints (Whisky Point)

6.3.4 PROPOSED TRANSPORT PLAN

Road Network Hierarchy - Whisky Point

Whisky Point's road network hierarchy is designed to facilitate connectivity, accessibility, and efficient traffic management within the region, particularly focusing on integrating residential, tourist, and ecological areas effectively.

Primary Arterial Road

The primary arterial road at Whisky Point plays a crucial role in regional connectivity by linking directly to the Colombo-Batticaloa highway. This highway is a vital corridor for economic activity, connecting Whisky Point with major urban centers like Colombo and the eastern cities of Sri Lanka, including Batticaloa. By facilitating high-speed and high-volume traffic, the primary arterial ensures efficient transport routes for goods, services, and commuters traveling long distances.

Secondary Arterial Roads

Secondary arterial roads in Whisky Point cater to local but significant traffic needs, connecting areas with low-rise residential buildings, eco-lodges, and resorts. These roads are essential for supporting the tourism sector, which is pivotal to the area's economy.

Collector Roads

Collector roads link smaller local streets to the broader arterial network, ensuring that residential areas are well-connected to major roads.

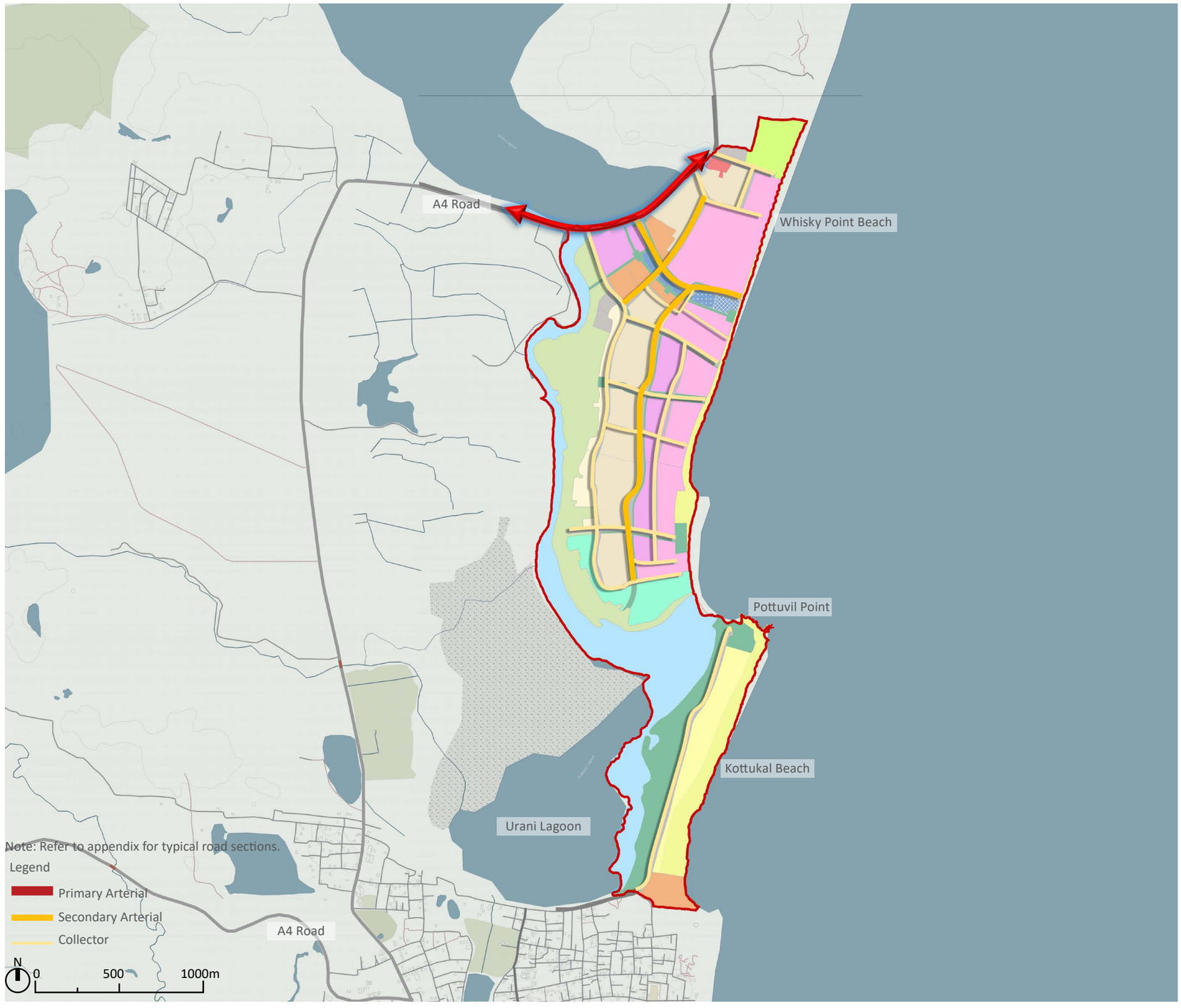


Figure 6.22 Proposed Transport Plan (Whisky Point)

6.3.5 PROPOSED INFRASTRUCTURE

TRAFFIC DEMAND FORECASTING

The proposed land use area for Whisky Point covers a total of 366.0 hectares. The land use distribution includes commercial areas, residential zones, resorts & hotels, agriculture, and other facilities such as community centers and a waterpark. This diverse mix of land uses is expected to generate substantial traffic, necessitating thorough planning and strategic management to ensure efficient traffic flow and minimise congestion.

Analysis and Observations

The traffic demand forecast for the Whisky Point study area reveals significant variations in trip generation across different land use types, reflecting the distinct characteristics and activities associated with each type.

- **Commercial Areas:** The commercial entertainment and retail shopping areas generate considerable traffic, especially during the evening hours. This indicates vibrant retail activity that attracts visitors towards the end of the business day. The commercial night market, with its mix of retail and entertainment options, is a major draw for both locals and tourists, contributing to high traffic volumes during the PM peak periods.

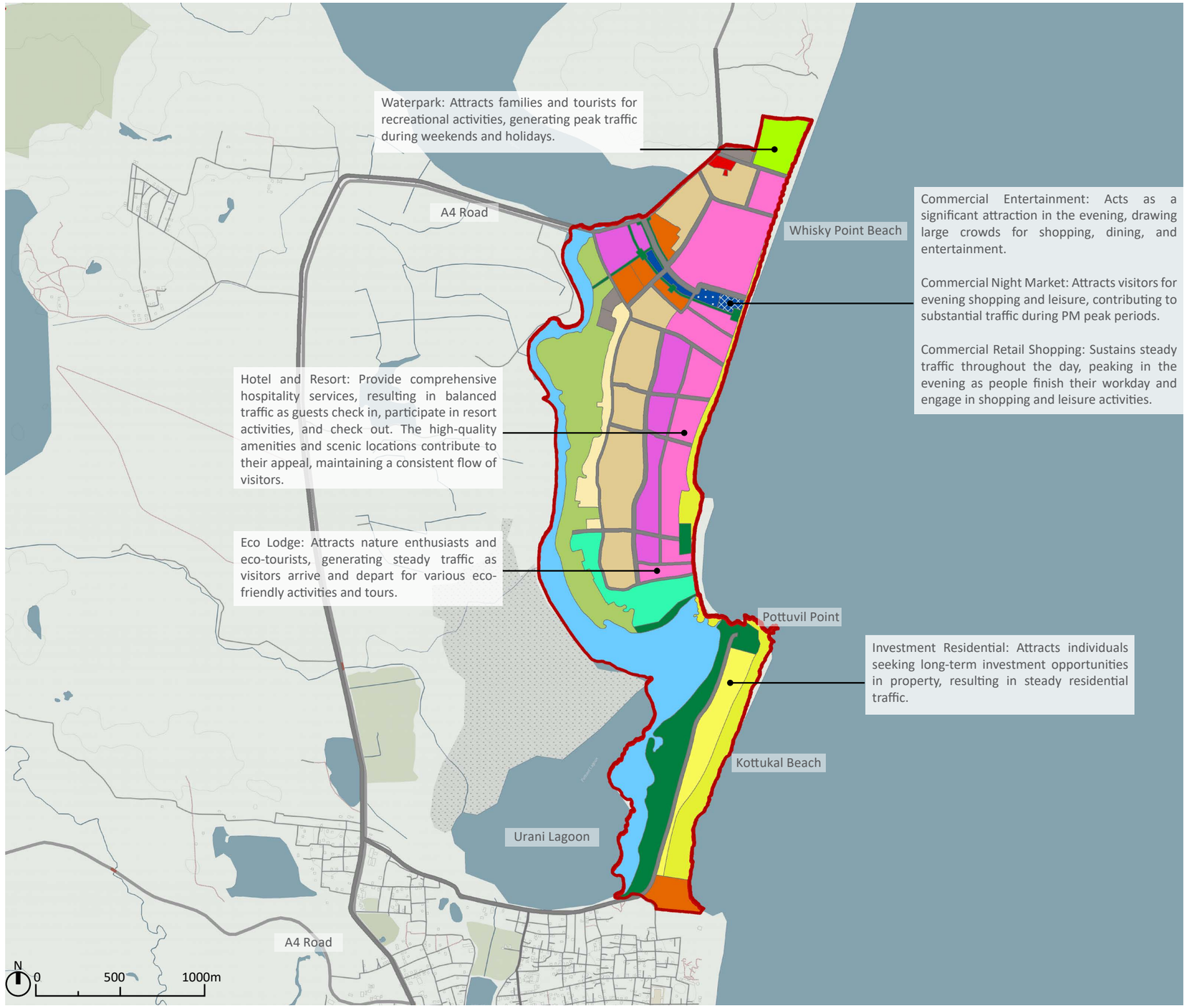


Figure 6.23 Traffic Demand Forecasting (Whisky Point)

- **Resorts & Hotels:** The various resort and hotel facilities exhibit balanced traffic patterns throughout the day, aligning with typical check-in and check-out times. These areas are designed to cater to both short-term visitors and long-term guests, offering a range of amenities and activities that maintain consistent traffic levels.

- **Residential Areas:** The residential zones, including investment residential, low-density, and mid-density areas, display typical commuting patterns with higher outbound trips in the morning and higher inbound trips in the evening. These areas are characterised by their family-friendly environments and community-focused amenities.

- **Community and Other Facilities:** The mixed-use and waterpark areas act as local hubs, supporting a range of activities that generate significant traffic. These centers are essential for community engagement, providing spaces for social, recreational, and entertainment activities.

- **Agriculture:** Agricultural areas generate consistent traffic related to farming activities and produce transportation. These areas maintain a steady flow of vehicles throughout the day, supporting local agricultural operations.

	Proposed Land Use	Total GFA (sqm)	Trip Gen (veh)			
			AM In	Am Out	PM In	Pm Out
	Agriculture	388,926	544	156	233	583
	Commercial	31,351	138	83	432	467
	Commercial Entertainment	11,435	50	30	158	170
	Commercial Night Market	10,484	46	28	145	156
	Eco Lodge	62,368	186	73	146	186
	Hotel	214,001	310	121	243	310
	Resort	251,252	376	147	294	376
	Investment Residential	102,504	12	38	37	22
	Residential Low Density	43,341	12	38	38	23
	Residential Mid Density	818,832	111	362	350	215
	Mixed Use	188,266	401	262	324	371
	Water Park	37,387	271	163	847	916
	Total		**2,458**	**1,502**	**3,246**	**3,796**

Table 6.6 Trip Generation Projection (Whisky Point)

Peak Hour Calculation

To determine the required number of lanes, we calculate the peak hour traffic volume:

Total Peak Hour Volume (Inbound) = 3,246 vehicles/hour
Total Peak Hour Volume (Outbound) = 3,796 vehicles/hour

Since the site has two access points, the traffic will be handled by this single access:

Total Peak Hour Volume (Inbound) = 3,246/2 = 1,623 vehicles/hour

Total Peak Hour Volume (Outbound) = 3,796/2 = 1,898 vehicles/hour

Lane Capacity

Assuming a lane capacity of 1,100 vehicles per hour per lane:

Number of Lanes= Peak Hour Volume/Lane Capacity

Inbound Lanes Calculation per Access

Number of Inbound Lanes= 1,623 / 1,100 ≈ 1.48 ≈ 2 lanes (rounded up)

Outbound Lanes Calculation per Access

Number of Outbound Lanes= 1,898/ 1,100 ≈ 1.73 ≈ 2 lanes (rounded up)

Conclusion

Given the peak hour traffic volumes managed by two access points, each access will require 2 lanes for inbound traffic and 2 lanes for outbound traffic to ensure smooth traffic flow and avoid congestion during peak hours.

PHASE 1 (HIGH CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	1.8	17,991	15.5	79	48	248	268
Commercial Entertainment	1.04	10,448	9	46	28	144	156
Commercial Surfer Paradise	1.14	11,435	908	50	30	158	170
Resort	7.65	76,462	65.7	57	22	45	57
TOTAL	**11.63**	**116,336**		**233**	**128**	**595**	**652**

Table 6.7 Traffic Demand for Phase 1 (High Case)

PHASE 1 (LOW CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	2.4	23,987	26.6	106	64	331	358
Commercial Surfer Paradise	1.14	11,435	12.7	50	30	158	170
Hotel	5.48	54,756	60.7	82	32	64	82
TOTAL	**9.02**	**90,177**		**238**	**126**	**553**	**610**

Table 6.8 Traffic Demand for Phase 1 (Low Case)

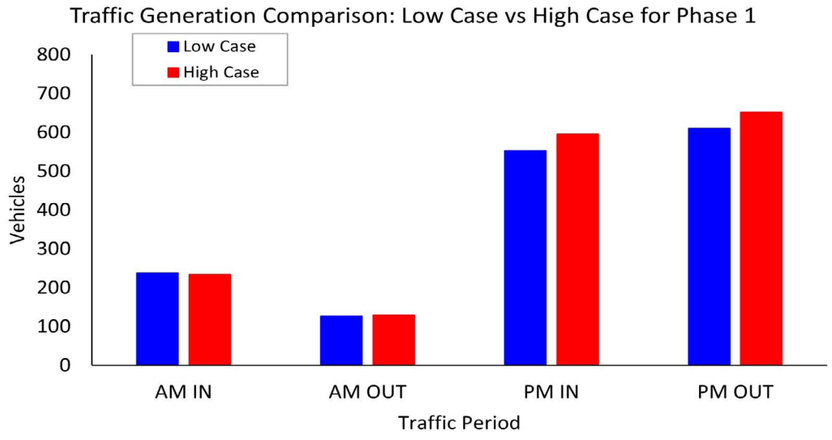


Figure 6.24 Traffic Demand for Phase 1: Comparing High Case and Low Case Scenario

Impact Analysis:

Low Case Scenario Impact:

- **Traffic Volume:** The low case scenario generates significantly lower traffic volumes compared to the high case scenario.
- **Infrastructure Requirements:** Infrastructure requirements are minimal. This scenario is manageable with the current infrastructure, requiring only basic upgrades to handle traffic efficiently.
- **Congestion Levels:** Lower traffic volumes will result in less congestion, easier traffic management, and lower infrastructure costs.
- **Suitability:** Infrastructure requirements are minimal. This scenario is manageable with the current infrastructure, requiring only basic upgrades to handle traffic efficiently.

High Case Scenario Impact:

Traffic Volume: The high case scenario generates substantially higher traffic volumes.

- **Infrastructure Requirements:** The higher volumes will necessitate significant upgrades to the existing infrastructure, including potential road widening and additional traffic management systems. Each access point will need to handle more traffic, especially during peak periods.
- **Congestion Levels:** The increased traffic volumes will likely lead to higher congestion, particularly during peak hours. This will require advanced traffic management strategies and higher investment in infrastructure.
- **Suitability:** This scenario supports more aggressive development and economic activity. However, it requires careful planning to ensure that the infrastructure can handle the increased demand, and it may necessitate long-term investments in transport and traffic management.

Specific Impacts Due to High Case Scenario:

Increased Traffic Congestion: The higher traffic volumes during AM and PM peak hours will lead to higher congestion during these times. This necessitates advanced traffic management systems to handle the increased load.

- **Higher Infrastructure Costs:** To accommodate the higher traffic volumes, additional infrastructure investments will be required. This includes widening roads, adding lanes, and improving intersections to ensure smooth traffic flow.
-
- **Enhanced Public Transport Needs:** With the higher traffic volumes, there will be a greater need for efficient public transport systems to reduce reliance on private vehicles. This includes increasing the frequency of buses, adding new routes, and potentially introducing new forms of public transport.
- **Environmental Impact:** Higher traffic volumes can lead to increased emissions and noise pollution. Sustainable transport solutions and green infrastructure will be necessary to mitigate these environmental impacts.
- **Economic Activity:** The high case scenario supports a higher level of economic activity due to the increased development intensity. This can attract more businesses and tourists, leading to greater economic benefits for the area.

CIP TRANSPORT PROJECTS

To handle the anticipated increase in traffic volumes and ensure efficient traffic flow in Whisky Point, the focus should be on upgrading and expanding the existing road infrastructure. This includes widening roads, adding lanes, constructing new roads, and integrating pedestrian spaces and green corridors. The proposed right-of-way (ROW) will facilitate smoother traffic flow and accommodate higher vehicle volumes, especially during peak tourist seasons.

1. **Upgrading of Existing Primary Arterial Road:** Enhance capacity and reduce congestion by expanding key arterial roads to dual-3 lanes. This long-term plan upgrade will facilitate smoother traffic flow and accommodate higher vehicle volumes, especially during peak tourist seasons.

2. **Upgrading of Existing Secondary Arterial Road:** Improve traffic flow and connectivity by upgrading secondary arterial roads to dual-2 lanes. This enhancement will support better distribution of traffic and provide improved access to key areas within Whisky Point.

3. **Construction and Upgrading of New and Existing Collector Road:** Enhance local access and circulation within Whisky Point by upgrading and constructing collector roads. Improved collector roads will ensure efficient movement within neighborhoods and connect local traffic to the primary and secondary arterial roads.

4. **Construction of Sheltered Bus Stops:** Improve passenger comfort and accessibility by constructing sheltered bus stops at strategic locations. These bus stops will provide protection from weather conditions and enhance the overall public transit experience.

5. **Construction of Roundabout:** Develop a roundabout to improve traffic circulation and safety. This infrastructure will help manage vehicle flow and reduce congestion in busy tourist areas.

6. **Proposed Development Integrated with Taxi Parking Bay:** Plan and develop new areas with integrated taxi parking bays to facilitate better traffic management and accessibility for tourists. These areas will ensure that tourists can easily access key attractions, reducing the need for personal vehicle use.

PROPOSED ROAD NETWORK

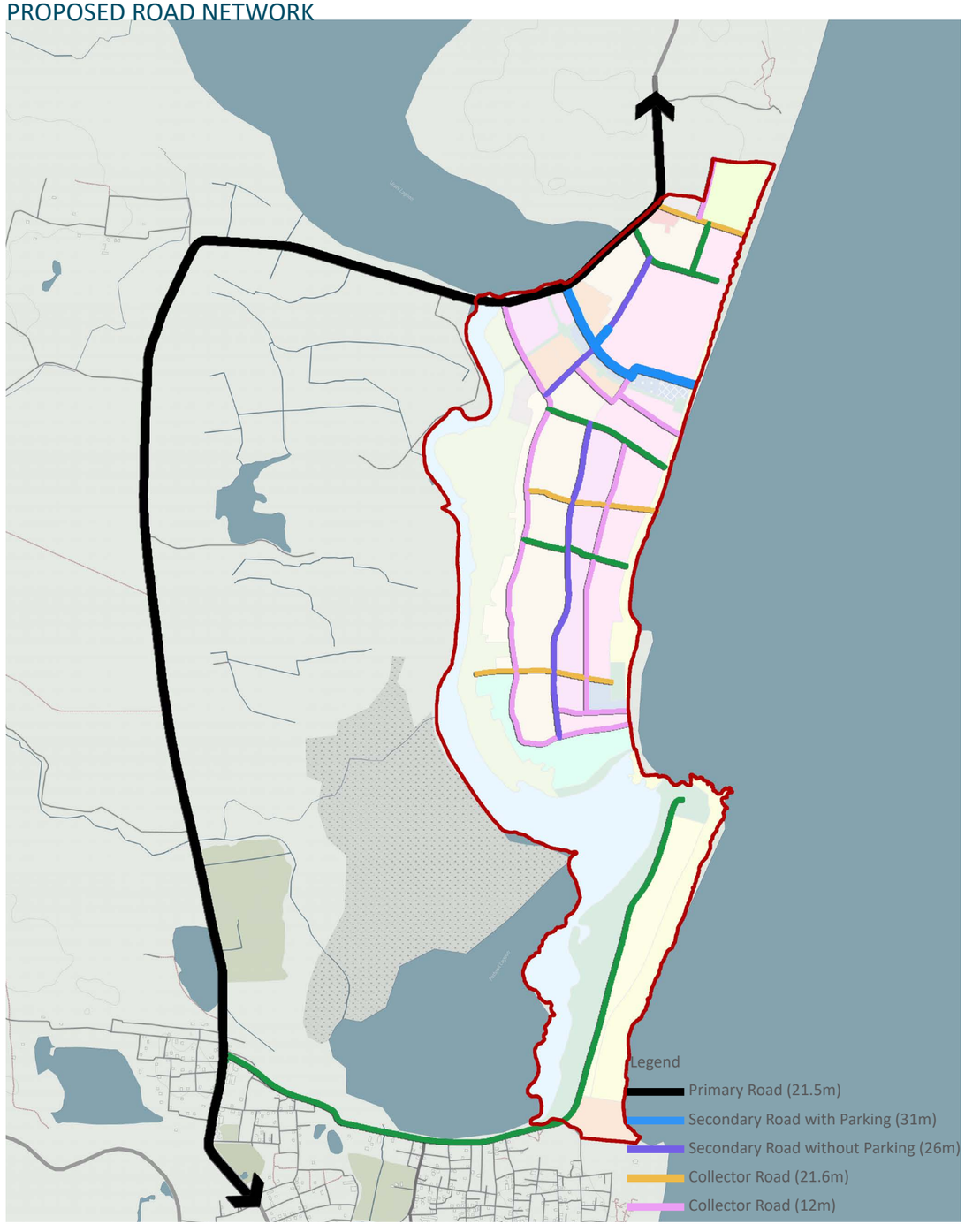


Figure 6.25 Road Network

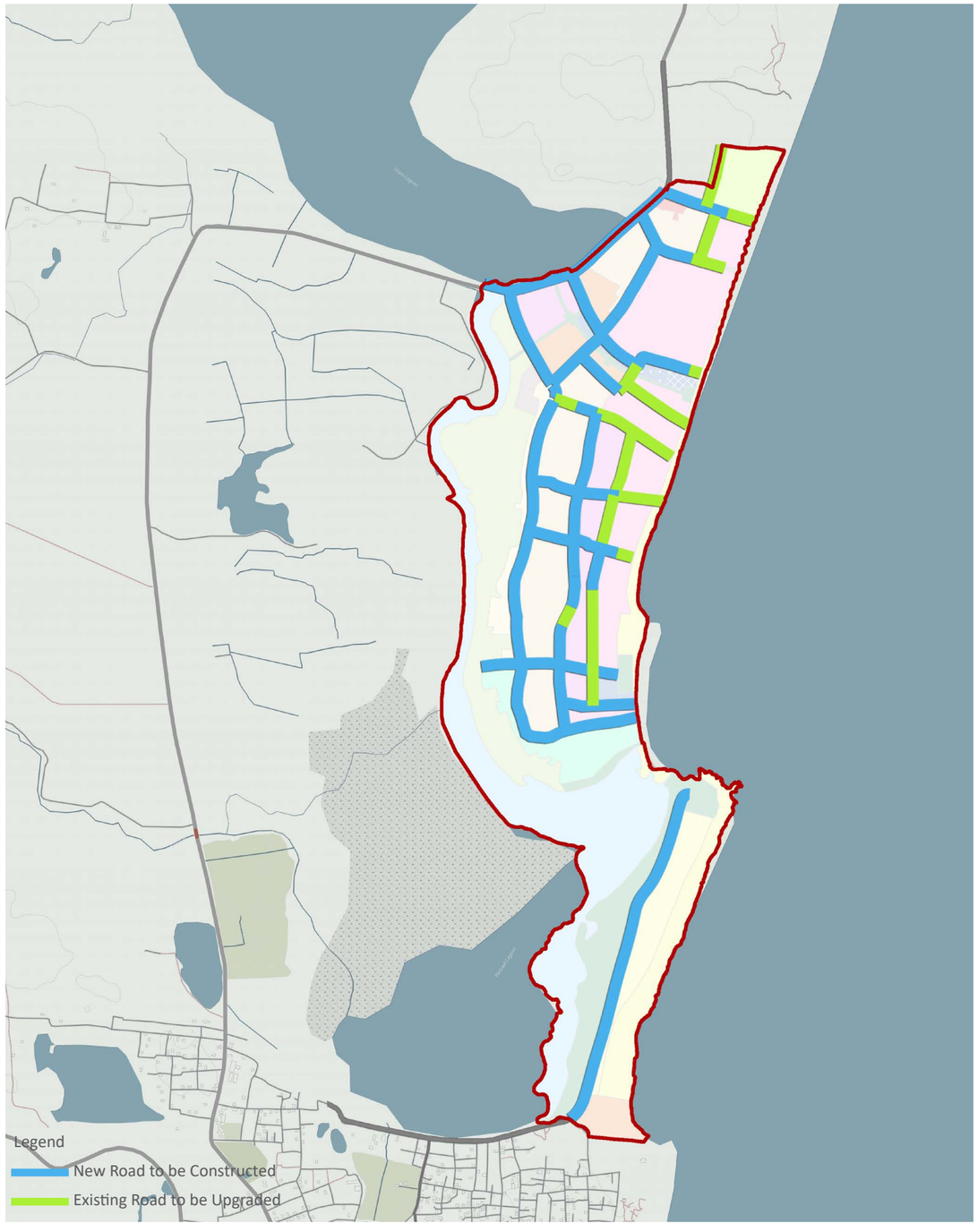


Figure 6.26 New and Upgrade Roads

STORM WATER DRAINAGE

- Storm water drainage is considered as basic infrastructure, which will not only reduce the flood damage, but also promote economic activities & improve the water environment.

- Being located along coastal line, developments are extremely vulnerable to the impact of sea level rise. This is especially serious when high tides coincide with heavy rain.

Measures to be considered:

- Coastline to be protected by sea walls / stone embankments that protect land and infrastructure from erosion and seawater intrusion.
- Structures such as dams and tidal gates & pumping stations where there are coastal reservoirs & outlet drains
- Optimal planning such as detention pond, open space, park, etc.
- Source control – treatment at source, such as rainwater harvesting system, and others can be considered for the purpose of:
  - Minimise post development runoff
  - Improve runoff water quality
  - Provide landscaping & recreational space

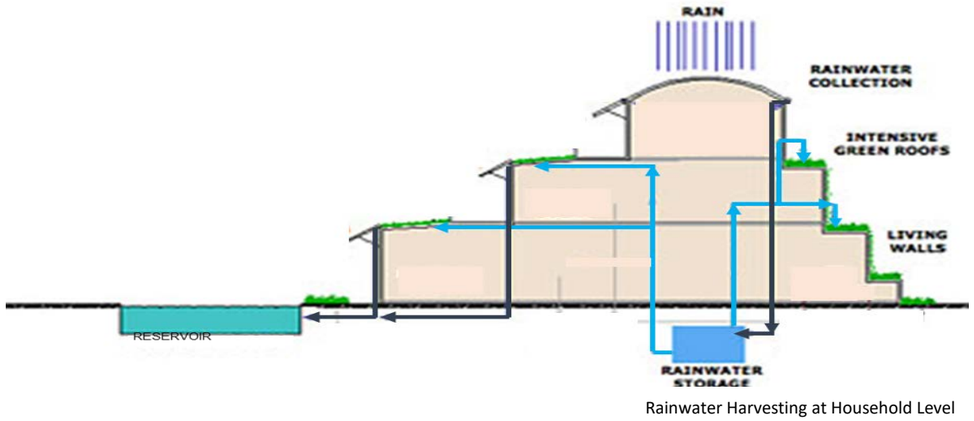
- The collection and convey system comprises the roadside drains and their main function is to collate all the surface runoff from the land plots and carriageway and release to the nearest water body. The size of the drains varies from about 1.2 to 2.0m approximately for various categories of roads. This can vary depending on sub-catchment of storm water discharge location and alignment.



Type of Green Roof/ Rooftop Greenery



Stormwater pond at Yishun (Source: Nparks, Singapore)



Rainwater Harvesting at Household Level

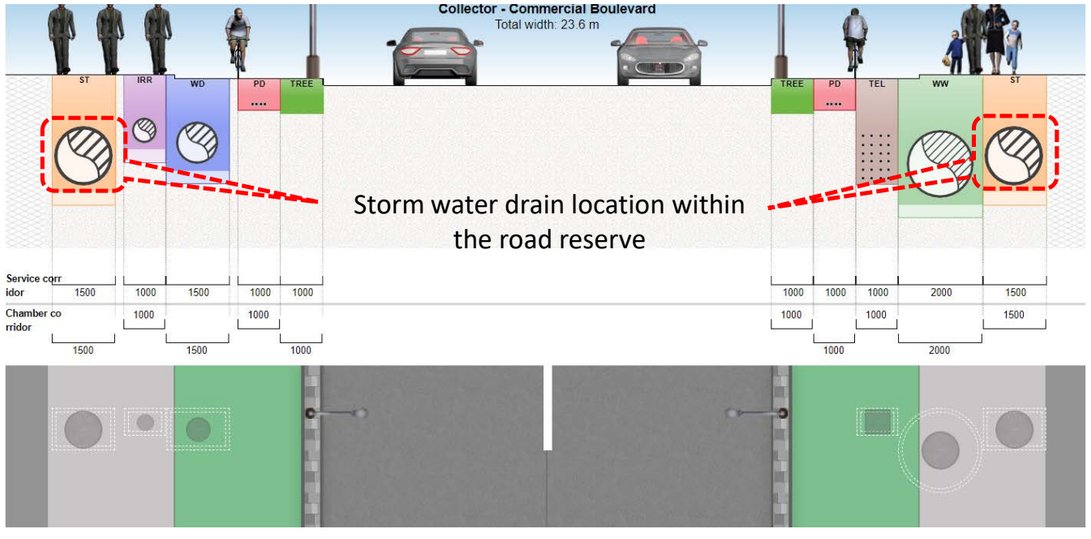


Figure 6.27 Typical Service Corridor Section

UNIT DEMAND (WATER, SOLID WASTE AND POWER)

- In deriving the projected utilities demand for the planning boundary, the unit demand of the various uses would need to be determined first, the table shows the unit utility (water, sewer, solid waste & power) demand used for Eastern Province. These figures are obtained from various sources including local standards and similar projects carried out by SJ in different countries.

- Based on the proposed unit demand, proposed land use distribution and projected population, the ultimate total average demand for various utilities has been worked out and shown in the following sections.

Sl No	Land Use	Unit Water Demand (m3/ha/d)/(lpcd)	Unit Solid Waste Generation (kg/ha/d), (room),(kg/d)	Unit Power Demand (VA/m2)
1	COMMERCIAL	15 - 25 m3/ha/d	160 - 200 kg/ha/d	90 - 110
2	ECO LODGE	250 - 350 l/room	1.6 kg/room	40 - 60
3	3*, 4* & 5* HOTEL	300 - 500 l/room	1.6 kg/room	70 - 90
4	OPEN SPACE/PARK	5 - 10 m3/ha/d		
5	INVESTMENT RESIDENTIAL	135 lpcd	0.8 kg/c/d	70 - 90
6	MID-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
7	LOW-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
8	MIXED USE	135 lpcd	0.8 kg/c/d	70 - 90
9	RESORT	500 - 700 l/room	1.6 kg/room	50 - 70
10	WELLNESS CENTER	500 - 700 l/room	1.6 kg/room	50 - 70
11	VISITOR CENTER	20 - 30 m3/ha/d	180 - 220 kg/ha/d	70 - 90

Table 6.9 Unit Demand (Water, Solid Waste and Power)

- lpcd = litre per capita per day
- Sewage; 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration.
- Recycle Water; The source for recycle water is from sewage treatment plant. The recycle water is treated to standards required for its various uses (i.e. made fit-for-purpose)

UTILITIES DEMAND PROJECTION: WHISKY POINT

- The average water demand for the development is estimated by using unit water demand for each land use. Both potable water and recycle water shall serve the development. Water from local authority / ground water / rainwater harvested, can be the main sources of raw water. The source for recycle water shall be from the proposed Sewage Treatment Plant (STP). The recycle water can be used for non-potable purposes.

- Presently there are gaps in water supply and demand, to address these issues NWSDB has proposed multifaceted approach, comprising construction of water treatment plant (short-term), desalination plant (intermediate), and enhancement of Heda Oya & Ali Oluwa reservoir (long-term). If these are implemented in timely manner, it can accommodate the proposed development.

- 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration. Sewage generated from the commercial / residential activities shall be conveyed to sewage treatment plant.

- The solid waste generation is estimated based on population and land use within the proposed development. To treat the ultimate solid waste generated, about 5.5ha of landfill site is required, this has to be located outside the development. Alternately, existing landfill site can be augmented.

Proposed Land Use	Total Water Demand (m3/day)	Sewage Generation (m3/day)	Solid Waste Generation (kg/day)	Power Demand (MVA)
Commercial	63	55	564	2
Commercial Entertainment	23	20	206	1
Commercial Night Market	21	18	189	1
Eco Lodge	110	97	906	4
Hotel	141	124	800	8
Resort	327	287	1,030	10
Investment Residential	69	61	410	6
Residential Low Density	59	51	347	2
Residential Mid Density	663	584	3,930	31
Mixed Use	386	339	3,095	16
Water Park	262	69	1,645	3
Water Loss @ 10%	212			Co-Factor 0.6*0.7
Total	2,350	1,750	13,150	35

Table 6.10 Utilities Demand Projection (Whisky Point)

Utility	Land Area (Ha)
33kV SS	0.3
Water Storage	0.4
STP	1.0

- Power demand is projected based on land use distribution, gross plot ratio, power demand density and coincidence factor. Generally, coincidence factor are applied in the power demand computation as consumers are unlikely to consume their peak demand simultaneously.

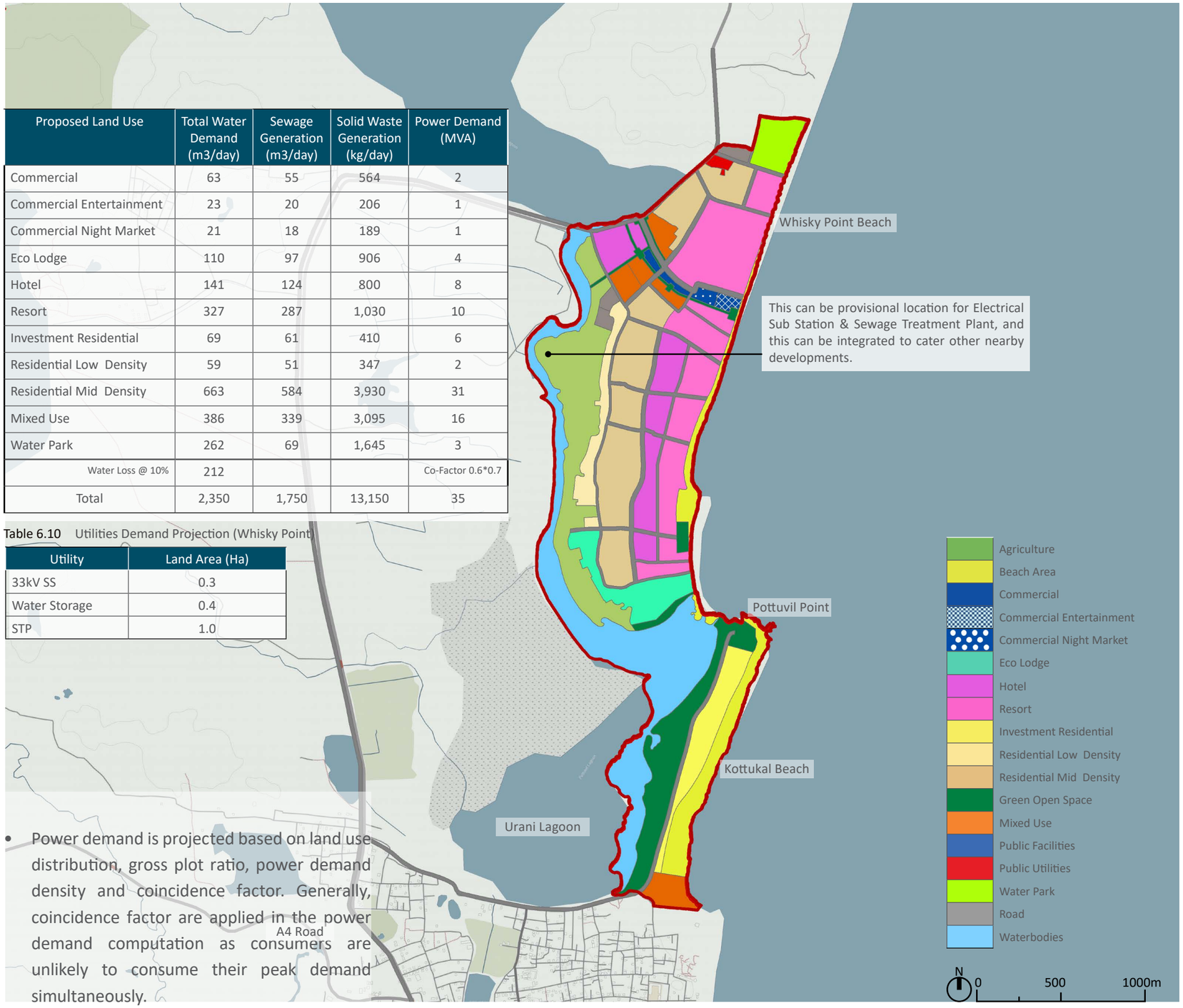


Figure 6.28 Utilities Demand Protection (Whisky Point)

6.3.6 ENVIRONMENTAL STRATEGIES

- Coastal Erosion: To mitigate coastal erosion, it's crucial to restrict construction activities within the designated reservation zones and maintain the natural vegetation line along the coast. Implementing coastal protection strategies, adopting socially and environmentally acceptable erosion control techniques, and enforcing a permanent vegetation line with appropriate setbacks are key measures. Additionally, restoring natural features that naturally inhibit erosion is vital to preserving the coastline.

- Destruction of Mangroves: Addressing the destruction of mangroves requires the establishment of waste disposal and sewage treatment facilities to prevent harmful runoff into the ocean. Raising awareness among tourists and locals about responsible waste disposal and introducing centralised water treatment plants in industrial zones are essential steps to control industrial effluents and protect these critical ecosystems.

- Solid Waste Disposal: Improving solid waste management involves proposing infrastructure developments for efficient waste collection, segregation, recycling, and disposal. Promoting community-based waste management initiatives can further enhance these efforts, encouraging local participation and ensuring more sustainable waste handling practices.

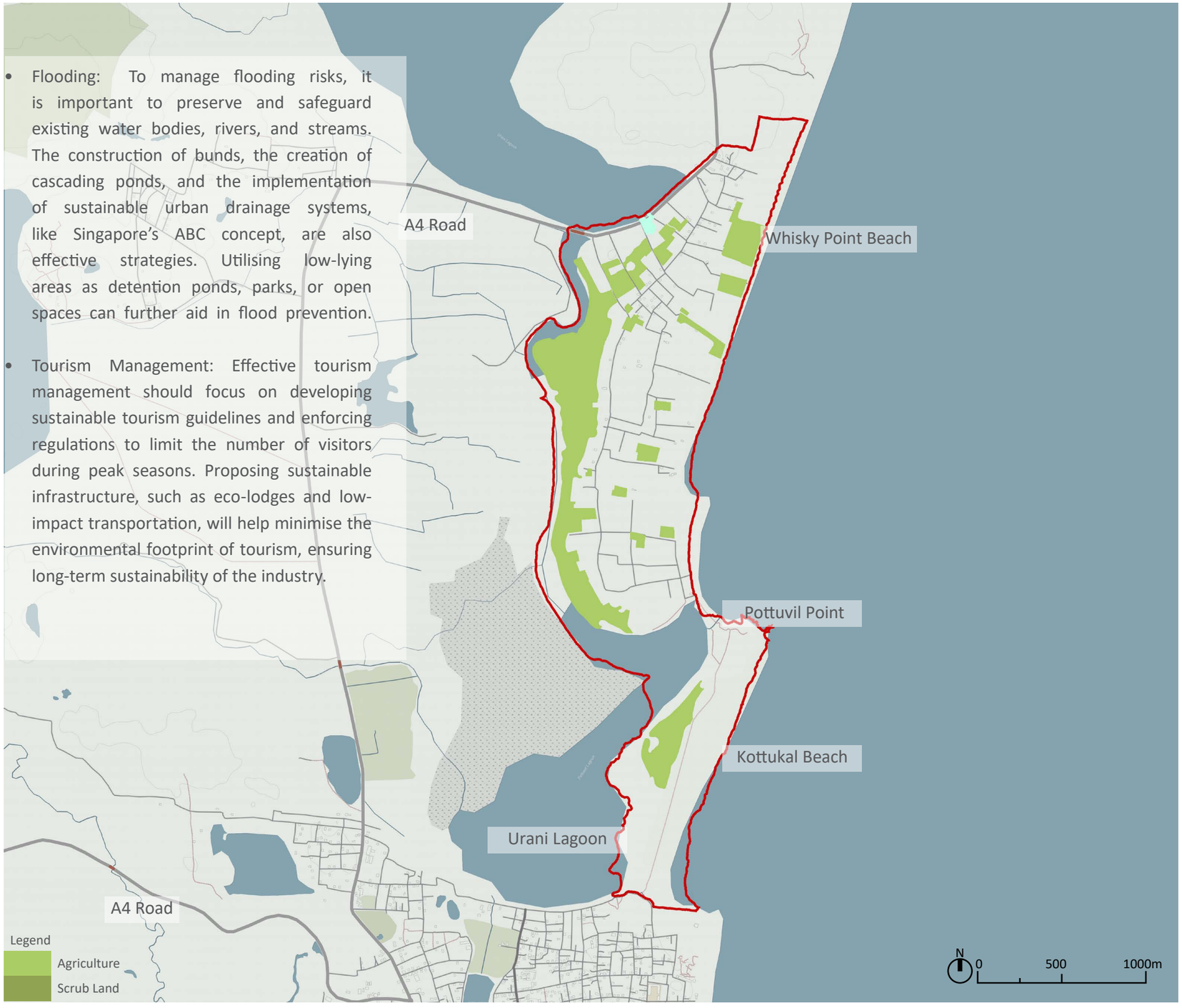


Figure 6.29 Environmental Strategies (Whisky Point)

6.3.7 SOCIAL STRATEGIES

- Tourism Development: Tourism development should be approached with inclusive planning that considers the needs and voices of all stakeholders, ensuring the provision of essential public facilities such as education and healthcare. Public participation is crucial in this process to create affordable tourism opportunities that benefit both visitors and local communities. By integrating these elements, tourism can become a sustainable and equitable industry that supports broader social and economic development.

- Local Unemployability and Underemployment: Addressing local unemployability and underemployment requires a focus on creating jobs in the tourism sector, expanding the fishing industry with modern tools and techniques, and prioritising local hiring in industrial developments like those in Trincomalee. Promoting local product-based entrepreneurship and providing skill training for locals to work in tourism will further empower communities, fostering economic growth and reducing underemployment.

- Poverty: To combat poverty, it is essential to focus on job creation, affordable housing, and skill training. Providing access to public facilities and promoting local product-based entrepreneurship, particularly in traditional industries like crafts and food, can offer sustainable income sources for impoverished communities. These efforts collectively contribute to breaking the cycle of poverty and enhancing the quality of life for local populations.

- Loss of Authenticity/Loss of Identity: Preserving cultural heritage and promoting sustainable tourism practices are key to preventing the loss of authenticity and identity in local communities. Emphasising local traditions and integrating cultural monuments, sacred areas, and natural reserves into a unified tourism plan will help maintain the unique character of the region. Adhering to proposed buffers for archaeological sites ensures that development respects and preserves historical and cultural landmarks.

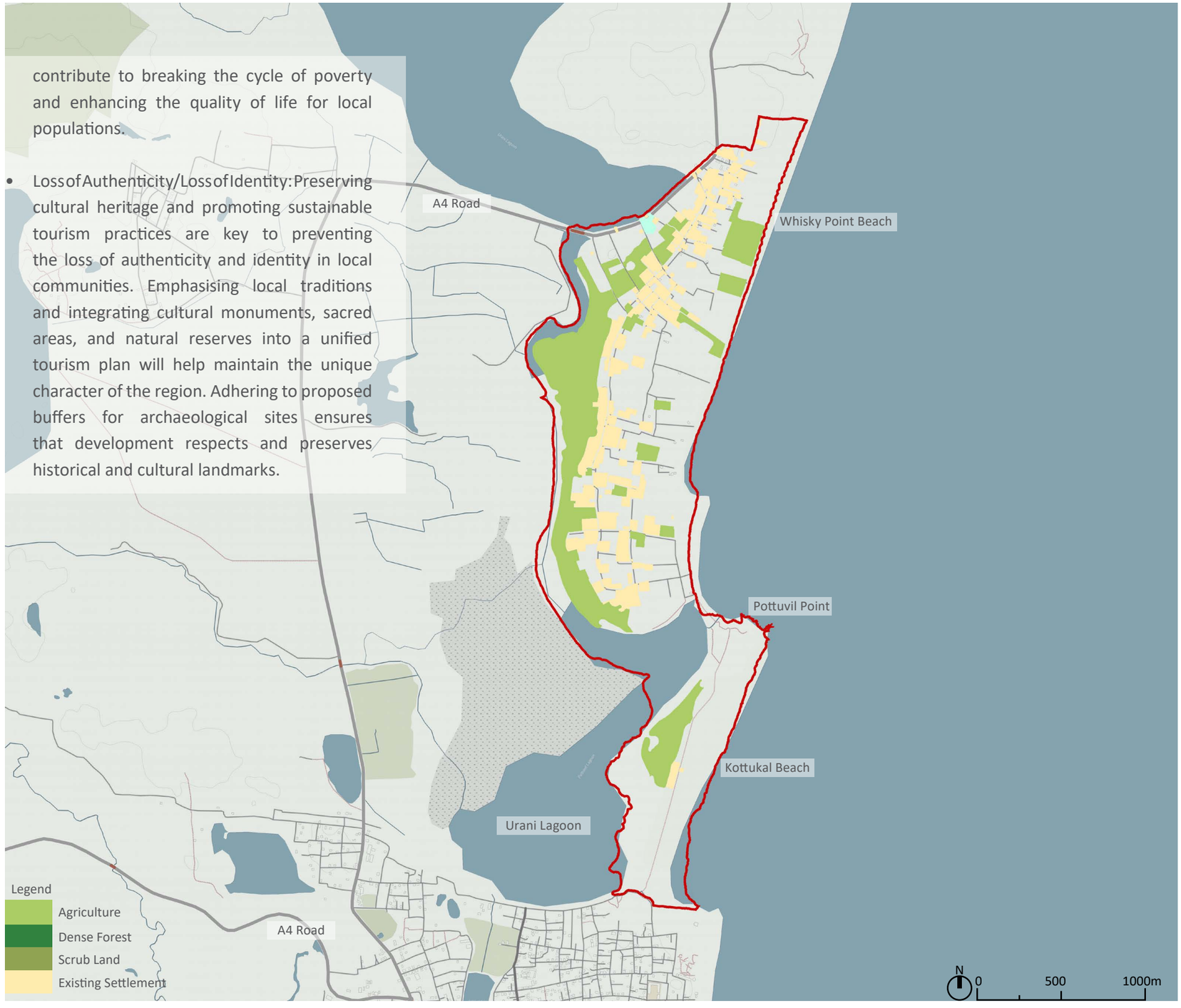


Figure 6.30 Social Strategies (Whisky Point)

6.4 ARUGAM BAY CONCEPT MASTER PLAN

6.4.1 CONCEPT STRUCTURE: ARUGAM BAY







Surfer's Paradise

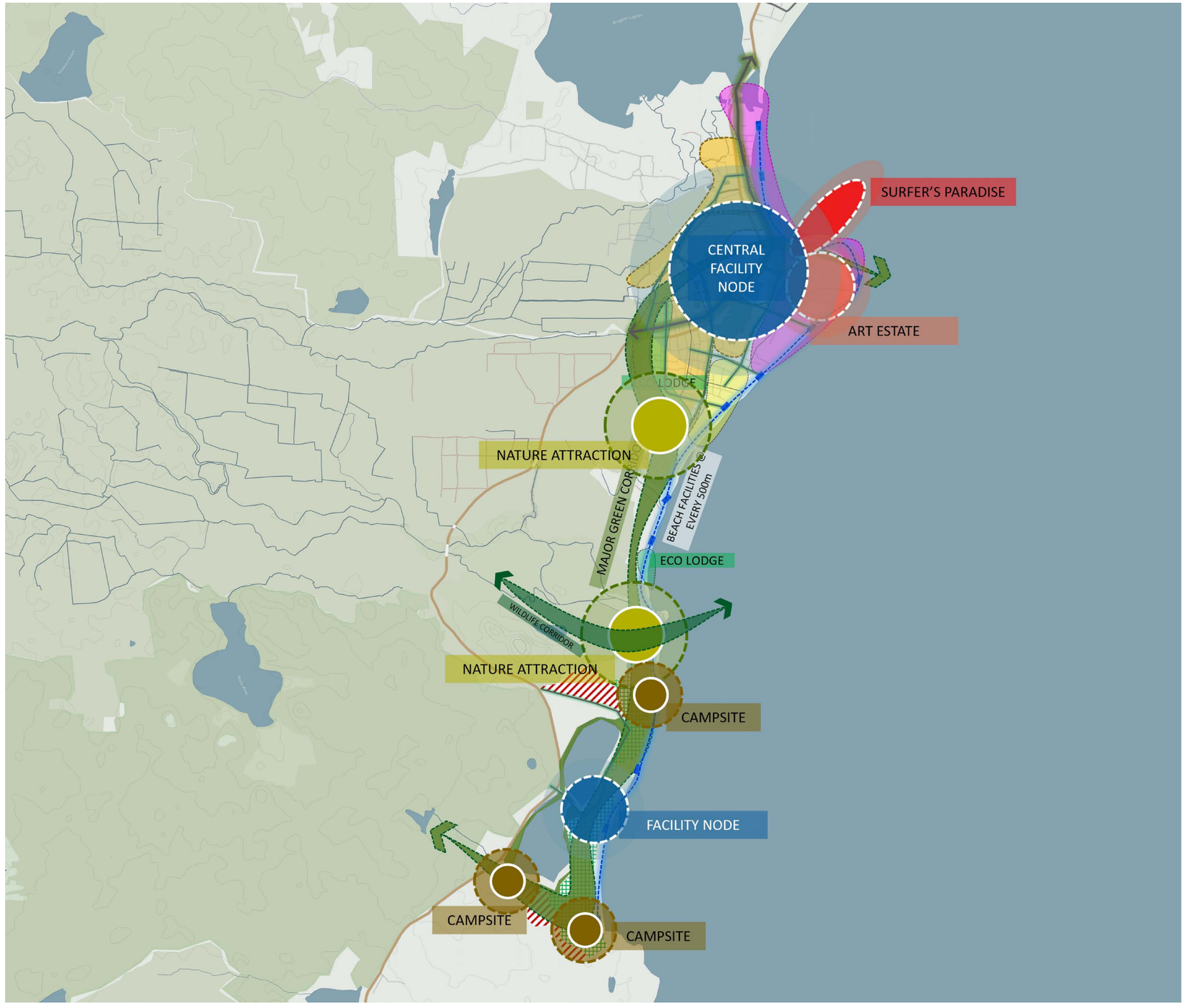


Figure 6.31 Vision Framework (Arugam Bay)

Surfer's Paradise

Situated along Arugam Bay Beach, this mixed-use area complements the surfing with high-standard facilities and amenities. It is seamlessly interconnected with the central facility node and enjoys easy access to major road, enhancing the overall experience of surfing cultural in Arugam Bay area.

Central Facility Node

Located at the heart of Arugam Bay, the central facility node serves as a vital hub with essential amenities. It includes a visitor centre, bus terminal, and commercial area, offering convenience and connectivity for residents and visitors.

Green Corridor and Natural Attraction Nodes

The Green Corridor, an intensive pathway stretching from Black Beach to the Peanut Farm area, weaves through significant natural landmarks such as Crocodile Rock, Elephant Rock, and the mangroves adjacent to Kudakalliya Beach. Each of these natural attractions serves as a pivotal node, presenting the opportunities not only to showcase the area's biodiversity but also to serve as focal points for environmental education and preservation efforts.

Camp Sites

Arugam Bay's appeal to young tourists is amplified by its themed campsites, offering experiences suited to various interests. Each campsite features a unique theme, catering to diverse visitor preferences. Whether it's adventure, relaxation, or cultural immersion, guests can indulge in activities tailored to their interests, enhancing the personalisation of their experience.





Green Corridor and Natural Attraction Nodes







Central Facilities Node



Camp Sites

6.4.2 PROPOSED LAND USE

The proposed land use for Arugam Bay predominantly focuses on resorts and residential settlements to accommodate both visitors and residents. Along the beach front, investment residential properties and hotels will be strategically placed to capitalise on the stunning coastal views and appeal to tourists. The lagoon front is designated for eco-tourism initiatives and green open spaces, ensuring a balanced and sustainable development approach. At the heart of this vibrant area, a commercial core is proposed, featuring a wide array of facilities, including Surfer Paradise and various entertainment options.

	Proposed Land Use	Area (Ha)	%
	Agriculture	15.84	2.8%
	Agro Tourism	10.52	1.9%
	Beach Area	46.13	8.3%
	Commercial	7.72	1.4%
	Commercial Art Estate	1.36	0.2%
	Commercial Entertainment	1.93	0.3%
	Commercial Surfer Paradise	4.54	0.8%
	Eco Lodge	22.62	4.1%
	Hotel	9.63	1.7%
	Resort	48.36	8.7%
	Camp Site	12.72	2.3%
	Investment Residential	9.43	1.7%
	Residential Low Density	72.92	13.1%
	Residential Mid Density	16.88	3.0%
	Green Open Space	119.12	21.4%
	Mixed Use	8.80	1.6%
	Visitor Center	0.75	0.1%
	Public Facilities	9.45	1.7%
	Public Utilities	1.29	0.2%
	Road	33.21	6.0%
	Defence	22.86	4.1%
	Sand dune	3.49	0.6%
	Waterbodies	77.44	13.9%
	Total	557.01	

Table 6.11 Proposed Land Use Distribution (Arugam Bay)

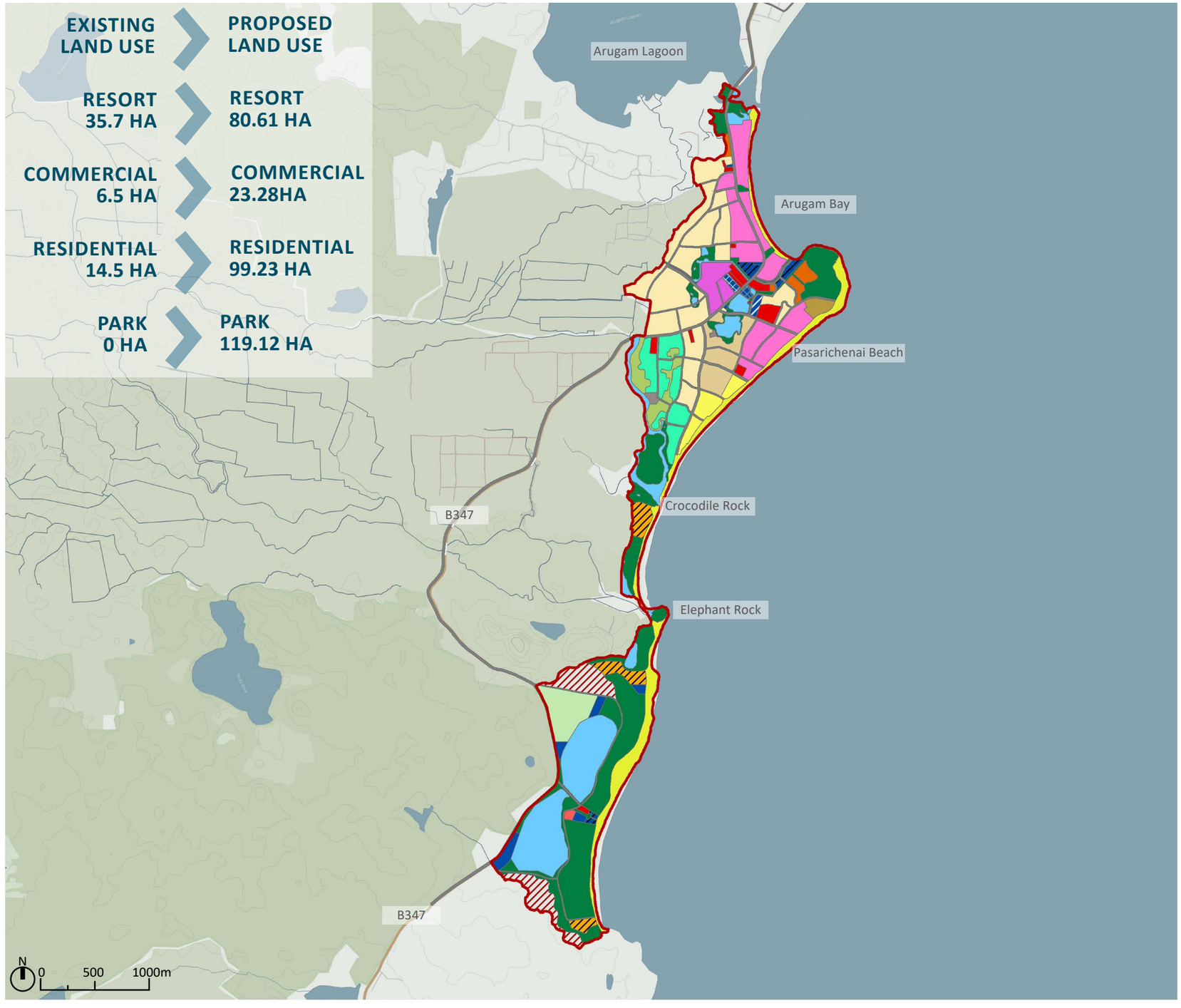


Figure 6.32 Proposed Land Use (Arugam Bay)

6.4.3 OPEN SPACE AND ATTRACTION POINTS

Arugam Bay and the Peanut Farm area, with their abundant natural resources, are proposed to 119.12 hectares of interconnected green open space. This green network flows through the planning area, linking major attractions such as beaches, surf points, and landmarks like Crocodile Rock and Elephant Rock. The design connects various natural environments, including sand dunes, mangroves, and agricultural land, offering visitors different experiences as they move through the area. Tourists can explore this space on foot or by bike, walking through neighborhoods that lead to these natural attractions.

Each section of the green connectivity provides a unique way to experience the area's beaches and landscapes, offering an alternative mode for visitors to immerse themselves in its diverse surroundings.

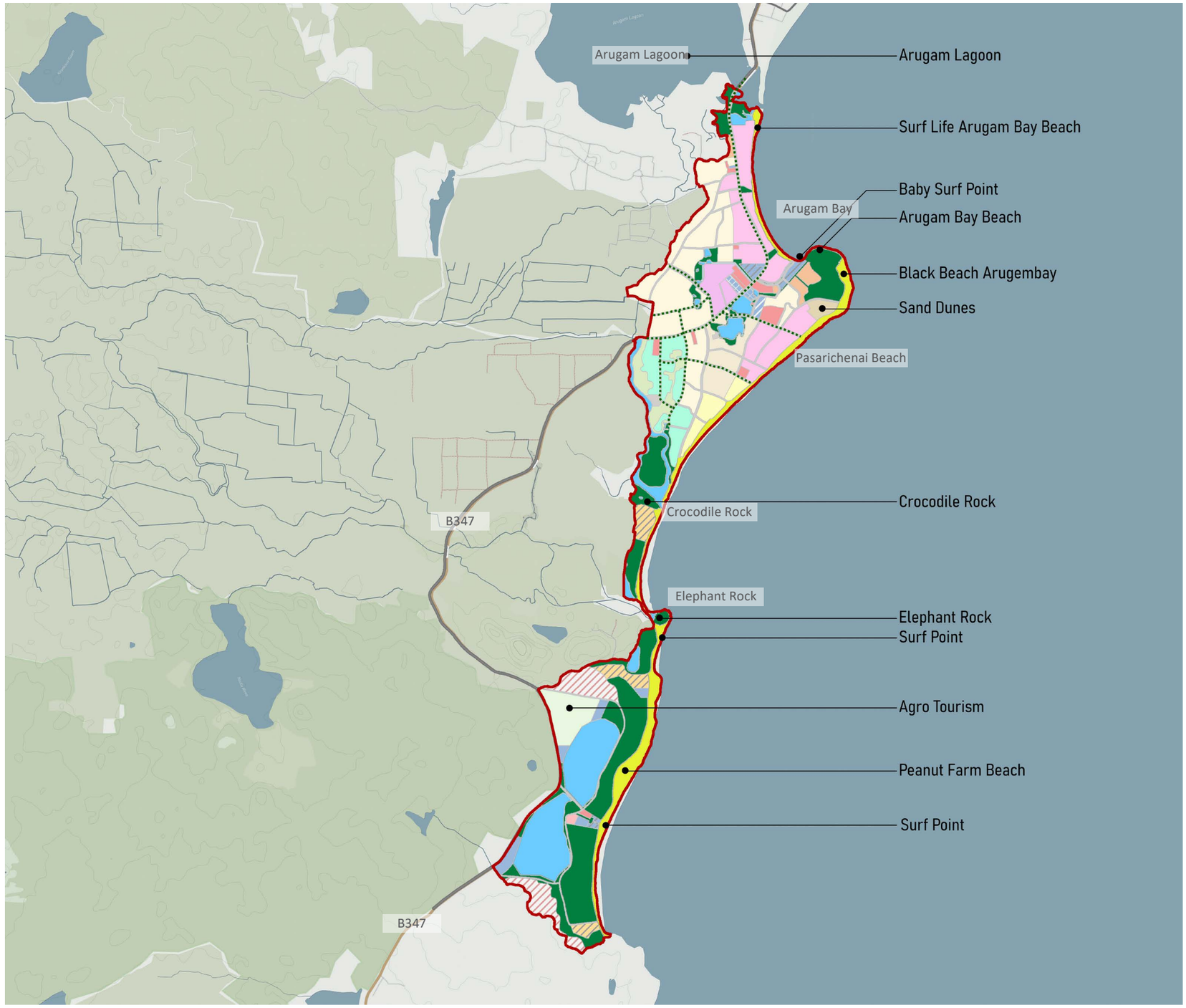


Figure 6.33 Open Space and Attraction Pints (Arugam Bay and Peanut Farm)

6.4.4 PROPOSED TRANSPORT PLAN

Road Network Hierarchy - Arugam Bay & Peanut Farm

The road network hierarchy for Arugam Bay and Peanut Farm is designed to cater to the unique geographic and economic characteristics of these coastal regions, known for their vibrant tourism sectors and growing residential communities.

Primary Arterial Road

The primary arterial road in Arugam Bay and Peanut Farm is a critical infrastructure component that provides a direct connection to the B374 highway leading to Pottuvil. This highway is essential for facilitating smooth and efficient traffic flow from major urban centers and other parts of the country into the area. It supports high-speed, high-volume traffic, making it vital for the transport of goods and travelers to and from the region.

Secondary Arterial Roads

Secondary arterial roads in Arugam Bay and Peanut Farm serve diverse functions, connecting residential areas, resorts, and mixed-use developments. These roads are crucial for distributing traffic from the primary arterial into the local streets, thus supporting the daily operations of local businesses and tourism activities.

Collector Roads

The collector roads in Arugam Bay and Peanut Farm are primarily focused on serving residential communities and eco-lodges. These roads are essential for providing access to more secluded areas, often frequented by tourists seeking eco-friendly accommodations and local residents.

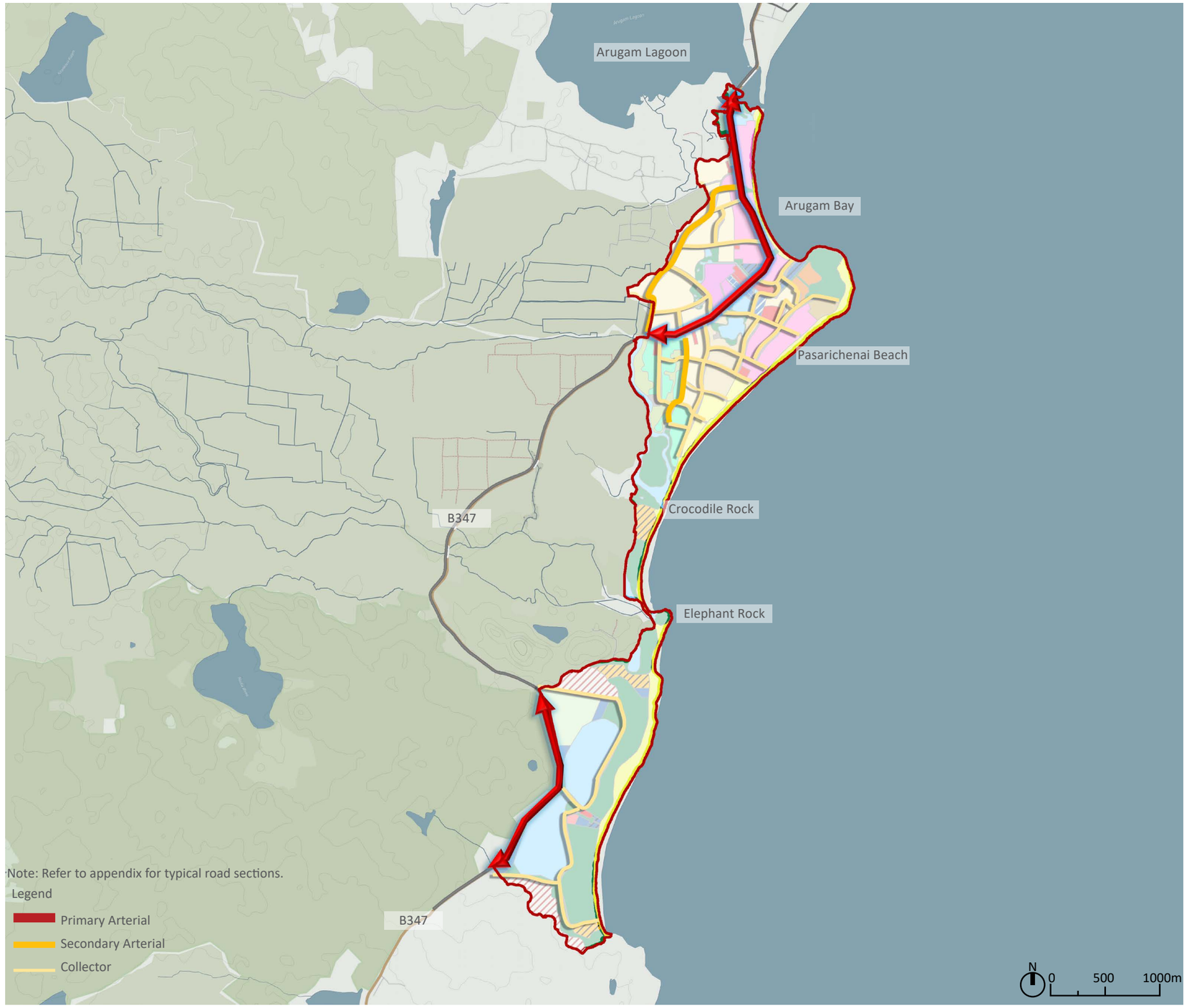


Figure 6.34 Proposed Transport Plan (Arugam Bay)

6.4.5 PROPOSED INFRASTRUCTURE

TRAFFIC DEMAND FORECASTING

The proposed land use area for Arugam and Peanut Farm covers a total of 557.1 hectares, with a total GFA of 1,561,558 square meters. The land use distribution includes commercial areas, residential zones, resorts & hotels, agriculture, and other facilities such as community centers and sand dunes. This diverse mix of land uses is expected to generate substantial traffic, necessitating thorough planning and strategic management to ensure efficient traffic flow and minimise congestion.

Analysis and Observations

- The traffic demand forecast for the Arugam Bay and Peanut Farm reveals significant variations in trip generation across different land use types, reflecting the distinct characteristics and activities associated with each type.

- **Commercial Areas:** The commercial areas, including commercial retail shopping, entertainment, and art estate, generate considerable traffic, especially during the evening hours. This indicates vibrant retail and entertainment activities that attract visitors towards the end of the business day.

- **Resorts & Hotels:** The various resort and hotel facilities exhibit balanced traffic patterns throughout the day, aligning with typical check-in and check-out times. These areas are designed to cater to both short-term visitors and long-term guests, offering a range of amenities and activities that maintain consistent traffic levels.

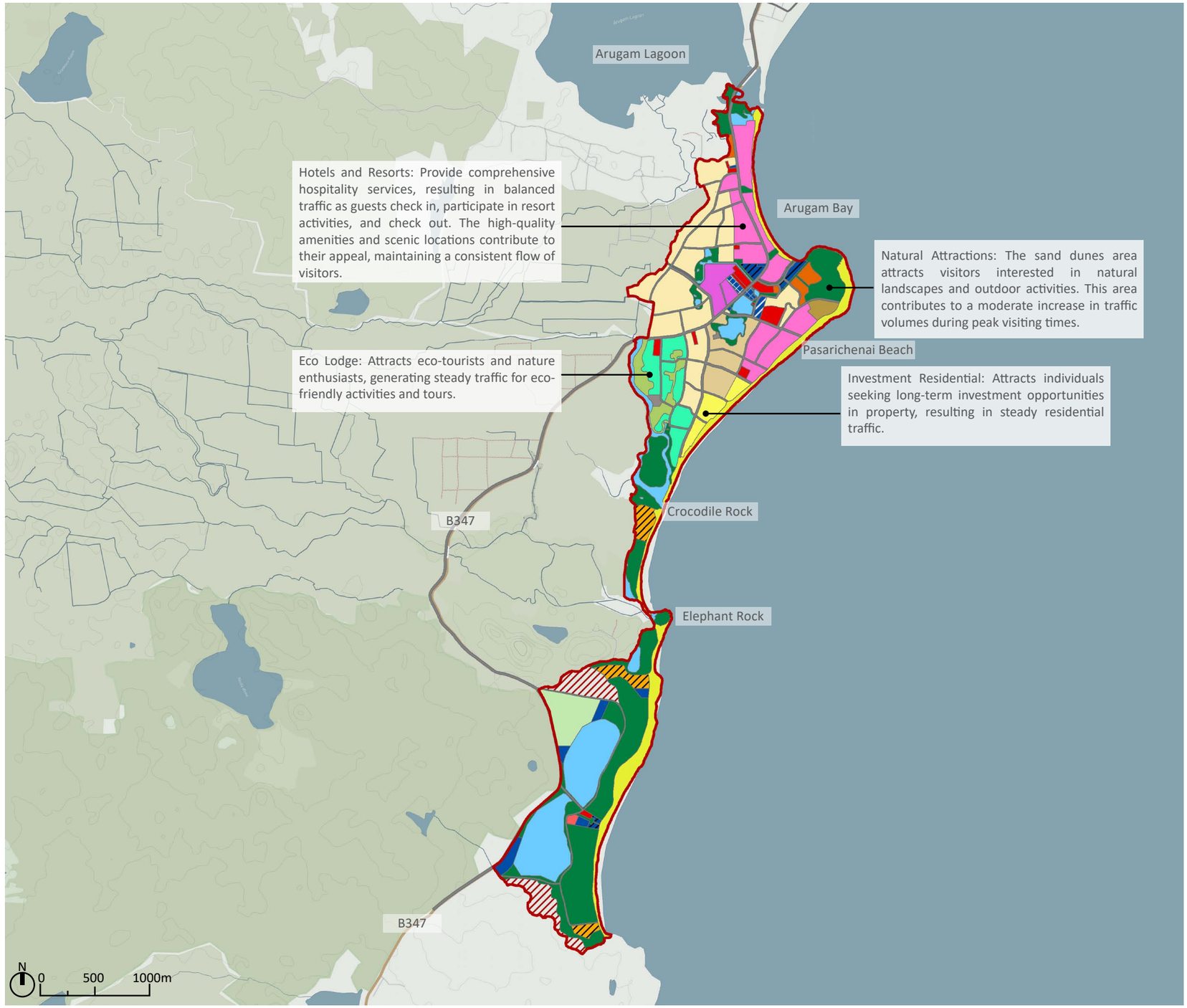


Figure 6.35 Traffic Demand Forecasting (Arugam Bay)

- **Residential Areas:** The residential zones, including investment residential, low-density, and mid-density areas, display typical commuting patterns with higher outbound trips in the morning and higher inbound trips in the evening. These areas are characterised by their family-friendly environments and community-focused amenities.

- **Community and Other Facilities:** The mixed-use and visitor center areas act as local hubs, supporting a range of activities that generate significant traffic. These centers are essential for community engagement, providing spaces for social, recreational, and educational activities.

- **Agriculture:** Agricultural areas generate consistent traffic related to farming activities and produce transportation. These areas maintain a steady flow of vehicles throughout the day, supporting local agricultural operations.
- **Natural Attractions:** The sand dunes area attracts visitors interested in natural landscapes and outdoor activities. This area contributes to a moderate increase in traffic volumes during peak visiting times.

	Proposed Land Use	Total GFA (sqm)	Trip Gen (veh)			
			AM In	Am Out	PM In	Pm Out
	Agriculture	105,204	147	42	63	158
	Commercial	77,204	340	205	1,065	1,151
	Commercial Art Estate	13,643	119	61	112	126
	Commercial Entertainment	19,341	85	51	267	288
	Commercial Surfer Paradise	45,363	200	121	626	676
	Eco Lodge	113,113	169	66	132	169
	Hotel	96,257	144	56	113	144
	Resort	241,798	361	141	283	361
	Camp Site	25,431	1	1	5	4
	Investment Residential	75,460	8	28	27	17
	Residential Low Density	364,596	100	319	319	191
	Residential Mid Density	303,817	41	134	130	80
	Mixed Use	132,006	281	184	227	260
	Visitor Center	7,542	94	48	88	100
	Sand dune	34,901	3	3	21	14
	Total		**2,113**	**1,478**	**3,572**	**3,819**

Table 6.12 Trip Generation Projection (Arugam Bay)

Peak Hour Calculation

To determine the required number of lanes, we calculate the peak hour traffic volume:

Total Peak Hour Volume (Inbound) = 3,572 vehicles/hour
Total Peak Hour Volume (Outbound) = 3,819 vehicles/hour

Since the site has two access points, the traffic will be divided among these accesses:

Peak Hour Volume per Access (Inbound) = 3,572 / 2 = 1,624 vehicles/hour
Peak Hour Volume per Access (Outbound) = 3,819 / 2 = 1,736 vehicles/hour

Lane Capacity

Assuming a lane capacity of 1,100 vehicles per hour per lane:

Number of Lanes= Peak Hour Volume/Lane Capacity

Inbound Lanes Calculation per Access

Number of Inbound Lanes= 1,624 / 1,100 ≈ 1.48 ≈ 2 lanes (rounded up)

Outbound Lanes Calculation per Access

Number of Outbound Lanes= 1,736 / 1,100 ≈ 1.58 ≈ 2 lanes (rounded up)

Conclusion

Given the peak hour traffic volumes distributed across two access points, each access will require approximately 2 lanes for both inbound and outbound traffic to ensure smooth traffic flow and avoid congestion, especially during peak hours. The proposed right-of-way (ROW) for the entire development provides sufficient capacity to handle the traffic at each access, considering potential future traffic growth.

PHASE 1 (HIGH CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial	1.3	12,600	5.5%	56	34	174	188
Commercial Entertainment	0.7	7,400	3.2%	33	20	102	110
Commercial Surfer Paradise	2.8	27,600	12.1%	122	73	381	412
Hotel	4.6	46,200	20.2%	204	123	637	689
Visitor Center	0.71	7,100	3.1%	89	45	83	94
TOTAL	**22.9**	**228,800**		**651**	**368**	**1,502**	**1,643**

Table 6.13 Traffic Demand for Phase 1 (Low Case)

PHASE 1 (LOW CASE)							
Land Use	Area (Ha)	Area (Sqm)	%	Trip Gen (Veh)			
				AM IN	AM OUT	PM IN	PM OUT
Commercial Surfer Paradise	2.86	28,556	37.8	126	76	394	426
Hotel	1.96	19,574	25.9	29	11	23	29
TOTAL	**4.81**	**48,129**		**155**	**87**	**412**	**455**

Table 6.14 Traffic Demand for Phase 1 (High Case)

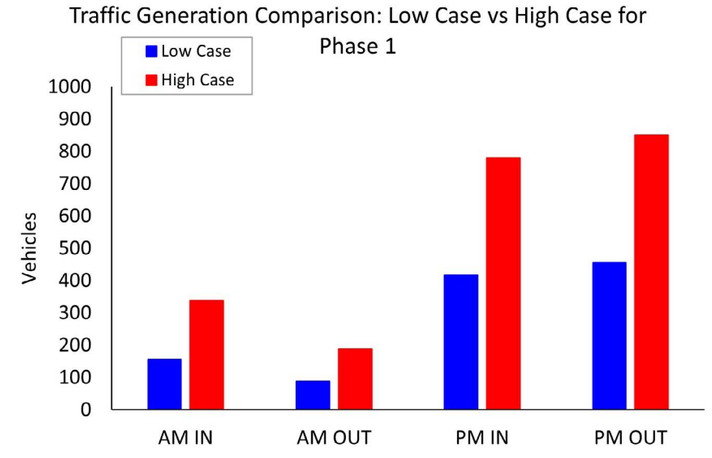


Figure 6.36 Traffic Demand for Phase 1: Comparing High Case and Low Case Scenario

Impact Analysis:

Low Case Scenario Impact:

- **Traffic Volume:** The low case scenario generates moderate traffic volumes. The traffic flow is manageable within the current infrastructure limits.

- **Infrastructure Requirements:** Requires fewer infrastructure upgrades. Each access point will need approximately 1 lane for both inbound and outbound traffic.

- **Congestion Levels:** Lower traffic volumes will result in less congestion, easier traffic management, and lower infrastructure costs.

- **Suitability:** This scenario is suitable for phased development, focusing on a controlled growth strategy that minimises environmental impact and maintains the existing road infrastructure's capacity.

High Case Scenario Impact:

Traffic Volume: The high case scenario results in significantly higher traffic volumes. This reflects a more aggressive development strategy, potentially leading to greater economic activity but also posing challenges in traffic management.

- **Infrastructure Requirements:** The substantial increase in traffic demands more robust infrastructure upgrades, including road widening and additional lanes to prevent congestion, particularly during peak hours. Investment in traffic management technologies may also be required to optimise flow.
- **Congestion Levels:** Higher traffic volumes will likely lead to increased congestion, especially during peak periods. This could result in delays and a need for advanced traffic management strategies to mitigate the impact on residents and visitors.
- **Suitability:** This scenario is more appropriate for rapid development with a focus on maximising economic returns. However, it requires careful planning and significant investment in infrastructure to ensure that the increased traffic does not negatively affect the area's livability or environmental quality.

Specific Impacts Due to High Case Scenario:

- **Traffic Volume:** The substantial rise in both AM IN and PM OUT traffic volumes compared to the low case scenario will likely cause congestion during peak periods. This is particularly concerning given the potential for bottlenecks in key areas like Commercial Surfer Paradise and high-density residential zones.
- **Higher Infrastructure Costs:** To support the increased traffic, significant investment in road infrastructure is necessary. This includes not only widening existing roads but also potentially creating new routes or improving intersections to maintain traffic flow.
- **Environmental Impact:** The increase in traffic could lead to higher emissions and noise pollution. Sustainable transport solutions, such as improved public transport options or the introduction of green infrastructure, will be essential to mitigate these environmental concerns.
- **Economic Activity:** The high case scenario could bring greater economic activity, attracting more businesses and tourists to the area. However, this must be balanced with the potential for congestion and environmental degradation.

CIP TRANSPORT PROJECTS

Arugam Bay

To effectively manage the anticipated increase in traffic volumes in Arugam Bay, priority should be given to upgrading and expanding existing road infrastructure. This will ensure smoother traffic flow, reduce congestion, and enhance connectivity within the area. The following projects are essential for achieving these goals:

1. **Upgrading of Existing Primary Arterial Road:** A long-term plan to enhance capacity and reduce potential congestion by expanding key arterial roads to dual-3 lanes, facilitating smoother traffic flow and accommodating higher vehicle volumes, especially during peak tourist seasons.

2. **Construction and Upgrading of New and Existing Collector Road:** Enhance local access and circulation within Arugam Bay by upgrading and constructing collector roads, ensuring efficient movement within neighborhoods and connecting local traffic to the primary and secondary arterial roads.

3. **Proposed Development Integrated with Parking and Bus Stop:** Ensure new developments include adequate parking facilities and bus stops to manage traffic flow effectively. This integration will support efficient traffic management and provide convenient access to public transport.

4. **Proposed Upgrade of Road to Secondary Arterial as Bypass Road (via Sagya Road) with Installation of Signages for Traffic Diversion:** Upgrade key roads to function as bypass routes to divert traffic and reduce congestion on primary roads. The installation of appropriate signages will facilitate smooth traffic diversion and improve overall traffic flow.

Peanut farm

Similar to Arugam Bay, Peanut Farm will benefit from targeted road infrastructure upgrades to manage increased traffic volumes and enhance connectivity. The focus should be on integrating pedestrian and cycling pathways and improving existing roads to support non-motorised transport modes.

1. **Upgrading of Existing Primary Road:** Enhance local road infrastructure to support increased traffic and ensure efficient movement within Peanut Farm, linking it with key areas of Arugam Bay.

2. **Proposed Development with Sheltered Bus Stop:** Ensure new developments include sheltered bus stops to enhance public transport accessibility.

3. **Upgrading of Existing Road with Enhanced Pedestrian and Cycling Pathways and Amenities (Collector):** Improve existing roads by integrating pedestrian and cycling pathways, ensuring safe and accessible routes for non-motorised traffic, and adding amenities to support these modes of transport.

PROPOSED ROAD NETWORK

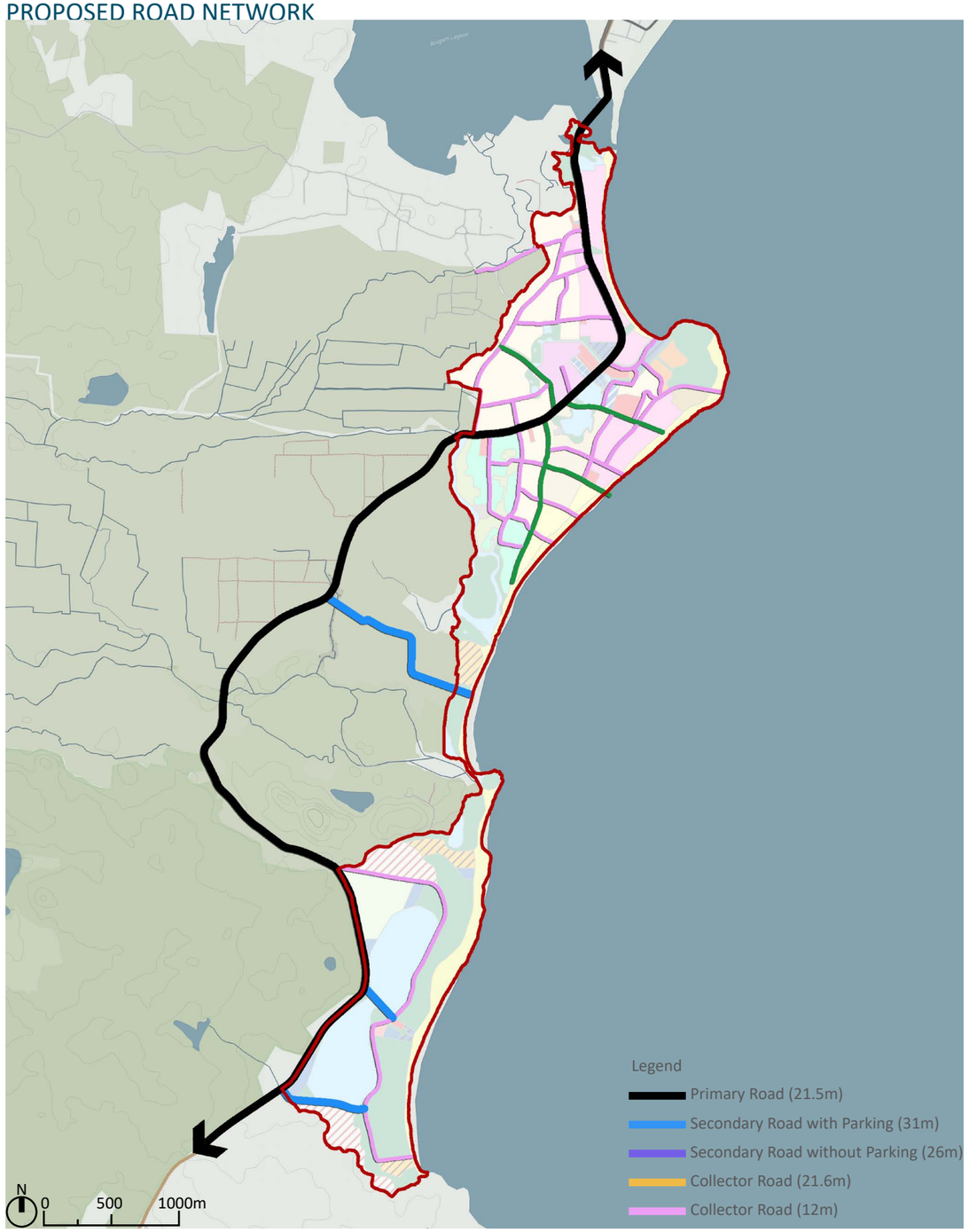


Figure 6.37 Road Network

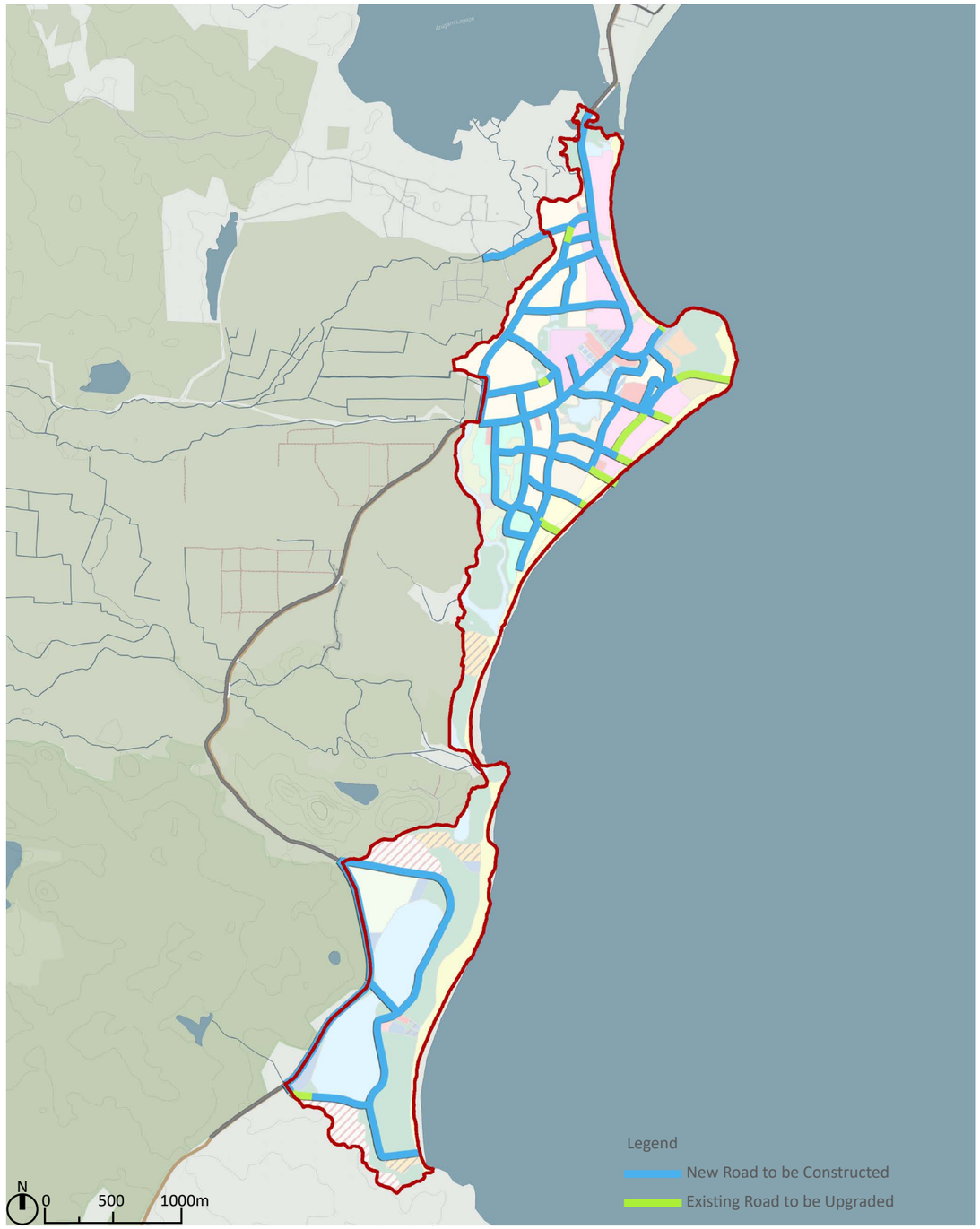


Figure 6.38 New and Upgrade Roads

STORM WATER DRAINAGE

- Storm water drainage is considered as basic infrastructure, which will not only reduce the flood damage, but also promote economic activities & improve the water environment.

- Being located along coastal line, developments are extremely vulnerable to the impact of sea level rise. This is especially serious when high tides coincide with heavy rain.

Measures to be considered:

- Coastline to be protected by sea walls / stone embankments that protect land and infrastructure from erosion and seawater intrusion.
- Structures such as dams and tidal gates & pumping stations where there are coastal reservoirs & outlet drains
- Optimal planning such as detention pond, open space, park, etc.
- Source control – treatment at source, such as rainwater harvesting system, and others can be considered for the purpose of:
  - Minimise post development runoff
  - Improve runoff water quality
  - Provide landscaping & recreational space

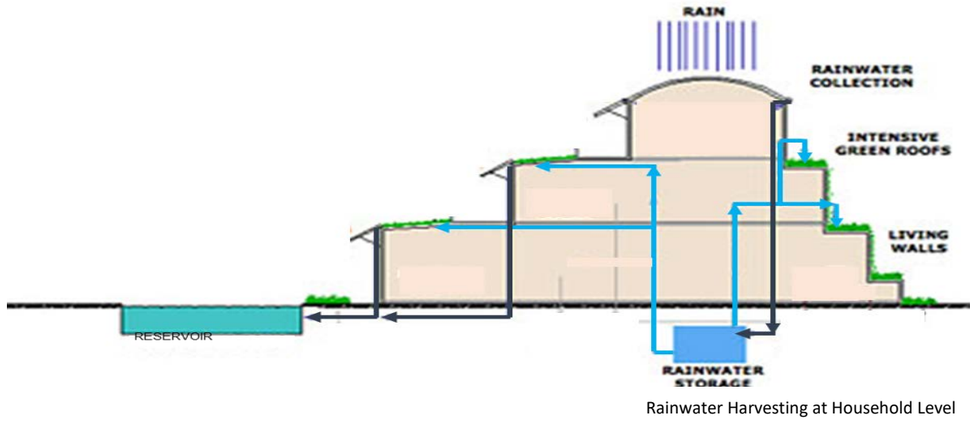
- The collection and convey system comprises the roadside drains and their main function is to collate all the surface runoff from the land plots and carriageway and release to the nearest water body. The size of the drains varies from about 1.2 to 2.0m approximately for various categories of roads. This can vary depending on sub-catchment of storm water discharge location and alignment.



Type of Green Roof/ Rooftop Greenery



Stormwater pond at Yishun (Source: Nparks, Singapore)



Rainwater Harvesting at Household Level

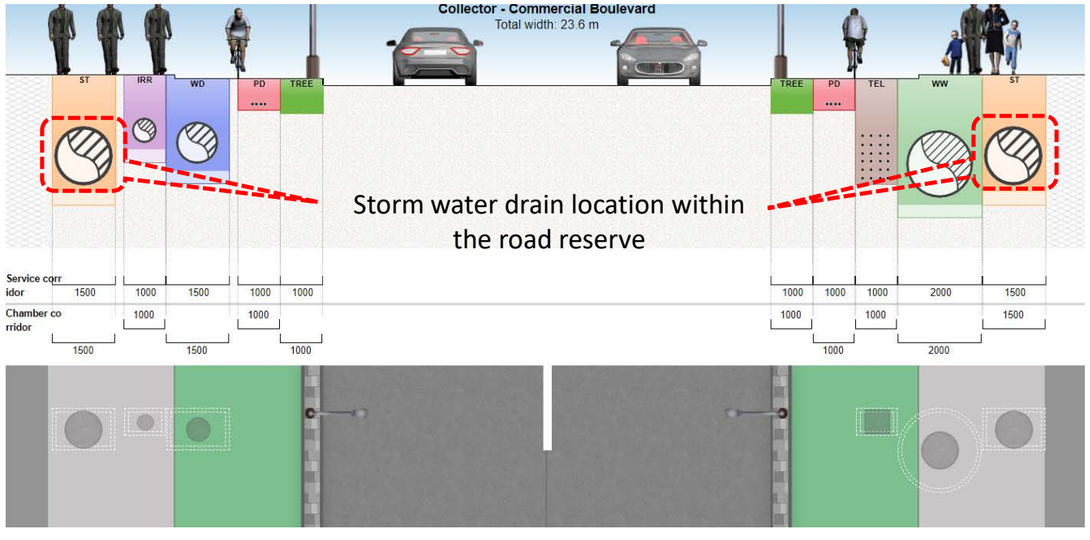


Figure 6.39 Typical Service Corridor Section

UNIT DEMAND (WATER, SOLID WASTE AND POWER)

- In deriving the projected utilities demand for the planning boundary, the unit demand of the various uses would need to be determined first, the table shows the unit utility (water, sewer, solid waste & power) demand used for Eastern Province. These figures are obtained from various sources including local standards and similar projects carried out by SJ in different countries.

- Based on the proposed unit demand, proposed land use distribution and projected population, the ultimate total average demand for various utilities has been worked out and shown in the following sections.

Sl No	Land Use	Unit Water Demand (m3/ha/d)/(lpcd)	Unit Solid Waste Generation (kg/ha/d), (room),(kg/d)	Unit Power Demand (VA/m2)
1	COMMERCIAL	15 - 25 m3/ha/d	160 - 200 kg/ha/d	90 - 110
2	ECO LODGE	250 - 350 l/room	1.6 kg/room	40 - 60
3	3*, 4* & 5* HOTEL	300 - 500 l/room	1.6 kg/room	70 - 90
4	OPEN SPACE/PARK	5 - 10 m3/ha/d		
5	INVESTMENT RESIDENTIAL	135 lpcd	0.8 kg/c/d	70 - 90
6	MID-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
7	LOW-RISE RESIDENTIAL	135 lpcd	0.8 kg/c/d	40 - 60
8	MIXED USE	135 lpcd	0.8 kg/c/d	70 - 90
9	RESORT	500 - 700 l/room	1.6 kg/room	50 - 70
10	WELLNESS CENTER	500 - 700 l/room	1.6 kg/room	50 - 70
11	VISITOR CENTER	20 - 30 m3/ha/d	180 - 220 kg/ha/d	70 - 90

Table 6.15 Unit Demand (Water, Solid Waste and Power)

- lpcd = litre per capita per day
- Sewage; 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration.
- Recycle Water; The source for recycle water is from sewage treatment plant. The recycle water is treated to standards required for its various uses (i.e. made fit-for-purpose)

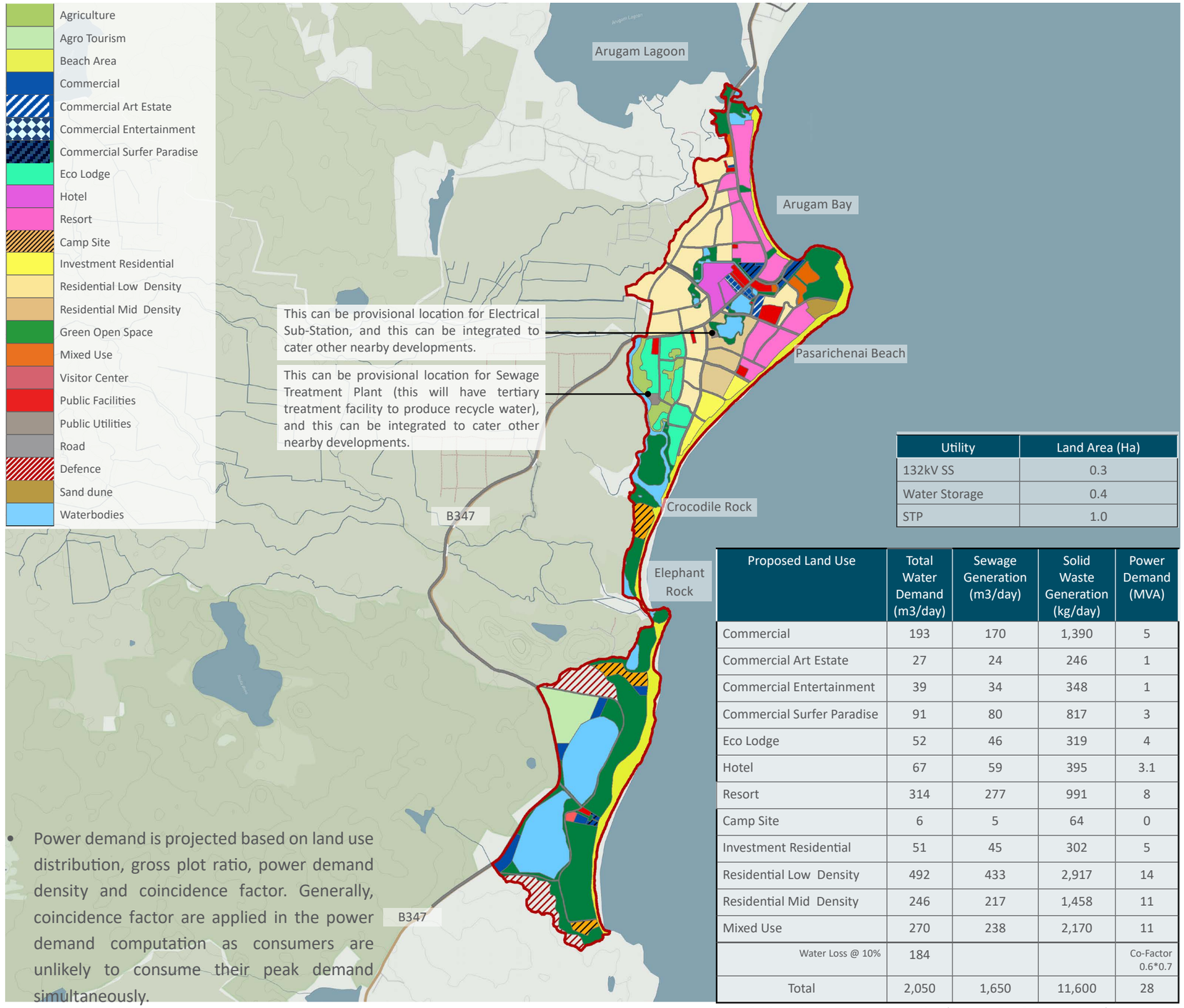
UTILITIES DEMAND PROJECTION (ARUGAM BAY & PEANUT FARM)

- The average water demand for the development is estimated by using unit water demand for each land use. Both potable water and recycle water shall serve the development. Water from local authority / Ground water / rainwater harvested, can be the main sources of raw water. The source for recycle water shall be from the proposed Sewage Treatment Plant (STP). The recycle water can be used for non-potable purposes.

- Presently there are gaps in supply and demand, to address these issues NWSDB has proposed multifaceted approach, comprising construction of water treatment plant (short-term), desalination plant (intermediate), and enhancement of Heda Oya & Ali Oluwa reservoir (long-term). If these are implemented in timely manner, it can accommodate the proposed development.

- 80% of water consumed is considered as sewage flow. In addition to that, 10% of average flow is considered as infiltration. Sewage generated from the commercial / residential activities shall be conveyed to sewage treatment plant.

- The solid waste generation is estimated based on population and land use within the proposed development. To treat the ultimate solid waste generated, about 5ha of landfill site is required, this has to be located outside the development. Alternately, existing landfill site can be augmented.



Utility	Land Area (Ha)
132kV SS	0.3
Water Storage	0.4
STP	1.0

- Power demand is projected based on land use distribution, gross plot ratio, power demand density and coincidence factor. Generally, coincidence factor are applied in the power demand computation as consumers are unlikely to consume their peak demand simultaneously.

Figure 6.40 Utilities Demand Projection (Arugam Bay & Peanut Farm)

Proposed Land Use	Total Water Demand (m3/day)	Sewage Generation (m3/day)	Solid Waste Generation (kg/day)	Power Demand (MVA)
Commercial	193	170	1,390	5
Commercial Art Estate	27	24	246	1
Commercial Entertainment	39	34	348	1
Commercial Surfer Paradise	91	80	817	3
Eco Lodge	52	46	319	4
Hotel	67	59	395	3.1
Resort	314	277	991	8
Camp Site	6	5	64	0
Investment Residential	51	45	302	5
Residential Low Density	492	433	2,917	14
Residential Mid Density	246	217	1,458	11
Mixed Use	270	238	2,170	11
Water Loss @ 10%	184			Co-Factor 0.6*0.7
Total	2,050	1,650	11,600	28

Table 6.16 Utilities Demand Projection (Arugam Bay & Peanut Farm)

6.4.6 ENVIRONMENTAL STRATEGIES

- Arugam bay and Arugam Bay Lagoon have been declared as Special Management Areas under the legal provisions of the CC&CRM Act.

- Kudakalli Crocodile Rock (Hada Oya River Mouth) to Arugam Bay Ulla Sand Dune Start Point 65m setback is kept including 25m reservation. Arugam Bay Ulla Sand Dune Start Point to Ulla surf point, 125m setback is kept including 45m reservation. Arugam Bay Ulla Surfing Point to Arugam Bay Bridge 45m setback is kept including 15m reservation. Arugam Bay Bridge to Viski Point Sand Dune Start Point (Kanahar Gramam (326 Km Post) 50m setback is kept including 20m reservation. as of CC & CRM Act

- Arugam Bay on the Eastern Coast provide nesting sites for five turtle species that come ashore for nesting

- Arugam Bay is a rich mangrove site and around the lagoon, elephant habitats are spotted.

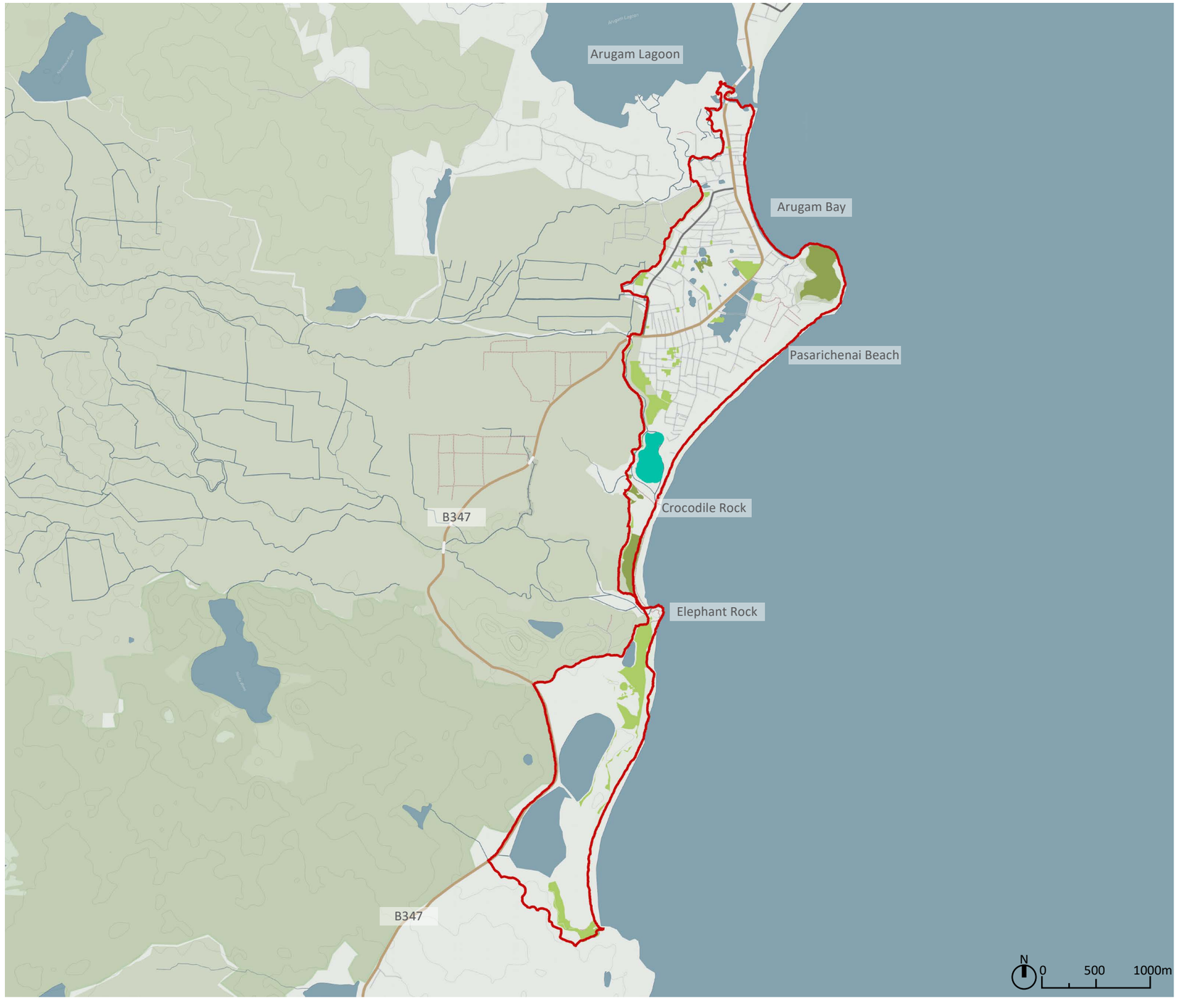


Figure 6.41 Environmental Strategies (Arugam Bay)

6.4.7 SOCIAL STRATEGIES

1. COMMUNITY-BASED FISHERIES MANAGEMENT

Fishing has been a key economic activity along the eastern coastal areas, including Trincomalee, Pasikudah, and Arugam Bay, so promoting fisheries industry is important for local as well as national economic development. However, in order to minimise impacts on local communities, it is recommended to engage communities through participatory decision making in fisheries management.

2. INTEGRATION OF TRADITIONAL FISHING INDUSTRY WITH TOURISM

Traditional fishing is a great potential to promote tourism in the eastern coastal belt, particularly in Arugam Bay area as it is emerging as a destination among local as well as international visitors. However, it must be noted that these has been conflicts between local fishermen and tourism industry for a long period, hence strategic integration between fisheries industry and tourism is a must. In a more planned and sustainable approach for integration, benefits can be leveraged to local fishing communities in Arugam Bay. Traditional fishing villages shall be preserved. However, value addition activities in fishing communities/ fishing areas (e.g. fish markets/ sea food restaurants for tourists and local visitors, etc.) shall be promoted. Local communities shall be provided with a mandatory quota for the employment opportunities generated through these value addition activities. In addition, impact of tourism to local culture and community values shall be addressed.

3. COMMUNITY-FOCUSED PHYSICAL DEVELOPMENT

If physical development leads to community segregation through relocation that does not achieve the development targets or sustainability of proposed development activities. Hence, physical development shall focus on leveraging benefits to local communities rather than forcing them to be left out from development activities either through relocation or not letting them in the decision making process.

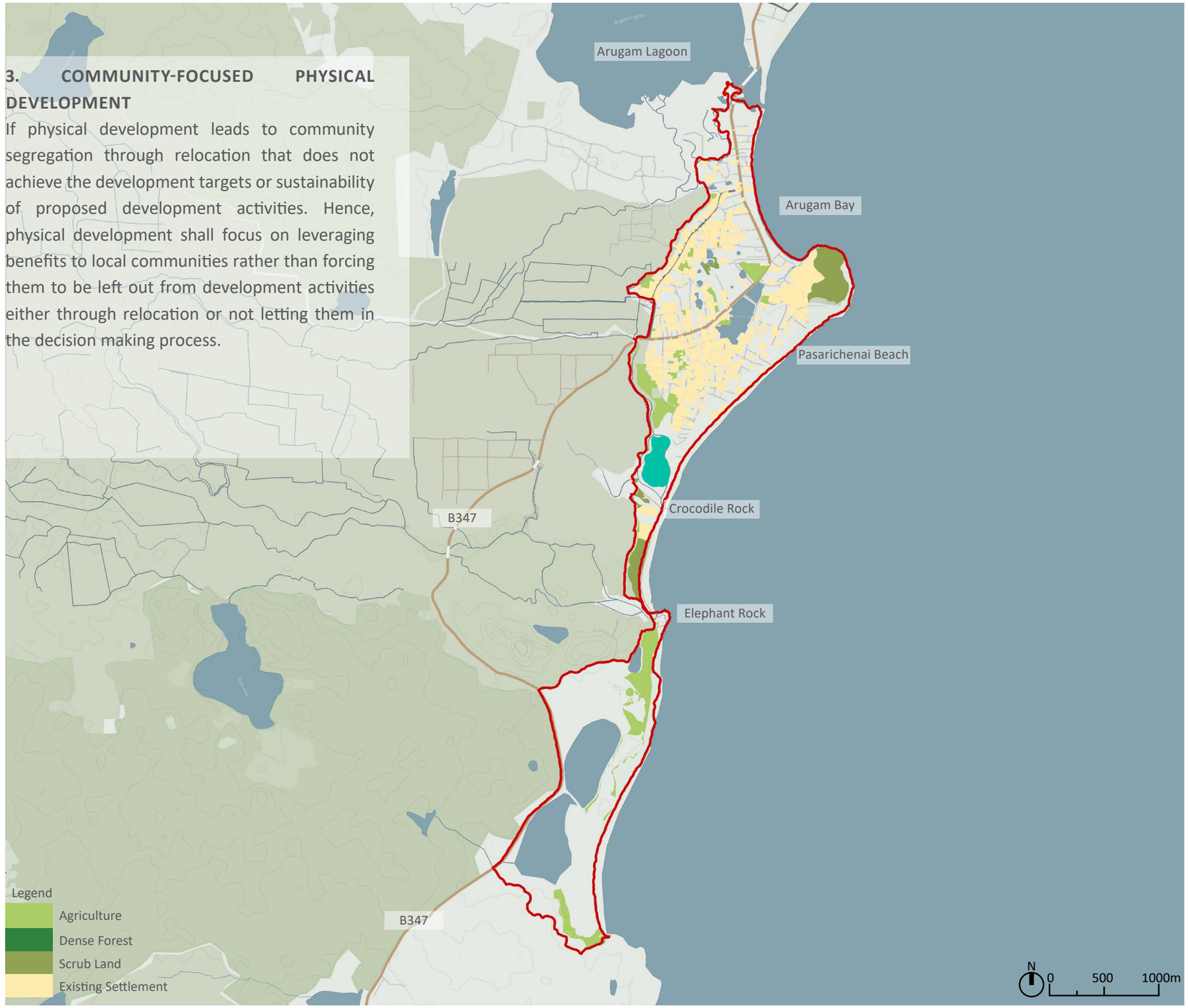


Figure 6.42 Social Strategies (Arugam Bay)

6.5 DEVELOPMENT PHASING (WHISKY POINT, ARUGAM BAY & PEANUT FARM)

6.5.1 DEVELOPMENT PHASING (HIGH CASE SCENARIO)

In the optimal development scenario, the project is envisioned to unfold in three distinct phases, each carefully planned to maximise the potential of the area while balancing luxury, tourism, and residential needs.

Phase 1 recommended to focus primarily on the hospitality sector, with the establishment of a variety of accommodations to cater to different market segments. The development will include 3 hectares dedicated to a five-star resort, 5 hectares for a four-star resort, and 2 hectares for a three-star hotel. Additionally, 6 hectares will be allocated for retail and tourism amenities to support these facilities, bringing the total land requirement for this phase to 16 hectares.

In Phase 2 the development is envision to significantly expand the hospitality offerings, adding another 5 hectares of five-star resort space, 8 hectares for a four-star hotel, and 2 hectares for a three-star hotel. This phase will also introduce 6 hectares of additional retail and tourism amenities. Moreover, the development will include 12 hectares dedicated to a theme park and another 12 hectares for luxury residential villas, marking a significant step towards creating a fully integrated tourism and residential area.

Phase 3 will further enhance the hospitality and tourism infrastructure, with 7 hectares for five-star resorts, 11 hectares for four-star hotels, and 4 hectares for three-star hotels. This phase will also see the addition of 4 hectares of retail and tourist amenities, providing essential support facilities. Like the previous phase, 12 hectares will be dedicated to both a theme park and luxury investment residential villas.

Throughout these phases, a gradual development, a 250-meter strip of beach and a 100-meter strip of lagoon front will take place, ensuring that both waterfront areas are thoughtfully integrated into the overall development plan.

Looking ahead, a substantial 825 hectares of land has been reserved for future development, allowing for the potential expansion of tourism, residential, and commercial activities as demand grows. This reserve ensures that the area can continue to evolve in a sustainable and well-planned manner, accommodating future needs and opportunities.

Positioning: MID TO UPPER MID- END

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Beach front development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, gear rental stores, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters and F&B kiosks etc.
2	**Lagoon front development**	100 m Strip along the Lagoon to act as nature reserve - will be ticketed for tourists			Camping and tent stays, Bird watching, nature trails, cycling, lagoon kayaking, traditional fishing, parks & open spaces, picnic spots etc.
4	**4-star resort hotel**	5	8	11	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon, beach views and Farmland views
5	**3-star hotel**	2	2	4	Beach view Hotels
6	**Entertainment – water based Theme park + Entertainment zone**	0	12	12	Water based theme parks, Food street, Clubs & Pubs, Outdoor events area
7	**Retail High street + Tourist amenities**	6	6	4	Local crafts, local stores, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores, visitors center, Surfer's paradise
8	**Investment residential**	0	12	12	In next 15 years 2 to 3 projects can be proposed
	Total	**13**	**28**	**43**	Total land area requirement (A+B+C) – **84 hectares**

Table 6.17 Development Phasing (High Case Scenario)

PHASE-1 (0-5 YEAR)

TOURISM ACTIVITIES: The establishment of a night market aims to enhance activities during both the day and night.

ENTERTAINMENT: Development of F&B and Entertainment center to support visitors.

HOTELS: 3 Stars hotel development.

PHASE-2 (5- 10 YEAR)

RESORTS & HOTELS: Expansion of 3 to 4 stars hotel and surfer paradise.

WATERPARK: Establishment of additional tourist facility in the area

INVESTMENT RESIDENTIAL: Investment residential to support housing demand.

PHASE-3 (10- 15 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels

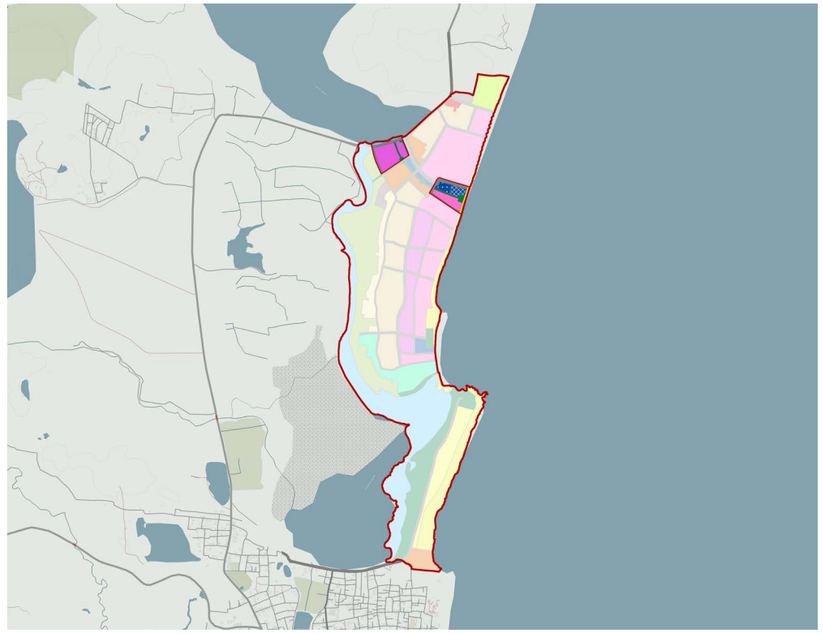
MIXED USE: Tourism related mixed use facilities to support visitors

INVESTMENT RESIDENTIAL: Expansion of investment residential.

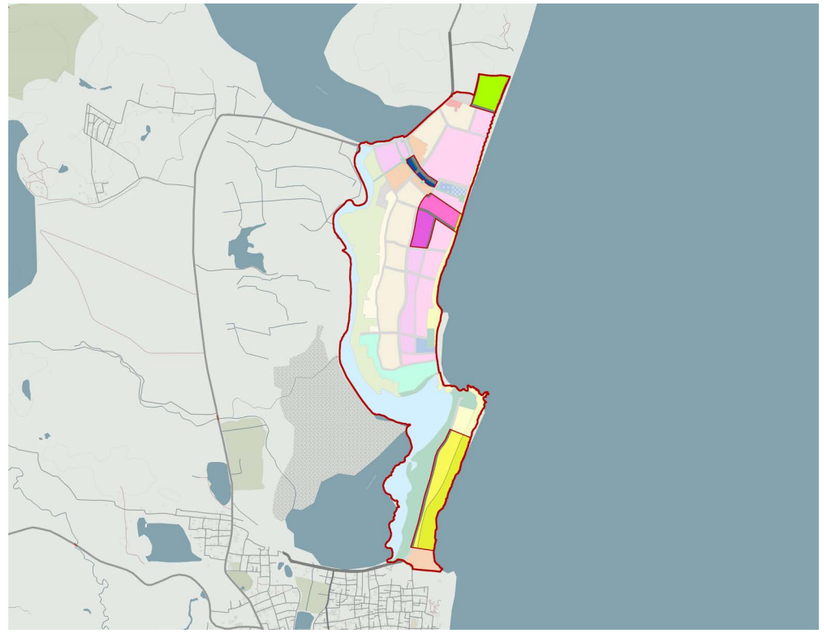
PHASE-4 (FUTURE)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.

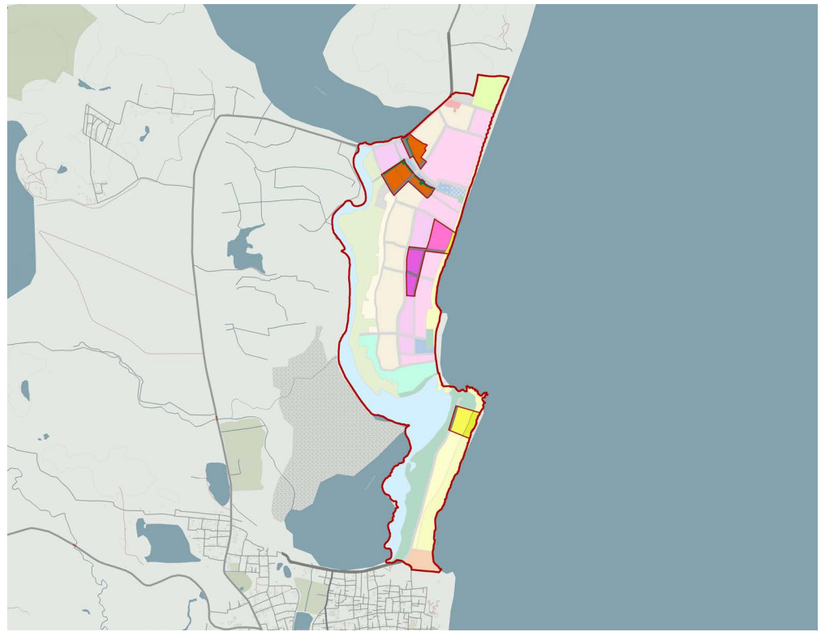
RESIDENTIAL: Expansion of Low to Mid density residential to support future housing demand.



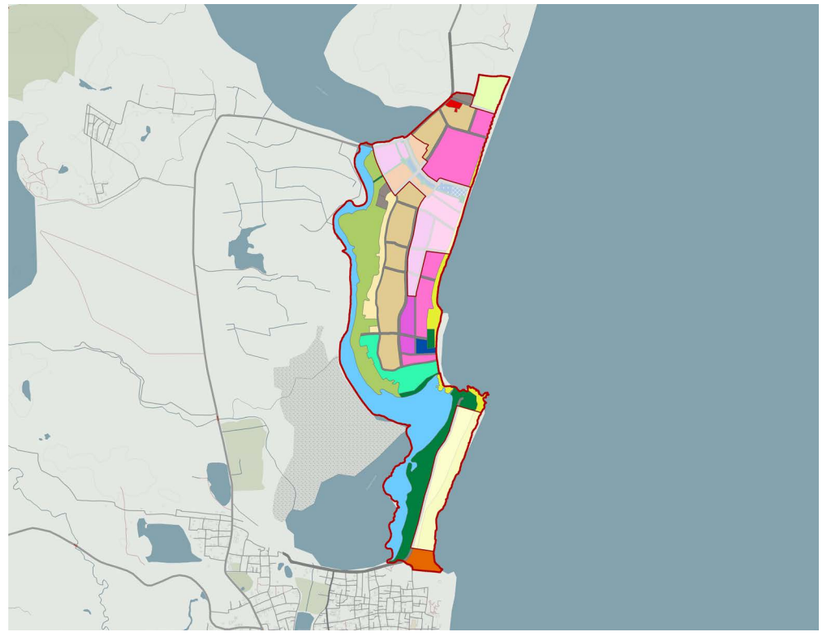
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 6.43 Phasing Strategies (High Case Scenario)

PHASE-1 (0-5 YEAR)

TOURISM ACTIVITIES: Establishment of a surfer paradise with retail shop, surfing school etc.
ENTERTAINMENT: Development of F&B and Entertainment center to support visitors.
HOTELS: 3 Stars hotel development.

PHASE-2 (5- 10 YEAR)

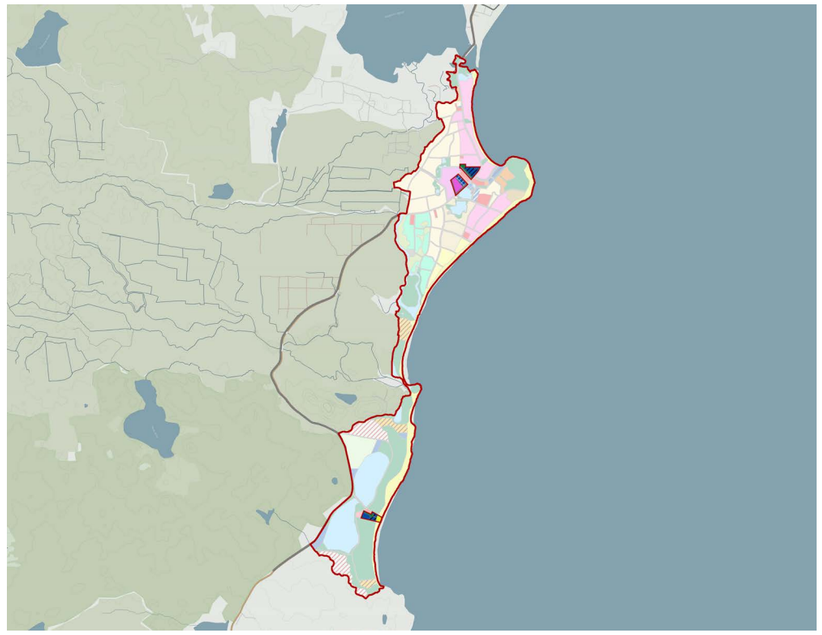
RESORTS & HOTELS: Expansion of 3 to 4 stars hotel and surfer paradise.
MIXED USE: Tourism related mixed use facilities to support visitors
INVESTMENT RESIDENTIAL: Investment residential to support housing demand.

PHASE-3 (10- 15 YEAR)

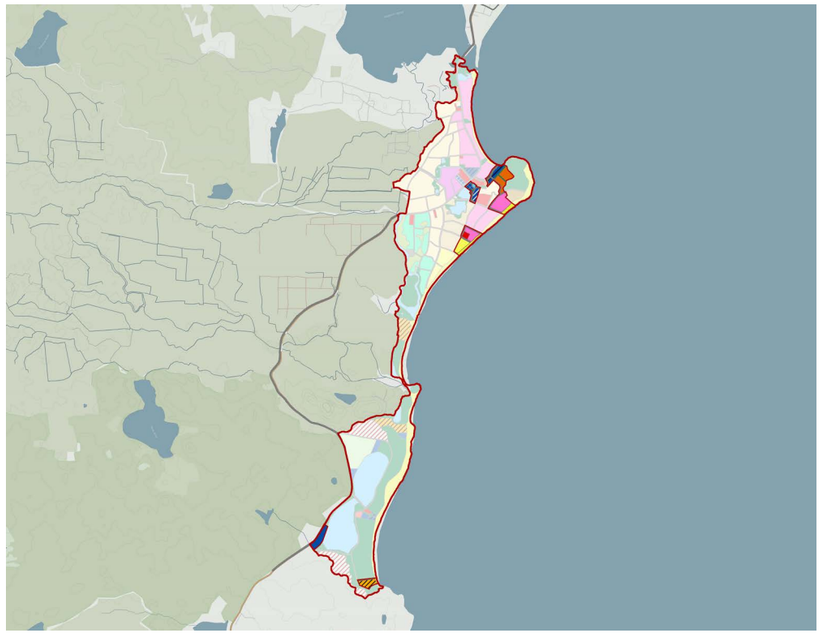
RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels
TOURISM ACTIVITIES: Tourism related Mixed Use to support tourism activity.
INVESTMENT RESIDENTIAL: Expansion of investment residential.
CAMPING: Development of Beach front park and camp sites

PHASE-4 (FUTURE)

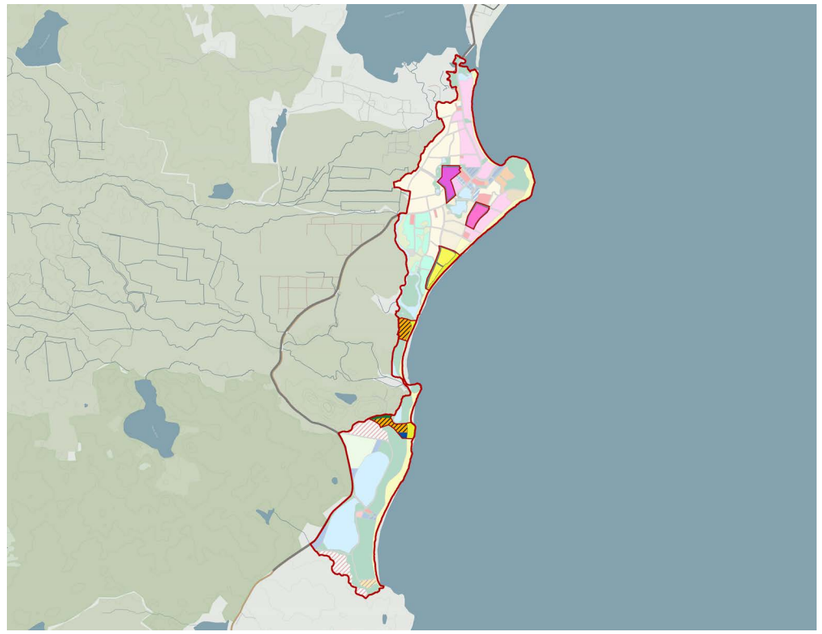
RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.
RESIDENTIAL: Expansion of Low to Mid density residential to support future housing demand.
CAMPING: Expansion of Beach front park and camp sites
AGRO TOURISM: Development of agro tourism and beach front park



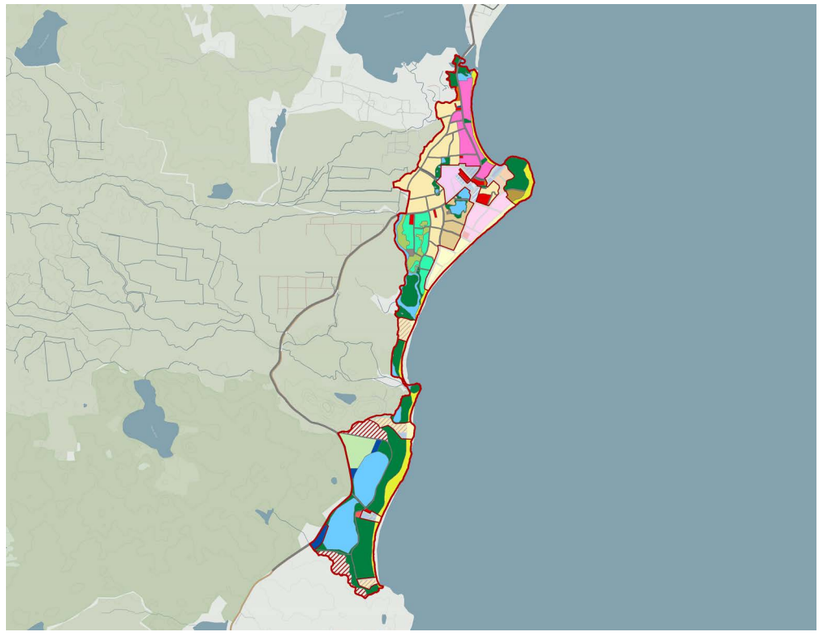
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 6.44 Phasing Strategies (High Case Scenario)

6.5.2 DEVELOPMENT PHASING (LOW CASE SCENARIO)

In the low case scenario, which represents the baseline for the development, the project will be executed in a more modest and phased approach, focusing on essential elements that lay the foundation for future growth.

First 5 years of the development is recommended to focus on the hospitality sector, featuring a 5.1 hectare area dedicated to a four-star resort. In addition to the accommodation, 5 hectares will be allocated for retail and tourism amenities, providing necessary support services for visitors. The total land requirement for this initial phase will be 12 hectares, setting a solid base for further expansion.

In 5-10 years it will continue the development with the addition of a 5 hectare area for another four-star hotel and a 1-hectare area for a three-star hotel, catering to a broader range of tourists. Complementing these accommodations, 6 hectares will be dedicated to retail and tourism amenities, ensuring that guests have access to essential services and leisure options.

10-15 years of development is envision to further expand the hospitality infrastructure with an additional 5-hectare area for a four-star hotel and a 1-hectare area for a three-star hotel. This phase will also enhance tourism support facilities with 2 hectares of retail and tourist amenities. Moreover, a significant component of this phase is the development of a 6-hectare theme park, offering a major attraction for visitors. Additionally, 12 hectares will be dedicated to luxury investment residential villas, providing high-end living spaces that appeal to both residents and long-term visitors.

Throughout all phases, the development will include a gradual expansion of a 250-meter strip of beach and a 100-meter strip of lagoon front. These waterfront areas will be thoughtfully developed to enhance the appeal of the project, integrating natural beauty with the built environment in each stage of the development.

Positioning: MID TO UPPER MID- END

#	Key Components	Tentative Area (in hectares)			Amenities
		5 years (A)	10 years (B)	15 years (C)	
1	**Beach front development**	250 m Strip next to beach for 1 km stretch - comprising of kiosks and temporary structures			Ticketing counter, gear rental stores, waiting lobby, resting shacks, washrooms, changing rooms, instructors/ operators offices, Food / Beverage counters and F&B kiosks etc.
2	**Lagoon front development**	100 m Strip along the Lagoon to act as nature reserve - will be ticketed for tourists			Camping and tent stays, Bird watching, nature trails, cycling, lagoon kayaking, traditional fishing, parks & open spaces, picnic spots etc.
4	**4-star resort hotel**	5	5	5	Beach view resorts/ hotels utilising the frontage of the beach, Eco resorts with lagoon, beach views and Farmland views
5	**3-star hotel**	1	1	1	Beach view Hotels
6	**Entertainment – water based Theme park + Entertainment zone**	0	0	6	Water based theme parks, Food street, Clubs & Pubs, Outdoor events area
7	**Retail High street + Tourist amenities**	6	6	2.0	Local crafts, local stores, Restaurants, cafes, F&B kiosks, departmental stores, souvenir stores, visitors center, Surfer's paradise
8	**Investment residential**	0	0	12	In next 15 years 2 to 3 projects can be proposed
	Total	**12**	**12**	**23**	Total land area requirement (A+B+C) – **47 hectares**

Table 6.18 Development Phasing (Low Case Scenario)

PHASE-1 (0-5 YEAR)

ENTERTAINMENT: Development of F&B and Entertainment center to support visitors.

HOTELS: 3 Stars hotel development.

PHASE-2 (5- 10 YEAR)

RESORTS & HOTELS: Expansion of 3 to 4 stars hotel and surfer paradise.

TOURISM ACTIVITIES: The establishment of a night market aims to enhance activities during both the day and night.

PHASE-3 (10- 15 YEAR)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels

MIXED USE: Tourism related mixed use facilities to support visitors

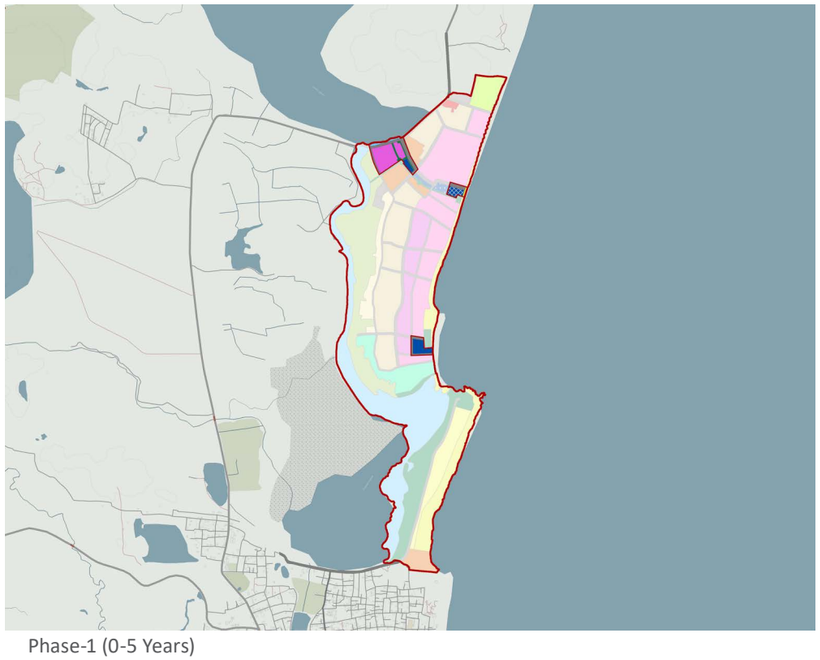
INVESTMENT RESIDENTIAL: Investment residential to support housing demand.

WATERPARK: Establishment of additional tourist facility in the area

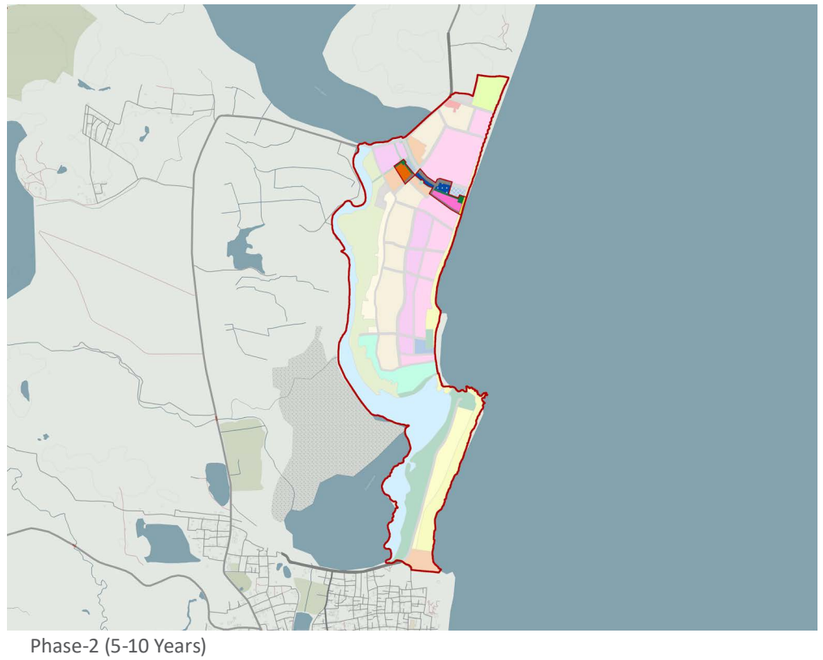
PHASE-4 (FUTURE)

RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.

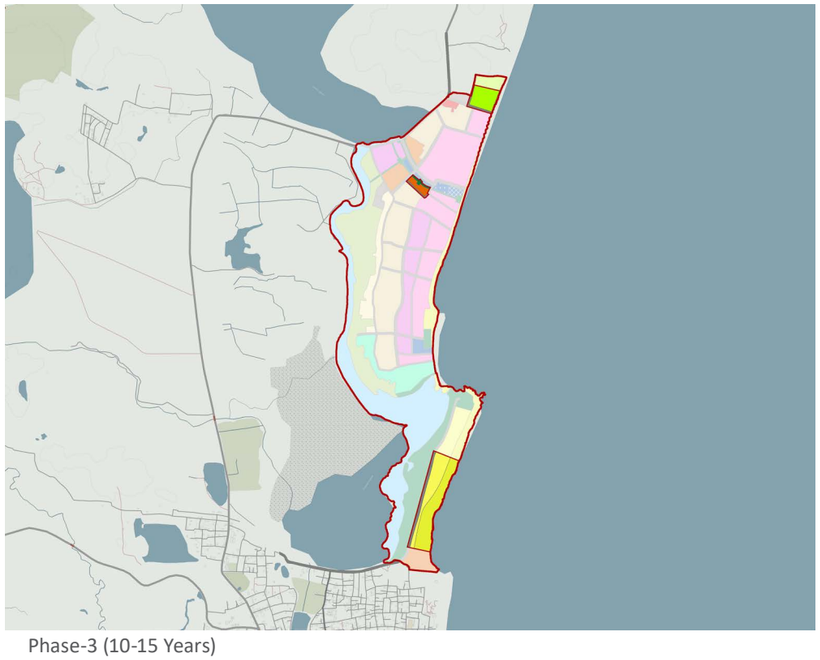
RESIDENTIAL: Expansion of Low to Mid density residential to support future housing demand.



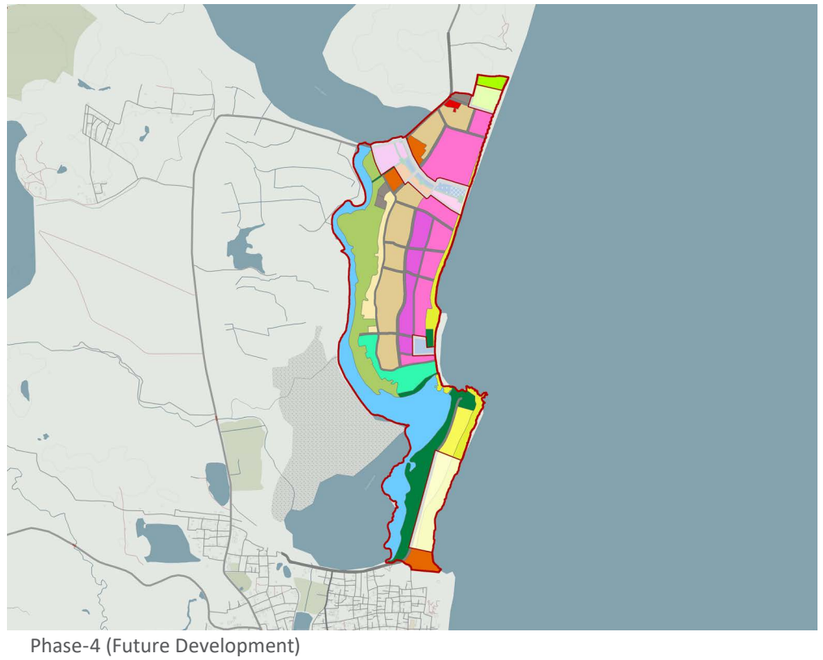
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 6.45 Phasing Strategies (High Case Scenario)

PHASE-1 (0-5 YEAR)

TOURISM ACTIVITIES: Establishment of a surfer paradise with retail shop, surfing school etc.
HOTELS: 3 Stars hotel development.
CAMPING: Development of Beach front park and camp sites

PHASE-2 (5- 10 YEAR)

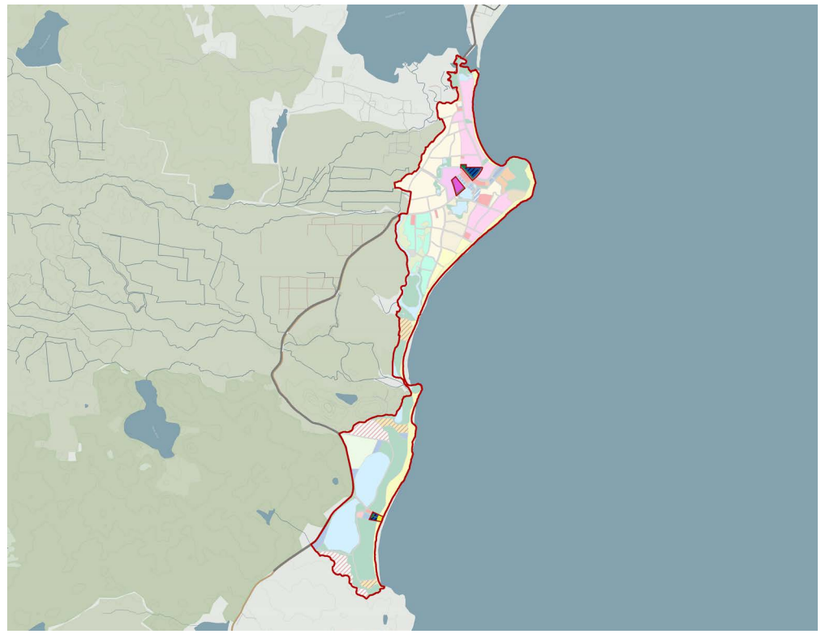
RESORTS & HOTELS: Expansion of 3 to 4 stars hotel and surfer paradise.
TOURISM ACTIVITIES: Establishment of a surfer paradise with retail shop, surfing school etc.

PHASE-3 (10- 15 YEAR)

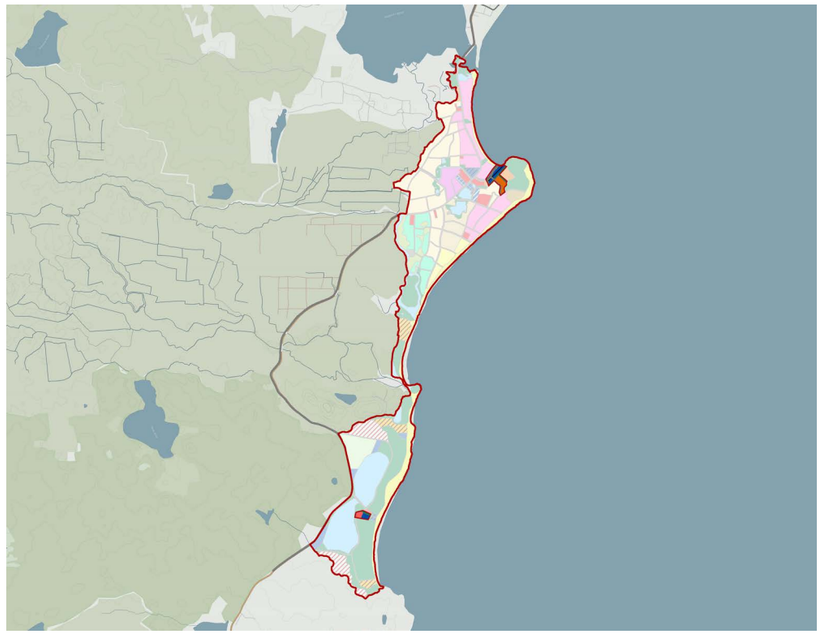
RESORTS & HOTELS: Expansion of 3 to 4 stars hotel and surfer paradise.
INVESTMENT RESIDENTIAL: Investment residential to support housing demand.
ENTERTAINMENT: Development of F&B and Entertainment center to support visitors.

PHASE-4 (FUTURE)

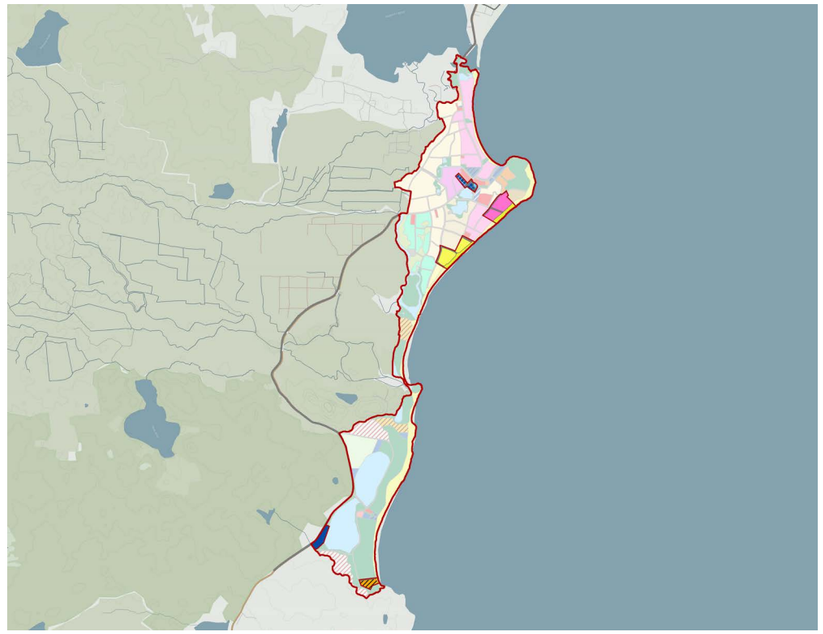
RESORTS & HOTELS: Expansion of 4 to 5 stars Hotels and Eco Lodge.
RESIDENTIAL: Expansion of Low to Mid density residential to support future housing demand.
CAMPING: Expansion of Beach front park and camp sites



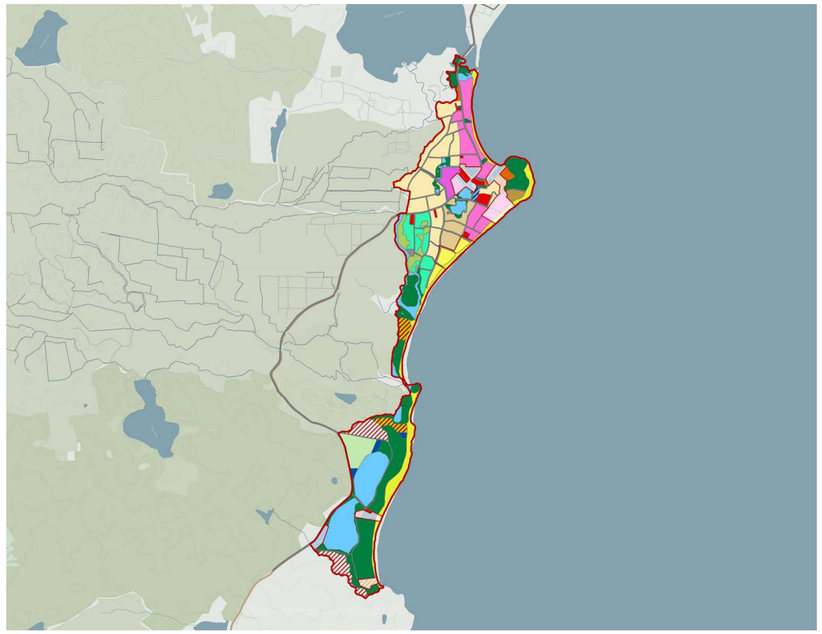
Phase-1 (0-5 Years)



Phase-2 (5-10 Years)



Phase-3 (10-15 Years)



Phase-4 (Future Development)

Figure 6.46 Phasing Strategies (Low Case Scenario)

PHASE WISE ROAD NETWORK

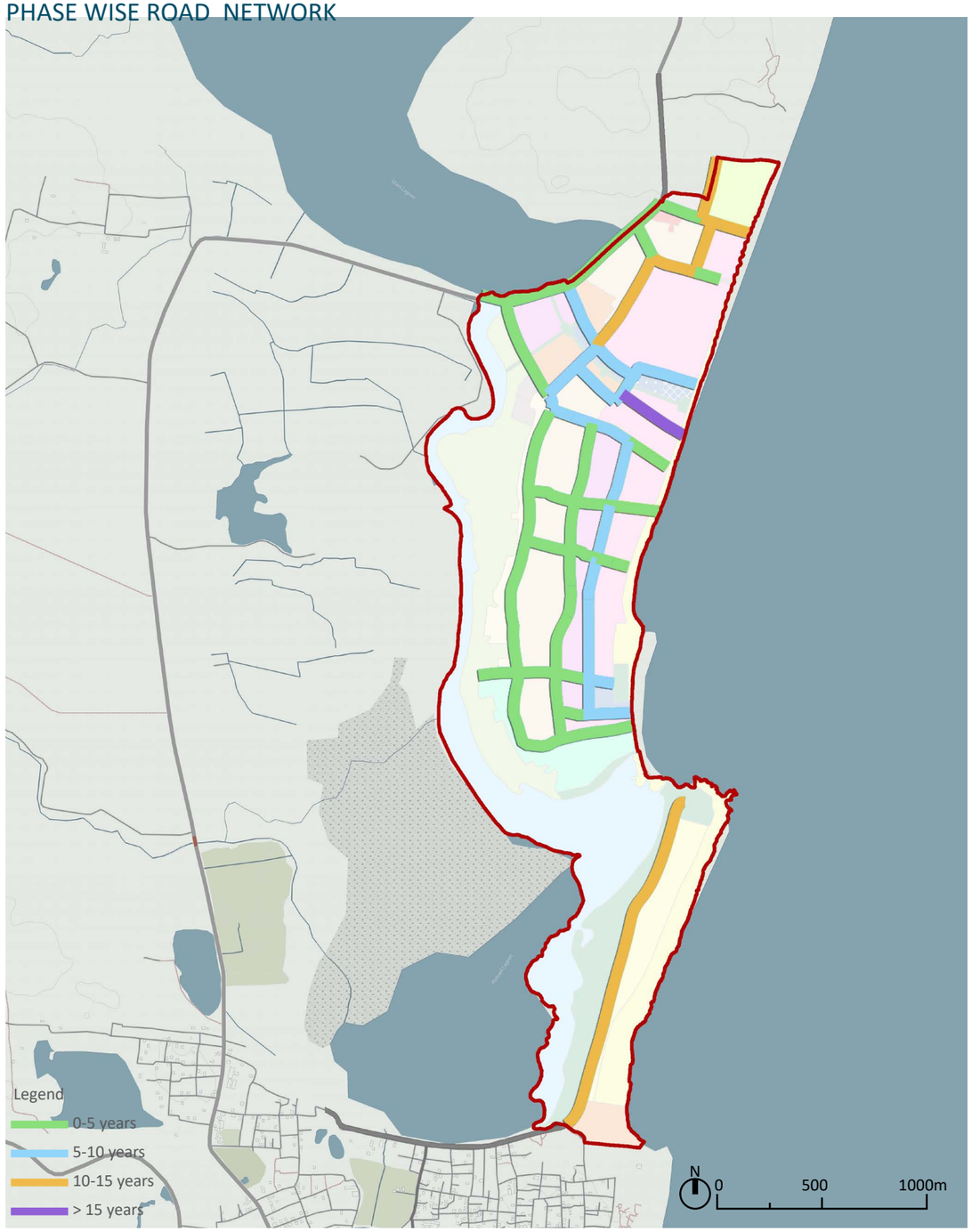


Figure 6.47 Phase wise Road Network (High Case)

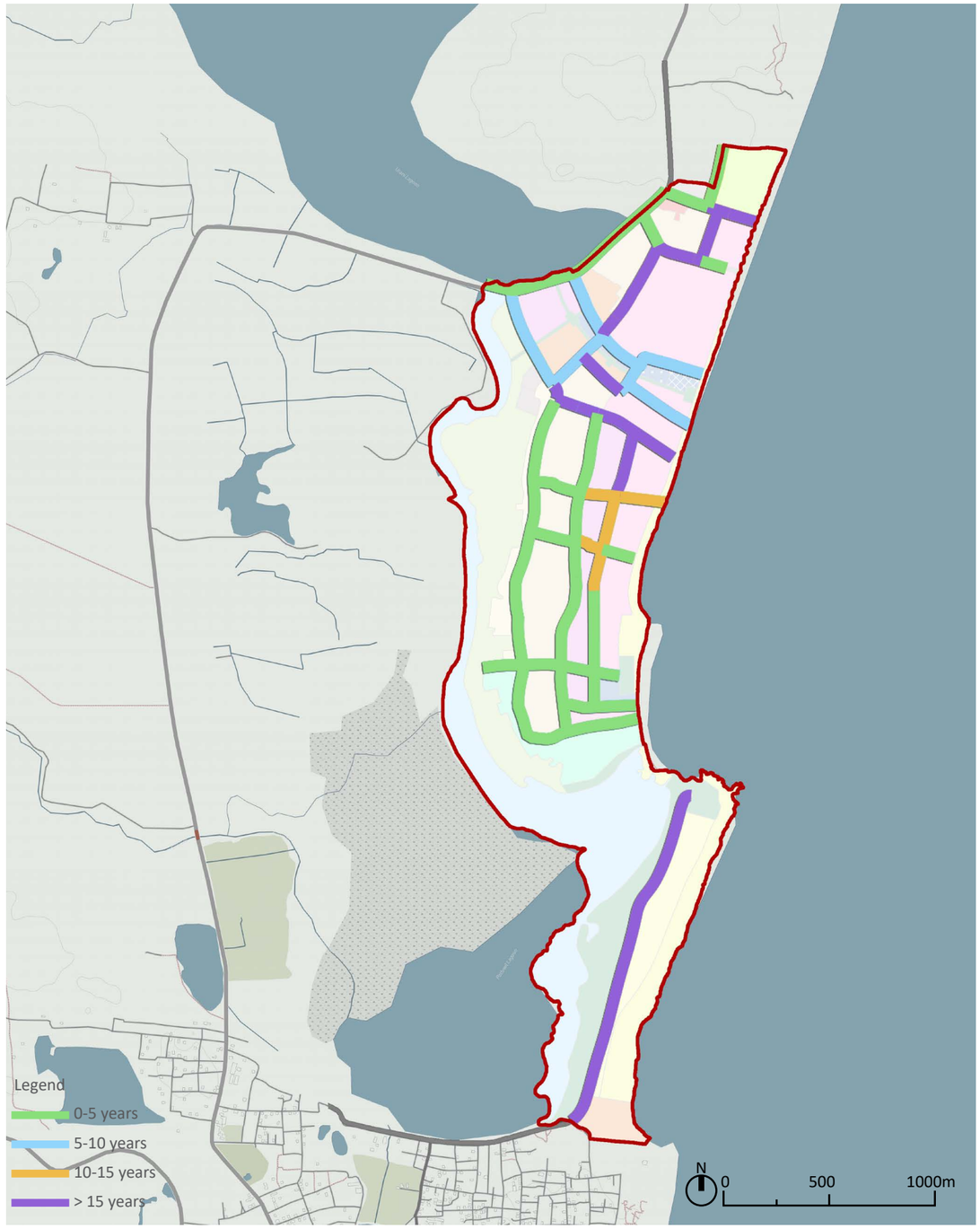


Figure 6.48 Phase wise Road Network (Low Case)

PHASE WISE ROAD NETWORK

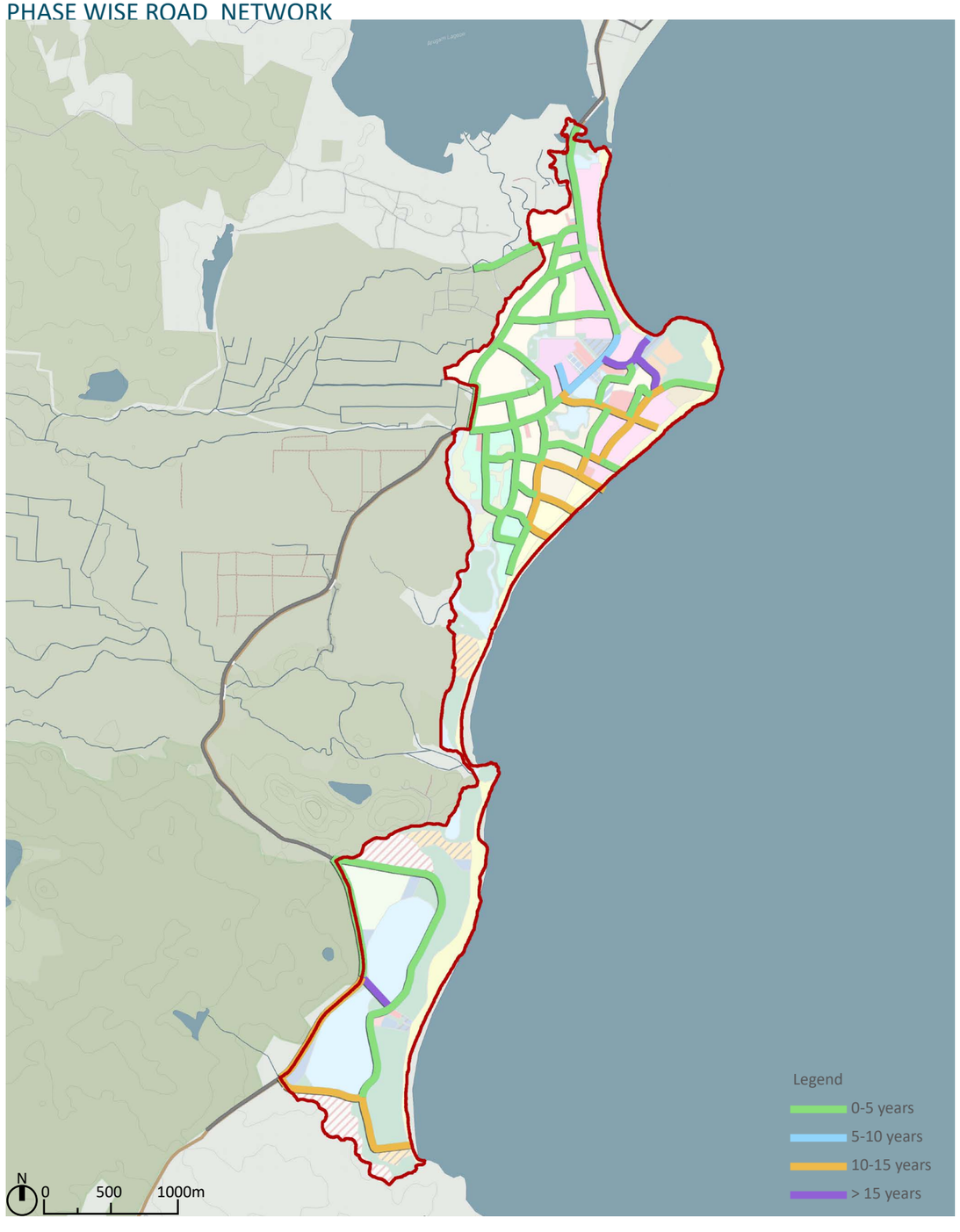


Figure 6.49 Phase wise Road Network (Low Case)

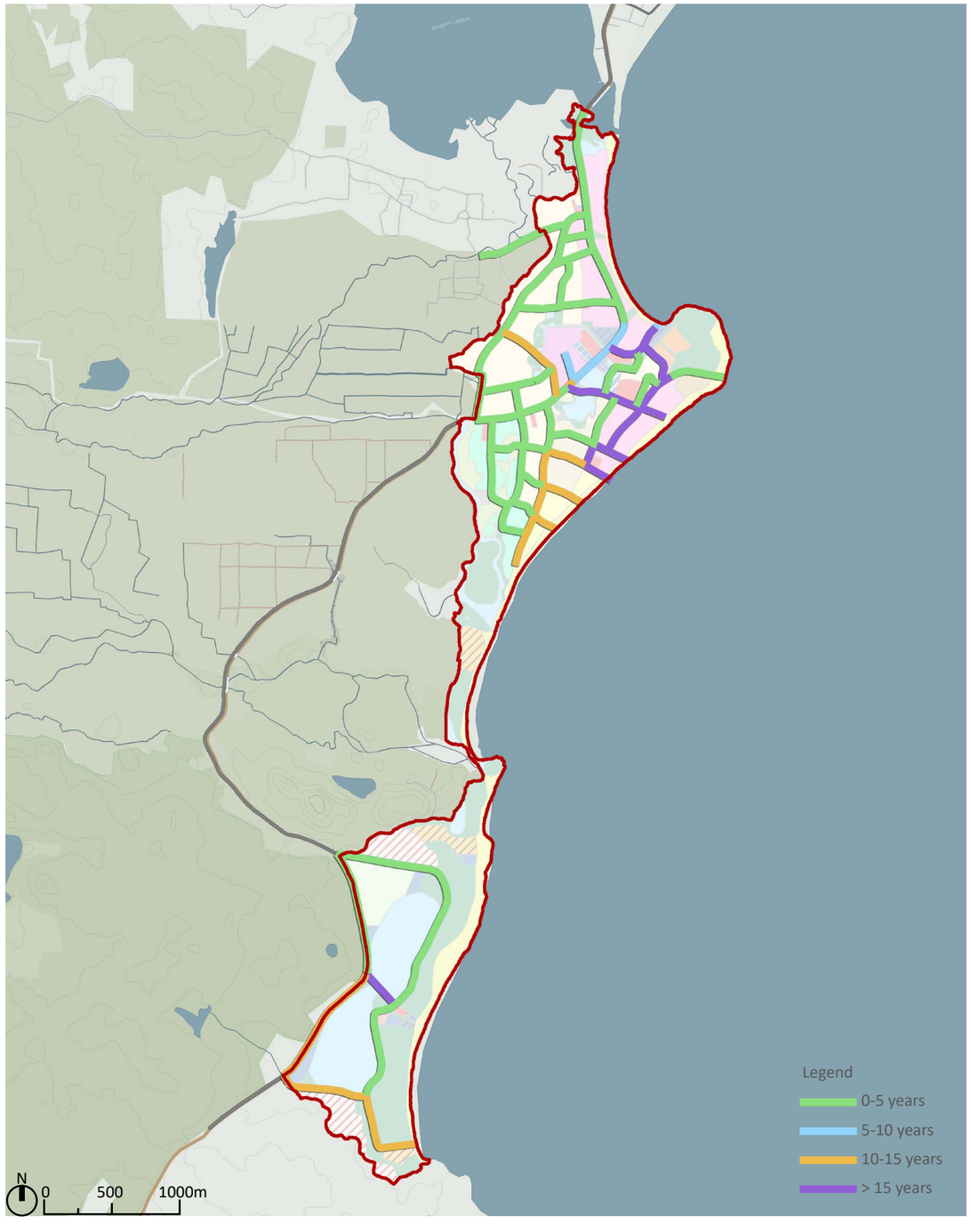


Figure 6.50 Phase wise Road Network (High Case)

CRITICAL INFRASTRUCTURE PROJECTS

SUBSTATION – 0.3 HA

STP- 1.0 HA

WATER STORAGE- 0.4 HA

(Water storage will be distributed across multiple areas based on demand and ground level.)

Tapping of potable water, Construction of Sewage Treatment Plant and tapping of power supply to support the new development.

Note: Critical Infrastructure Projects are applicable for both High Case and Low Case Scenarios, module design will come under detailed engineering

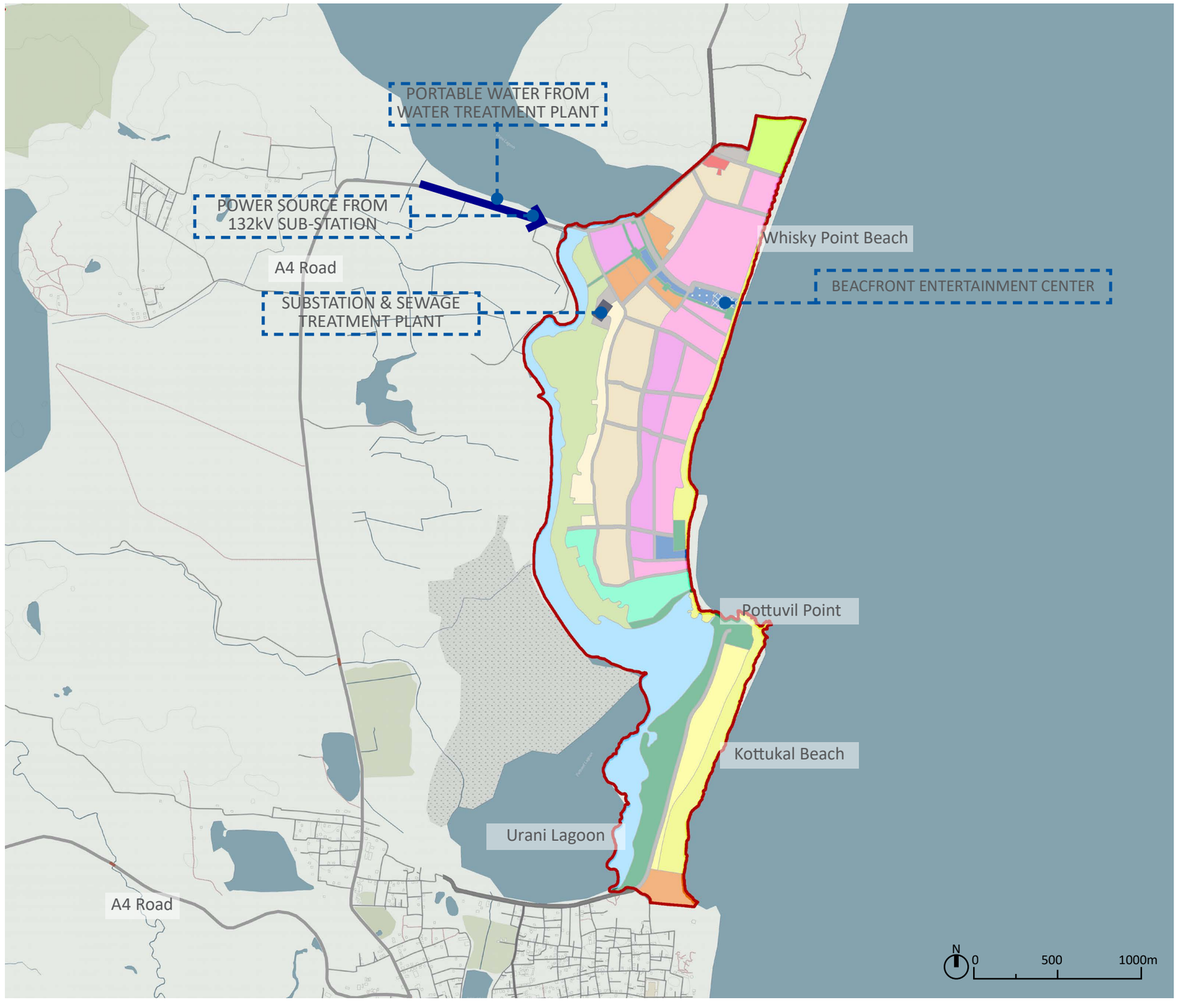


Figure 6.51 Critical Infrastructure Projects (Whisky Point)

CRITICAL INFRASTRUCTURE PROJECTS

SUBSTATION – 0.3 HA

STP- 1.0 HA

WATER STORAGE- 0.4 HA

(Water storage will be distributed across multiple areas based on demand and ground level.)

Tapping of potable water, Construction of Sewage Treatment Plant and tapping of power supply to support the new development.

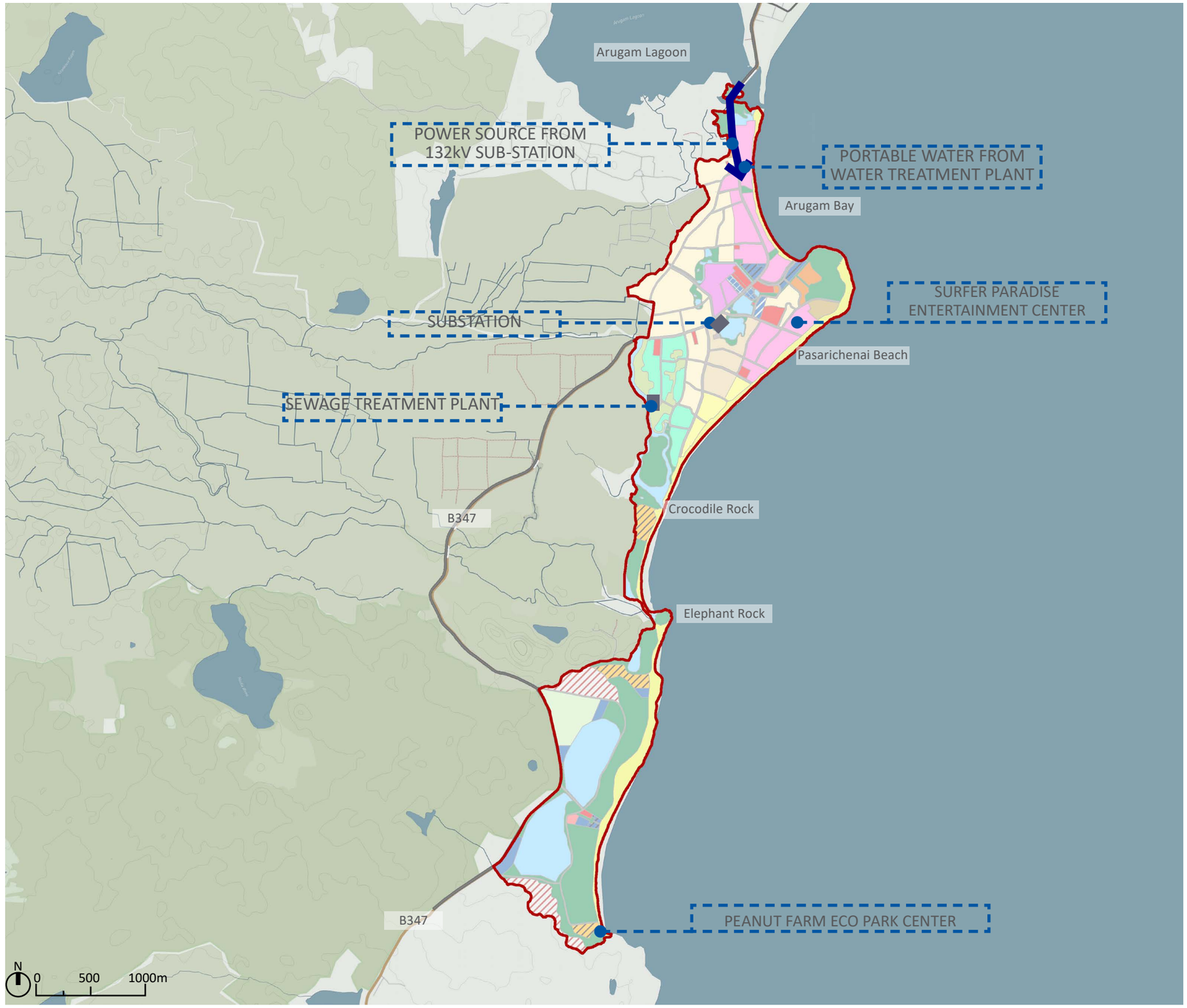
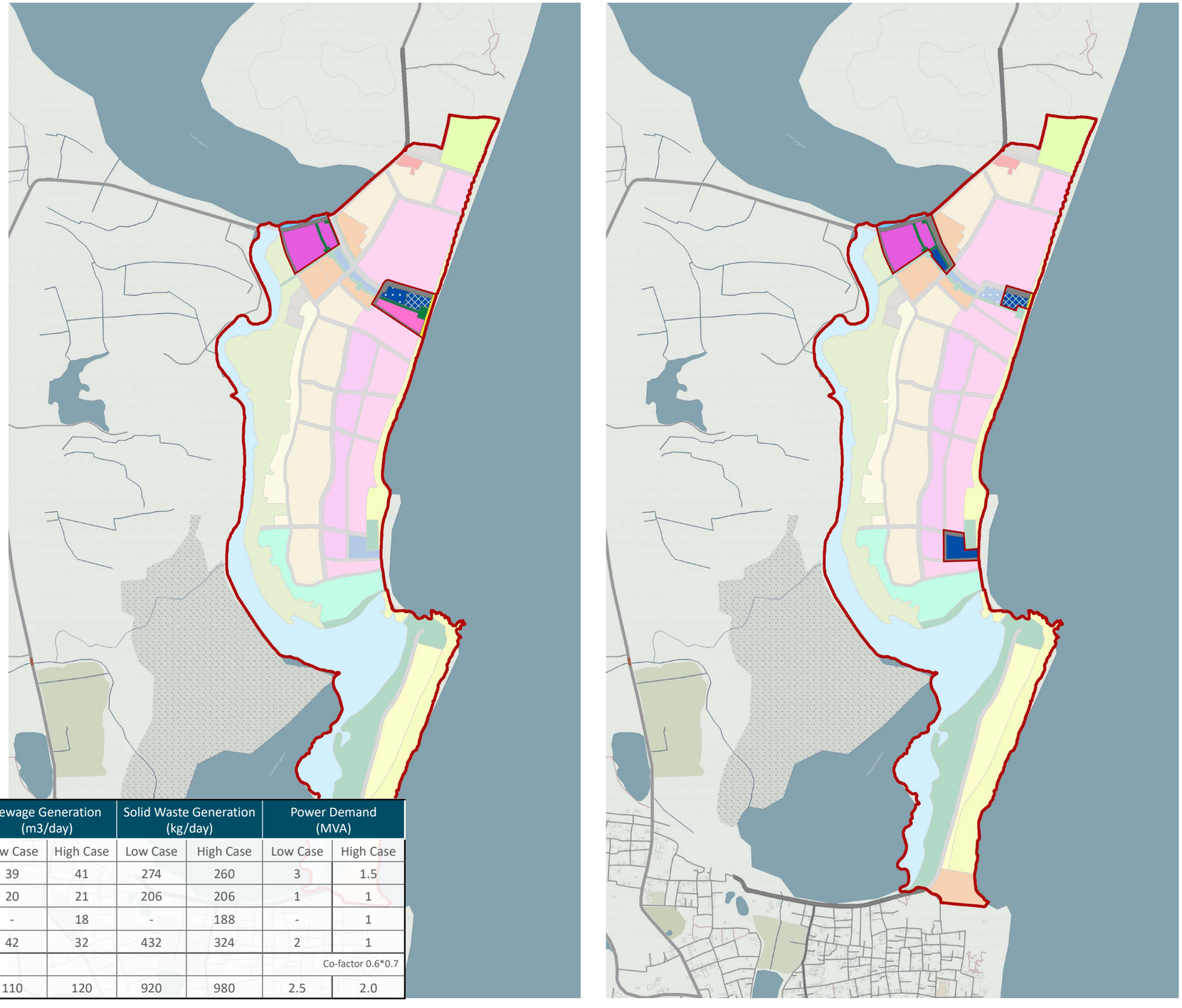


Figure 6.52 Critical Infrastructure Projects (Arugam Bay & Peanut Farm)

Note: Critical Infrastructure Projects are applicable for both High Case and Low Case Scenarios, module design will come under detailed engineering

UTILITIES DEMAND PROJECTION (WHISKY POINT)

- Utilities demand projection for Urban Design (UD) Area and for Phase 1 (Low Case & High Case Scenario) are estimated and shown in the table below.

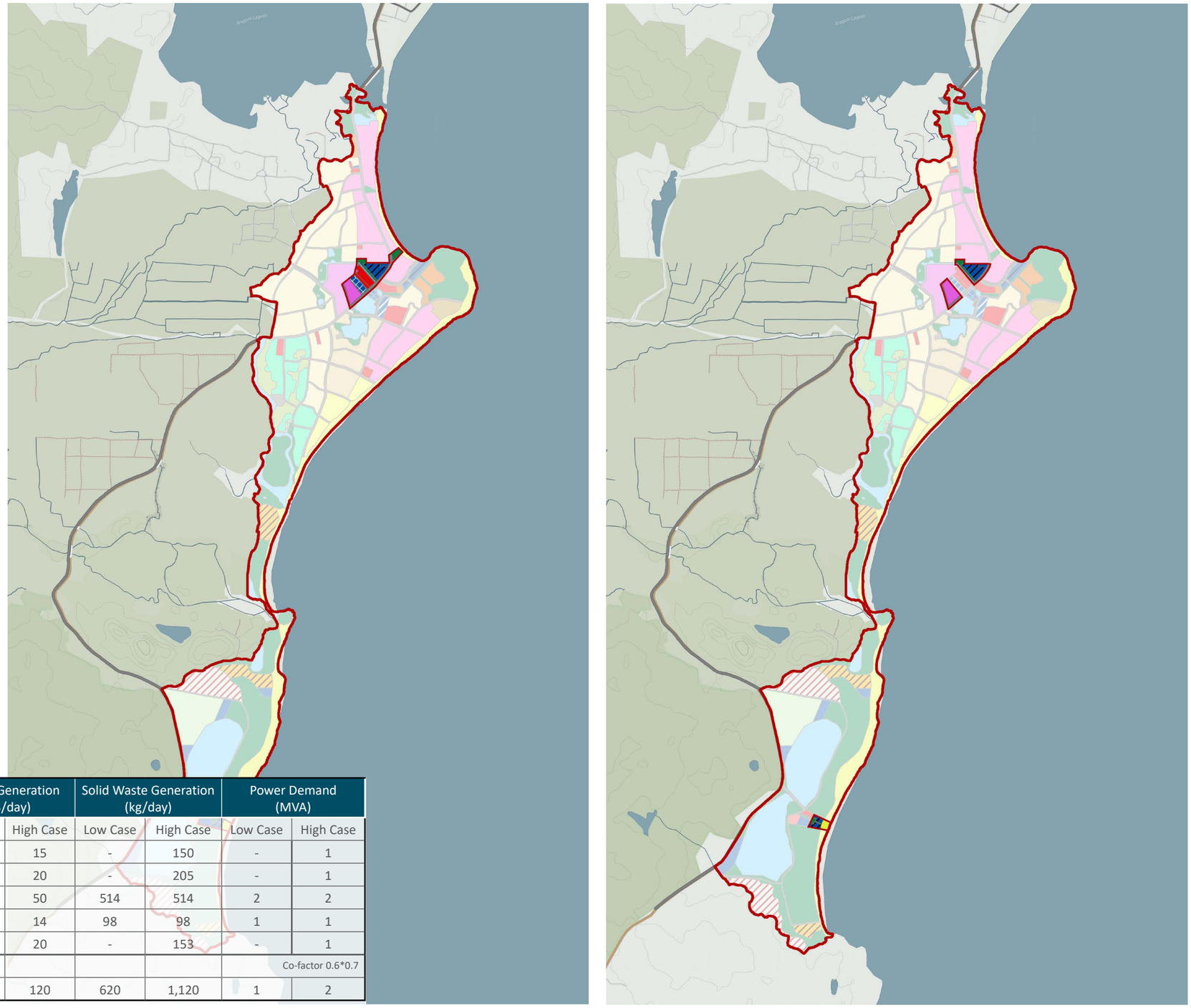


Proposed Land Use		Total Water Demand (m3/day)		Sewage Generation (m3/day)		Solid Waste Generation (kg/day)		Power Demand (MVA)	
		Low Case	High Case	Low Case	High Case	Low Case	High Case	Low Case	High Case
	Hotel	44	46	39	41	274	260	3	1.5
	Commercial Entertainment	23	23	20	21	206	206	1	1
	Commercial Night Market	-	21	-	18	-	188	-	1
	Commercial	48	36	42	32	432	324	2	1
	Water Loss @ 10%	12	13					Co-factor 0.6*0.7	
	Total	130	140	110	120	920	980	2.5	2.0

Figure 6.53 Utilities Demand (Phase-1) Whisky Point

UTILITIES DEMAND PROJECTION (KUCHHAVELI-NILAVELI)

- Utilities demand projection for Urban Design (UD) Area and for Phase 1 (Low Case & High Case Scenario) are estimated and shown in the table below.



Proposed Land Use		Total Water Demand (m3/day)		Sewage Generation (m3/day)		Solid Waste Generation (kg/day)		Power Demand (MVA)	
		Low Case	High Case	Low Case	High Case	Low Case	High Case	Low Case	High Case
	Commercial	-	17	-	15	-	150	-	1
	Commercial Entertainment	-	23	-	20	-	205	-	1
	Commercial Surfer Paradise	57	57	50	50	514	514	2	2
	Hotel	16	16	14	14	98	98	1	1
	Visitor Center	-	23	-	20	-	153	-	1
	Water Loss @ 10%	7	14						Co-factor 0.6*0.7
	Total	80	150	70	120	620	1,120	1	2

Figure 6.54 Utilities Demand (Phase-1) Arugam Bay

6.6 ACTION PROJECTS

6.6.1 WHISKY POINT

CATALYTIC PROJECTS

- Rainbow Coast proposed at Whisky Point is the key catalytic project to establish Whisky Point as the center of entertainment in the east. The catalytic project is identified as the Urban Design intervention area elaborated in subsequent sections.

- The priority projects within the gateway cluster are designed to create a dynamic and multifaceted development that blends commercial, entertainment, and hospitality elements.

- The cluster will feature a significant allocation of 1.28 hectares dedicated to commercial spaces, providing a hub for retail, business, and service-oriented activities. Complementing this, 1.14 hectares will be set aside for commercial entertainment, strategically positioned along the beach front to offer vibrant and engaging experiences for both visitors and locals. To further enhance the leisure and cultural offerings, 1.04 hectares will be dedicated to a commercial night market and food street. This area will become a focal point for social gatherings, culinary experiences, and nighttime activities, adding a unique charm to the development.

- In terms of accommodation, the gateway cluster will include 5.48 hectares designated for hotels and an additional 2.17 hectares for resort facilities. These hospitality projects will cater to a wide range of guests, from business travelers to vacationers seeking beach front luxury.

- Lastly, 5.01 hectares will be allocated for mixed-use development, integrating residential, commercial, and possibly office spaces. This mix will create a vibrant, multifunctional environment where people can live, work, and enjoy recreational activities within a cohesive community setting. The gateway cluster's strategic blend of these elements is designed to ensure a lively and attractive destination that supports both economic growth and community well-being.

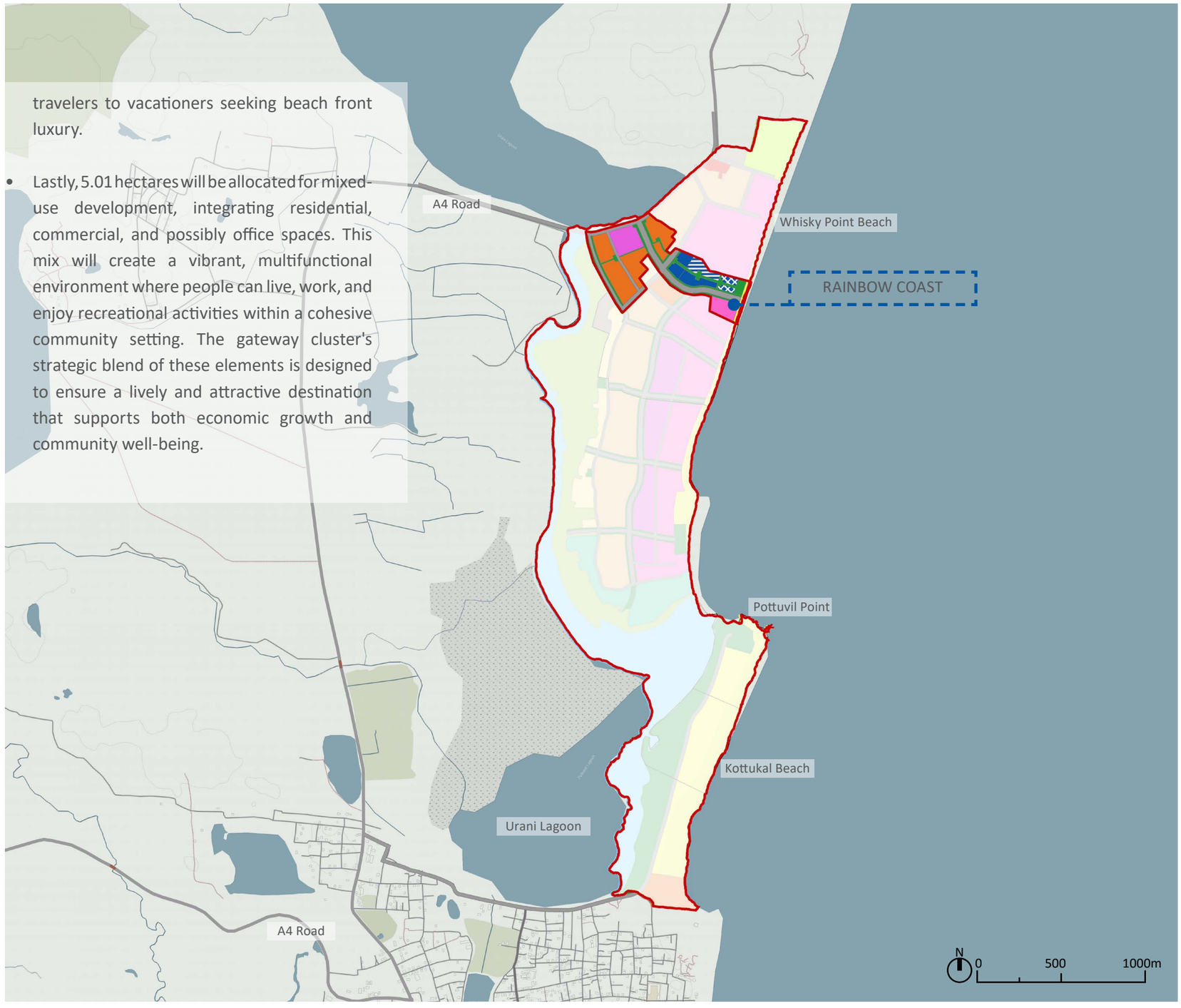


Figure 6.55 Catalytic Projects Whisky Point (High Case Scenario)

6.6.2 ARUGAM BAY & PEANUT FARM

CATALYTIC PROJECTS

- Two key catalytic Projects are identified for this node including the Surfer's Haven within the Arugam Bay core area and the Eco- Park at the Peanut Farm. The projects are aimed to enhance the positioning of Arugam Bay as the Surfing Paradise of the East while offering diverse eco-experiences at the Peanut Farm to harness the tourism potential. The catalytic project is identified as the Urban Design intervention area elaborated in subsequent sections.
- In the high case scenario, the priority projects within the Surfer Paradise Entertainment Center are designed to create a vibrant and culturally rich environment that caters to both local and international audiences. A key feature of this development is the 1.26 hectares allocated for a Commercial Art Estate, which will serve as a creative hub for artists from around the world, providing them with a dedicated space to showcase their work and engage with the community.

- Additionally, the center will include 0.74 hectares dedicated to Commercial Entertainment, featuring food and beverage outlets alongside entertainment areas. This will create a lively atmosphere where visitors can enjoy a variety of dining options and recreational activities. The project also includes 1.83 hectares for a Commercial Surfer Paradise, focusing on facilities related to surfing, ensuring that enthusiasts have access to top-notch equipment and services.

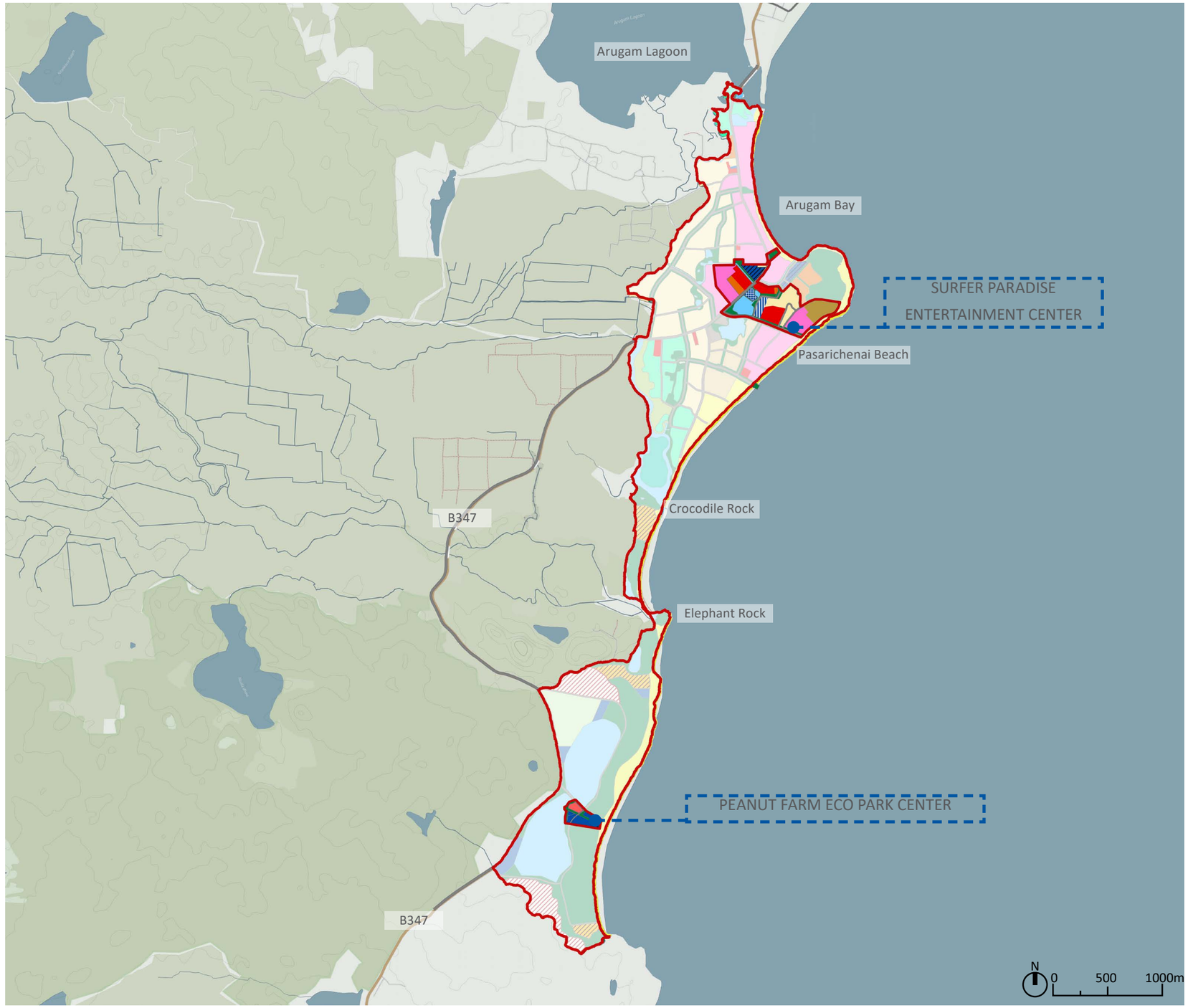


Figure 6.56 Catalytic Projects Arugam Bay & Peanut Farm (High Case Scenario)

- The hospitality aspect of the center is also well-considered, with 4.02 hectares designated for hotels and an additional 4.77 hectares for resorts. These accommodations will cater to a diverse range of visitors, offering luxurious stays that complement the active and creative spirit of the area. Furthermore, 2.54 hectares are set aside for low-density residential development, providing a tranquil living environment within this vibrant community. Finally, 1.46 hectares are reserved for mixed-use development, integrating residential, commercial, and possibly office spaces to create a dynamic and multifunctional district.

- In the Peanut Farm Eco Park Center, the priority projects focus on sustainable and nature-oriented developments. The center will feature 4.62 hectares dedicated to commercial areas, providing essential services and amenities that support eco-tourism and local businesses. A specialised 0.93-hectare Surfer Paradise will cater to surfing enthusiasts, offering facilities that align with the park's eco-friendly ethos.

- To enhance the park's outdoor experience, 2.38 hectares will be developed into a campsite, allowing visitors to immerse themselves in the natural surroundings while enjoying modern camping facilities. Additionally, a 0.71-hectare visitor center will be established to serve as the gateway to the eco park, offering educational resources, information about the park's attractions, and a starting point for guided tours and activities. Together, these projects will create a harmonious blend of nature, recreation, and sustainable development in the Peanut Farm Eco Park Center.

CIP TRANSPORT PROJECTS

- The Rainbow Coast @ Whisky Point development focuses on enhancing key roadways and public transport facilities to support the area's growth into a premier surfing and tourism destination.
- The main improvements include upgrading existing roads, such as the primary arterial road to enhance traffic flow and access to key destinations, the collector road with necessary land acquisition and vesting to improve traffic distribution, and the secondary road to enhance connectivity and access to local attractions.
- Additionally, the project involves constructing sheltered bus stops on both sides of key roads for commuter comfort and protection, integrating a taxi parking bay for organised and convenient taxi services, and constructing a roundabout to streamline traffic flow and improve safety.
- Upgrading existing bus stops throughout the area will also improve the overall public transport infrastructure. These upgrades aim to create a safer, more efficient transport network, promoting the area's development into a world-class surfing city, a diverse tourism hub, and an eco-centric beach destination.
- Enhanced road networks and improved public transport facilities will ensure seamless connectivity and accessibility for residents and visitors alike, supporting the overall growth and attractiveness of Rainbow Coast @ Whisky Point.

Sl No	Land Use	Total Water Demand (m3/d)		Sewage Generation (m3/d)		Solid Waste Generation (kg/d)		Power Demand (MVA)	
		Low Case	High Case	Low Case	High Case	Low Case	High Case	Low Case	High Case
1	4* Hotel	-	47	-	41	-	205	-	2
2	3* Hotel	11	16	10	14	64	144	1	1
3	Commercial Entertainment	34	23	30	20	306	205	1	1
4	Commercial Night Market	-	21	-	18	-	187	-	1
5	Commercial	-	26	-	23	-	230	-	1
6	Mixed Use	-	79	-	69	-	559	-	3
	Water Loss @ 10%	5	21					Co-factor 0.6 * 0.7	
	TOTAL	50	250	40	200	370	1,550	1	4

Table 6.19 Unit Demand (Water, Solid Waste and Power)

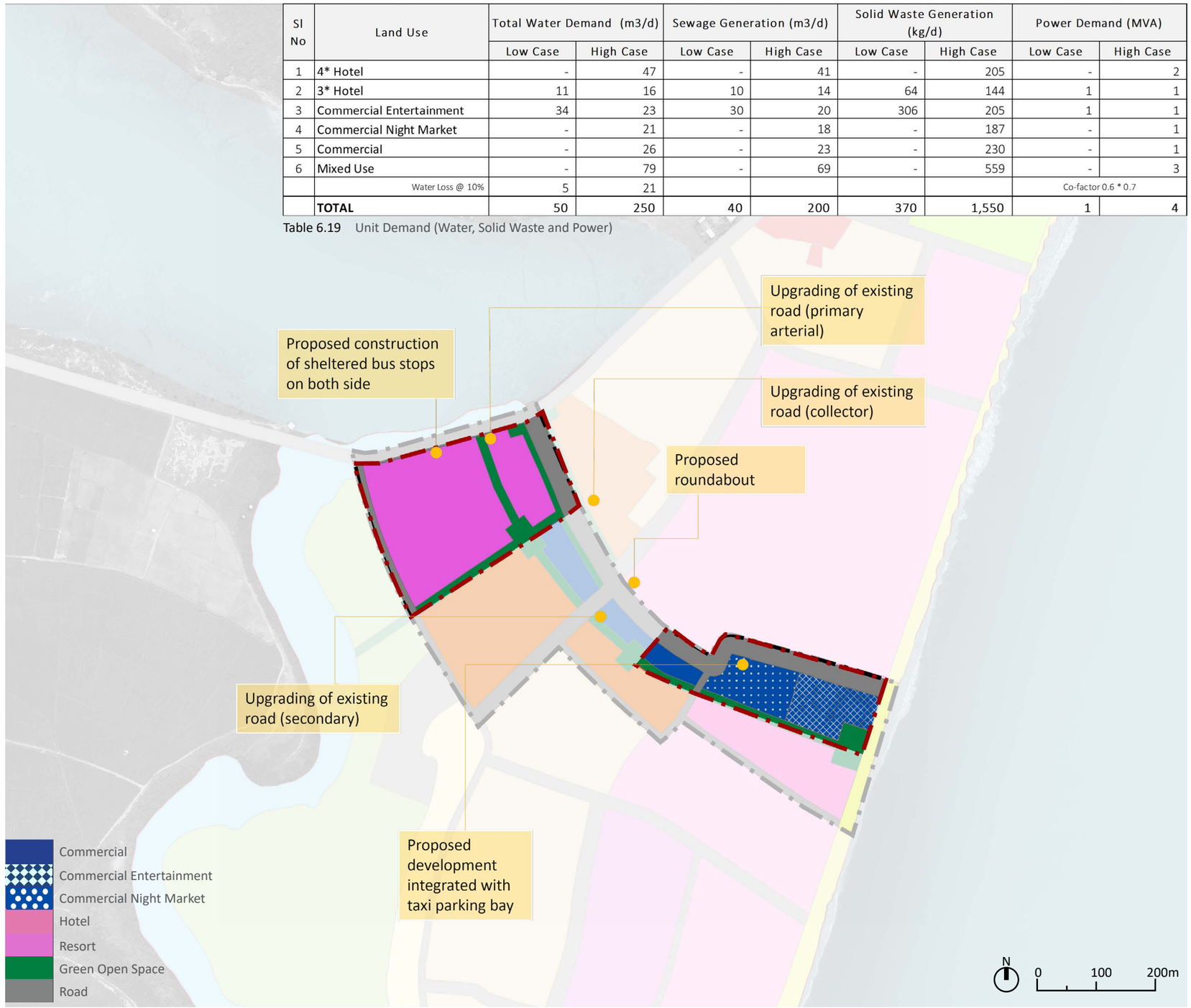


Figure 6.57 CIP Transport Projects (Whisky Point Intervention Area)

CIP TRANSPORT PROJECTS

- The transport infrastructure improvements at Surfer Haven @ Arugam Bay focus on enhancing roadways and encouraging active mobility to support the area's development into a prime tourism destination.

- Pedestrian night market activities have been proposed to connect to the nearby beach and resorts. It is also proposed to partially access the primary arterial for night activities, with several traffic management measures considered.

Upgrading Existing Roads:

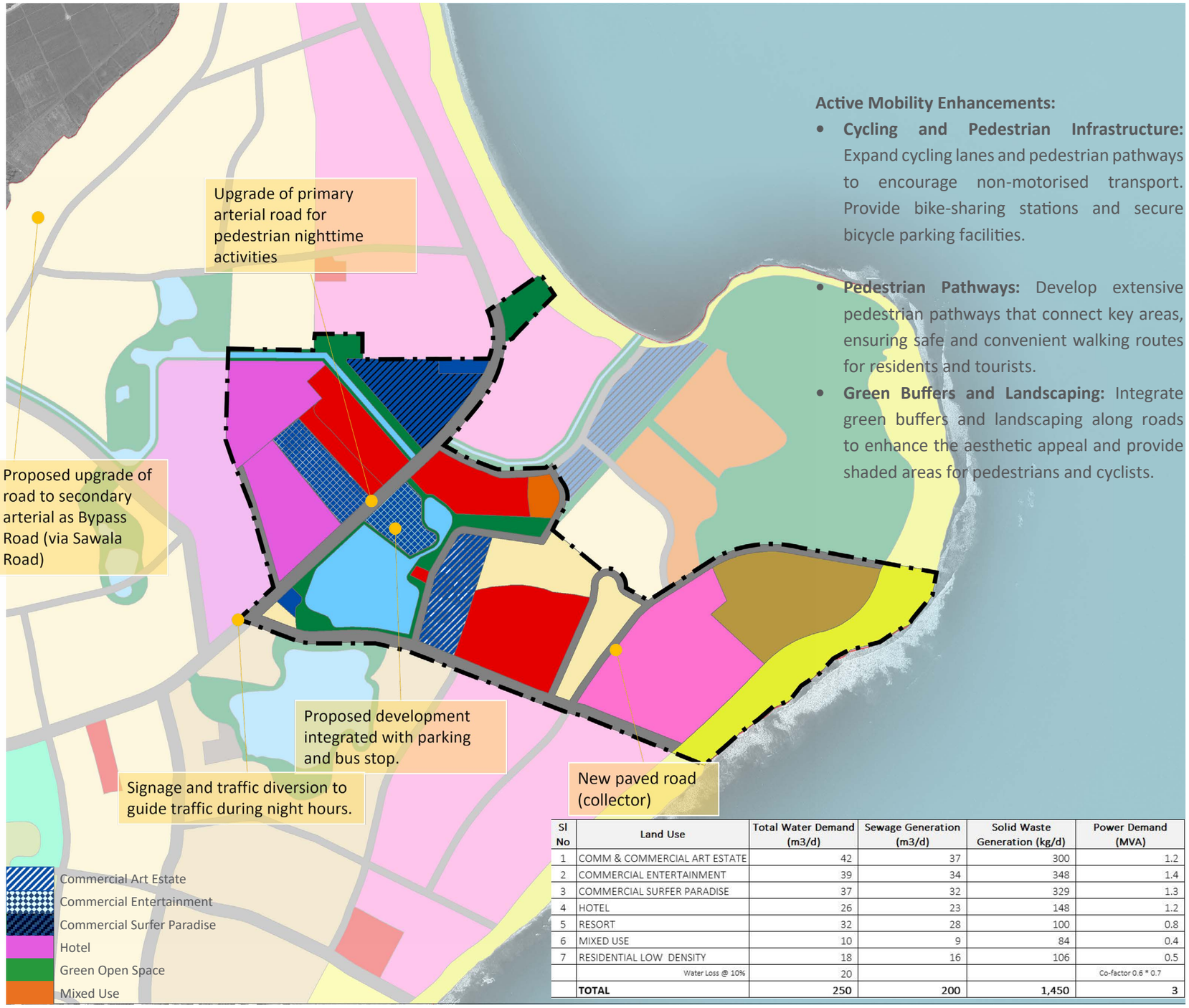
- **Primary Arterial Road:** Enhance the primary arterial road for pedestrian night activities by incorporating dedicated pedestrian paths and improved street lighting to ensure safety and smooth traffic flow.

- **Bypass via Sawala Road:** Provide a bypass via Sawala Road, passing through the residential area. This requires upgrading the existing road and proposing an upgrade to a secondary arterial with additional lanes to accommodate bypass traffic.

- **New Paved Collector Road:** Construct the new collector road with provisions for future expansion.

UTILITIES DEMAND PROJECTION

- Utilities demand projection for Urban Design (UD) Area and for Phase 1 (Low Case & High Case Scenario) are estimated and shown in the table.



Sl No	Land Use	Total Water Demand (m3/d)	Sewage Generation (m3/d)	Solid Waste Generation (kg/d)	Power Demand (MVA)
1	COMM & COMMERCIAL ART ESTATE	42	37	300	1.2
2	COMMERCIAL ENTERTAINMENT	39	34	348	1.4
3	COMMERCIAL SURFER PARADISE	37	32	329	1.3
4	HOTEL	26	23	148	1.2
5	RESORT	32	28	100	0.8
6	MIXED USE	10	9	84	0.4
7	RESIDENTIAL LOW DENSITY	18	16	106	0.5
	Water Loss @ 10%	20			Co-factor 0.6 * 0.7
	TOTAL	**250**	**200**	**1,450**	**3**

Figure 6.58 CIP Transport Projects (Arugam Bay Intervention Area)

CIP TRANSPORT PROJECTS

- The Eco Park @ Peanut Farm development focuses on essential road and transport infrastructure enhancements to improve connectivity and accessibility, supporting its growth as a sustainable eco-tourism destination.

- Key projects include upgrading 494 meters of existing roads to enhance traffic flow and road quality, including reducing carriageway width and enhancing pedestrian and cycling pathways with amenities. Additionally, the installation of new sheltered bus stops at strategic locations will provide comfort and convenience for public transport users.

- Additionally, the project will integrate enhanced pedestrian and cycling pathways to promote eco-friendly travel within the park.

- These improvements aim to support key development zones, including Surfer Paradise, Lagoon Front Development, Retail Zone, Camp Site, and Visitor Centre, by ensuring efficient and sustainable access.

- The comprehensive transport upgrades will significantly enhance connectivity, safety, and the overall visitor experience, fostering the sustainable growth of Peanut Farm as a premier eco-tourism destination.

UTILITIES DEMAND PROJECTION

- Utilities demand projection for Urban Design (UD) Area is estimated and shown in the table.

Sl No	Land Use	Total Water Demand (m3/d)	Sewage Generation (m3/d)	Solid Waste Generation (kg/d)	Power Demand (MVA)
1	CAMP SITE	1	1	12	0.1
2	COMMERCIAL	79	69	709	2.8
3	COMMERCIAL SURFER PARADISE	15	14	139	0.5
4	VISITOR CENTER	23	20	151	0.6
	Water Loss @ 10%	12			Co-factor 0.6 * 0.7
	TOTAL	150	120	1,050	2

Table 6.20 Unit Demand (Water, Solid Waste and Power)

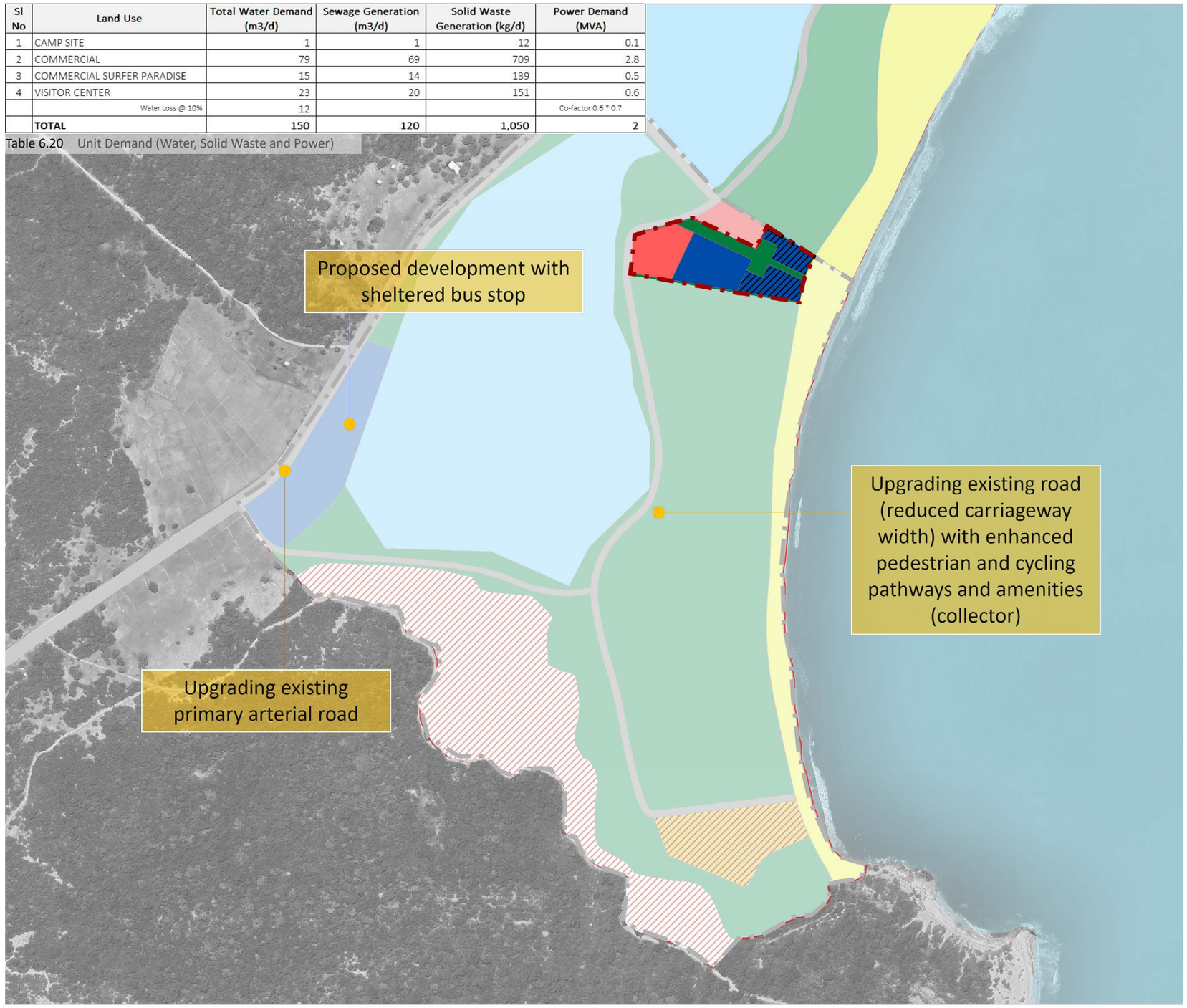


Figure 6.59 CIP Transport Projects (Peanut Farm Intervention Area)

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6.7 RAINBOW COAST- WHISKY POINT

6.7.1 INTERVENTION AREA CONTEXT



① Beach front



② Existing Dirt Road



③ Existing Paved Road



④ A4 Road and Site Entrance



Figure 6.60 Intervention Area Context (Whisky Point)

LAND OWNERSHIP

The land ownership within the Whisky Point intervention area can be categorised into three distinct types: State Lands, lands distributed under various grants, and private land.

The majority of the land in this area is privately owned, indicating that individuals or private entities hold significant portions of the land. Following this, a substantial portion of the land has been distributed under various grants, which suggests that these lands were allocated by the state or other authorities for specific purposes or to particular groups or individuals. Finally, a smaller portion of the land is classified as State Lands, meaning that it is owned and managed by the government.

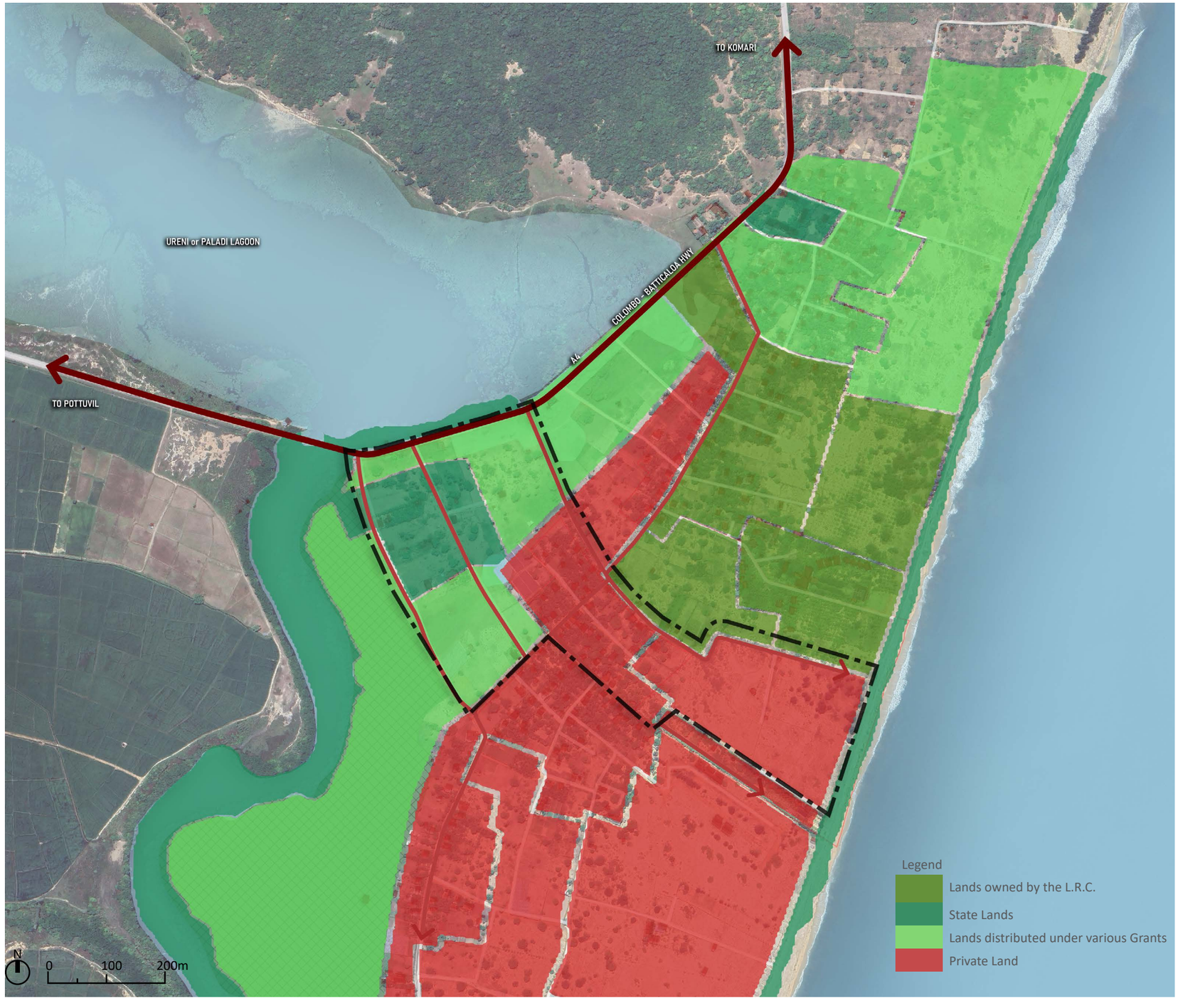


Figure 6.61 Land Ownership (Whisky Point Intervention Area)

6.7.2 PROPOSED LANDUSE

Envisioned as the "Rainbow Coast @ Whisky Point" is designed as a vibrant mixed-use area, blending commercial, hotel, residential, and various tourist-related facilities. The development plan includes entertainment venues, night markets, and shopping centers to enhance the area's viability and support its overall growth. Visitors can choose from a range of accommodations, including mid-range hotels and luxury resorts. At the heart of this intervention area lies a green spine, seamlessly connecting the lagoon to the sea, integrating two natural areas and enhancing the overall aesthetic and ecological value of the development.

	Proposed Land Use	Area (Ha)	%
	Beach Area	0.58	2%
	Commercial	1.29	5%
	Commercial Entertainment	1.14	5%
	Commercial Night Market	1.05	4%
	Hotel	5.51	22%
	Resort	2.22	9%
	Green Open Space	2.53	10%
	Mixed Use	5.09	20%
	Road	5.57	22%
	Total	24.99	

Table 6.21 Proposed Land Use Distribution (Whisky Point Intervention Area)

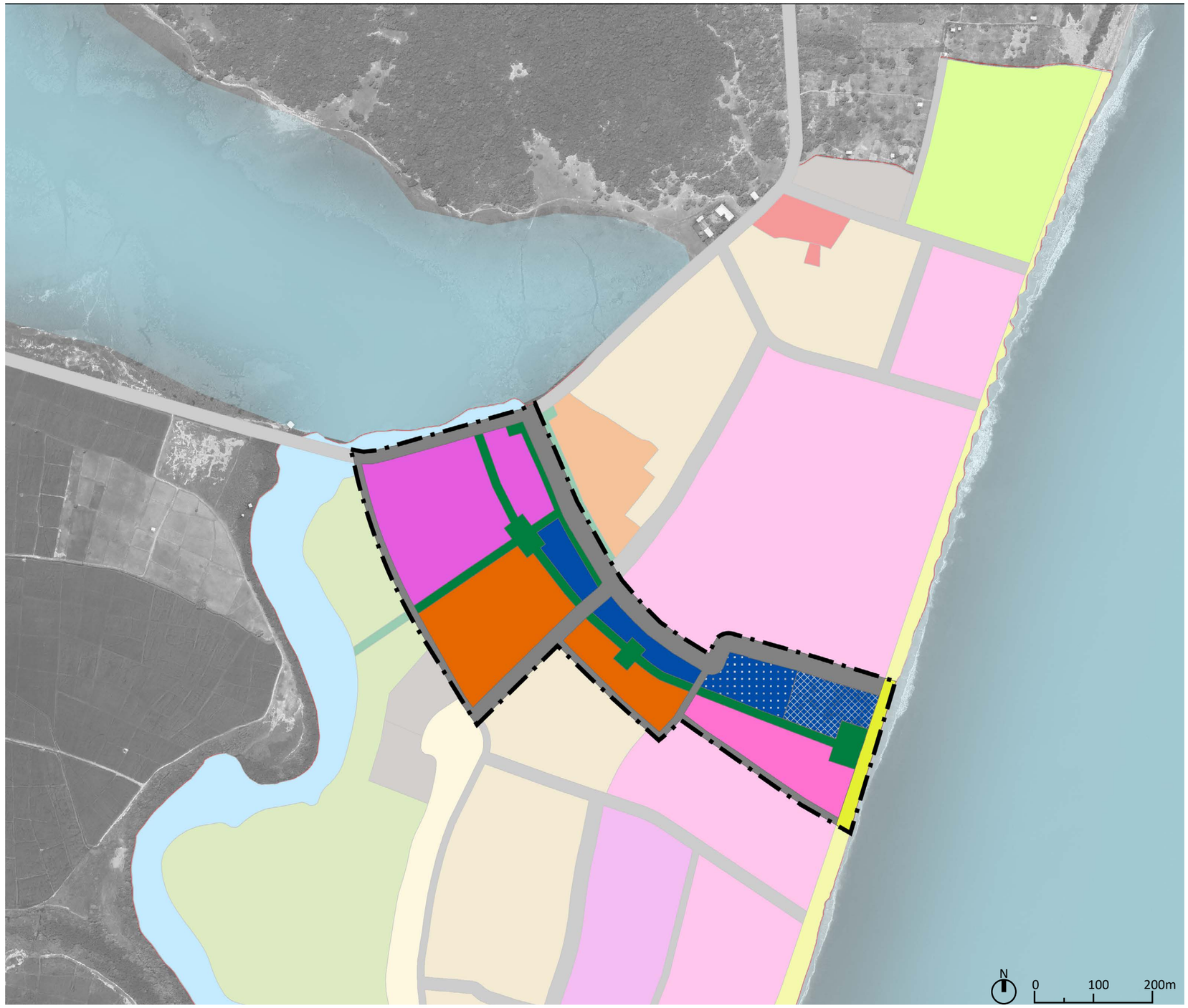


Figure 6.62 Proposed Land Use Plan (Whisky Point Intervention Area)

6.7.3 ARTIST'S IMPRESSION



RAINBOW COAST @ WHISKY POINT

The vision for Rainbow Coast @ Whisky Point is to create an enchanting destination that seamlessly blends relaxation, entertainment, and vibrant nightlife against a backdrop of a stunning scenic coastline. By day, visitors will enjoy the buzz of exciting activities and luxury accommodations, while the evenings transform into a hub of lively beach parties and music festivals. Catering to individuals of all ages, from children to adults, Rainbow Coast @ Whisky Point promises a diverse array of facilities and experiences, ensuring every visitor finds their perfect slice of paradise.

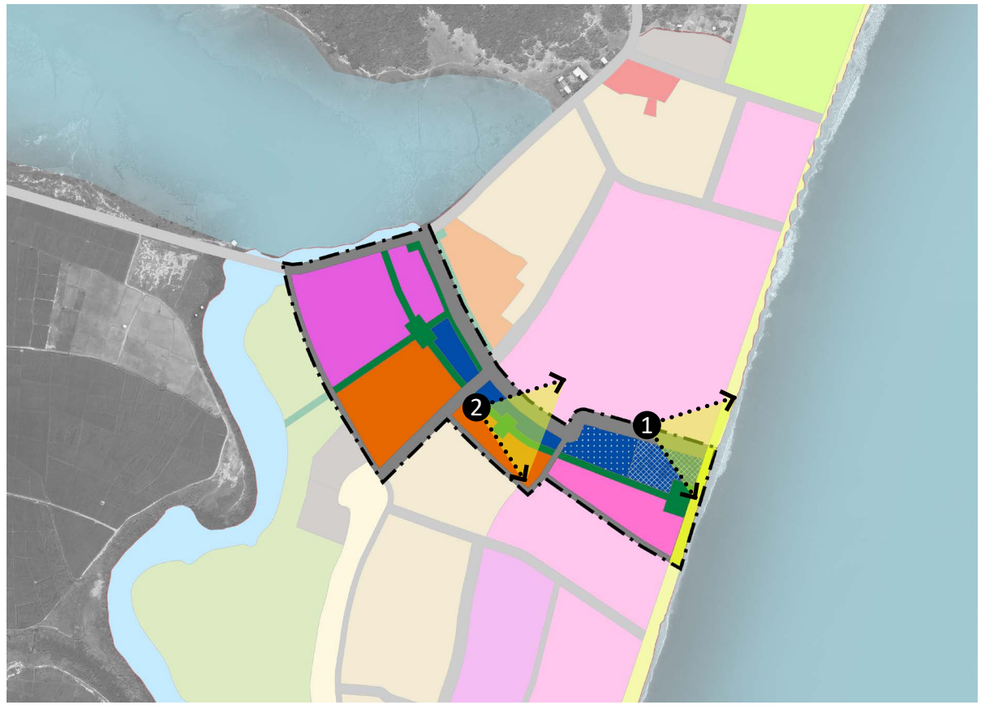




Figure 6.63 View-1 Overlooking Wellness Center to the Beach



Figure 6.64 View-2 from Active Pedestrian Spine

6.7.4 URBAN DESIGN CONCEPT

The central focus of the Whisky Point Intervention area is the pedestrian spine, which seamlessly links the lagoonfront and beach front natural areas. To invigorate this spine, a series of landmarks and nodes are strategically placed, while the edges are enlivened with commercial, food and beverage, and entertainment facilities. Beyond the spine, the entrance to the development is accentuated with landmark buildings, creating a strong sense of arrival and setting the tone for the entire area. This thoughtful integration of natural and built environments not only enhances connectivity but also enriches the overall visitor experience.

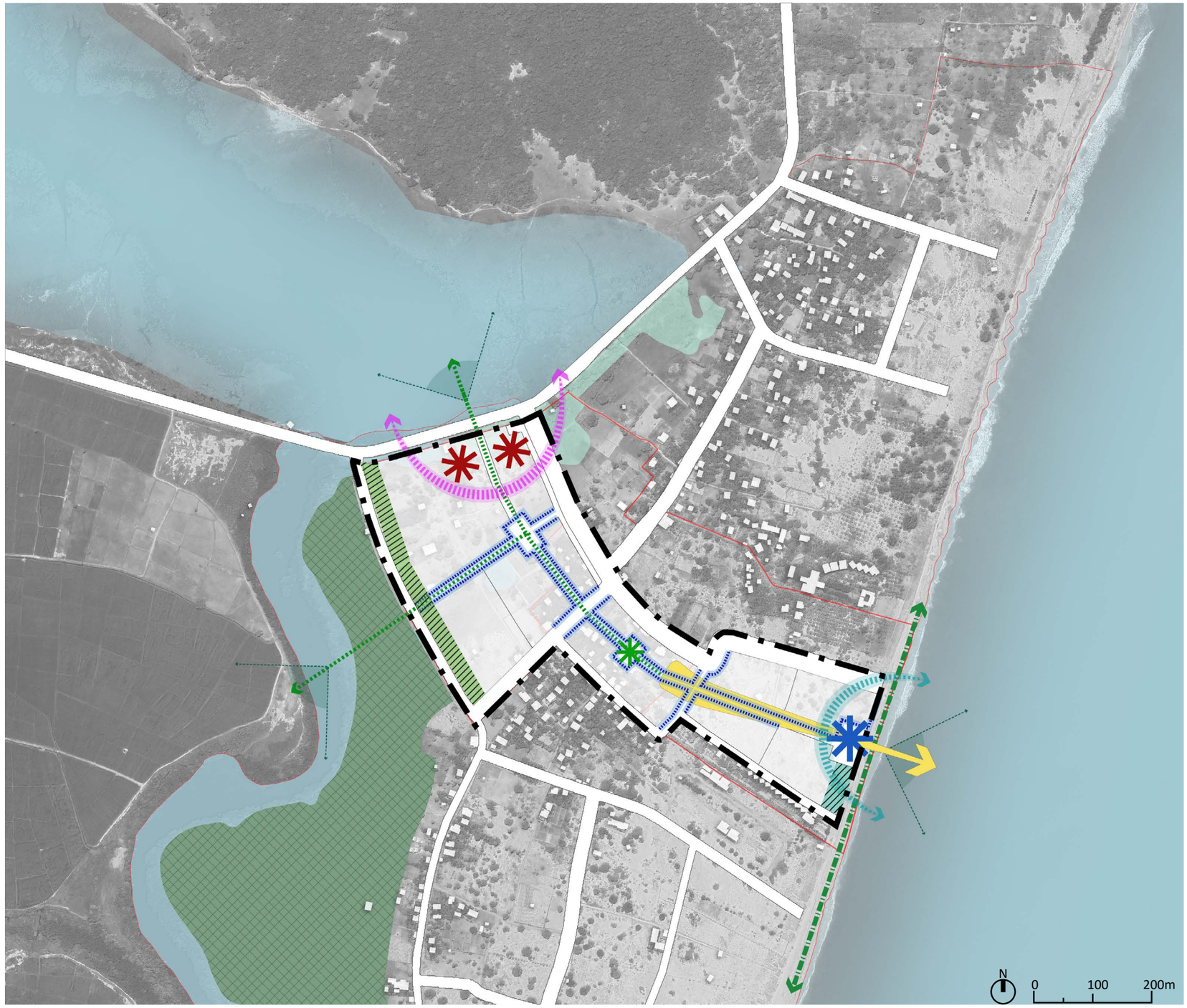
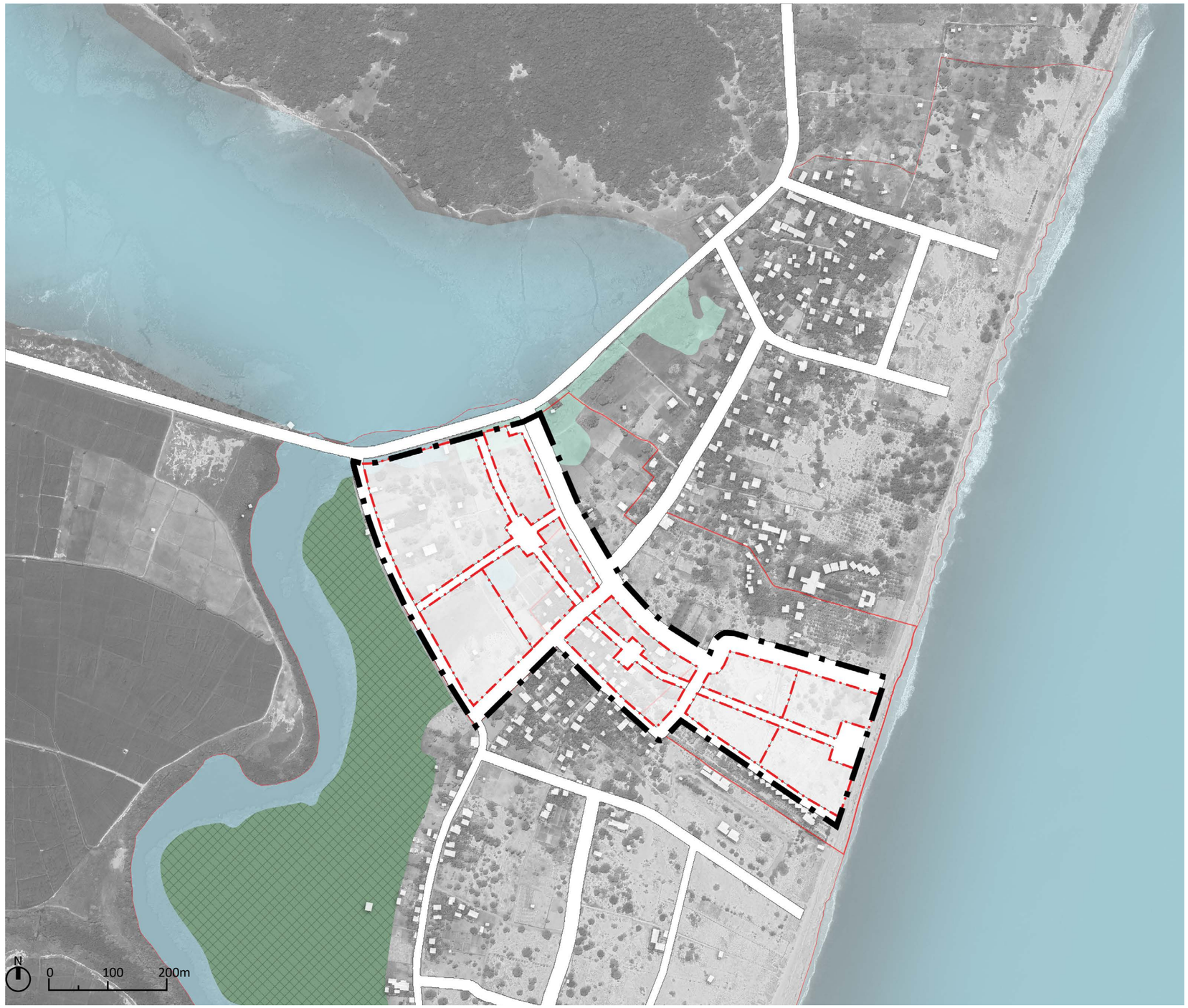
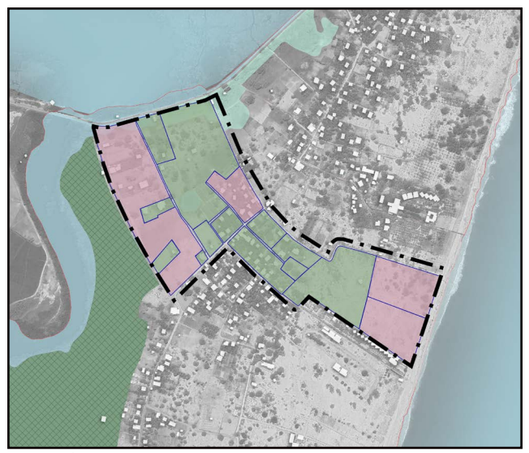


Figure 6.65 Urban Design Concept (Whisky Point Intervention Area))

6.7.5 PARCELLATION STRATEGIES

Given that most existing parcels within the intervention area are compatible with the proposed development, the current parcel configuration will largely be maintained. However, certain parcels will be amalgamated to better align with the development plans. This parcellation strategy ensures optimal land use while accommodating the new development seamlessly within the existing framework.





Legend

- Amalgamation of Existing Parcels
- Existing Parcel developed as it is
- Proposed Parcel

Figure 6.66 Parcellation Strategies (Whisky Point Intervention Area)

6.7.6 URBAN DESIGN GUIDE PLANS

PARCEL & BUILDING USE



Legend

- Proposed Parcel

LANDMARKS & NODES



Legend

- Oceanfront Landmark Plaza
- Landmark Building

VIEWS AND VISTAS



Legend

- Oceanfront Landmark Plaza
- Landmark Building
- Oceanfront Landmark Plaza
- View and Vista

BUILDING EDGE & ACTIVITY GENERATION USES



Legend

- Active Edge
- Plaza/ Open Space

PUBLIC OPEN SPACES



Legend

- Active Edge
- Plaza/ Open Space

ACCESS & CIRCULATION



Legend

- Vehicular Entrances

Figure 6.67 Urban Design Guide Plans (Whisky Point Intervention Area)

SECTION

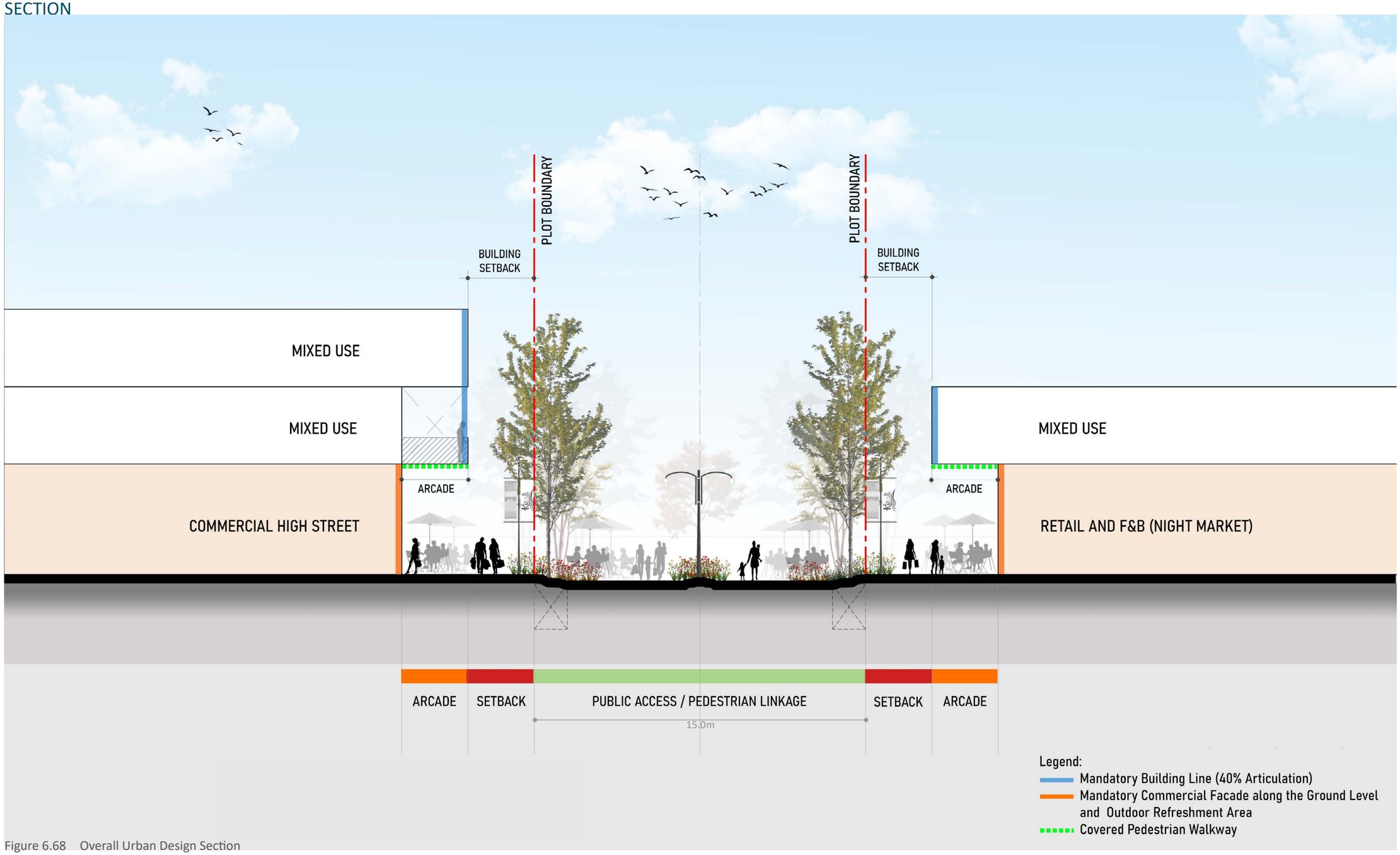


Figure 6.68 Overall Urban Design Section

6.7.7 PRIORITY PROJECTS

HIGH CASE SCENARIO

1. Beach front Entertainment

Site Area: 1.14Ha
Plot Ratio: 1.0
Bld Height: G+1

2. Night Market/ Retail F&B

Site Area: 1.04Ha
Plot Ratio: 1.0
Bld Height: G+1

3. 4 Star Resort Hotel

Site Area: 5.48Ha
Plot Ratio: 1.0
Bld Height: G+3

4. Road Enhancement

Secondary Road with Parking (31m)
New Road to be Constructed- 56m
Existing Road to be Upgraded- 822m

Secondary Road without Parking (26m)
Existing Road to be Upgraded- 336m

Collector Road (12m)
Existing Road to be Upgraded- 488m

Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	-	488	488
Collector	26	-	336	336
Collector	12	56	822	878

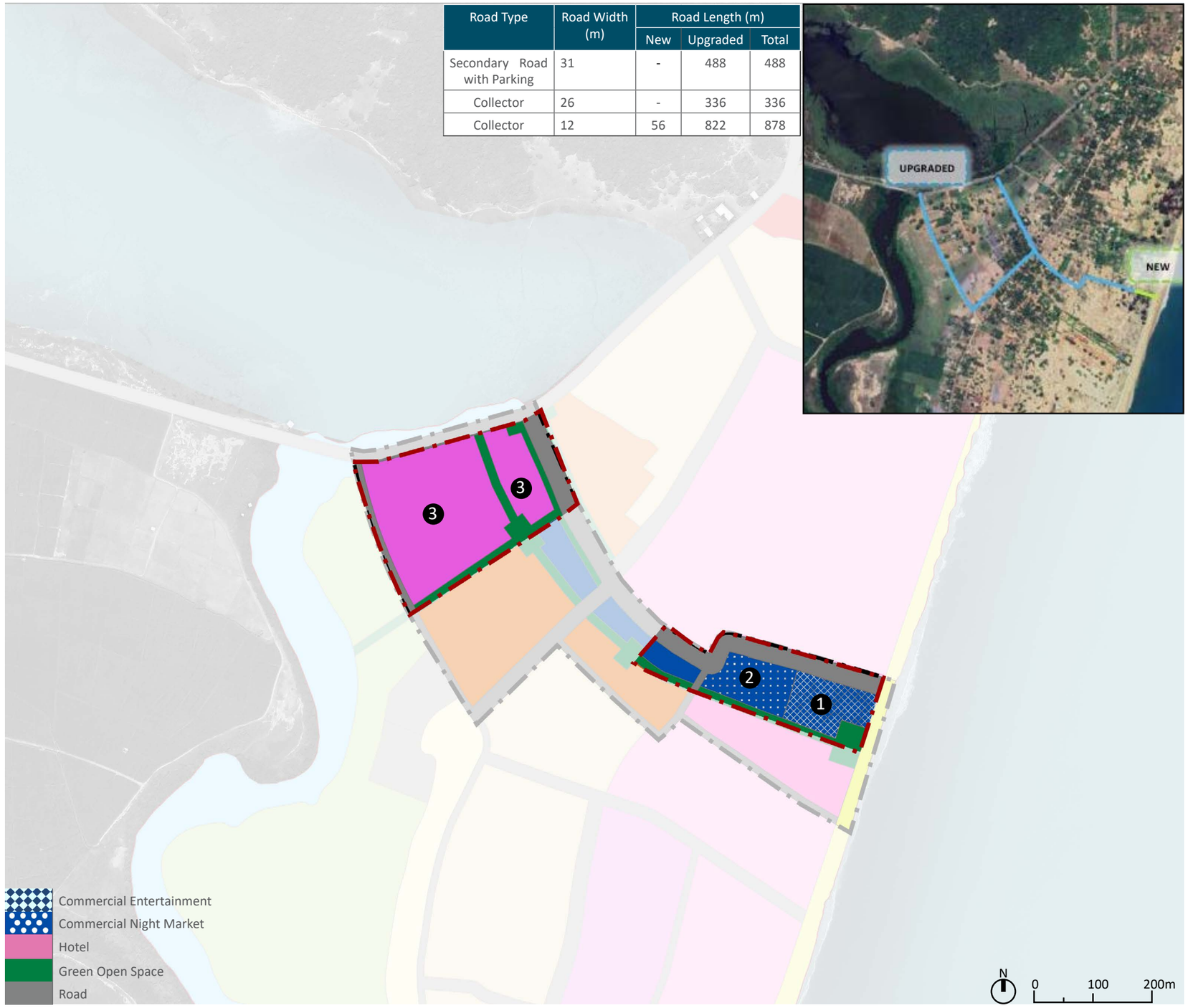


Figure 6.69 Priority Projects Whisky Point Intervention Area (High Case Scenario)

LOW CASE SCENARIO

1. Beach front Entertainment

Site Area: 0.4Ha

Plot Ratio: 1.0

Bld Height: G+1

2. Night Market/ Retail F&B

Site Area: 0.4Ha

Plot Ratio: 1.0

Bld Height: G+1

3. 4 Star Resort Hotel

Site Area: 5.48Ha

Plot Ratio: 1.0

Bld Height: G+3

4. Road Enhancement

Secondary Road with Parking (31m)

Existing Road to be Upgraded- 822m

Secondary Road without Parking (26m)

Existing Road to be Upgraded- 336m

Collector Road (12m)

Existing Road to be Upgraded- 488m

Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	-	488	488
Collector	26	-	336	336
Collector	12	-	822	822

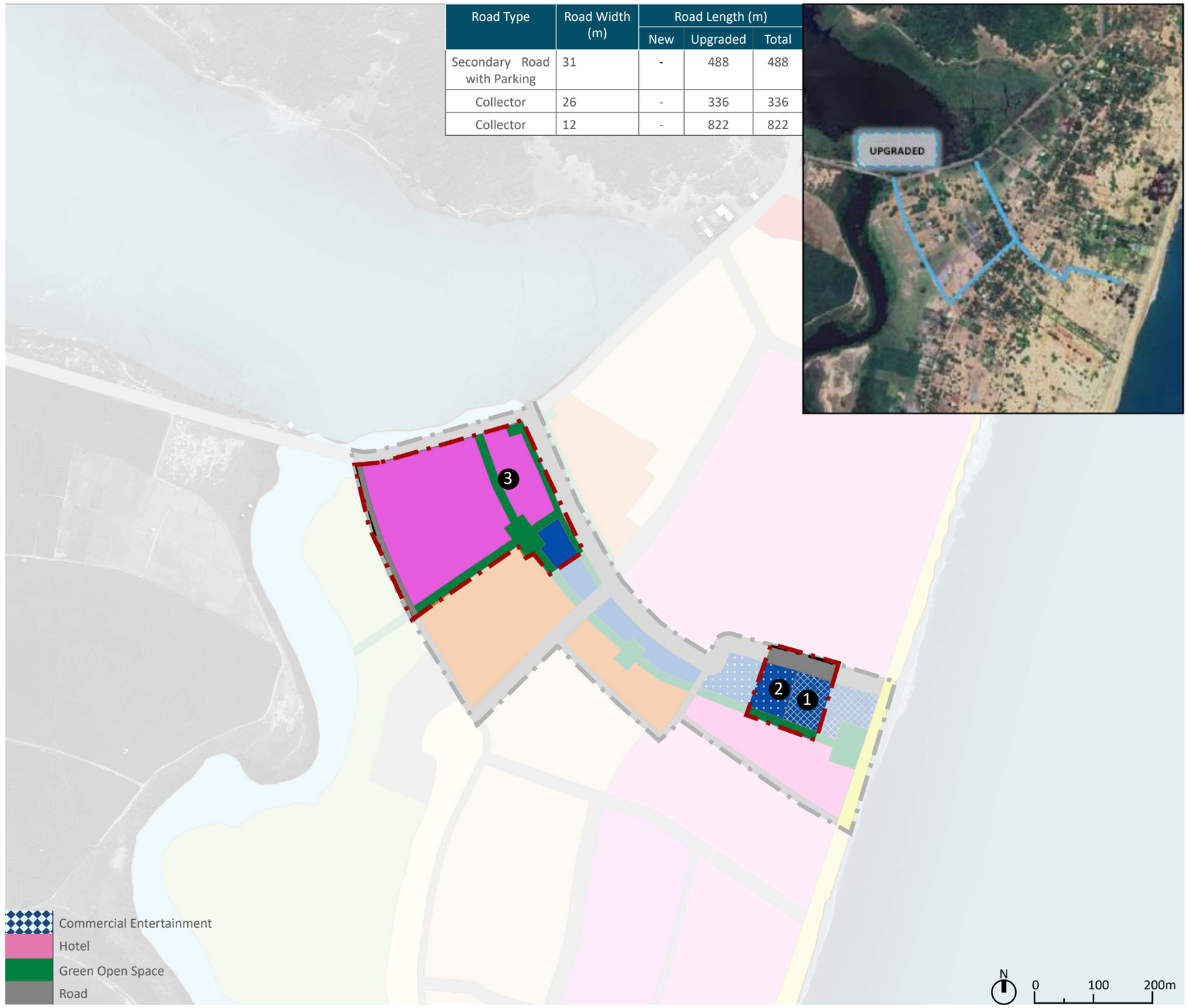


Figure 6.70 Priority Projects Whisky Point Intervention Area (High Case Scenario)

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6.7.8 PRIORITY PROJECT DESIGN BRIEF GUIDELINES

Note: The proposed land use plan (PLU) is based on a high-case scenario to maximize opportunities for both the community and the region. Accordingly, project-level guidelines for priority initiatives have been developed in alignment with the PLU and the high-case scenario framework.

PROJECT BRIEF: OVERALL AMPARA

RATIONALE OF PROJECT

What is the problem, need or the existing gap/ deficiency?

The Eastern Province of Sri Lanka, despite its rich natural resources and pristine beaches, is witnessing a decline in tourist visits. There is a pressing need to leverage these resources to boost tourism in the region and enhance its economic status.

What are the root-causes, underline causes and immediate causes that contribute for the problem or the need that the project intents to address?

The primary issue is the limited connectivity to the Eastern Province, as foreign tourists must first land in Colombo - the only location with an international airport in Sri Lanka. From there, it takes 8-10 hours to reach the Eastern Province by road. Other challenges include:

- The absence of tourist facilities such as banks, exchange offices, and visitor centers.
- The requirement of a marketing strategy to promote the region.
- The static tourist landmarks that do not attract much tourist attention.
- Low tourist spending due to limited opportunities except for accommodations.
- Insufficient tourist amenities like waiting areas, shower and changing rooms, restaurants, and retail outlets.

How does this project contribute to fulfill the existing gap in the sector?

The project is designed to address the difficulties and challenges encountered by tourists in the Eastern Province and to adapt to the economic conditions and current situation in Sri Lanka. Tourism initiatives are planned for each area based on existing developments and proposed tourism concepts. These initiatives are expected to drive the tourist inflow into the region and enhance the tourist experience

What is the mode of intervention of this project in addressing the gap?

- Arugam Bay, famous for its surfing, has a Surfers paradise as a central element, anticipated to increase visitor numbers.
- Besides the central elements in each area, tourist facilities such as visitor centers, retail, restaurants, parks, etc. are suggested to enhance the tourist experience.

1	Project Location	Whisky Point Beach, Arugam Bay Beach and Peanut Farm Beach, Ampara District, Eastern Province
2.	Rationale of Project	**Mode of Intervention** Arugam Bay, famous for its surfing, has a Surfers paradise as a central element, anticipated to increase visitor numbers.
3.	Cost Breakdown	USD 56.6 Mn (for intervention projects)
4.	Revenue Forecast	24.5 USD Mn (Year 1 – 5)
		123.8 USD Mn (Year 6 – 10)
		186.6 USD Mn (Year 11 – 15)
		334.9 USD Mn (Total)
5.	Findings of the Economic and Financial Analysis	14 – 15%avg: IRR in avg: 10 years payback period

1. HOTEL PARCEL-01

SITE CONTEXT

Plot H-01 is a hotel plot located at the entrance of the Intervention area with a site area of 1.0Ha. The development is situated at the intersection of a major road and the main boulevard, offering unparalleled accessibility and convenience. The junction's prominence offer high visibility and traffic flow, making it an ideal spot for commercial establishments and ensuring a vibrant, dynamic environment for visitors.

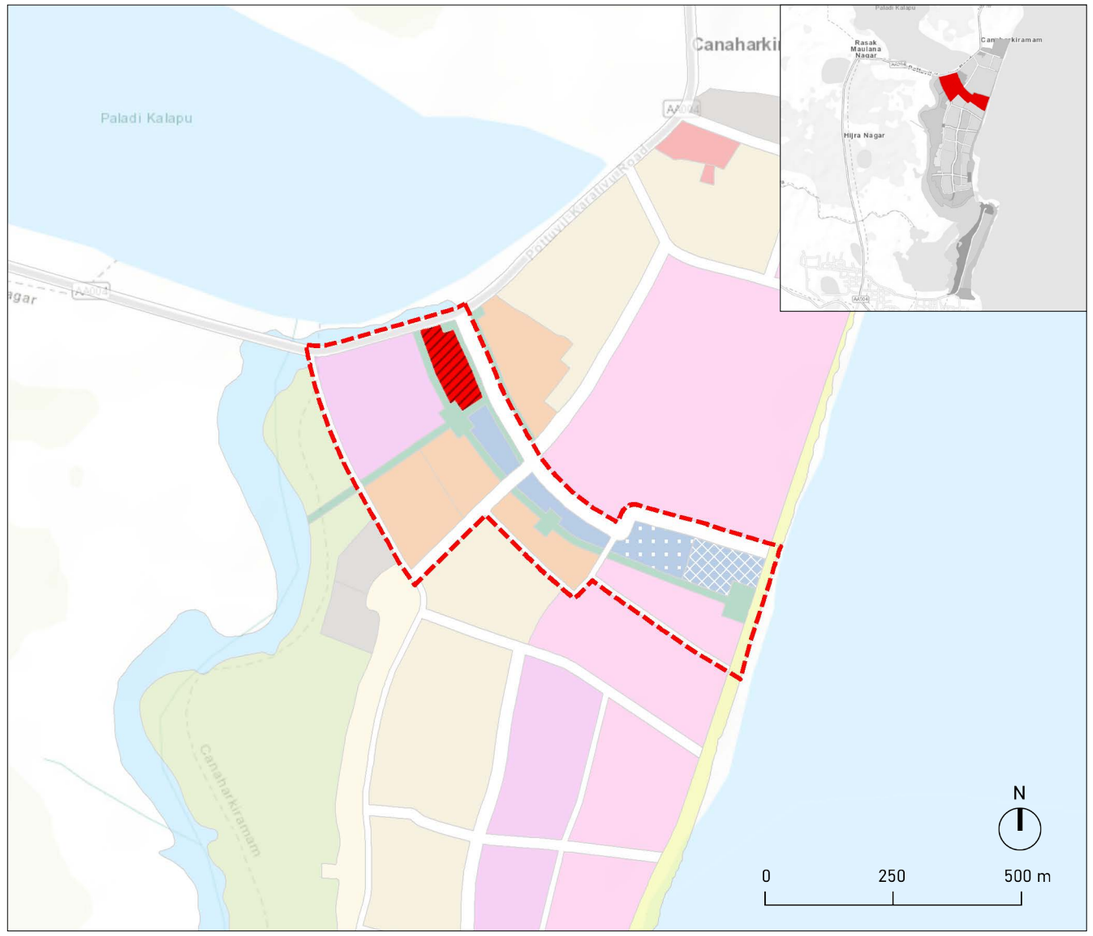
OBJECTIVE

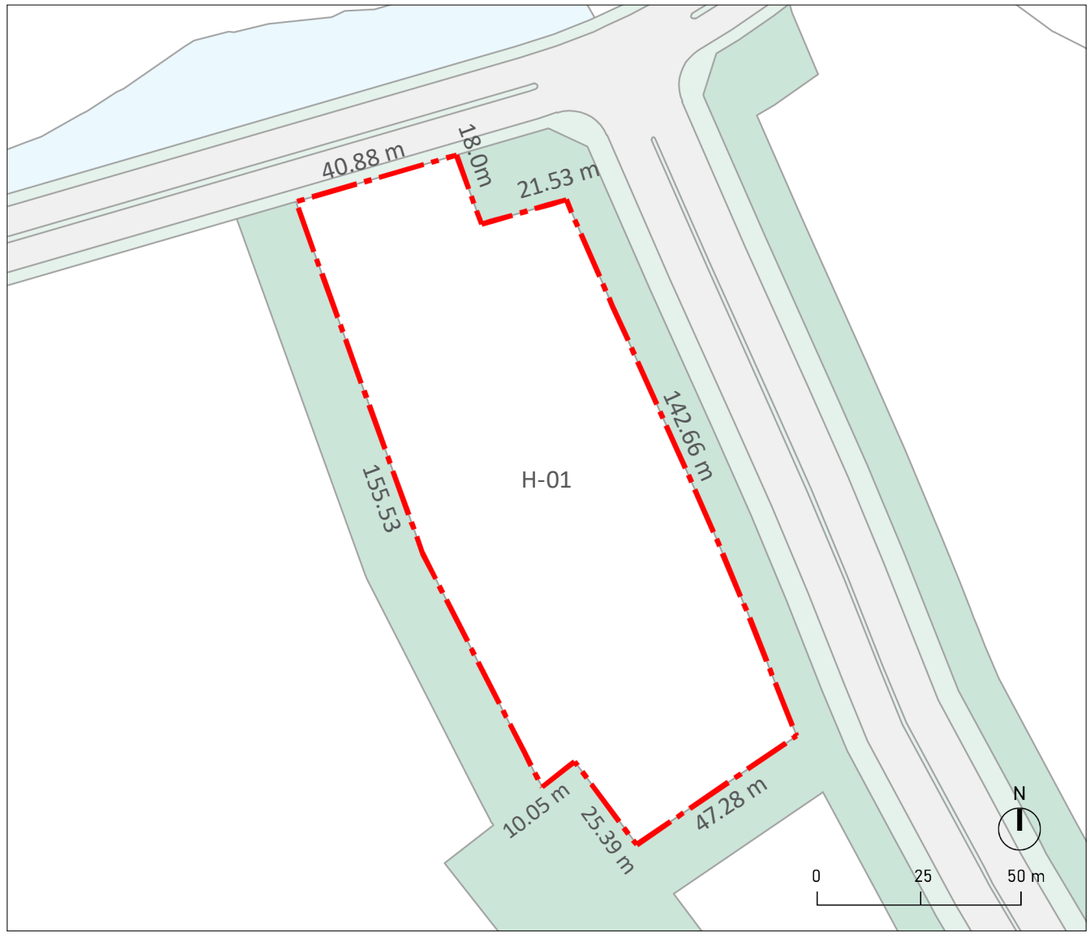
Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development includes a Hotel facility with fine dining, ballrooms and banquet halls etc.

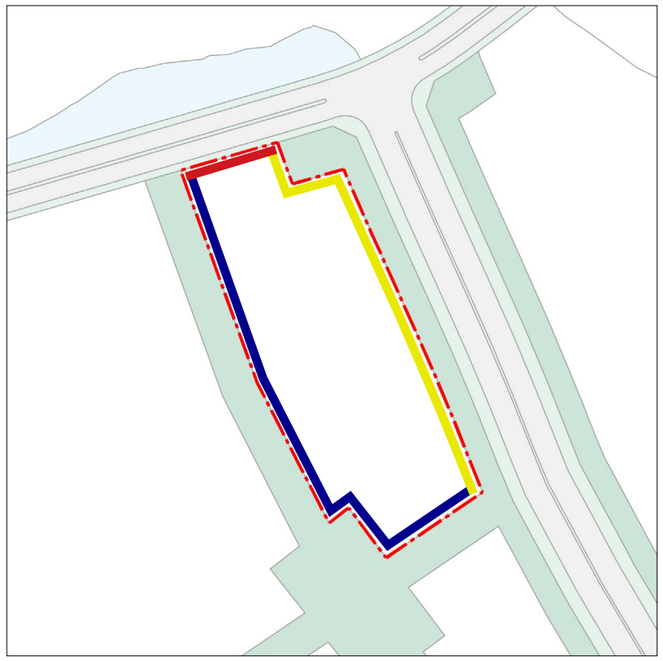
PLANNING PARAMETERS	
PLOT NUMBER	H-01
ALLOWABLE USE	HOTEL
PLOT AREA	1.0HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+3





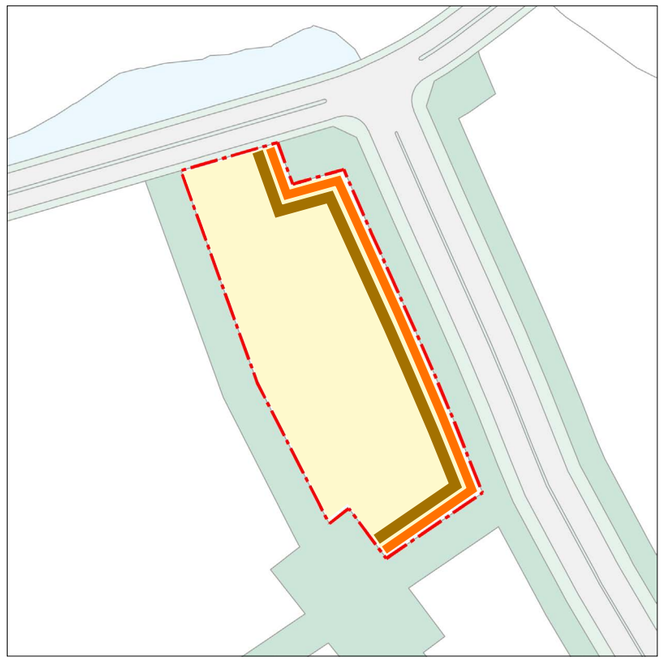
PLOT REGULATION

BUILDING SETBACK



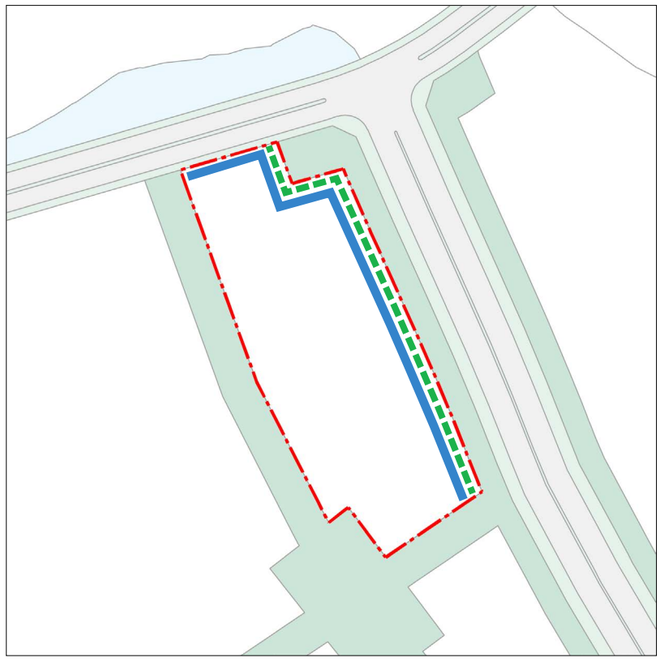
Planning Area Boundary
6.0m Setback (Minimum)
3.0m Setback (Minimum)
0.0m Setback

BUILDING USE



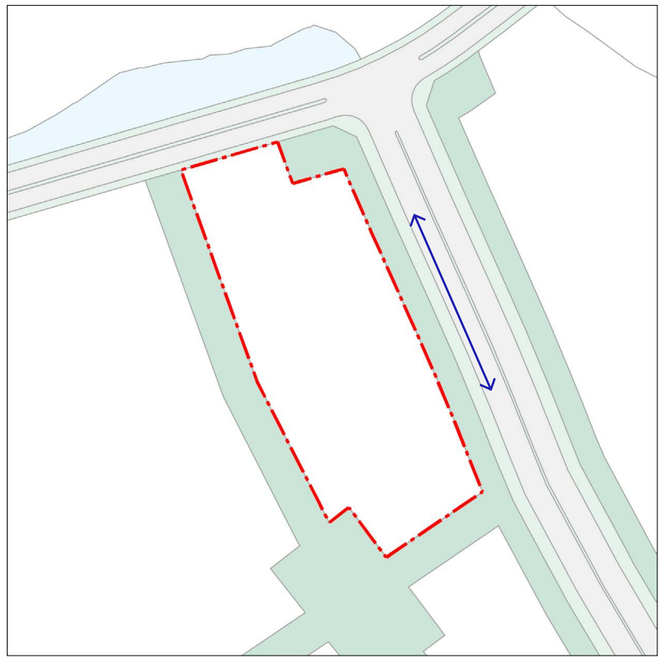
Planning Area Boundary
30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
Mandatory Commercial Facade along the Ground Level
Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



Planning Area Boundary
Mandatory Building Lines (40% Articulation)
Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



Planning Area Boundary
Vehicular Ingress/Egress

2. HOTEL PARCEL-02

SITE CONTEXT

Plot H-01 is a hotel plot located at the entrance of the Intervention area with a site area of 5.1Ha. The development is situated at the intersection of a major road and the main boulevard, offering unparalleled accessibility and convenience. The junction's prominence offer high visibility and traffic flow, making it an ideal spot for commercial establishments and ensuring a vibrant, dynamic environment for visitors.

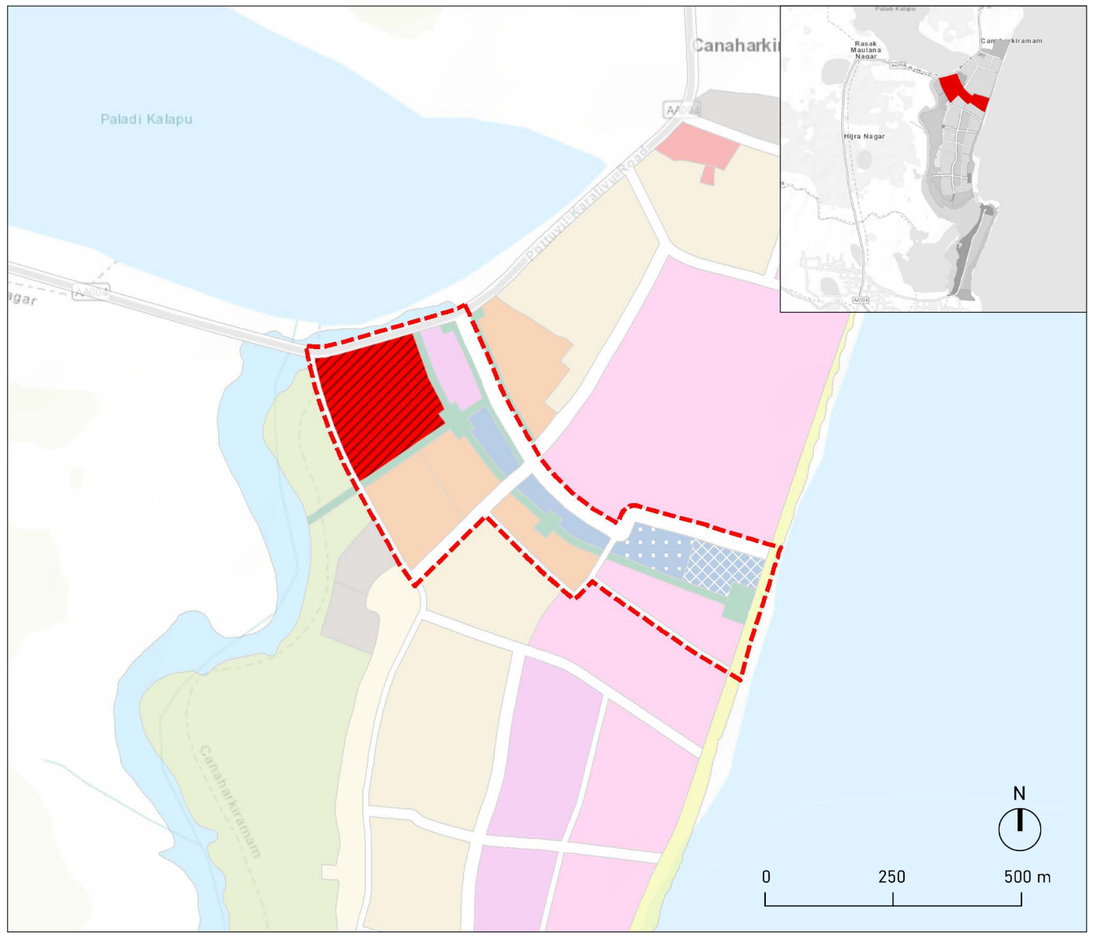
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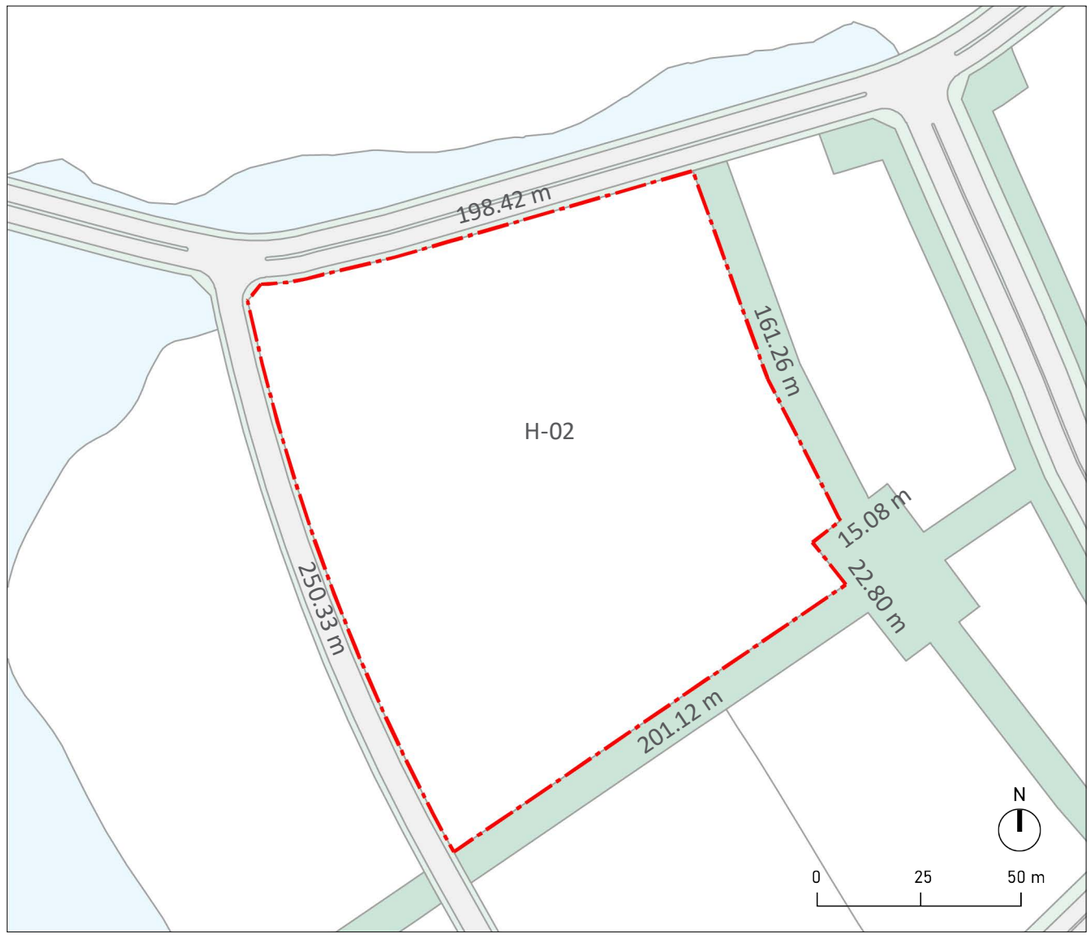
Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development includes a Hotel facility with fine dining, ballrooms and banquet halls etc.

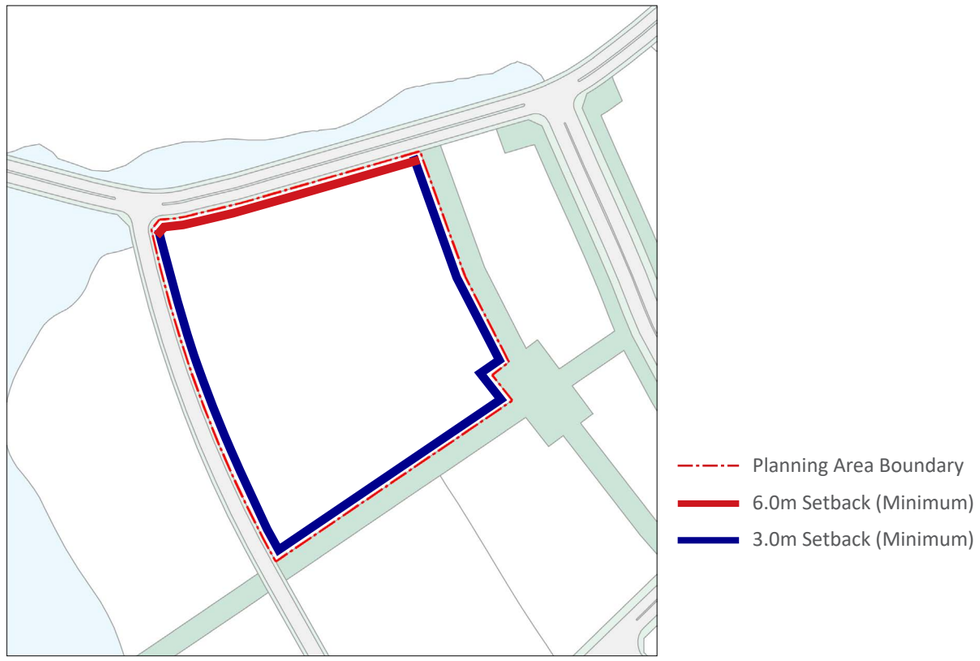
PLANNING PARAMETERS	
PLOT NUMBER	H-02
ALLOWABLE USE	HOTEL
PLOT AREA	5.1HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+3



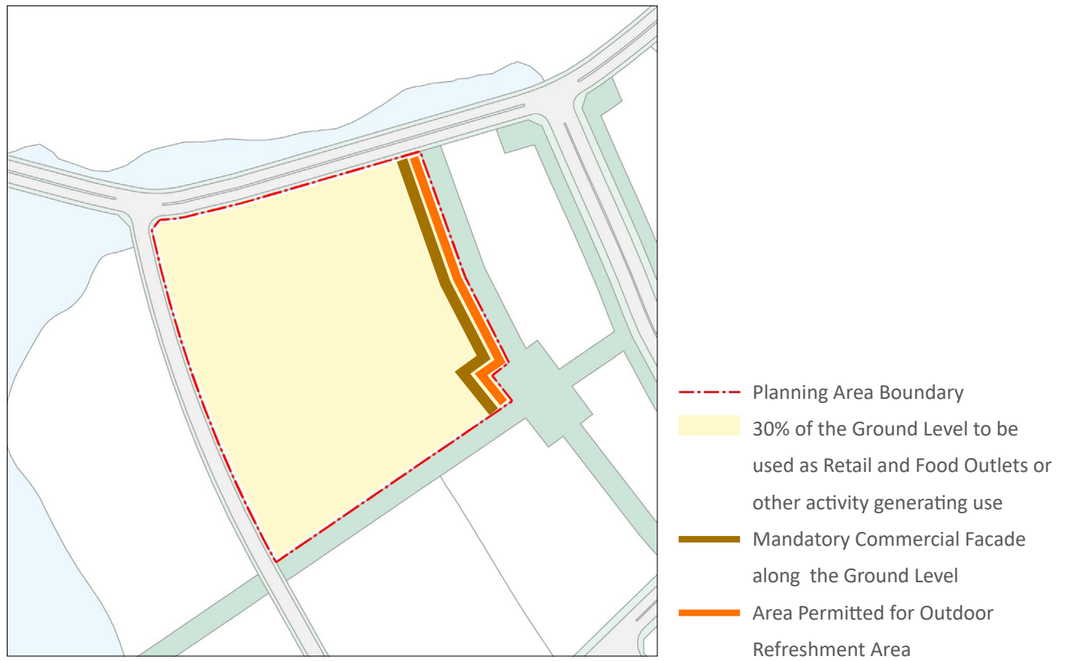


PLOT REGULATION

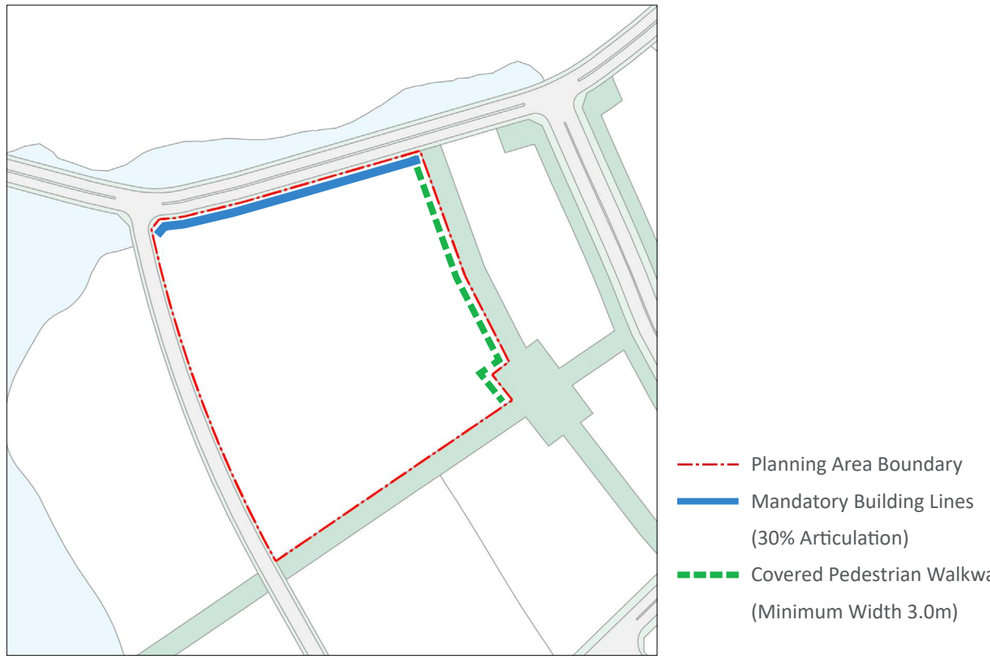
BUILDING SETBACK



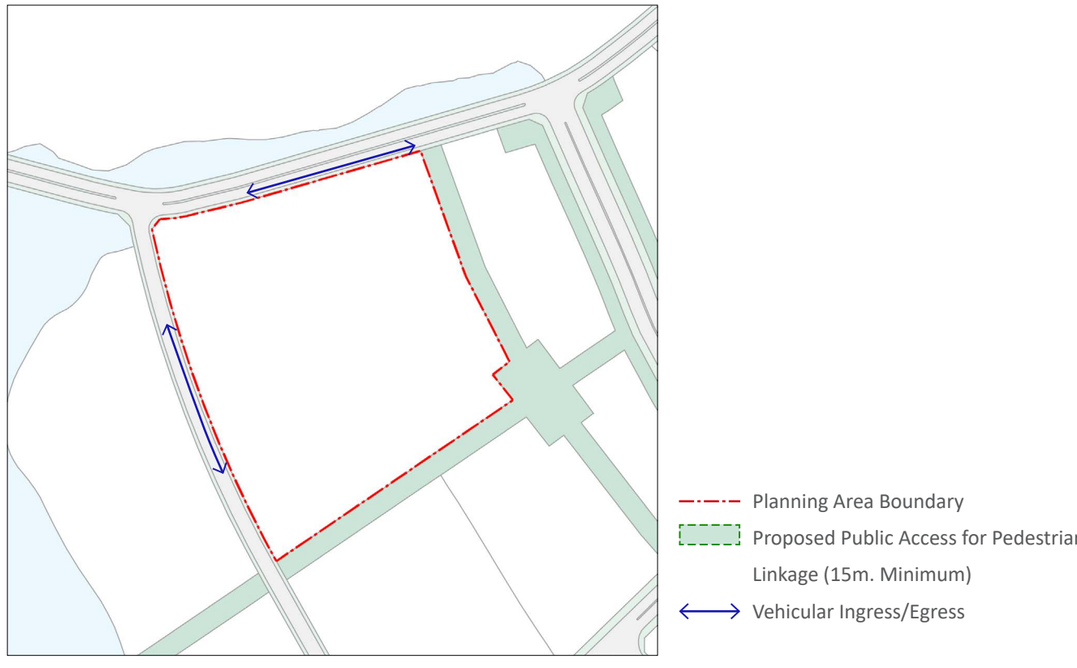
BUILDING USE



BUILDING EDGE & COVERED WALKWAY



PUBLIC AND VEHICULAR ACCESS

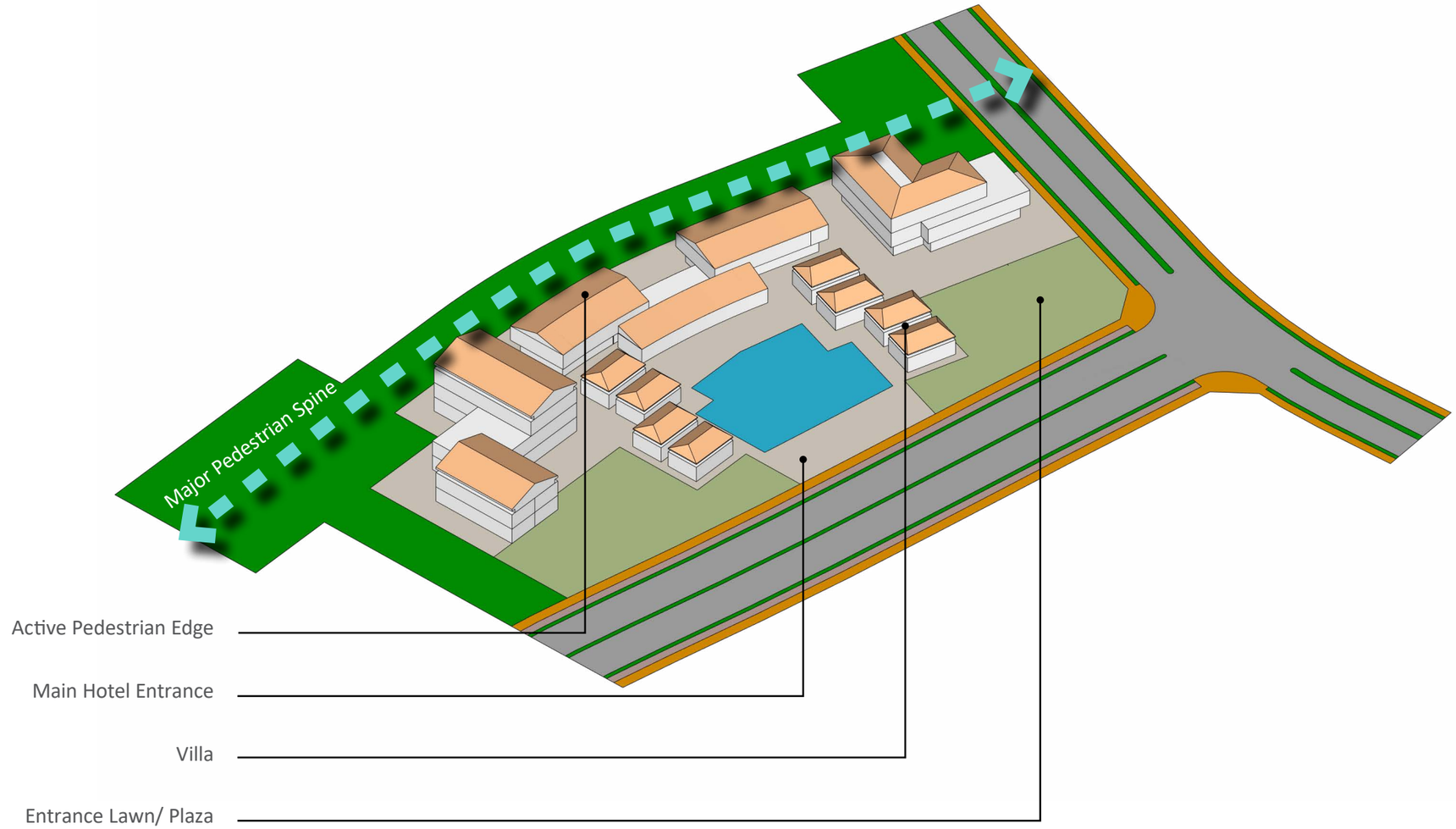


PROJECT BRIEF

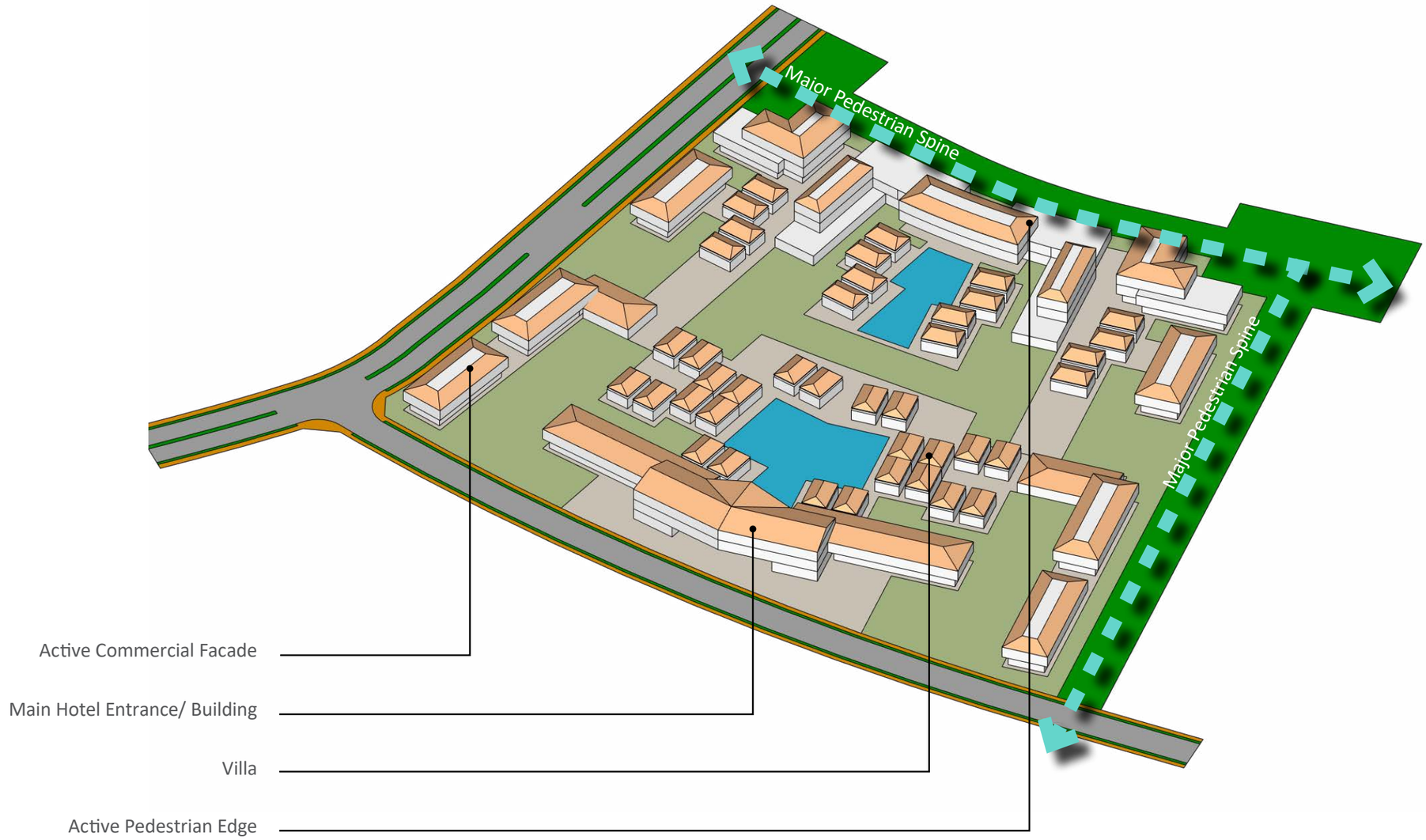
1.	Project Title	Hotel Parcel- H-01 & H-02
2.	Project Location	Whisky Point Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	5.1 Ha
4.	Location of the Land	Located at UD intervention area of Whisky Point Beach
5.	Ownership Detail of the Land	Land distributed under various Grants
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Cost of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Revenue Share
14.	Required Consents	Consent required from relevant organizations for project implementation.
11.	Project Objectives	Objective 1 **Enhance Guest Experience:** Provide high-quality accommodations and services that cater to both leisure and business travelers, ensuring a memorable and comfortable stay. Objective 2 **Increase Revenue Generation:** Capitalise on the high foot traffic and demand in the core tourism area to drive consistent occupancy rates and maximise profitability. Objective 3 **Contribute to Local Economic Growth:** Support the local economy by creating jobs, promoting local businesses, and attracting higher-spending tourists to the area.
12.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
13.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner

14.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period
15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 5.1 Ha 2. Phasing Targets: 0-5 years
17.	No. of Rooms	50-60 Rooms
18.	Land Cost	2.75 USD Mn
19.	Total Development Cost	13.4 USD Mn
20.	Revenue (30 years)	662 USD Mn
21.	IRR for 30 years	21.5%
22.	IRR for 30 years without land cost	24%
23.	Break even (year)	8 years
24.	Stabilisation period(year)	6 years
25.	Project Outputs	Result/ Benefit for communities • Tourism: Attracts more visitors, increasing local business and service demand. • Creates Jobs: Generates employment opportunities in hospitality and related sectors. • Enhances Infrastructure: Improves local amenities and services for residents and guests. • Stimulates Local Economy: Drives spending in local businesses and markets. • Provides Recreation: Offers leisure and entertainment options for locals and tourists. • Supports Community Development: Contributes to improved public facilities and services.
26.	Planned Activities in Achieving Outputs	• Market Research: Analyses demand, competition, and target demographics. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Recruit and Train Staff: Hire and train employees for various roles in hospitality and management. • Market and Promote: Create marketing strategies to attract visitors and build brand awareness. • Launch Operations: Open the resort or hotel and begin day-to-day management. • Monitor and Improve: Track performance, gather guest feedback, and make necessary improvements.

27.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
28.	Risk Assumption	Not Required
29.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
30.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
31.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
32.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES
The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution



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3. COMMERCIAL PARCEL-01 (NIGHTMARKET)

SITE CONTEXT

Plot C-01 is a 1.3 HA commercial plot situated at the focal point of the major pedestrian spine and surrounded by secondary roads. This prime location makes it a central hub within the development, adjacent to key facilities such as the visitor center and hotel. Its proximity to these nodes enhances its commercial potential, making it ideal for retail, dining, and entertainment establishments.

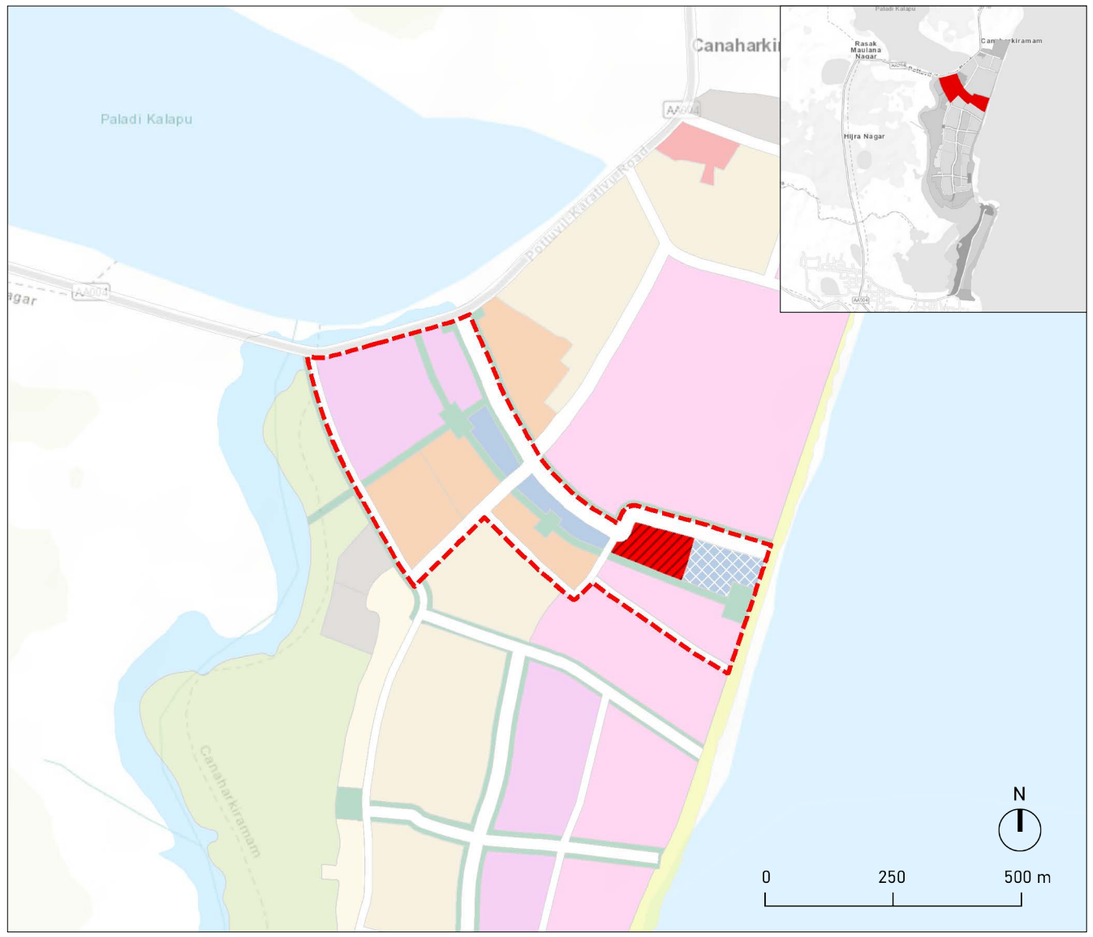
OBJECTIVE

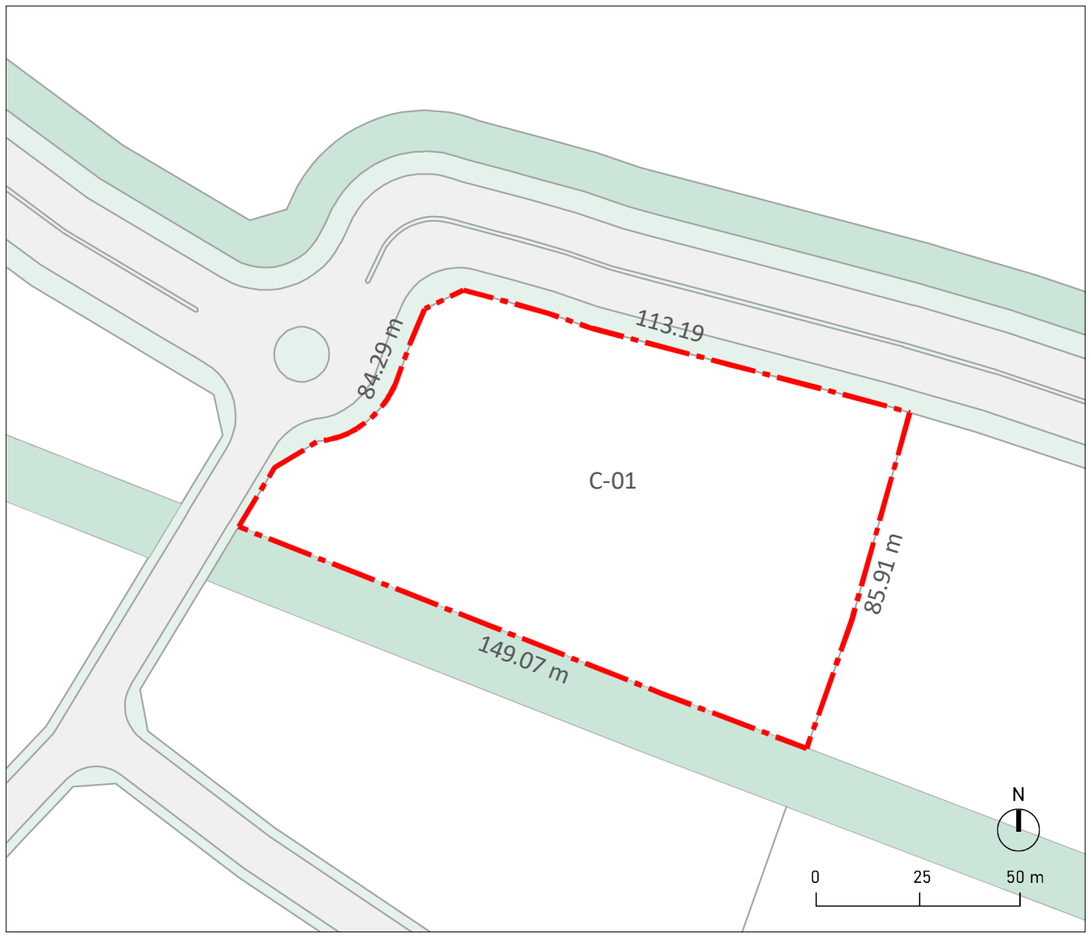
Situated at a key vantage point and serving as a major visual landmark, Plot C-01 will feature iconic architecture to enhance the area's identity and character.

DEVELOPMENT PROGRAMME

The program for Plot C-01 will include cafes, bars, various food and beverage establishments, retail shops, and other tourist-related commercial activities

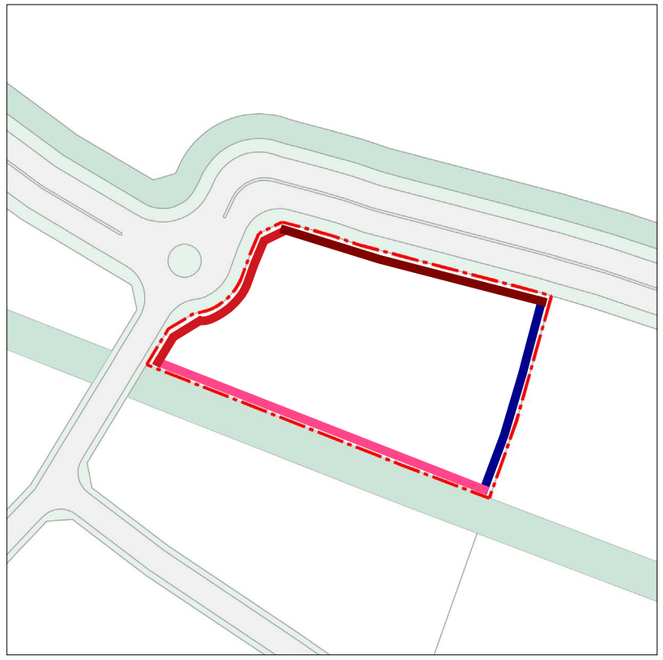
PLANNING PARAMETERS	
PLOT NUMBER	C-01
ALLOWABLE USE	RETAIL NIGHT MARKET
PLOT AREA	1.3 HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+1





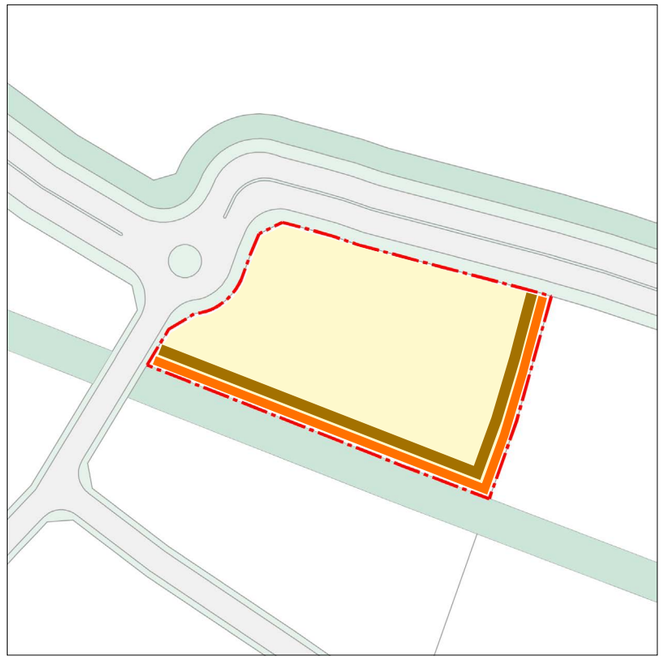
PLOT REGULATION

BUILDING SETBACK



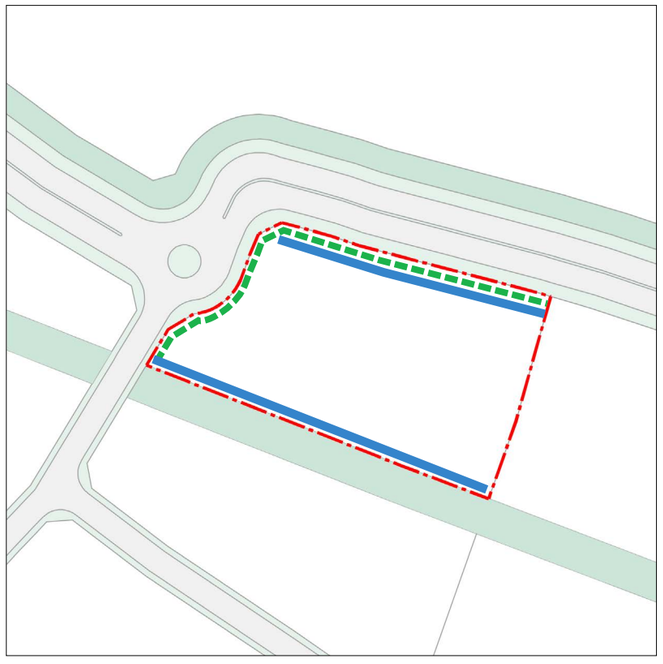
- Planning Area Boundary
- 15.0m Setback (Minimum) (Mandatory Pedestrian Area)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



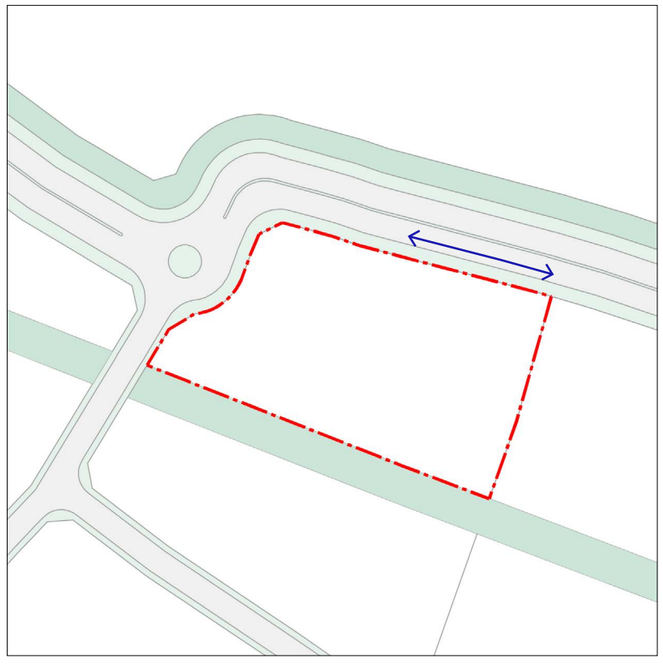
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



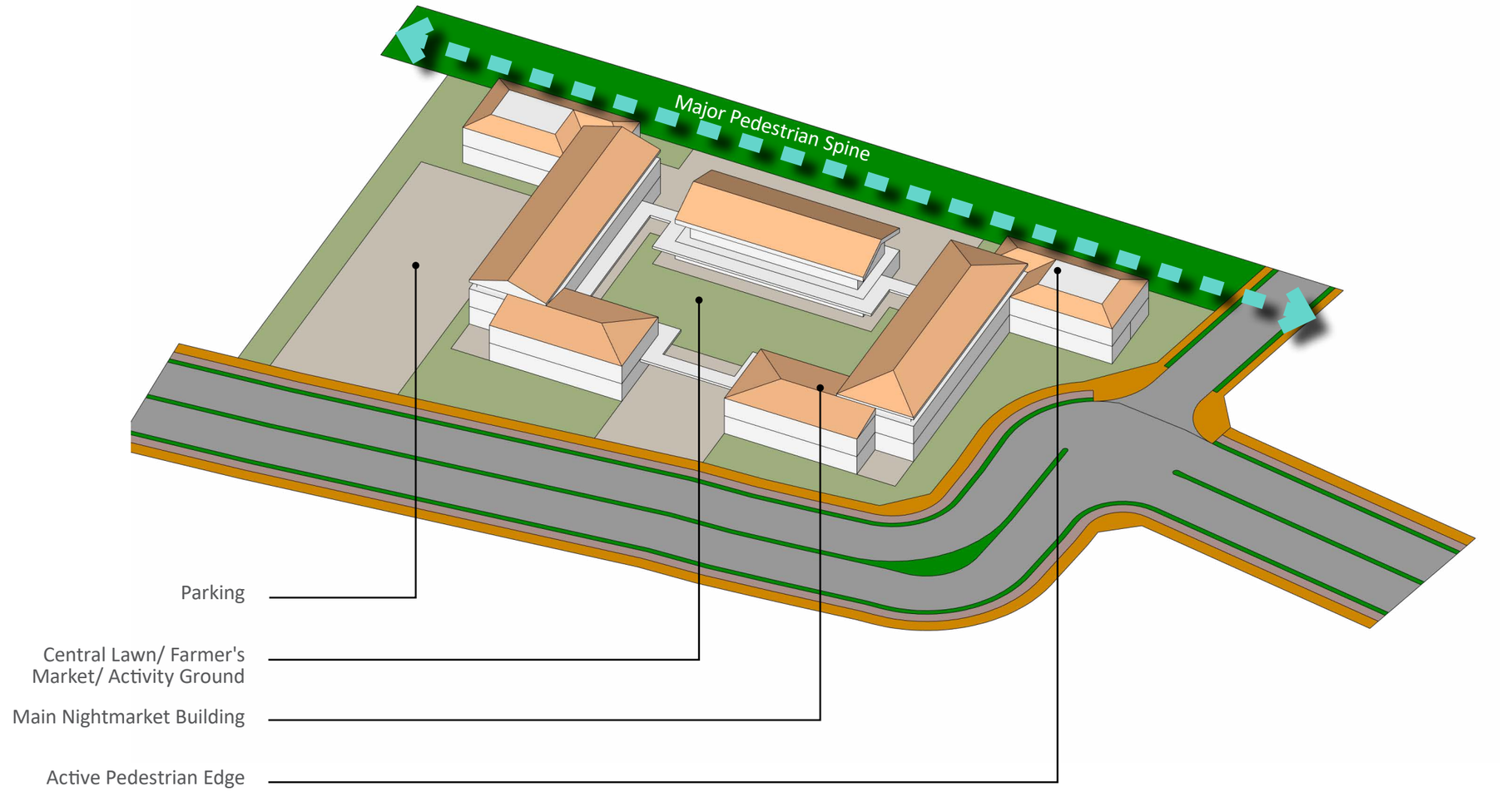
- Planning Area Boundary
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Commercial Parcel- 01 (Night Market)
2.	Project Location	Whisky Point Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	1.3 Ha
4.	Location of the Land	Located at UD intervention area of Whisky Point Beach
5.	Ownership Detail of the Land	Private Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Need to Purchase
7.	The Cost of Land if It's to be Purchased/ Acquire	0.7 – 0.9Mn USD/ hectare
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Revenue Share
14.	Required Consents	Consent required from relevant organizations for project implementation.
11.	Project Objectives	Objective 1 **Enhance Visitor Experience:** Create an iconic architecture and dynamic environment that seamlessly integrates hospitality, retail, dining, and entertainment options to provide a comprehensive and memorable experience for tourists. The goal is to increase visitor satisfaction and encourage longer stays. Objective 2 **Promote Economic Growth:** Foster a vibrant local economy by attracting both tourists and residents through a mix of commercial, residential, and recreational spaces. This encourages business development, creates job opportunities, and stimulates local spending. Objective 3 **Sustainable Urban Development:** Implement eco-friendly design and construction practices to ensure the development aligns with environmental sustainability goals. Priorities energy efficiency, green spaces, and public transportation options to minimise the environmental impact and support long-term ecological balance.
12.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
13.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner

14.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period
15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 2.0Ha 2. Phasing Targets: 0-5 years
17.	Land Cost	0.89 USD Mn
18.	Total Development Cost	5.4 USD Mn
19.	Revenue (30 years)	45 USD Mn
20.	IRR for 30 years	16.2%
21.	IRR for 30 years without land cost	18%
22.	Break even (year)	9 years
23.	Stabilisation period(year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Economic Growth: Boosts local businesses and creates job opportunities. • Tourist Attraction: Draws visitors, increasing foot traffic and spending in the area. • Cultural Exchange: Showcases local crafts, food, and traditions to tourists. • Community Engagement: Provides a vibrant space for local events and social interactions. • Increased Revenue: Generates additional income for vendors and local services. • Enhanced Experience: Enriches the visitor experience with diverse shopping and dining options.
25.	Planned Activities in Achieving Outputs	• Market Design: Plan and develop layout and infrastructure for the retail and night market. • Vendor Recruitment: Identify and invite local vendors and artisans to participate. • Regulatory Compliance: Ensure adherence to local regulations and obtain necessary permits. • Marketing and Promotion: Promote the market through advertising, social media, and tourism channels. • Event Scheduling: Organise and schedule market events, performances, and special activities. • Facility Management: Set up and maintain facilities, including stalls, lighting, and sanitation. • Community Engagement: Involve local stakeholders and community members in planning and execution. • Feedback Collection: Gather and analyses visitor and vendor feedback to refine and improve the market.

26.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
27.	Risk Assumption	Not Required
28.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
29.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
30.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
31.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

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COMMERCIAL PARCEL-02 (BEACH FRONT ENTERTAINMENT)

SITE CONTEXT

Plot C-01 is located at the junction of beach and a secondary road, offering a prime site area of 1.12 Ha. This plot benefits from its adjacency to a vibrant beach park, providing easy access to recreational activities and scenic views. The location's blend of natural beauty and upscale amenities makes it an ideal spot to host tourism and hospitality facilities.

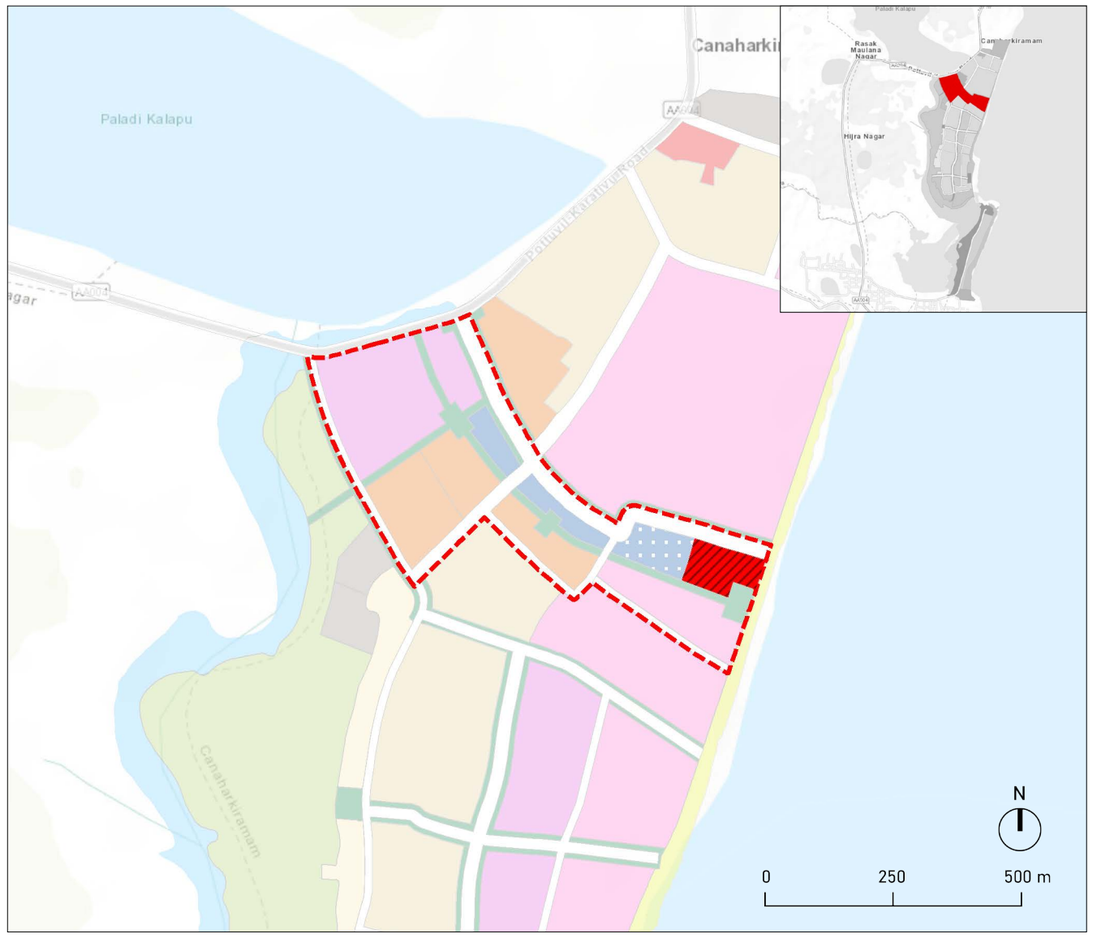
OBJECTIVE

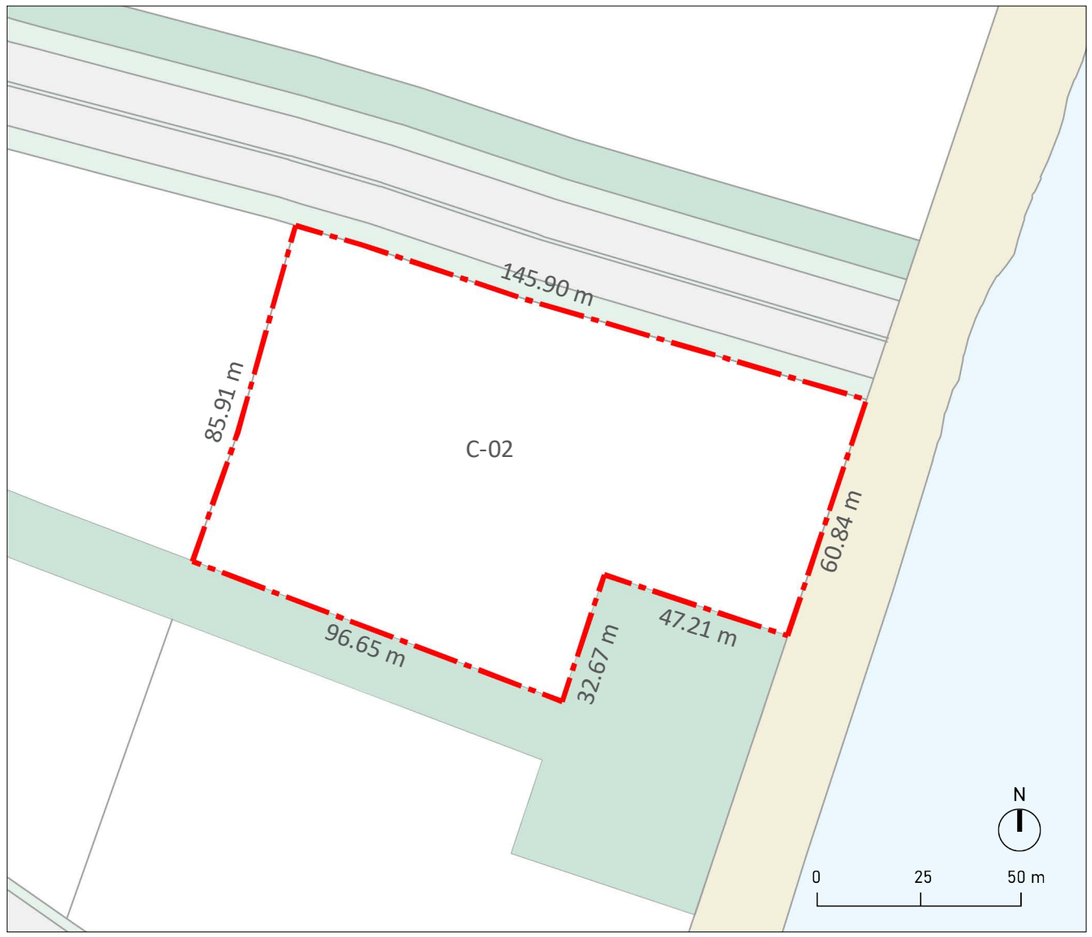
Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development includes a commercial facility and entertainment such as entertainment ground, beach club etc.

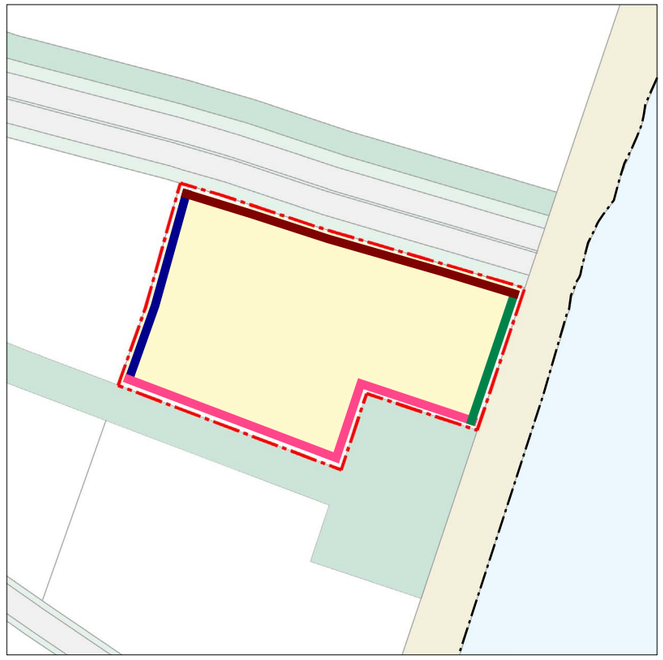
PLANNING PARAMETERS	
PLOT NUMBER	C-02
ALLOWABLE USE	BEACH FRONT ENTERTAINMENT
PLOT AREA	1.2HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2





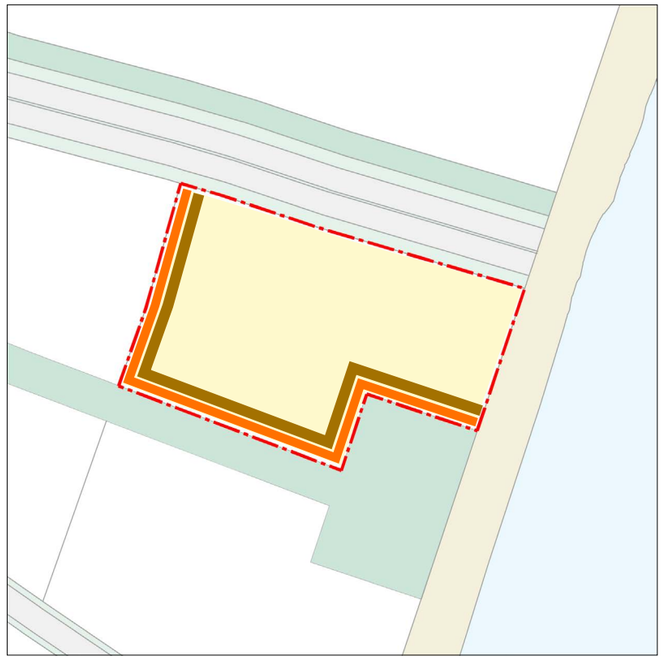
PLOT REGULATION

BUILDING SETBACK



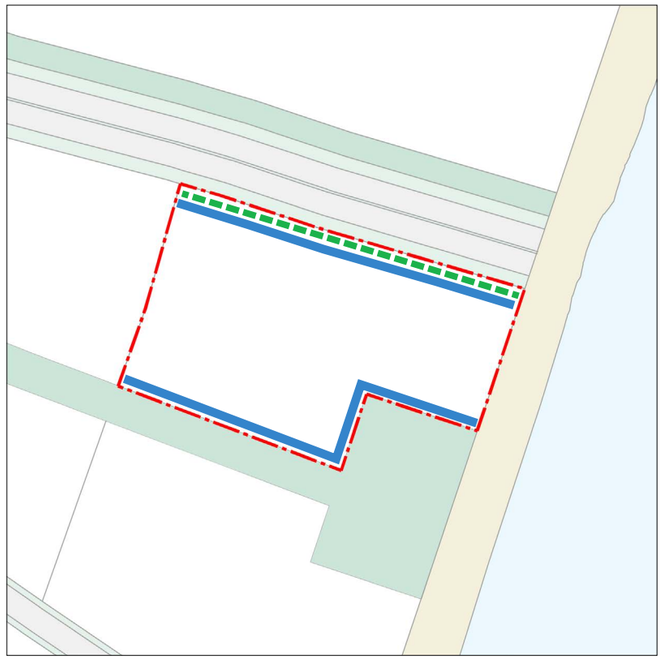
- Planning Area Boundary
- Indicative PVL
- 60.0m Setback from Indicative PVL Line (Subject to CCD Approval)
- 15.0m Setback (Minimum) (Mandatory Pedestrian Area)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



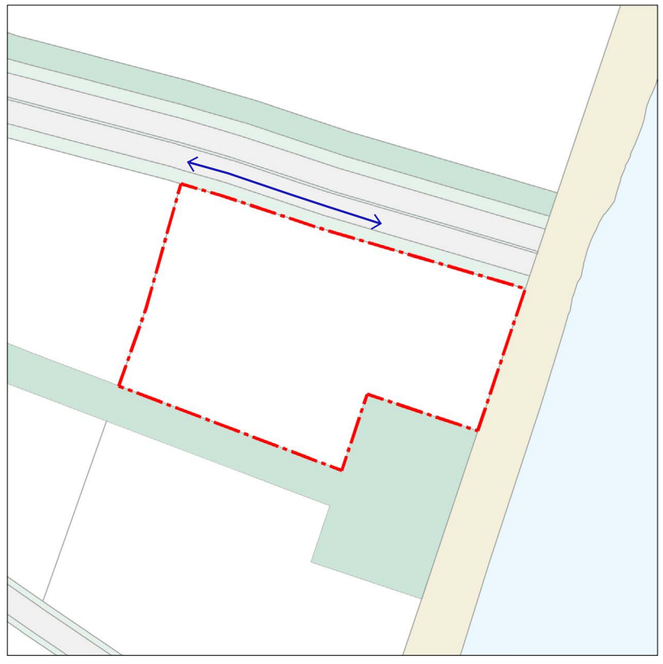
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



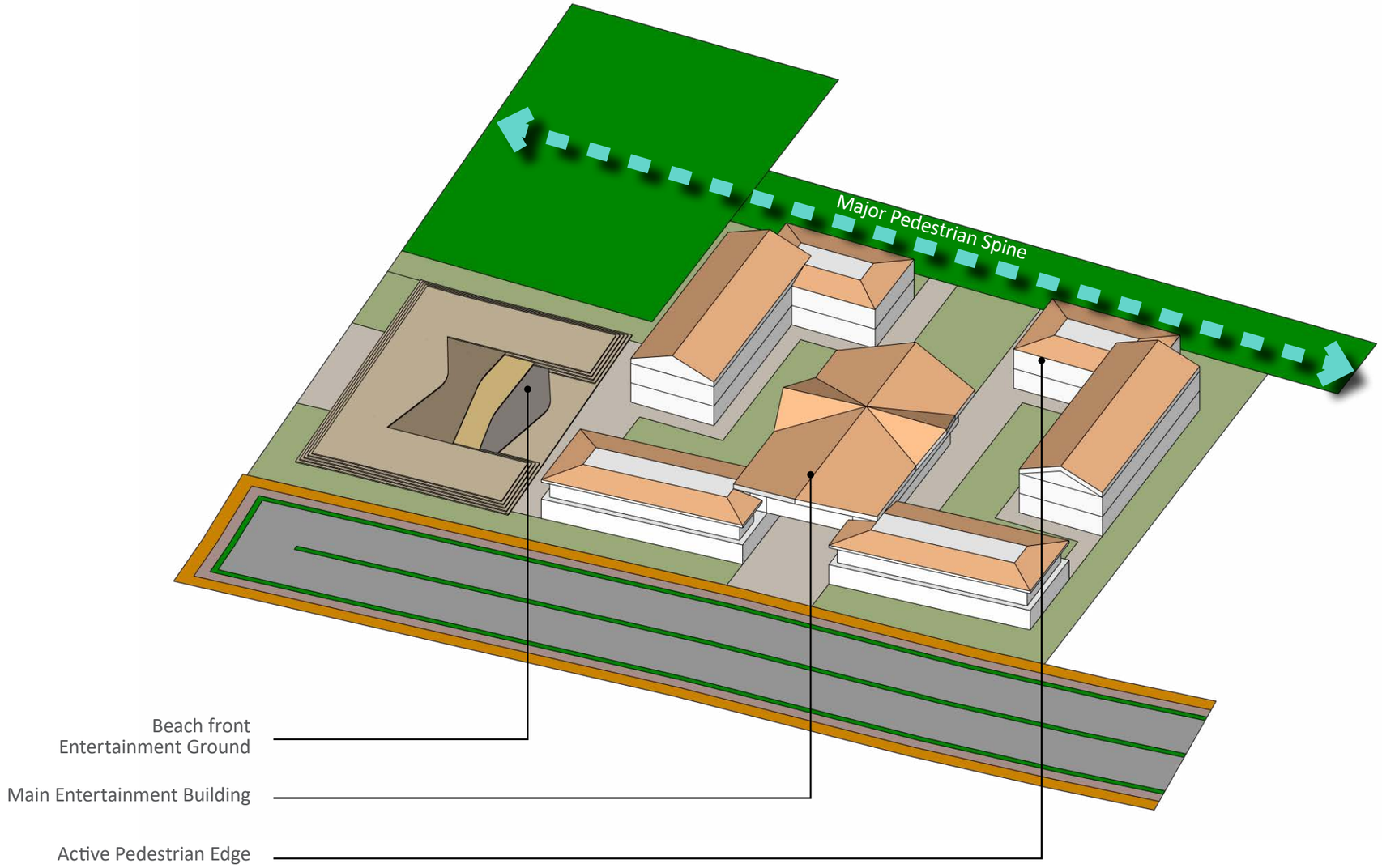
- Planning Area Boundary
- Proposed Public Access for Pedestrian Linkage (15m. Minimum)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Commercial Parcel-02 (Beach front Entertainment)
2.	Project Location	Whisky Point Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	1.2Ha
4.	Location of the Land	Located at UD intervention area of Whisky Point Beach
5.	Ownership Detail of the Land	Private Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Need to Purchase
7.	The Cost of Land if It's to be Purchased/ Acquire	0.7 – 0.9 Mn USD/ hectare
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	Long term lease with Revenue Share
15.	Project Objectives	Objective 1 **Enhance Visitor Experience:** Create a diverse range of entertainment options, including water sports, live performances, and family-friendly activities, to provide a memorable and engaging experience for all visitors. Objective 2 **Boost Local Economy:** Attract tourists and locals by developing unique beach front attractions, thereby increasing foot traffic, supporting local businesses, and generating revenue for the community. Objective 3 **Attract Year-Round Tourism:** Design and implement seasonal events, festivals, and indoor activities that draw visitors throughout the year, reducing the seasonality of beach front tourism and ensuring a steady stream of revenue.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
18.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period

19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 1.1Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	0.97 USD Mn
22.	Total Development Cost	5 USD Mn
23.	Revenue (30 years)	41.4 USD Mn
24.	IRR for 30 years	16%
25.	IRR for 30 years without land cost	18%
26.	Break even (year)	9 years
27.	Stabilisation period(year)	6 years
28.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Increased Property Values: Raises value of nearby properties. • Promote Tourism: Transforms the surroundings and Attracts visitors through enhanced retail, dining, and entertainment options. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
29.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.
30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities

31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
20.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

5. COMMERCIAL PARCEL-03(RETAIL)

Site Context

Commercial plot C-03 is strategically located between a pedestrian spine and a secondary road, surrounded by a vibrant mix of uses, including hotels and a night market.

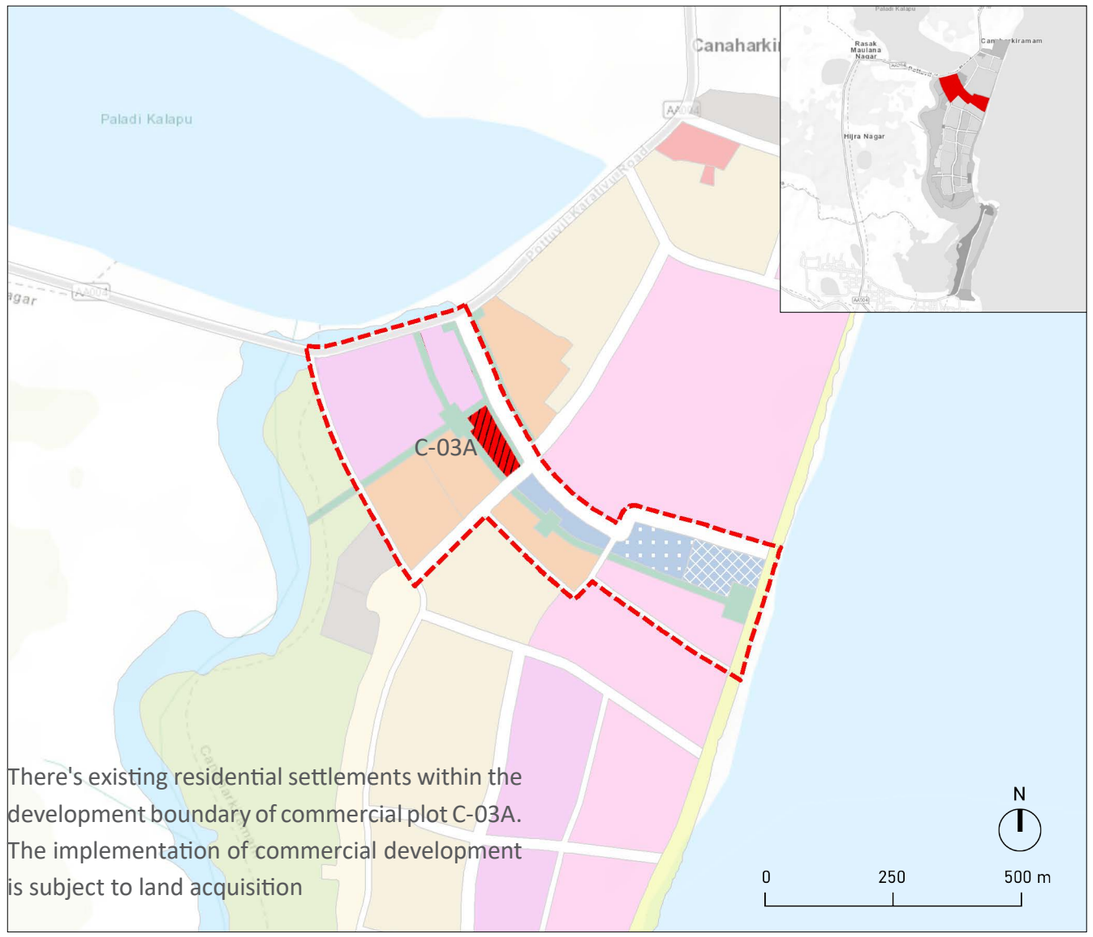
OBJECTIVE

Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development includes a commercial facility such as F&B cafe and shops.

PLANNING PARAMETERS	
PLOT NUMBER	C-03 A & B
ALLOWABLE USE	COMMERCIAL
PLOT AREA	1.3HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2



There's existing residential settlements within the development boundary of commercial plot C-03A. The implementation of commercial development is subject to land acquisition



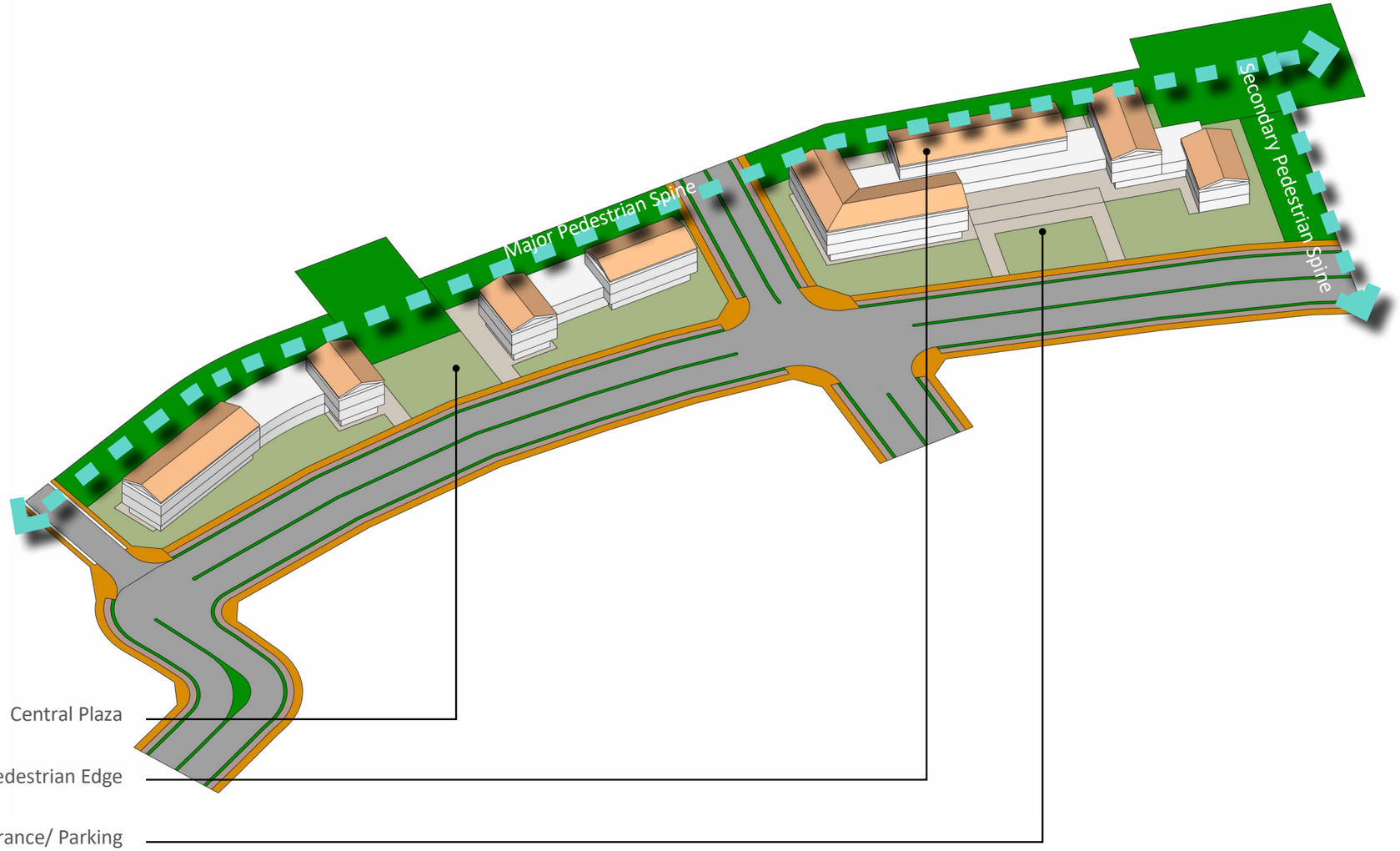
There's existing residential settlements within the development boundary of commercial plot C-03B. The implementation of commercial development is subject to land acquisition

PROJECT BRIEF

1.	Project Title	Commercial Parcel-03 A&B (Retail)
2.	Project Location	Whisky Point Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	1.3 Ha
4.	Location of the Land	Located at UD intervention area of Whisky Point Beach
5.	Ownership Detail of the Land	Private Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Need to Purchase
7.	The Cost of Land if It's to be Purchased/ Acquire	0.7 – 0.9 Mn USD/ hectare
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Revenue Enhancer
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long Term Lease with Annual Concession Fee (ACF)
14.	Required Consents	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhance Revenue Generation:** Optimise tenant mix, retail space allocation, and customer experience to ensure high foot traffic, increased sales, and long-term profitability for retailers and property owners. Objective 2 **Enhance Customer Experience and Attraction:** Create an attractive, modern, and accessible retail environment with amenities, services, and entertainment options to increase customer engagement, encourage repeat visits, and build brand loyalty. Objective 3 **Sustainability and Long-Term Viability:** Integrate sustainable building practices, energy-efficient systems, and flexible design to accommodate future growth, reduce environmental impact, and ensure the development remains relevant and resilient over time.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
13.	Role of Government	• Land ownership lies with the government • Collects revenue share from Partner
14.	Role of Partner	• Design, build, fund and operate and generates revenue until the concession period • Provides revenue share to the Government • Returns the land and building to UDA after concession period

15.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
16.	Project Outcomes	1. Total Land Area: 1.1Ha 2. Phasing Targets: 0-5 years
17.	Land Cost	1.05 USD Mn
18.	Total Development Cost	5.4 USD Mn
19.	Revenue (30 years)	45 USD Mn
20.	IRR for 30 years	16%
21.	IRR for 30 years without land cost	18%
22.	Break even (year)	9 years
23.	Stabilisation period(year)	5 years
24.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Increased Property Values: Raises value of nearby properties. • Promote Tourism: Transforms the surroundings and Attracts visitors through enhanced retail, dining, and entertainment options. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
25.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.

26.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
27.	Risk Assumption	Not Required
28.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
29.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
30.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

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6.8 SURFER'S HAVEN- ARUGAM BAY

6.8.1 SITE CONTEXT



① Panama Road



② Existing Dirt Road



③ Panama Road @ Intervention Area Entrance



④ Cemetery Road



Figure 6.71 Key Intervention Area (Arugam Bay)

LAND OWNERSHIP

The land ownership within the Arugam Bay intervention area can be categorised into three distinct types: State Lands, lands distributed under various grants, and private land.

In the intervention area, most of the land is categorised either as State Land or as land distributed through various grants. State Land predominantly includes environmentally sensitive areas, such as low-lying wetlands and sand dunes, which are crucial for maintaining ecological balance. On the other hand, land distributed through grants is mostly developed and utilised by existing settlements.

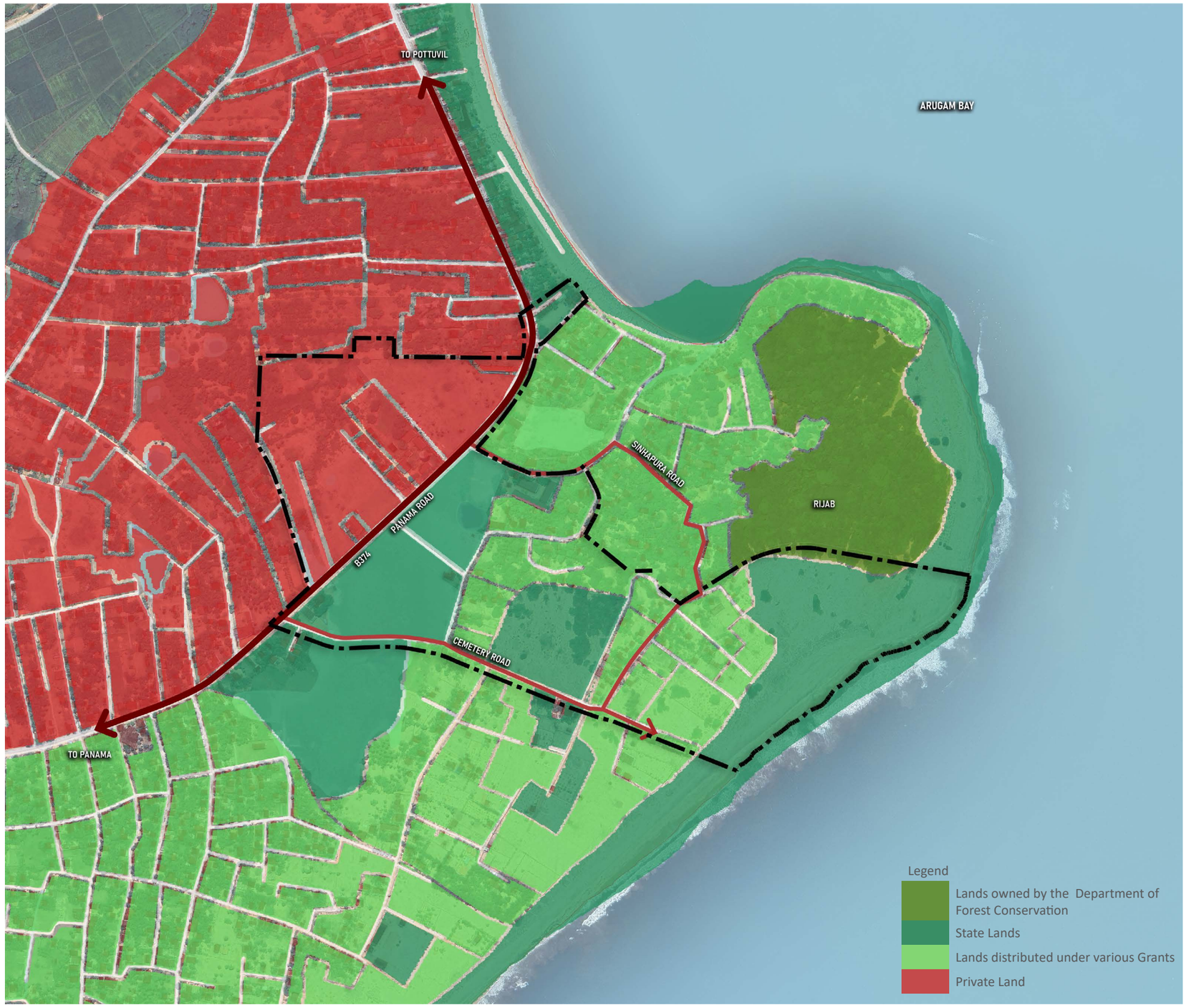


Figure 6.72 Land Ownership (Arugam Bay Intervention Area)

SURFER HAVEN @ ARUGAM BAY

The Arugam Bay intervention area is envisioned as a surfer's paradise, offering world-class facilities tailored for surfers of all levels. The proposed land use is distinctly divided into two main categories: accommodation and surfer-support facilities. Accommodations include mid-range hotels and luxurious resorts, providing a range of options to suit various preferences and budgets. The facilities section encompasses a variety of commercial components designed to enhance the surfing experience, such as the Surfer Paradise complex, entertainment centers, and visitor centers. Additionally, a green corridor seamlessly connects the beach front to the lagoon front, ensuring an integrated and environmentally harmonious development.

	Proposed Land Use	Area (Ha)	%
	Beach Area	3.37	8%
	Commercial Art Estate	0.30	1%
	Commercial Art Estate	1.36	3%
	Commercial Entertainment	1.93	5%
	Commercial Surfer Paradise	1.83	4%
	Hotel	3.97	10%
	Resort	4.89	12%
	Residential Low Density	2.66	6%
	Green Open Space	2.70	7%
	Mixed Use	0.34	1%
	Public Facilities	6.09	15%
	Road	5.35	13%
	Sand dune	3.49	8%
	Waterbodies	3.07	7%
	Total	41.35	

Table 6.22 Proposed Land Use Distribution (Arugam Bay Intervention Area)

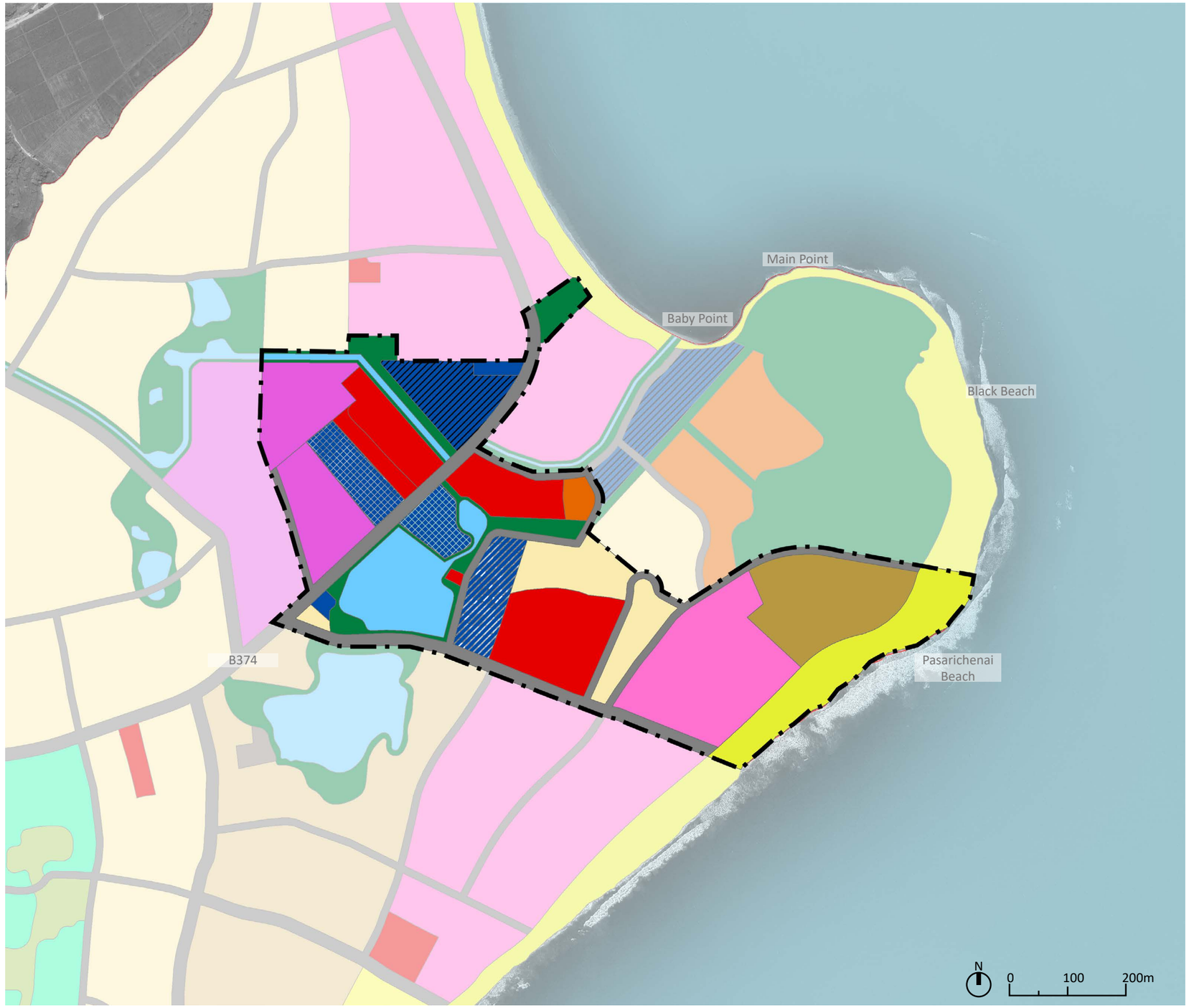


Figure 6.73 Proposed Land Use Plan (Arugam Bay Intervention Area)

6.8.2 ARTIST'S IMPRESSION



ARUGAM BAY – WHISKY POINT
SURFING PARADISE OF THE EAST

Be a haven for surfers of all levels, offering comprehensive facilities from top-tier equipment rentals to professional surfing schools. Beyond the waves, a vibrant commercial area seamlessly blends with nature, supporting the entire Arugam Bay region with various shops, restaurants, and services. This prime surf destination will cater to thrill-seekers riding the waves and captivate visitors with its diverse archaeological sites and rich natural assets, making it a unique and multifaceted travel experience. With these attractions, the goal is to transform this area into a diverse tourism hub and an eco-centric beach destination, attracting visitors from around the world.



Figure 6.74 View-1 to Retail, Nightmarket and Entertainment

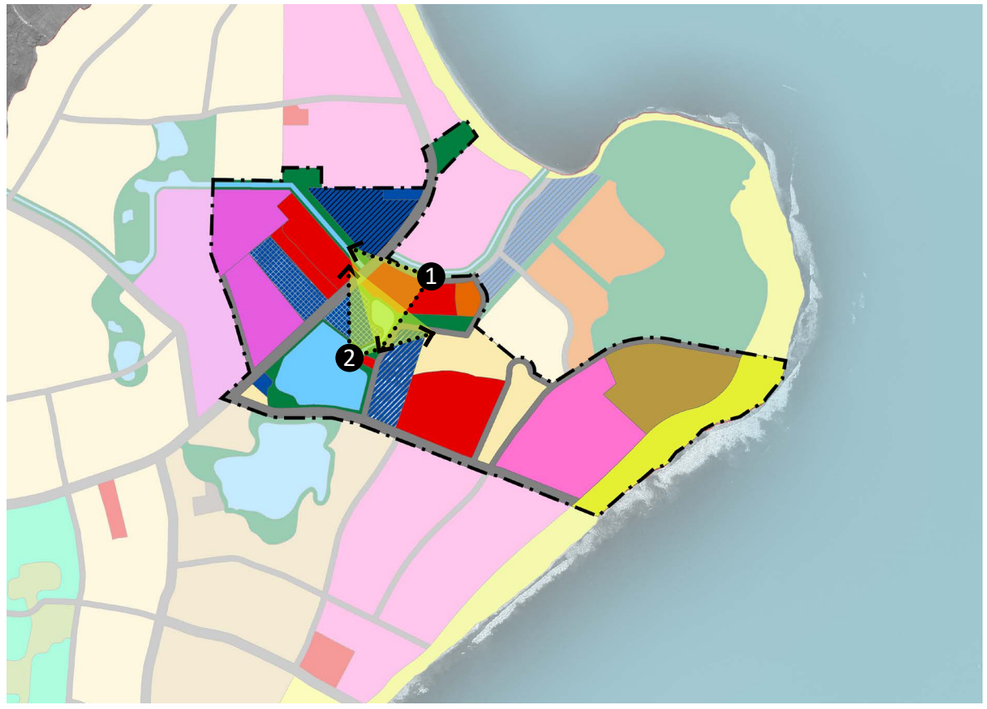




Figure 6.75 View-2 Overlooking Retail, Nightmarket and Entertainment to the Beach

6.8.3 URBAN DESIGN CONCEPT

The major anchor nodes of the Arugam Bay intervention area are the beach front, lagoon front, and internal green connectivity points. These nodes are seamlessly linked by expansive public spaces, ensuring constant connectivity throughout the development. While the primary road accommodates vehicular circulation, it is also designed to function as a significant public space, featuring ample pedestrian areas to facilitate movement. Active edges along this thoroughfare will enhance the vibrancy of the area, attracting visitors with dynamic commercial activities and recreational options. Important landmark buildings and facilities will be strategically placed along the road, creating a lively and cohesive environment that promotes accessibility, engagement, and a vibrant community



Figure 6.76 Urban Design Concept (Arugam Bay Intervention Area)

6.8.4 PARCELLATION STRATEGIES

To optimise the proposed development program, some existing parcels will be amalgamated, while others will be subdivided to address the suitability concerns of the current land configuration. Meanwhile, parcels that already align with the development objectives will remain unchanged to ensure efficient land use and maximise the potential of each parcel, facilitating the seamless integration of new facilities and amenities within the intervention area.

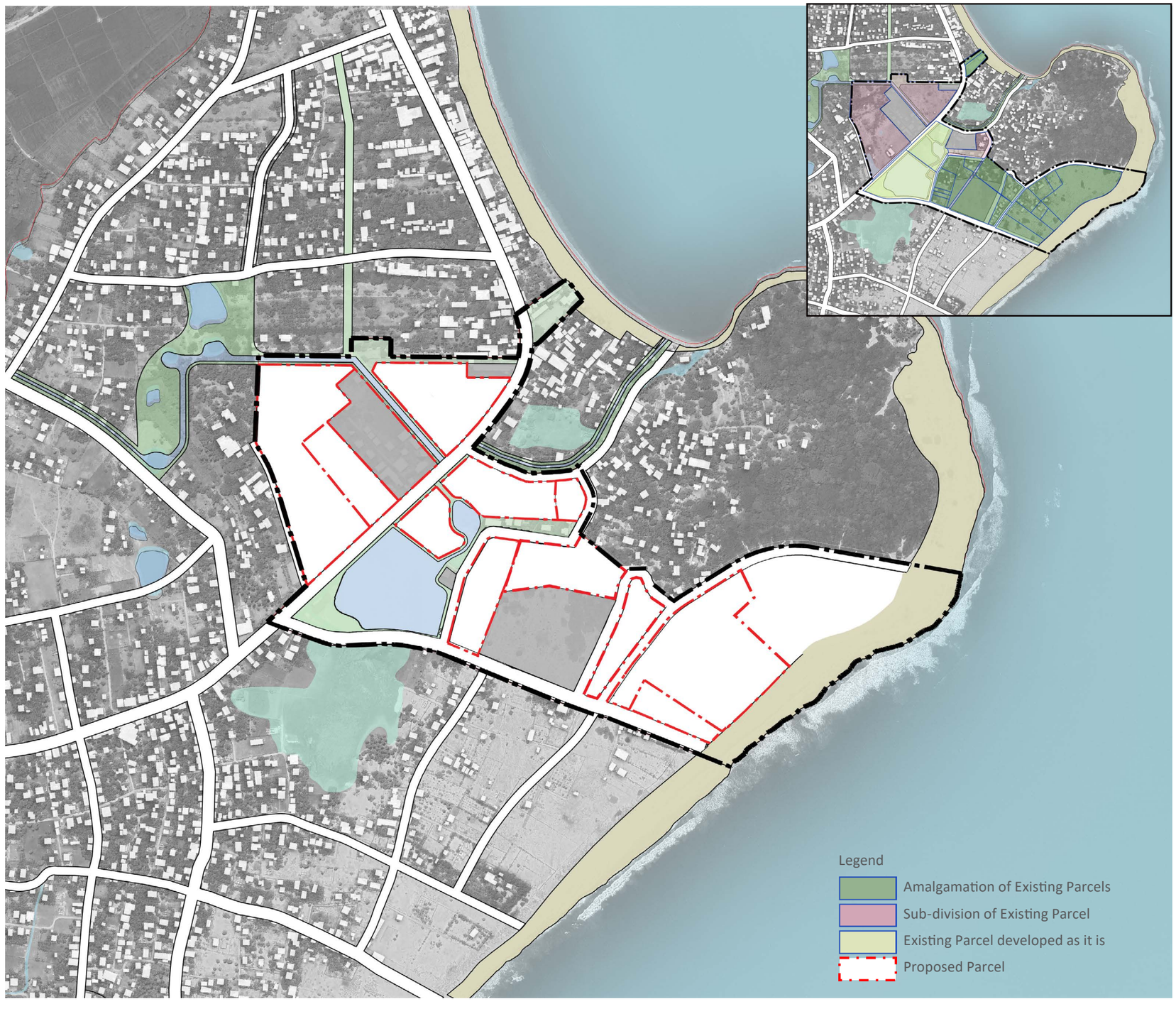
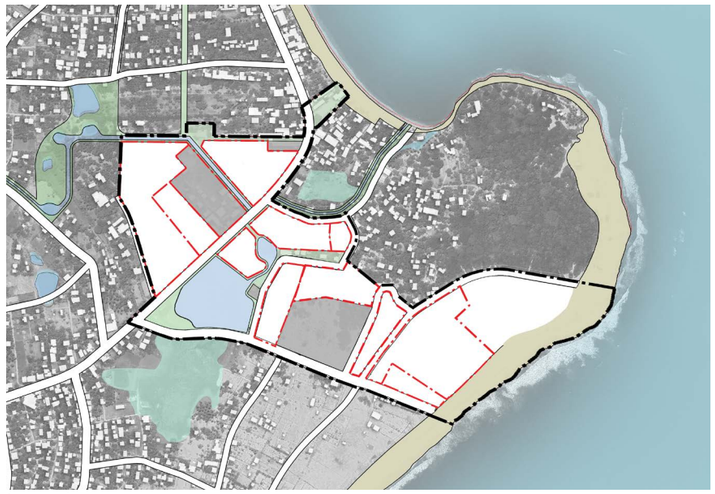


Figure 6.77 Parcellation Strategies (Arugam Bay Intervention Area)

6.8.5 URBAN DESIGN GUIDE PLANS

PARCEL & BUILDING USE



Legend

Proposed Parcel

LANDMARKS & NODES

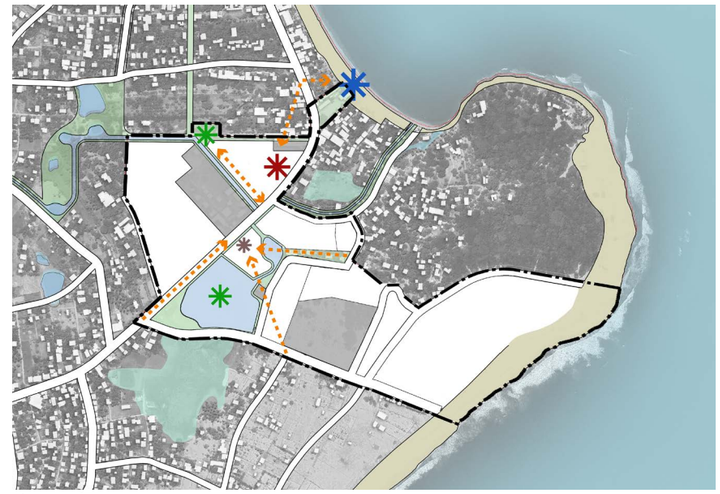


Legend

Oceanfront Landmark Plaza

Landmark Building

VIEWS AND VISTAS



Legend

Oceanfront Landmark Plaza

Landmark Building

Oceanfront Landmark Plaza

View and Vista

BUILDING EDGE & ACTIVITY GENERATION USES



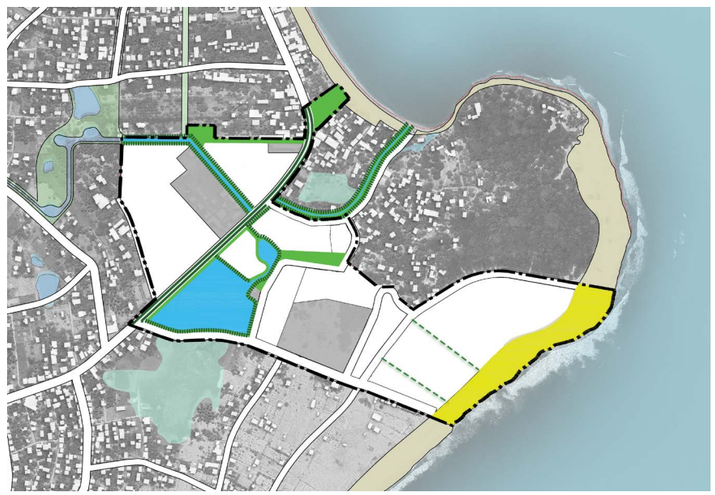
Legend

Active Edge

Plaza/ Open Space

Figure 6.78 Urban Design Guide Plans (Arugam Bay Intervention Area)

PUBLIC OPEN SPACES



Legend

Active Edge

Plaza/ Open Space

ACCESS & CIRCULATION



Legend

Vehicular Entrances

SECTIONS

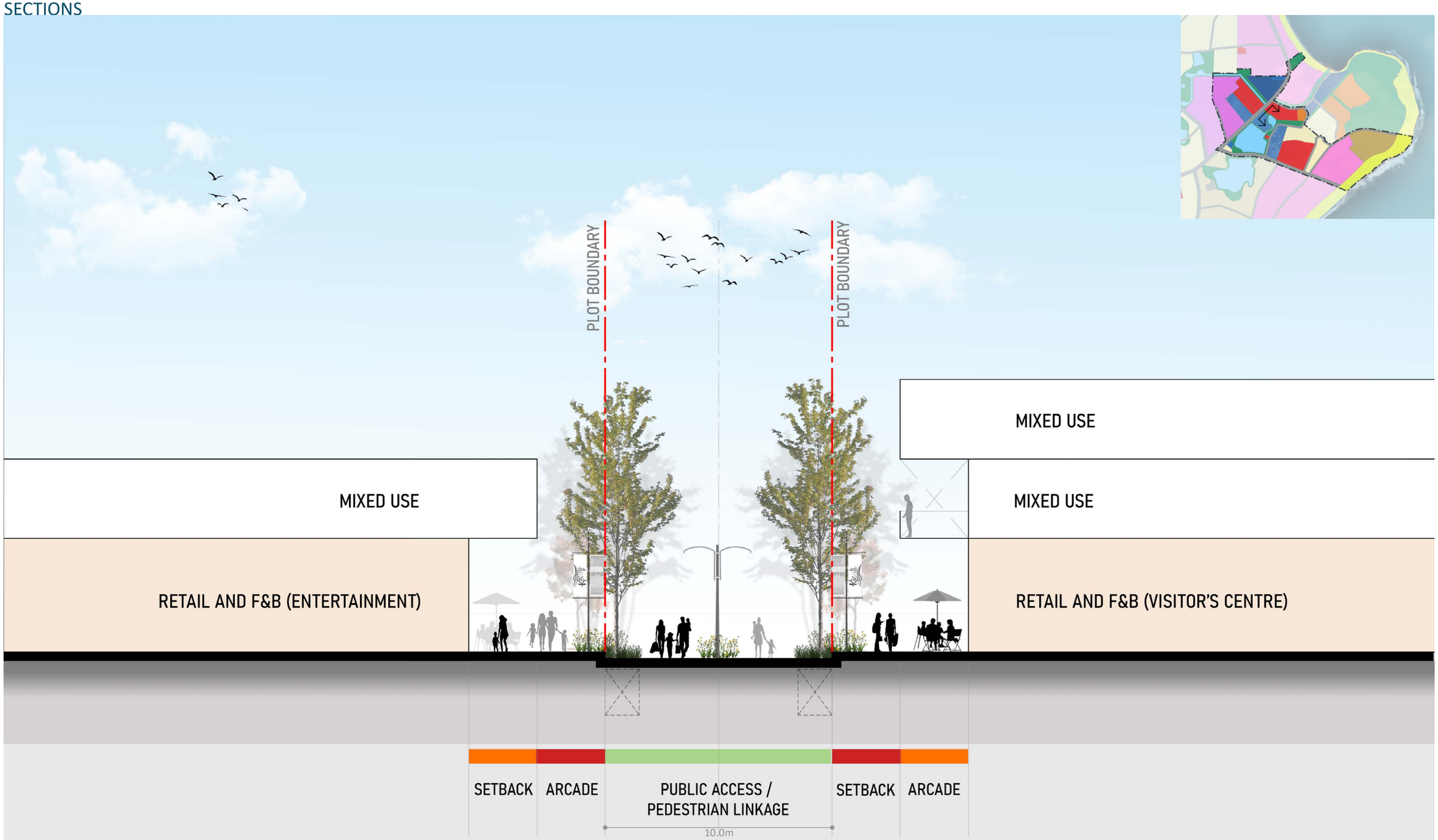


Figure 6.79 Overall Urban Design Section

6.8.6 PRIORITY PROJECTS

HIGH CASE SCENARIO

1. 3-4 Star Resort & Hotel

Site Area: 2.03Ha

Plot Ratio: 1.0

Bld Height: G+3

2. Surfer Paradise

Site Area: 1.83Ha

Plot Ratio: 1.0

Bld Height: G+1

3. Road Enhancement

Primary Road (21.5m)

Existing Road to be Upgraded- 607m

Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Primary Road	21.5	-	607	607

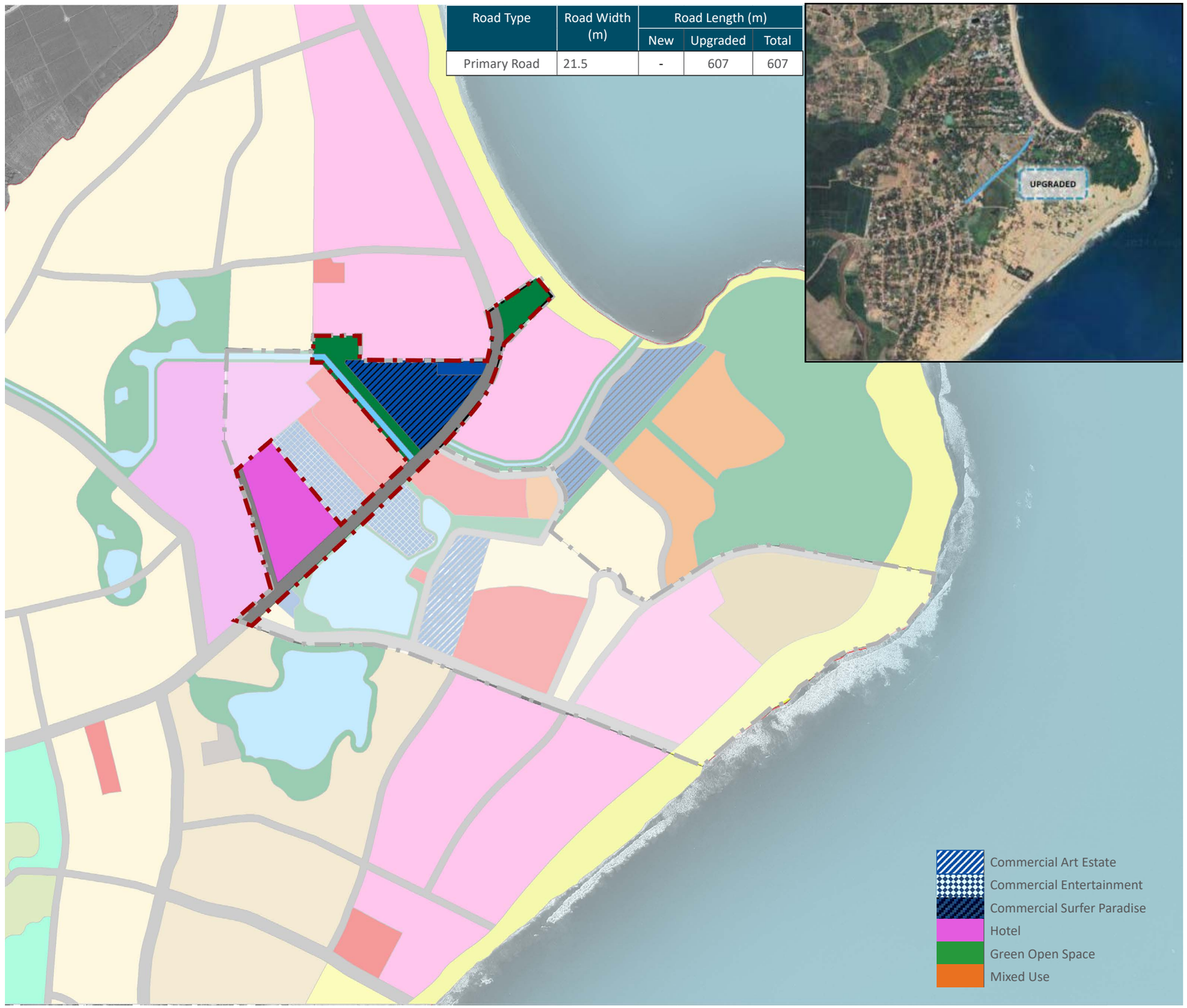


Figure 6.80 Priority Projects Arugam Bay Intervention Area (High Case Scenario)

LOW CASE SCENARIO

1. Surfer Paradise

Site Area: 1.83Ha

Plot Ratio: 1.0

Bld Height: G+1

2. Road Enhancement

Primary Road (21.5m)

Existing Road to be Upgraded- 293m

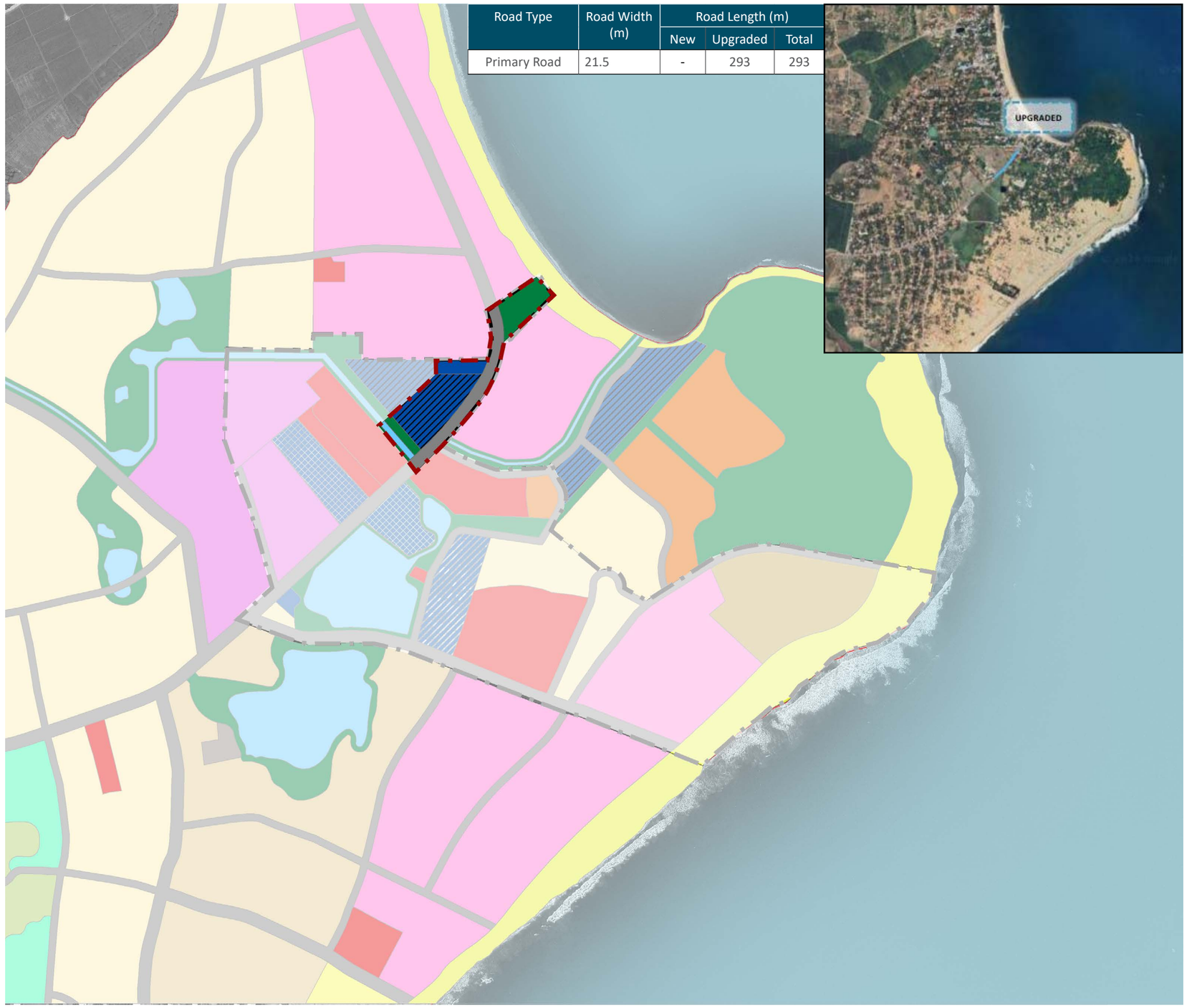


Figure 6.81 Priority Projects Arugam Bay intervention Area (Low Case Scenario)

6.8.7 PRIORITY PROJECTS DESIGN BRIEF GUIDELINES

Note: The proposed land use plan (PLU) is based on a high-case scenario to maximize opportunities for both the community and the region. Accordingly, project-level guidelines for priority initiatives have been developed in alignment with the PLU and the high-case scenario framework.



1. HOTEL PARCEL

SITE CONTEXT

Parcel H-01 is a 2.0-hectare hotel plot located on Panama Road. It offers stunning views of the wetland park directly in front of it. Surrounded by entertainment and hotel developments, this prime location combines prominent with convenience, making it an ideal spot for a premier hotel development.

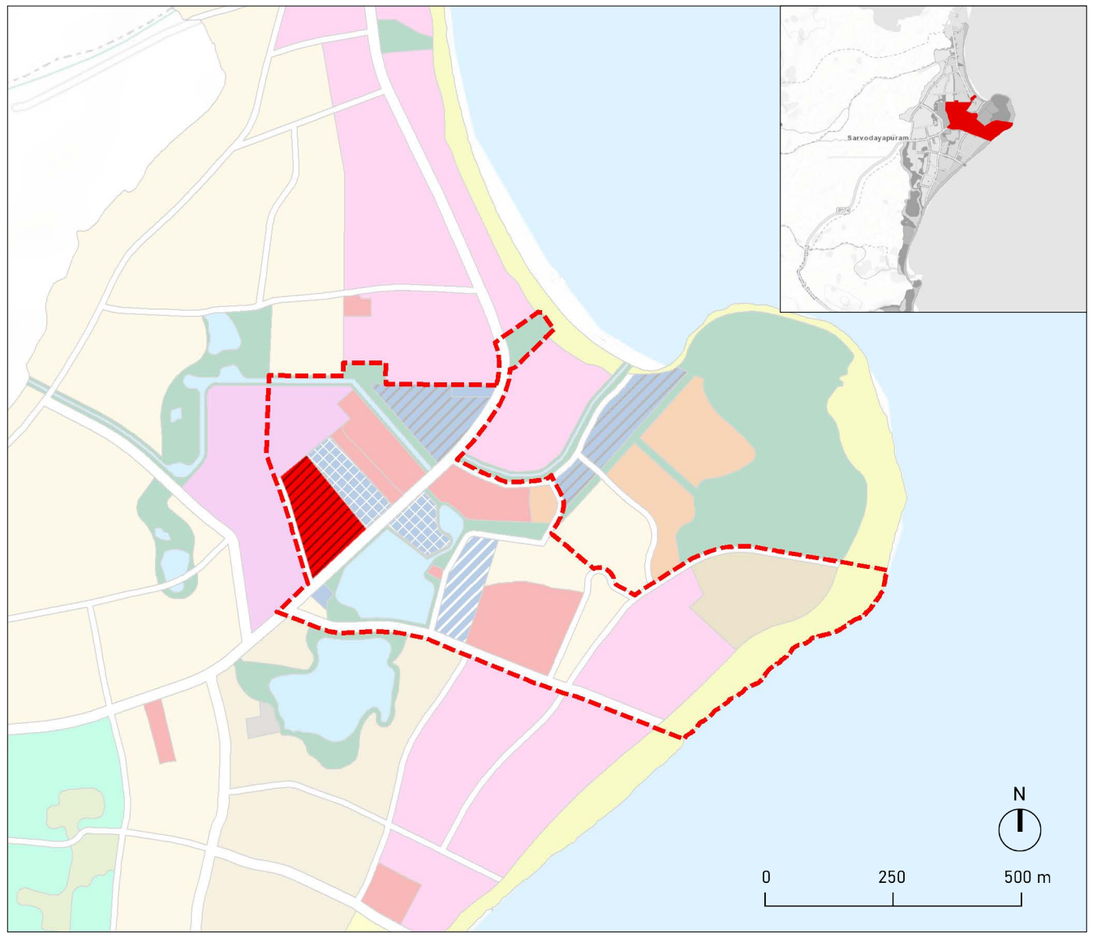
OBJECTIVE

The primary goal of this development is to fulfill the accommodation needs of visitors by providing a wide variety of hotel options. The aim is to improve the overall hospitality scene in the area

DEVELOPMENT PROGRAMME

The development focus is on establishing a premier hotel along the main road.

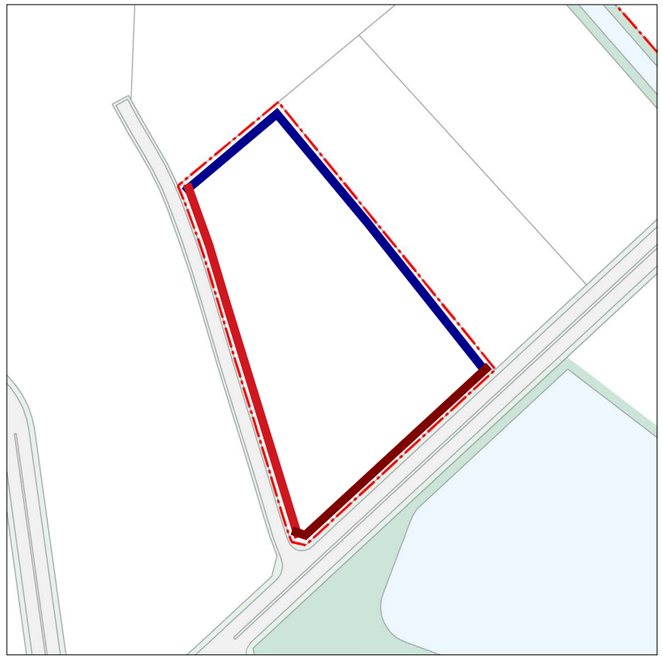
PLANNING PARAMETERS	
PLOT NUMBER	H-01
ALLOWABLE USE	HOTEL
PLOT AREA	2.0HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+3





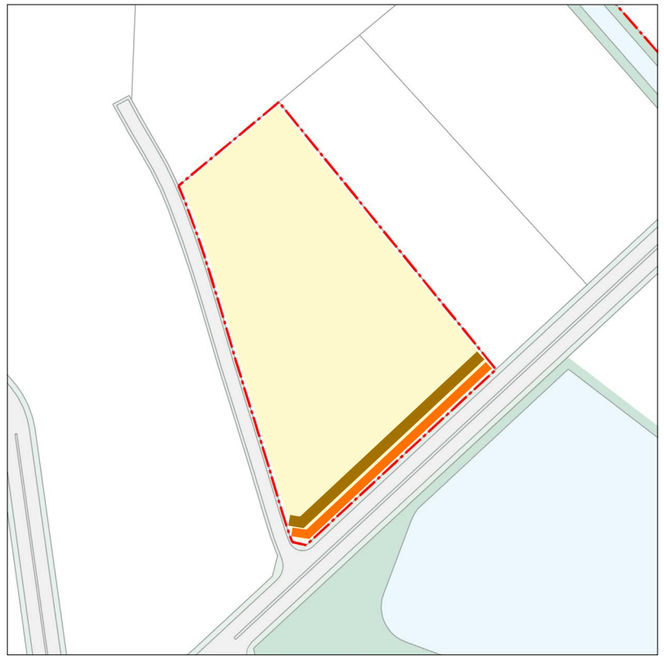
PLOT REGULATION

BUILDING SETBACK



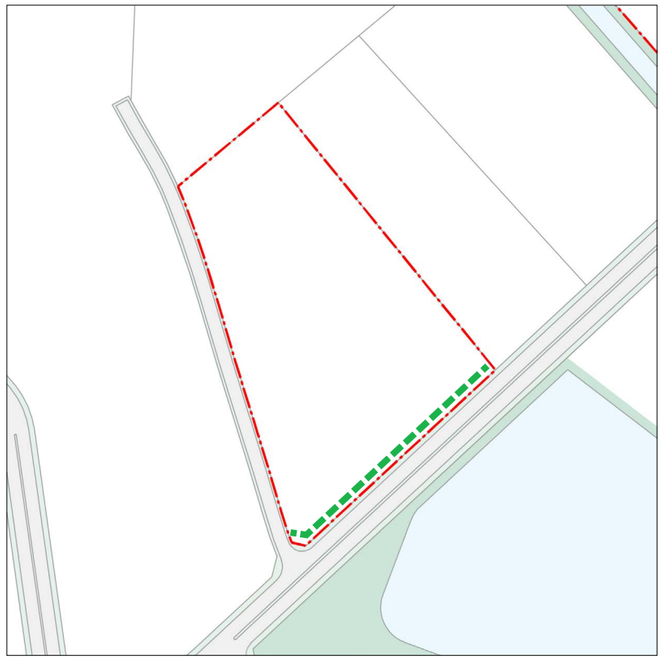
- Planning Area Boundary
- 15.0m Setback (Minimum) (Mandatory Pedestrian Area)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)

BUILDING USE



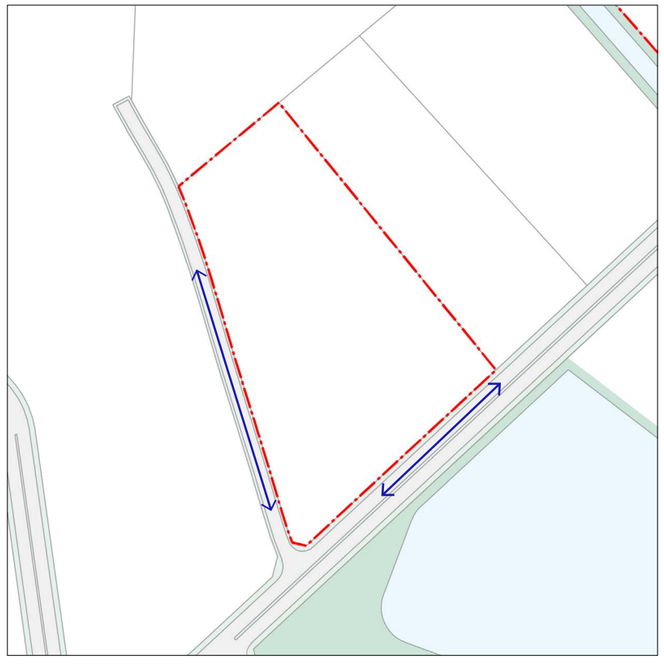
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



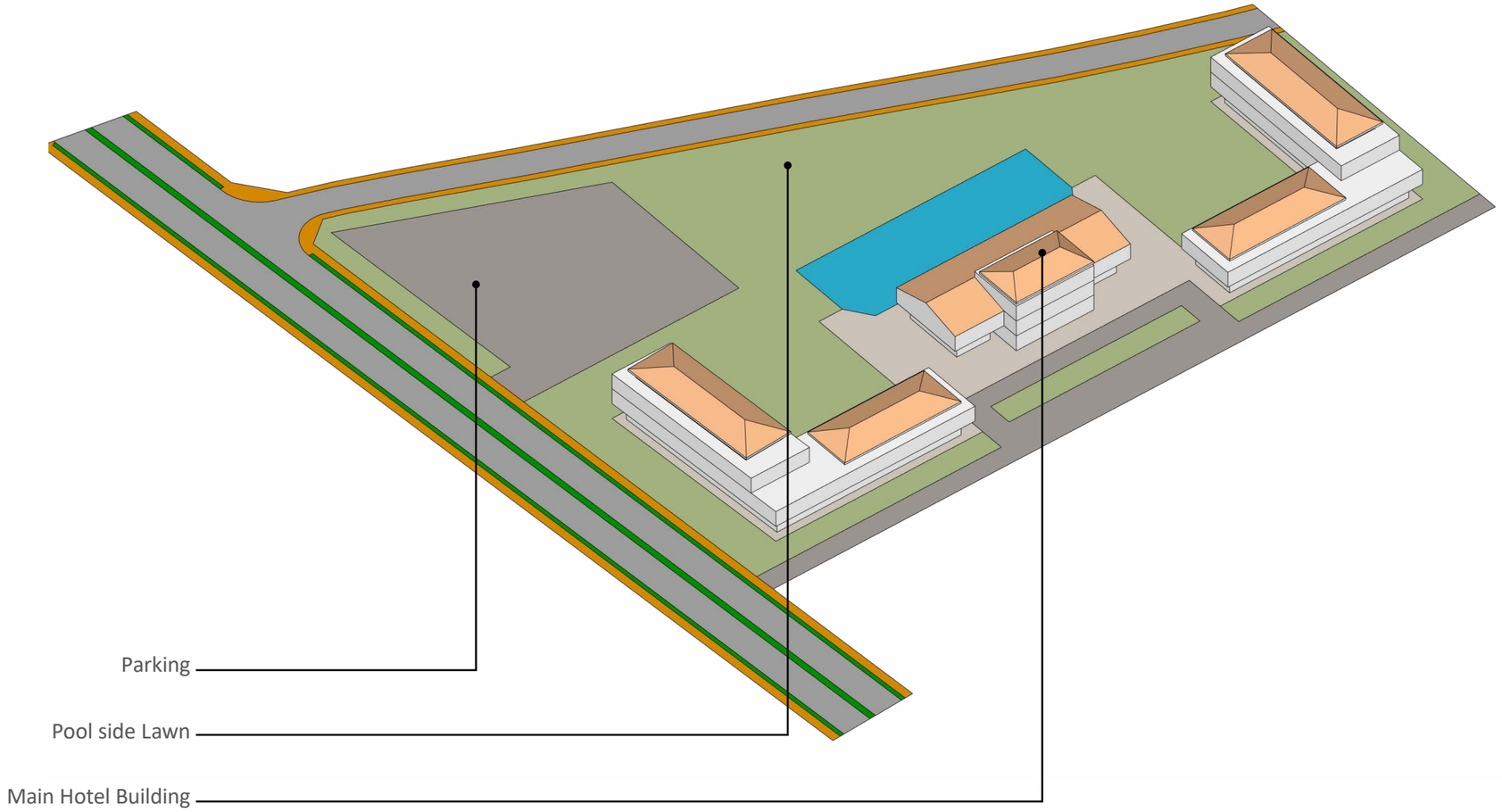
- Planning Area Boundary
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Hotel Parcel- 01
2.	Project Location	Arugam Bay Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	2.0 Ha
4.	Location of the Land	Located at UD intervention area of Arugam Bay Beach
5.	Ownership Detail of the Land	Private Land
6.	Proposed Land Need to be Purchased or Acquire	Option-1 Purchase by the government Option-2 Acquired through the land acquisition process, in accordance with current bylaws, and the relocation will be conducted to government-owned land within the study area.
7.	The Cost of Land if It's to be Purchased/ Acquire	0.7 – 0.9 Mn USD/ hectare
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Support Amenity
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Annual Concession Fee (ACF)
14.	Required Consents	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhance Guest Experience:** Provide high-quality accommodations and services that cater to both leisure and business travelers, ensuring a memorable and comfortable stay. Objective 2 **Increase Revenue Generation:** Capitalise on the high foot traffic and demand in the core tourism area to drive consistent occupancy rates and maximise profitability. Objective 3 **Contribute to Local Economic Growth:** Support the local economy by creating jobs, promoting local businesses, and attracting higher-spending tourists to the area.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects Annual Concession Fee (ACF) from the partner

18.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period
19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.0Ha 2. Phasing Targets: 0-5 years
21.	No. of Rooms	160-200 Rooms
22.	Land Cost	1.9 USD Mn
23.	Total Development Cost	8.6 USD Mn
24.	Revenue (30 years)	348 USD Mn
25.	IRR for 30 years	19%
26.	IRR for 30 years without land cost	22%
27.	Break even (year)	8 years
28.	Stabilisation period(year)	6 years
29.	Project Outputs	Result/ Benefit for communities • Tourism: Attracts more visitors, increasing local business and service demand. • Creates Jobs: Generates employment opportunities in hospitality and related sectors. • Enhances Infrastructure: Improves local amenities and services for residents and guests. • Stimulates Local Economy: Drives spending in local businesses and markets. • Provides Recreation: Offers leisure and entertainment options for locals and tourists. • Supports Community Development: Contributes to improved public facilities and services.
30.	Planned Activities in Achieving Outputs	• Market Research: Analyses demand, competition, and target demographics. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Recruit and Train Staff: Hire and train employees for various roles in hospitality and management. • Market and Promote: Create marketing strategies to attract visitors and build brand awareness. • Launch Operations: Open the resort or hotel and begin day-to-day management. • Monitor and Improve: Track performance, gather guest feedback, and make necessary improvements.
31.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities

32.	Risk Assumption	Not Required
33.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
34.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
35.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
36.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

2. COMMERCIAL PARCEL (SURFER PARADISE & VISITOR CENTRE)

SITE CONTEXT

Parcel SP-01, encompassing an area of 2.0 Ha, stands as a major commercial component within the intervention zone. It is positioned along Panama Road, this parcel is uniquely bordered by a verdant corridor that seamlessly links the beach to the lagoon front.

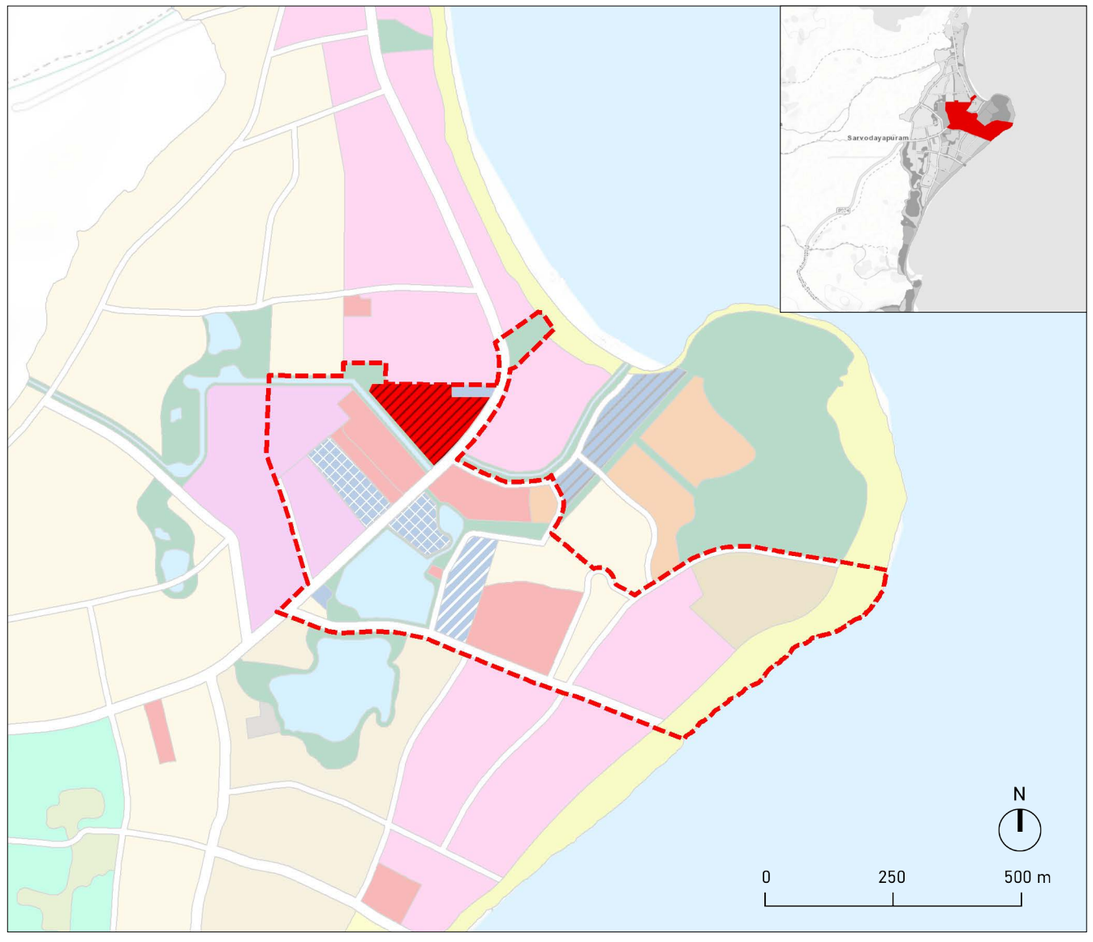
OBJECTIVE

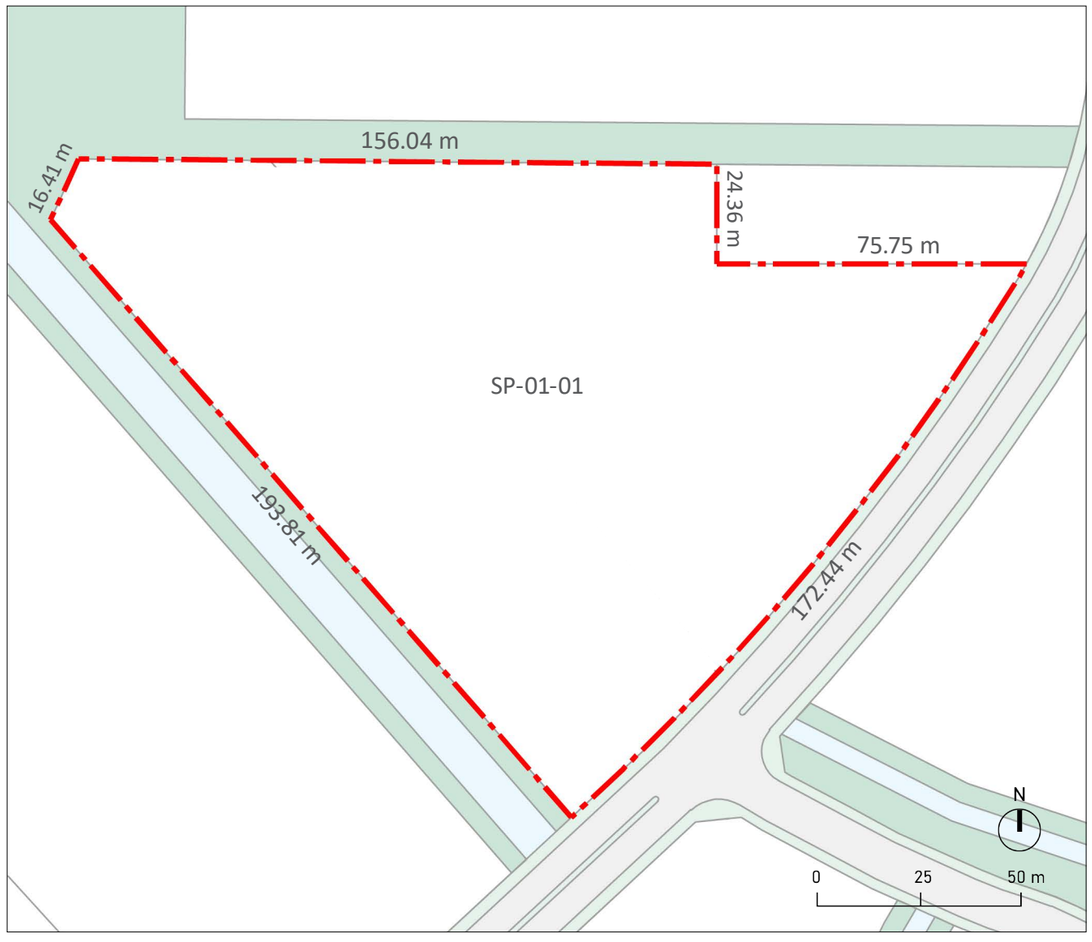
The primary objective of the development is to cater comprehensively to surfers by consolidating all necessary facilities within a single area. This plot will serve as the central hub, effectively accommodating all the needs of surfers.

DEVELOPMENT PROGRAMME

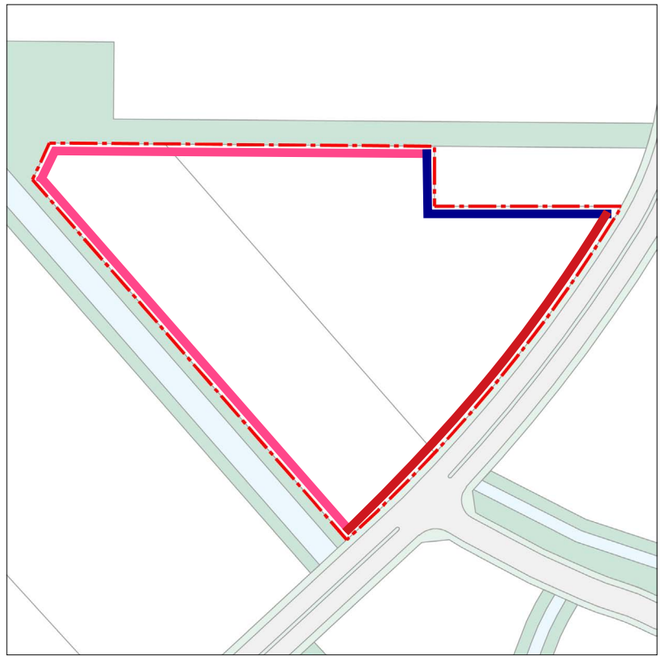
The development primarily focuses on commercial retail tailored to surfing, including supply shops, surf schools, and related services.

PLANNING PARAMETERS	
PLOT NUMBER	SP-01
ALLOWABLE USE	COMMERCIAL (SURFER PARADISE)
PLOT AREA	2.0 HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+1



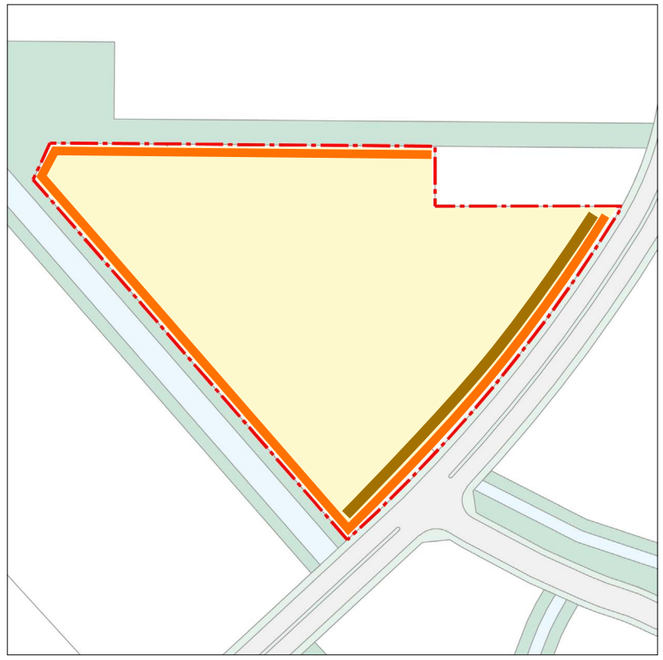


BUILDING SETBACK



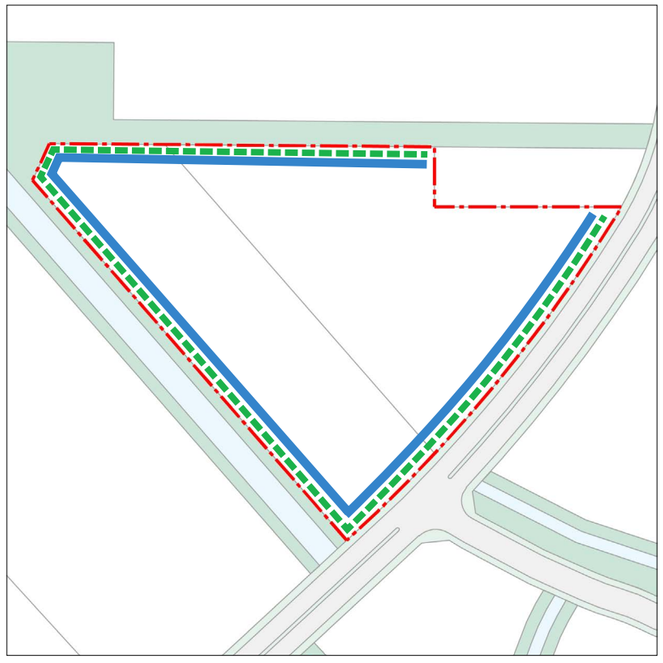
- Planning Area Boundary
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



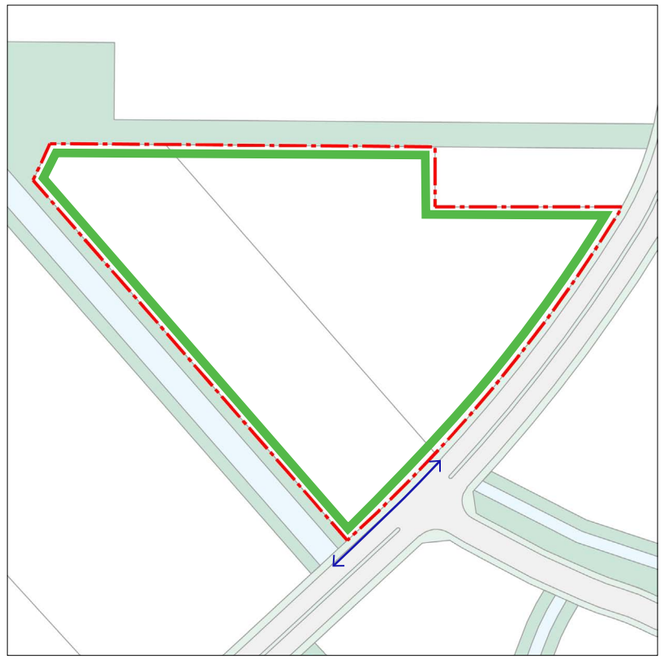
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (30% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



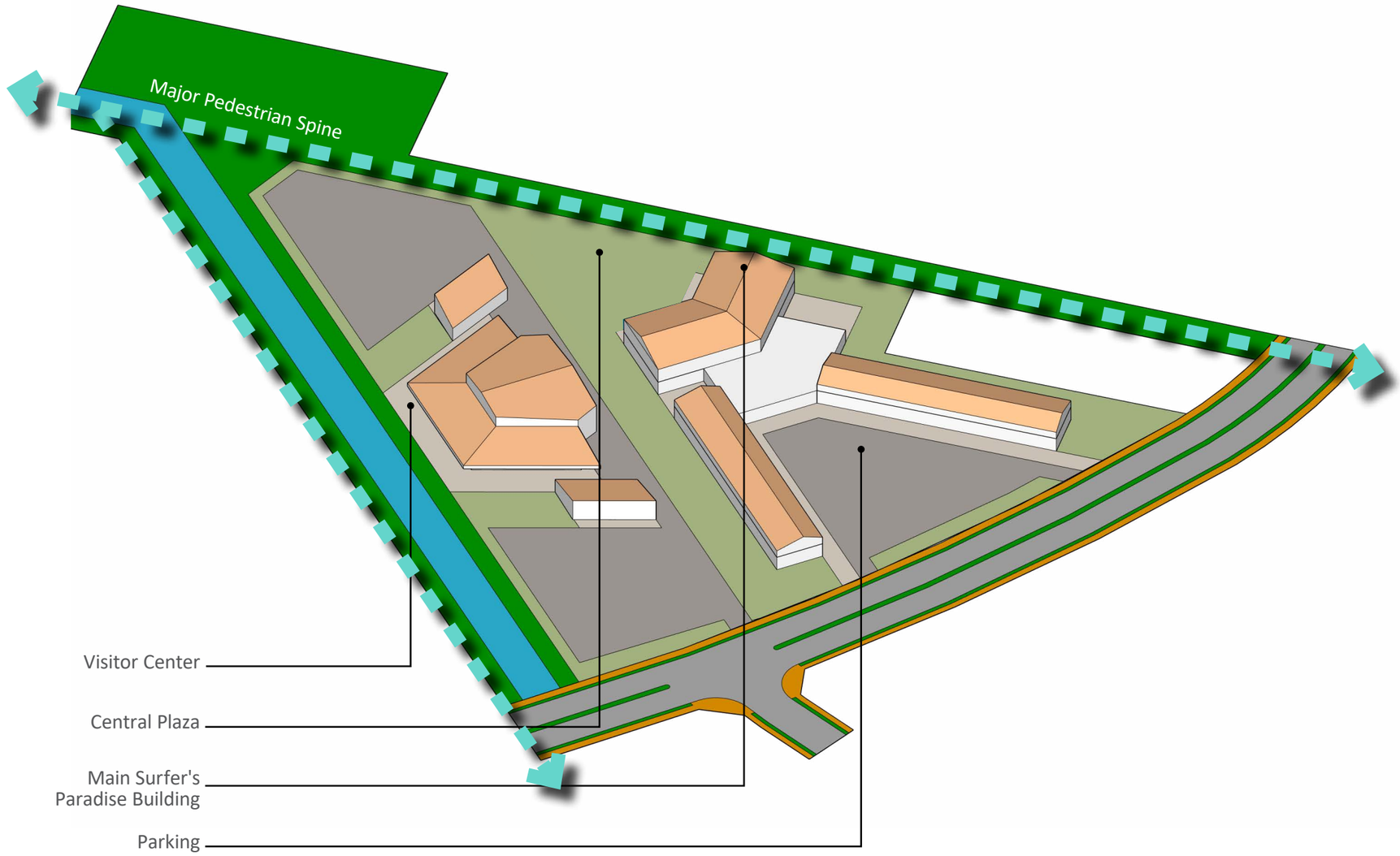
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Commercial Parcel (Surfer Paradise & Visitor Centre)
2.	Project Location	Arugam Bay Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	2.0 Ha
4.	Location of the Land	Located at UD intervention area of Arugam Bay Beach
5.	Ownership Detail of the Land	Private Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Option-1 Purchase by the government Option-2 Acquired through the land acquisition process, in accordance with current bylaws, and the relocation will be conducted to government-owned land within the study area.
7.	The Cost of Land if It's to be Purchased/ Acquire	0.7 – 0.9 Mn USD/ hectare
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Support Amenity
10.	Permitted Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Annual Concession Fee (ACF)
14.	Consents for Implementation	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhance Revenue Streams:** Develop a comprehensive range of surfing-related businesses, such as surfing equipment shops, rental services, and certified surfing schools, to attract both novice and experienced surfers. This will boost tourism revenue by catering to niche markets and increasing the average tourist spend. Objective 2 **Boost Tourist Engagement:** Create unique and immersive surfing experiences, and other eco-friendly adventure packages, to attract and retain more tourists. Objective 3 **Strengthen Community Engagement:** Foster local employment by training and hiring local residents for various roles within the surfing industry, including instructors, guides, and retail staff. This objective aims to increase local participation in the tourism economy and improve community well-being.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects Annual Concession Fee (ACF) from the partner

18.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period
19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Implement eco-friendly design, Eco-Tourism Promotion 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.0 Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	1.9 USD Mn
22.	Total Development Cost	6.1 USD Mn
23.	Revenue (30 years)	40 USD Mn
24.	IRR for 30 years	13%
25.	IRR for 30 years without land cost	17%
26.	Break even (year)	11 years
27.	Stabilisation period(year)	4 years
28.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Promote Tourism: Transforms the surroundings and attracts visitors through enhanced retail, dining, and entertainment options. • Increased Property Values: Raises value of nearby properties. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
29.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.

30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

3. BEACH FRONT PARK

SITE CONTEXT

Plot BP-01 is situated at the beach front, near the vibrant Surfer Paradise commercial area, right in the heart of the hotel district. It is also conveniently located close to both the main and baby surfing points, serving as the primary open space for visitors.

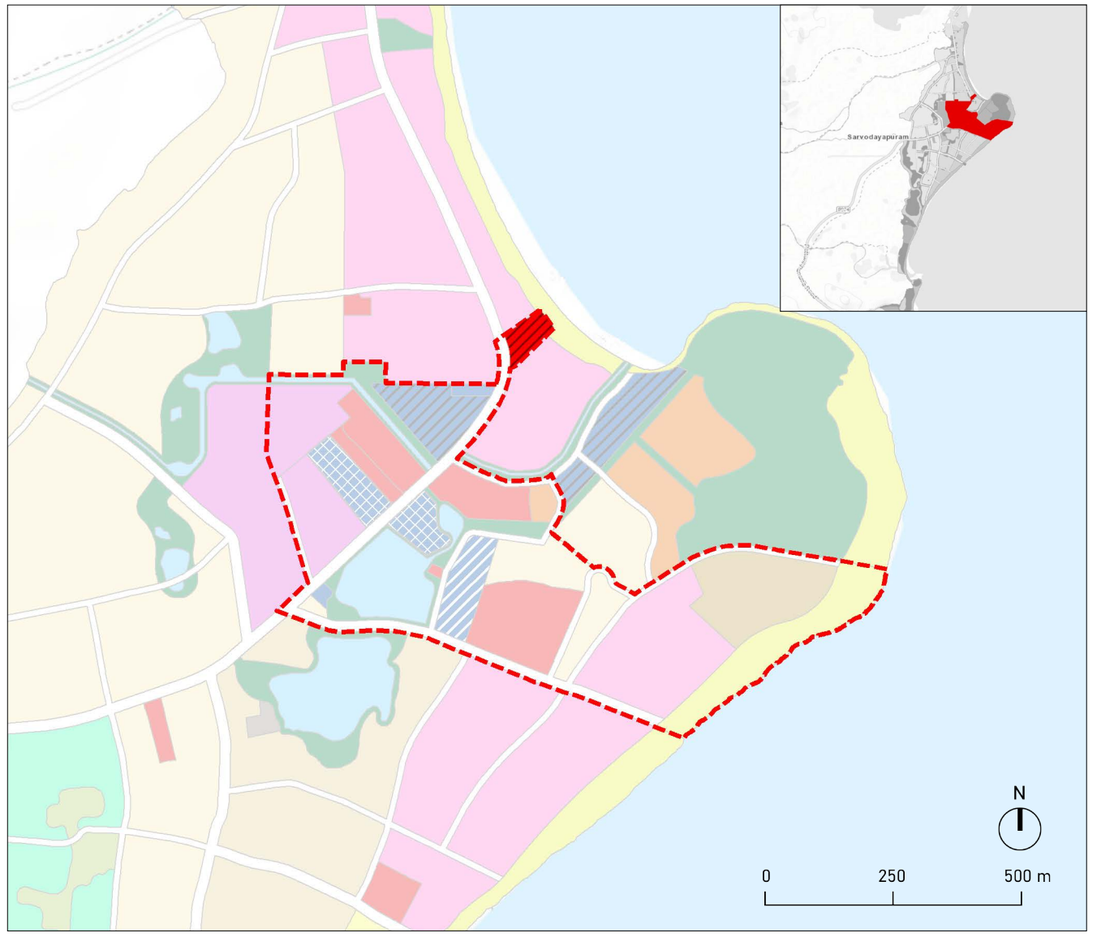
OBJECTIVE

Plot BP-01 Plot P-01 is designated primarily as an open space, ensuring minimal permanent structures to maintain its identity. The temporary and flexible structures will enhance the usability of the space without compromising its primary function as a communal and recreational area.

DEVELOPMENT PROGRAMME

The development plan focus on the kiosks and small retail to provide services to visitors.

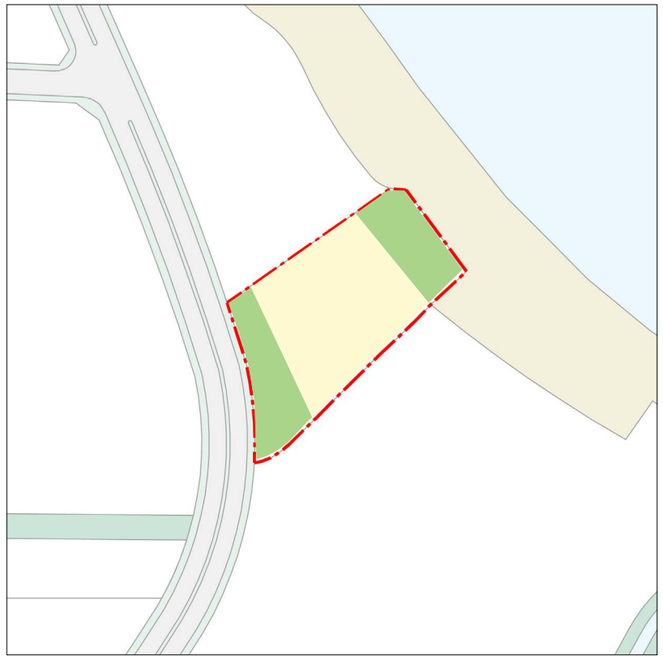
PLANNING PARAMETERS	
PLOT NUMBER	BP-01
ALLOWABLE USE	PARK
PLOT AREA	0.5 HA
PLOT RATIO	0.2
BUILDING HEIGHT	G+1





PLOT REGULATIONS

Building Use

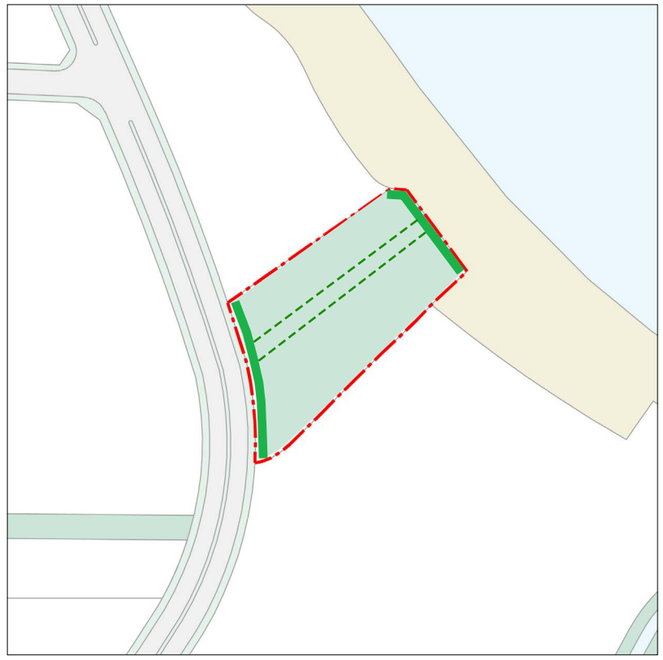


Planning Area Boundary

5% of the Ground Level to be used as Retail and Food Outlets or other activity generating use

Mandatory Open Plaza

Public And Vehicular Access



Planning Area Boundary

Publicly Accessible Area (No Physical Perimeter Fencing is allowed)

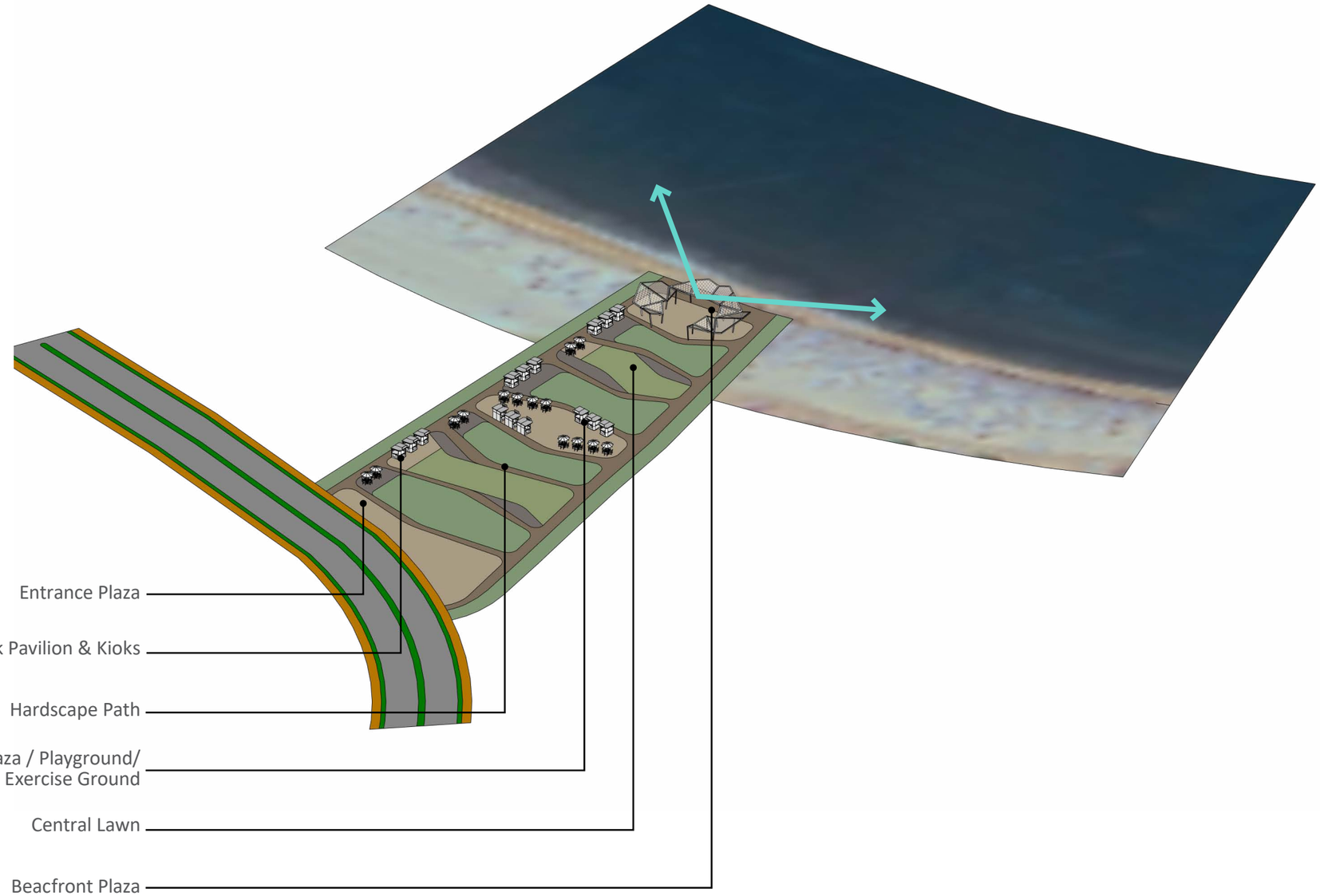
Proposed Public Access for Pedestrian Linkage (30m. Minimum)

PROJECT BRIEF

1.	Project Title	Beach front Park Parcel- 01
2.	Project Location	Arugam Bay Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	0.5Ha
4.	Location of the Land	Located at UD intervention area of Arugam Bay Beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Coast of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Self development model
10.	Permitted Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	• Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Required Consents	Consent required from relevant organizations for project implementation.
14.	Development Model	-
15.	Project Objectives	Objective 1 **Promote Cultural Engagement:** Establish the park as a vibrant venue for cultural events, showcasing local traditions, arts, and performances. This will enhance the cultural experience for tourists and support the preservation and promotion of local heritage. Objective 2 **Enhance Tourist Experience:** Create a relaxing and scenic environment where tourists can unwind, enjoy the natural beauty of the beach front, and take advantage of leisure activities. The park should offer amenities and spaces that encourage relaxation and recreation. Objective 3 **Boost Economic Impact Through Tourism:** Leverage the beach front park as a key attraction to drive increased foot traffic to the area, supporting local businesses and creating job opportunities. By offering a well-maintained and attractive venue for tourists, the park will contribute to the economic vitality of the tourism sector, encouraging longer stays and repeat visits.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of commercial and mix activities 2. Project Contribution to existing gap:Job creation, tourist attraction, tourism service and community facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with SLTDA/ EPC • The government builds, maintains and operate the beach front park. This is because, the park is not a revenue generating model and a public amenity.
18.	Role of Partner	-

19.	Project Impacts	1. Economic: Job creation, Support economic growth 2. Environment: Green area, permeable surfaces 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.34Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	0.2 USD Mn
22.	Total Development Cost	2.5 USD Mn
23.	Revenue (30 years)	11.2 USD Mn
24.	IRR for 30 years	12%
25.	IRR for 30 years without land cost	16%
26.	Break even (year)	8
27.	Stabilisation period(year)	6
28.	Project Outputs	Result/ Benifit for communities • Economic Growth: Boosts local businesses, creates jobs, and attracts investment. • Environmental Impact: Enhances coastal ecosystem health and preserves natural habitats. • Social Benefits: Provides recreational space, strengthens community identity, and encourages social interaction. • Health and Well-being: Promotes physical activity and mental well-being. • Cultural and Educational Value: Showcases local culture and offers educational opportunities. • Safety and Accessibility: Improves safety and accessibility for all users.

29.	Planned Activities in Achieving Outputs	• Environmental Assessment: Conduct impact studies and implement conservation measures. • Community Engagement: Hold consultations and workshops to gather input and foster support. • Construction: Oversee the building of park facilities, pathways, and landscaping. • Programming: Organize events, educational programs, and recreational activities. • Maintenance: Establish ongoing upkeep and management plans for sustainability. • Marketing: Promote the park to attract visitors and local users.
30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities
31.	Risk Assumption	• Coastal Erosion: Loss of beach area and park infrastructure due to natural erosion processes. • Tsunami Impact: Potential for severe damage to park facilities and surrounding areas from tsunami waves • Flooding: Risk of flooding from storm surges or high tides impacting park infrastructure.
32.	Mainstreaming the Disaster Risk Reduction (DRR)	• Erosion Control Measures: Implement beach nourishment, dune restoration, and vegetation planting. • Enhanced Coastal Defenses: Build or upgrade sea walls, breakwaters, and other protective structures. • Early Warning Systems: Install and maintain tsunami and flood warning systems.
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, timeline, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyze data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyze successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	• The government builds, maintains and operate the beach front park.



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

6.9 ECO PARK - PEANUT FARM

6.9.1 INTERVENTION AREA CONTEXT



① View from Panama Road



②View from Panama & Existing Road Junction



③ Existing Beach front



④ Existing Beach front

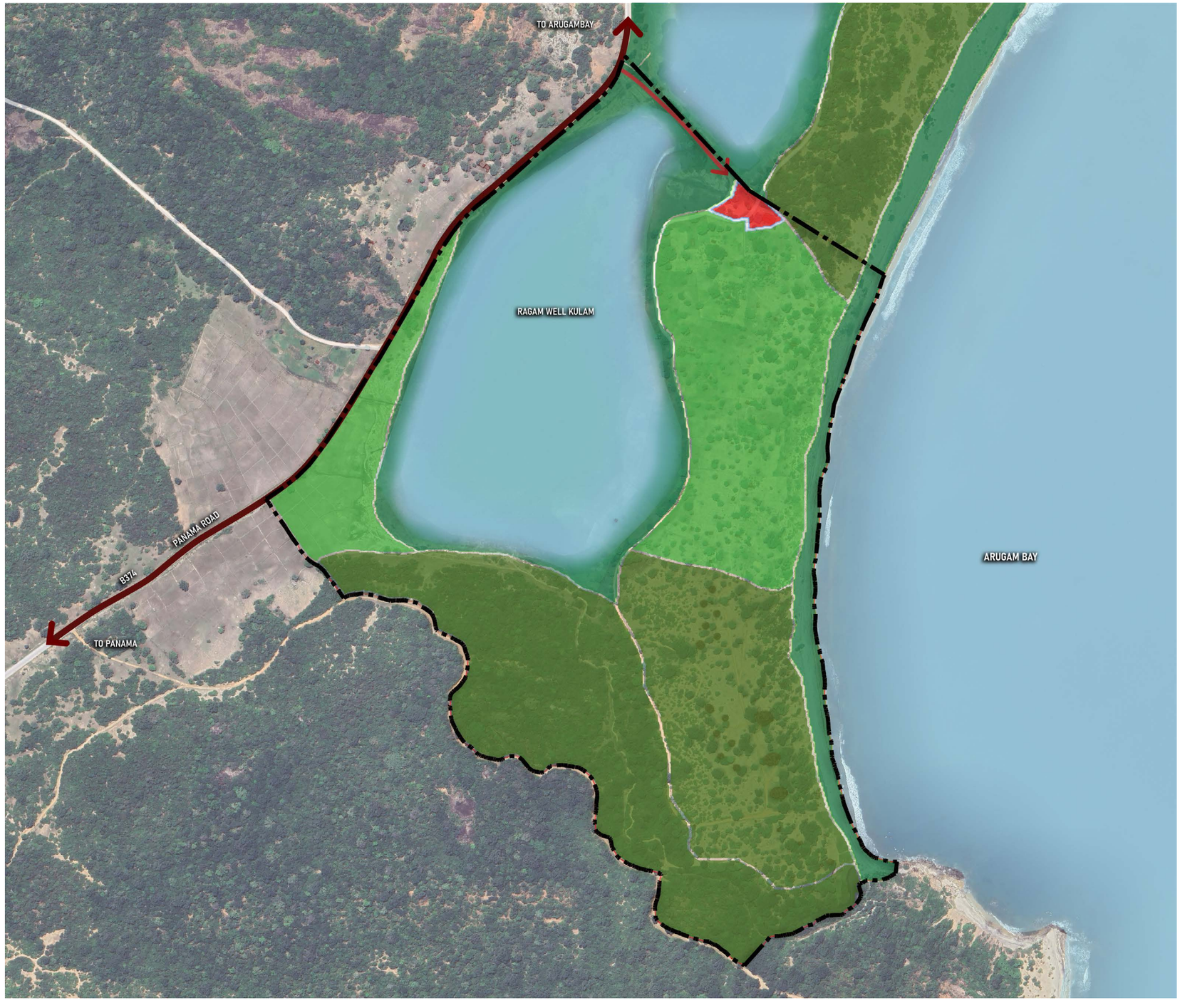


Figure 6.82 Intervention Area Context (Peanut Farm)

LAND OWNERSHIP

The ownership of the site is divided between two primary entities, reflecting a complex pattern of land distribution. One half of the site falls under the jurisdiction of the Department of Forest Conservation. This means that this portion of the land is managed and protected by the government, likely for the purpose of preserving natural resources, maintaining biodiversity, or conserving the area's ecological balance.

The remaining half of the site has been allocated through various grants, indicating that this portion of the land has been distributed to different individuals or organisations, potentially for purposes such as development, agriculture, or other uses as determined by the granting authority. Among these grants, there is a specific plot of land that is owned by religious bodies.



Legend

- Land owned by the Department of Forest Conservation
- Lands belong to religious bodies
- Lands distributed under various Grants

Figure 6.83 Land Ownership (Peanut Farm Intervention Area)

6.9.2 PROPOSED LANDUSE

The Peanut Farm intervention area is planned as an eco-park that provides spaces for surfers and campers, equipped with the necessary facilities for their needs. At the center of the area is a large park, which plays a dual role. It serves as a natural habitat for various animal species, supporting ecological balance, and also as a key attraction for visitors. This central space allows people to enjoy outdoor activities and connect with nature while preserving the environment for wildlife. The eco-park aims to offer a balance between recreation and conservation, making it a destination for both relaxation and ecological awareness.

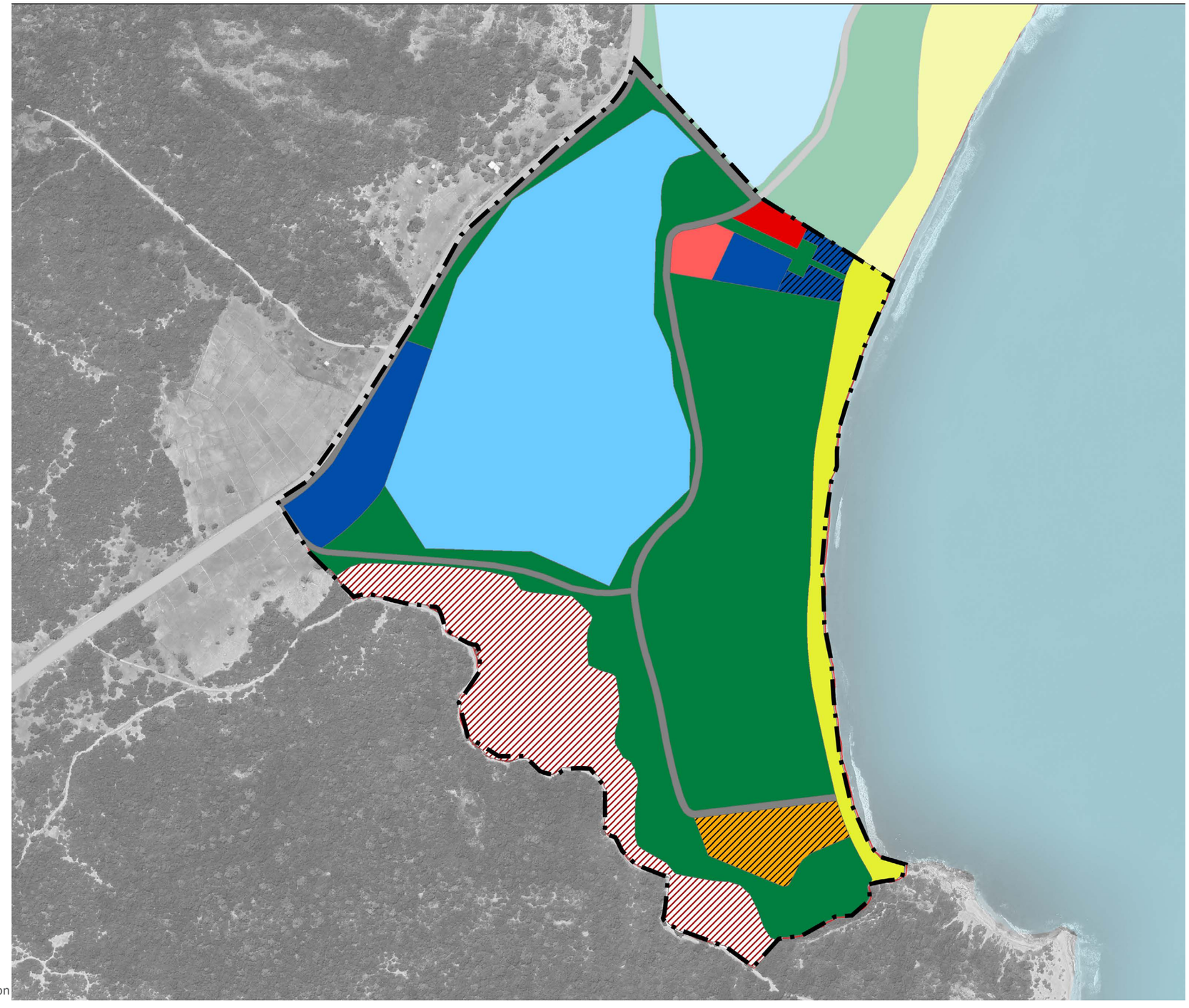


Figure 6.84 Proposed Land Use Plan (Peanut Farm Intervention Area)

	Proposed Land Use	Area (Ha)	%
	Beach Area	3.99	4.4%
	Commercial	4.62	5.1%
	Commercial Surfer Paradise	0.93	1.0%
	Camp Site	2.38	2.6%
	Green Open Space	34.85	38.7%
	Visitor Center	0.71	0.8%
	Public Facilities	0.45	0.5%
	Road	3.49	3.9%
	Defence	11.42	12.7%
	Waterbodies	27.29	30.3%
	Total	90.12	

Table 6.23 Proposed Land Use Distribution (Peanut Farm Intervention Area)

KEY FEATURES

The central facility node offers amenities such as coach and car parking, a visitor centre, a restaurant, a beach front fitness ground, and a bike rental and service area. Serving as the focal point of Peanut Farm development, this area will host a variety of facilities and commercial activities, enhancing the overall experience for visitors.

The surfer camps will provide comprehensive services including surfing schools and campgrounds tailored specifically for surfers. These camps will serve as hubs of activity, offering instruction, practice areas, and accommodations designed to cater to the unique needs of surfing enthusiasts. With a focus on fostering skill development and fostering a sense of community among surfers, these camps will enrich the overall surfing experience in the area.



Figure 6.85 Key Features (Peanut Farm Intervention Area)

6.9.3 ARTIST'S IMPRESSION



ECO PARK@ PEANUT FARM
SURFING PARADISE OF THE EAST

Nestled along the beach, the park offers an enchanting escape for those wishing to immerse themselves in nature, with a campsite that allows guests to sleep beneath the stars and wake to the gentle sound of the waves. For surfing enthusiasts, the park provides a comprehensive facility featuring surfboard rentals, wet suit provisions, and expert surfing instruction, ensuring that every aspect of their wave-riding adventure is effortlessly accommodated. Overlooking a serene lake with the grandeur of the sea as a backdrop, the Gateway Commercial area presents a captivating blend of natural beauty and commercial convenience, creating an idyllic setting for visitors.

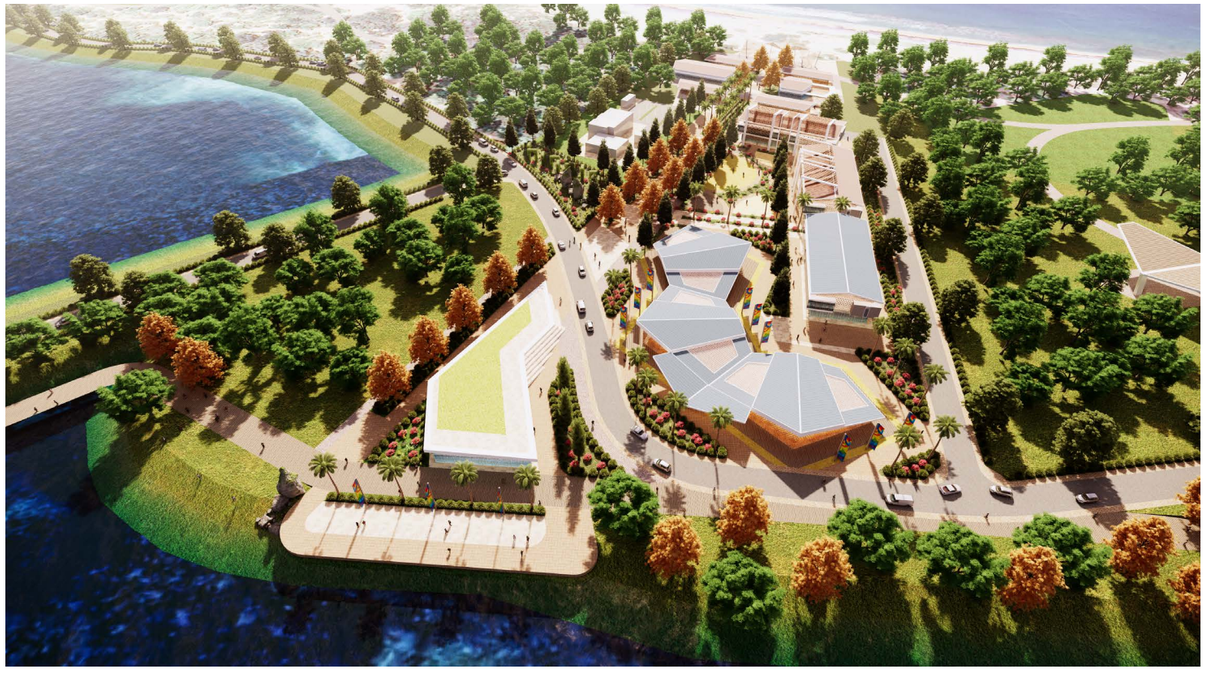


Figure 6.86 View-1 Active Pedestrian Spine



Figure 6.87 View-2 Overlooking Retail, Nightmarket and Entertainment to the Beach

6.9.4 URBAN DESIGN CONCEPT

The development is driven by a central spine that serves as a major connector between the lake and the sea. This central spine facilitates the integration of various key landmarks within the area. Prominent features of the development include the Oceanfront Plaza, Central Plaza, and the Landmark Building, which houses the Visitor Center. Together, these elements create a cohesive and accessible environment. The central spine is designed to be a walkable and vibrant thoroughfare, ensuring ease of movement and enhancing the overall connectivity between the different landmarks and the surrounding areas. This thoughtful design promotes both functionality and a dynamic beach front development.



Figure 6.88 Urban Design Concept (Peanut Farm Intervention Area)

6.9.5 INTERVENTION AREA CONTEXT

Despite the current land parcels being under different ownership titles, optimising the developable land necessitates strategic reconfiguration. Some parcels are subdivided into smaller units to allow for more flexible development options, catering to diverse needs and projects. Conversely, certain parcels are amalgamated to enhance the overall value and efficiency of land use. This approach ensures that the land is utilised in the most effective manner, balancing the goals of flexibility and optimisation.

The new parcellation strategy ensures that the land is divided into sizable and marketable units. However, based on market demands, further adjustments to parcel sizes may be necessary. This flexibility allows for tailored solutions that can better meet the capacities and needs of potential investors, ensuring that the land is utilised efficiently and effectively.



Legend

- Amalgamation of Existing Parcels
- Sub-division of Existing Parcel
- Existing Parcel developed as it is
- Proposed Parcel

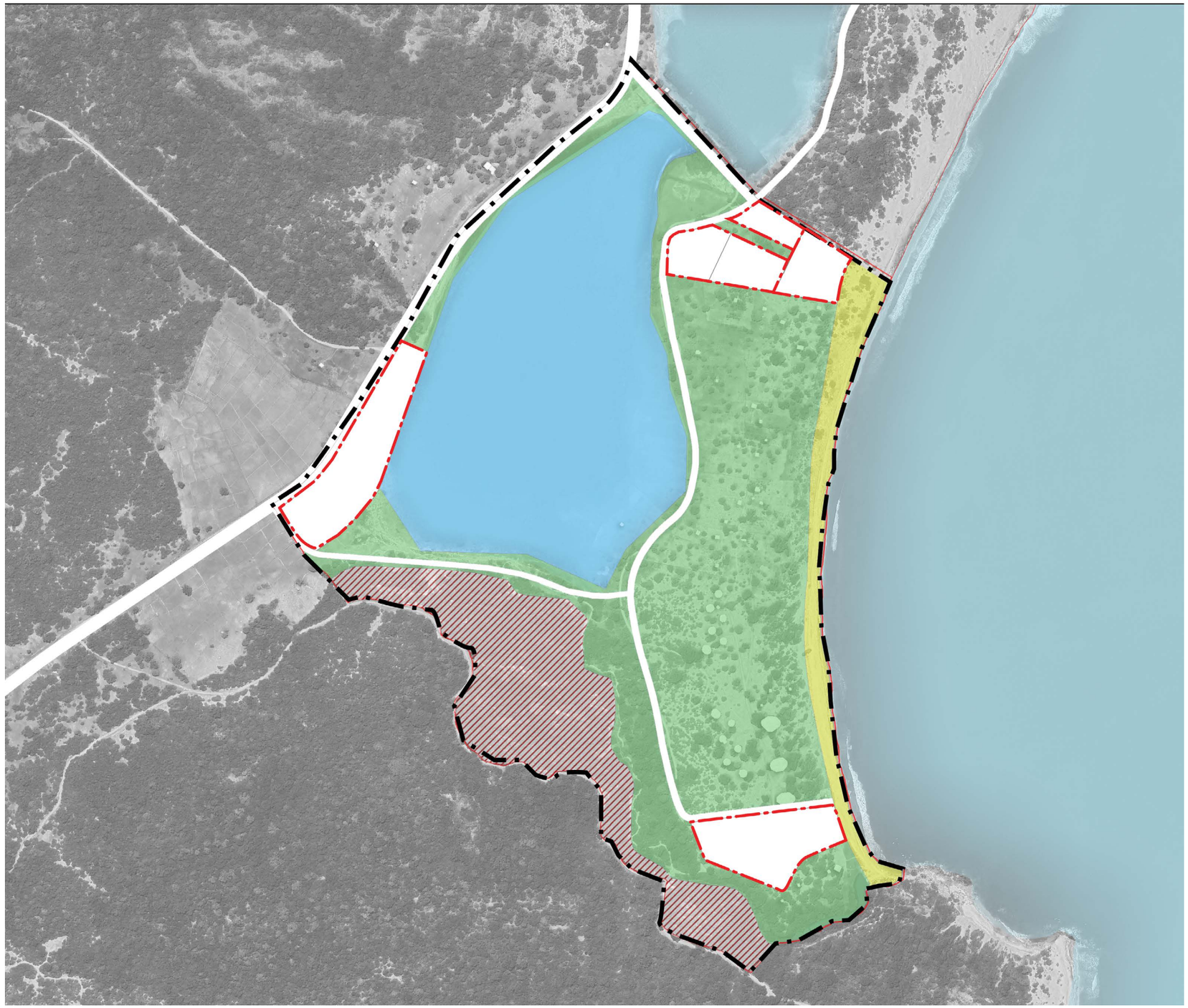
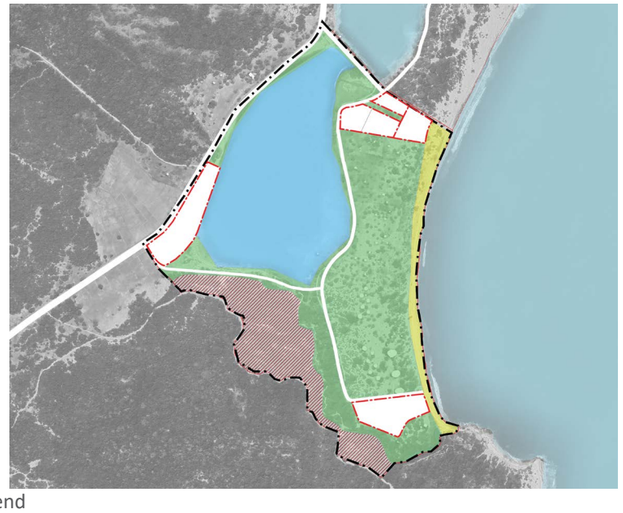


Figure 6.89 Parcellation Strategies (Peanut Farm Intervention Area)

6.9.6 URBAN DESIGN GUIDE PLANS

PARCEL & BUILDING USE



Legend

Proposed Parcel

LANDMARKS & NODES

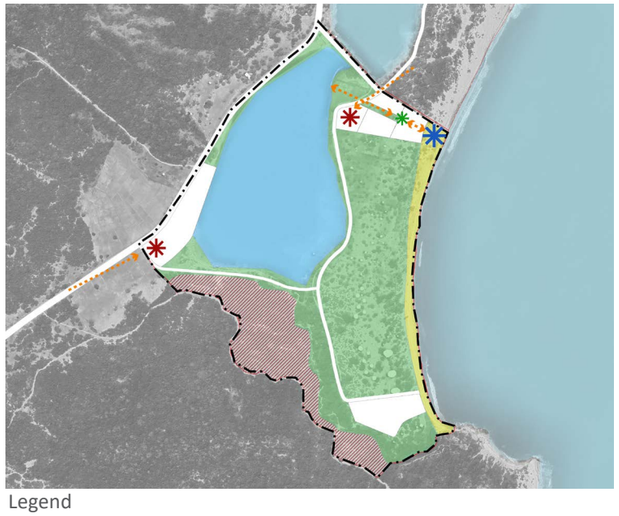


Legend

Oceanfront Landmark Plaza

Landmark Building

VIEWS AND VISTAS



Legend

Oceanfront Landmark Plaza

Landmark Building

Oceanfront Landmark Plaza

View and Vista

BUILDING EDGE & ACTIVITY GENERATION USES



Legend

Active Edge

Plaza/ Open Space

PUBLIC OPEN SPACES



Legend

Active Edge

Plaza/ Open Space

ACCESS & CIRCULATION



Legend

Vehicular Entrances

Figure 6.90 Urban Design Guide Plans (Peanut Farm Intervention Area)

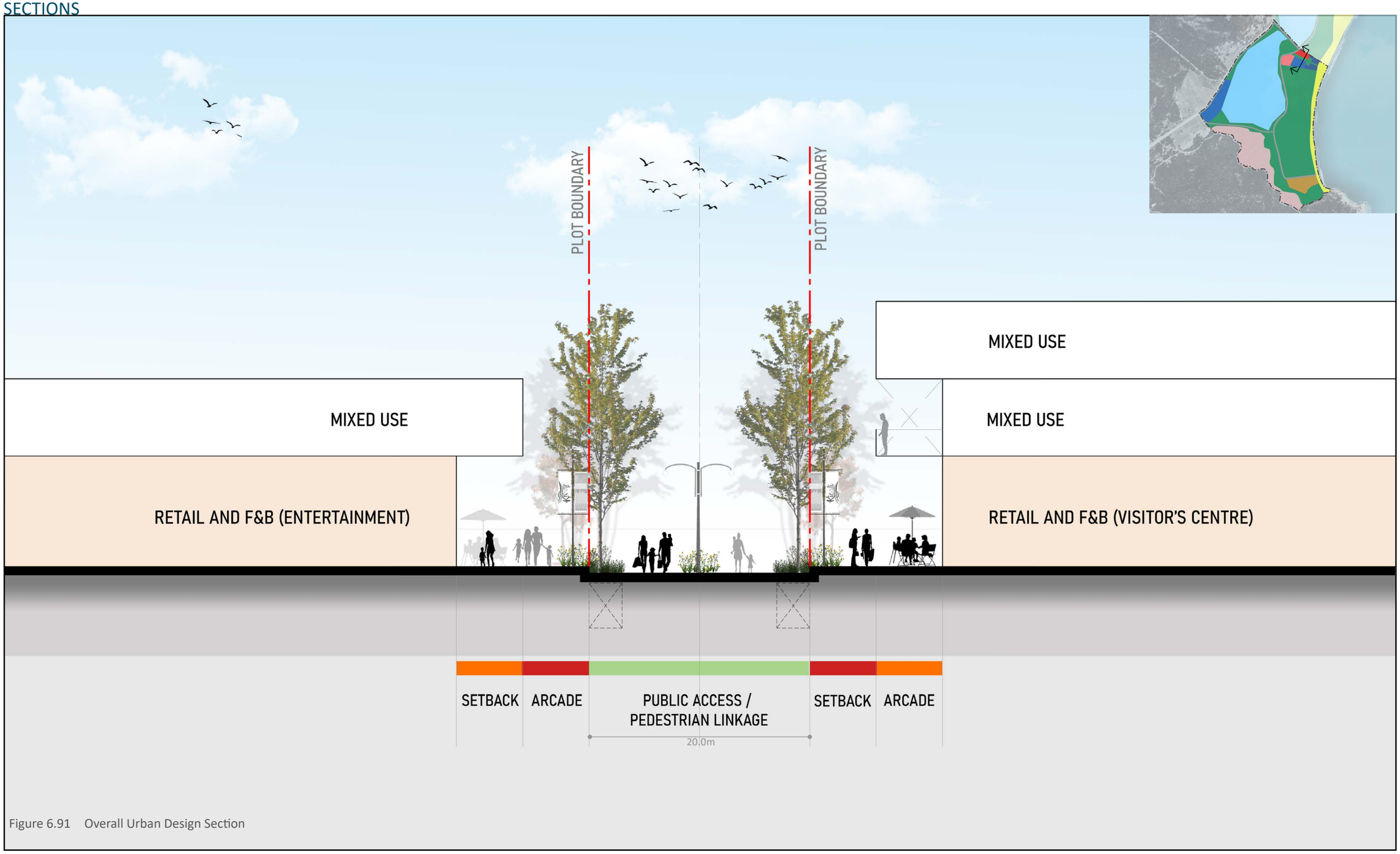


Figure 6.91 Overall Urban Design Section

6.9.7 PRIORITY PROJECTS

HIGH CASE SCENARIO

1. Retail

Site Area: 0.83Ha

Plot Ratio: 1.0

Bld Height: G+2

2. Surfer Paradise

Site Area: 1.00Ha

Plot Ratio: 1.0

Bld Height: G+1

3. Visitor Centre

Site Area: 0.75Ha

Plot Ratio:1.0

Bld Height: G+2

4. Road Enhancement

Secondary Road with Parking (31m)

Existing Road to be Upgraded- 315m

Collector Road (12m)

Existing Road to be Upgraded- 256m

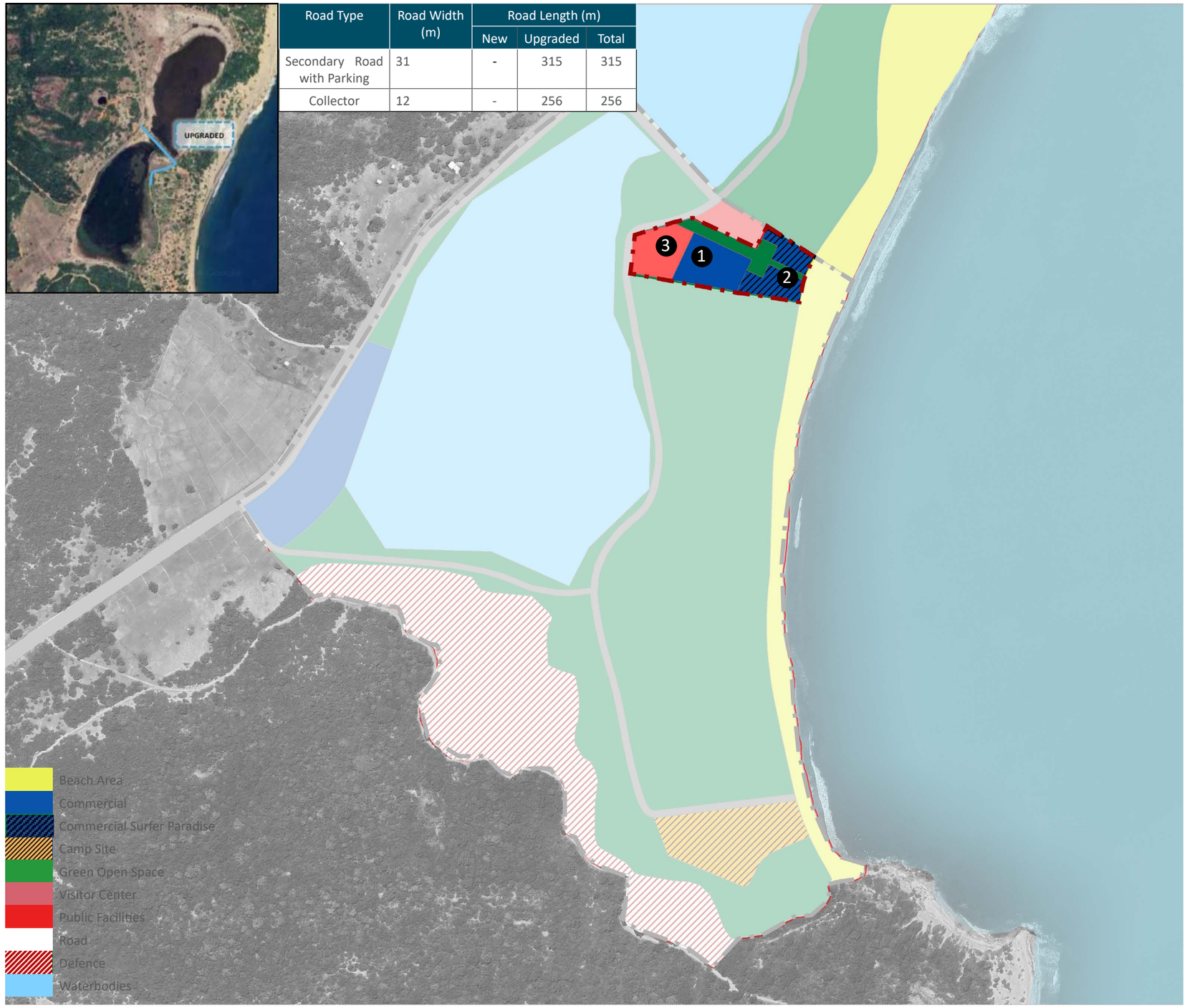


Figure 6.92 Priority Projects Peanut Farm Intervention Area (High Case Scenario)

LOW CASE SCENARIO

1. Visitor Center

Site Area: 0.35Ha

Plot Ratio: 1.0

Bld Height: G+2

2. Surfer Paradise

Site Area: 0.35Ha

Plot Ratio: 1.0

Bld Height: G+1

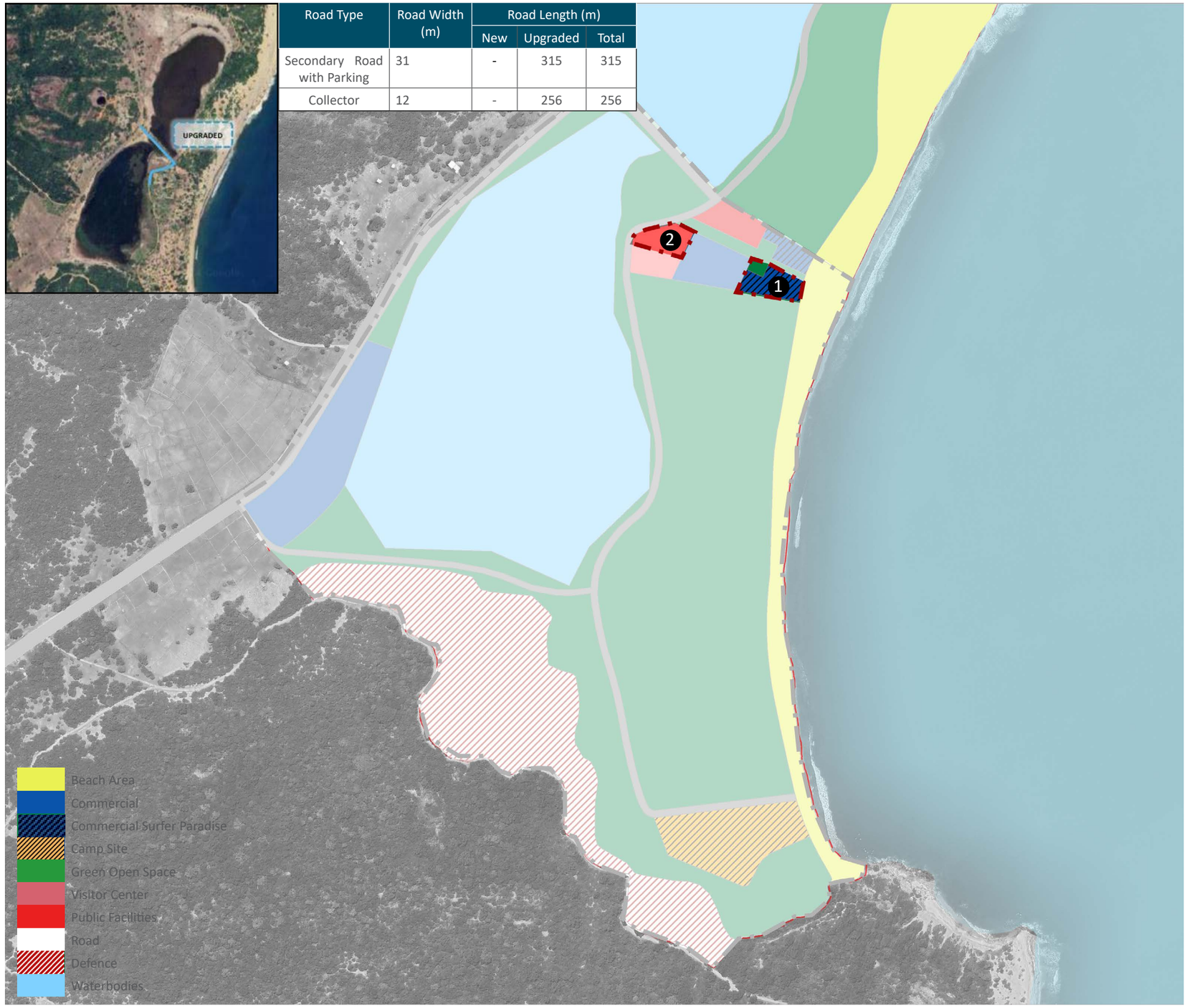
3. Road Enhancement

Secondary Road with Parking (31m)

Existing Road to be Upgraded- 315m

Collector Road (12m)

Existing Road to be Upgraded- 256m



Road Type	Road Width (m)	Road Length (m)		
		New	Upgraded	Total
Secondary Road with Parking	31	-	315	315
Collector	12	-	256	256

Figure 6.93 Priority Projects Peanut Farm Intervention Area (Low Case Scenario)

6.9.8 PRIORITY PROJECT DESIGN BRIEF GUIDELINES

Note: The proposed land use plan (PLU) is based on a high-case scenario to maximize opportunities for both the community and the region. Accordingly, project-level guidelines for priority initiatives have been developed in alignment with the PLU and the high-case scenario framework.



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1. VISITOR CENTER PARCEL

SITE CONTEXT

Plot VC-01 is a Visitor Center plot located at the entrance of the Intervention area with a site area of 0.75Ha. The development is strategically situated at the intersection of a major road and the main boulevard, offering unparalleled accessibility and convenience. The junction's prominence offer high visibility and traffic flow, making it an ideal spot for commercial establishments and ensuring a vibrant, dynamic environment for visitors.

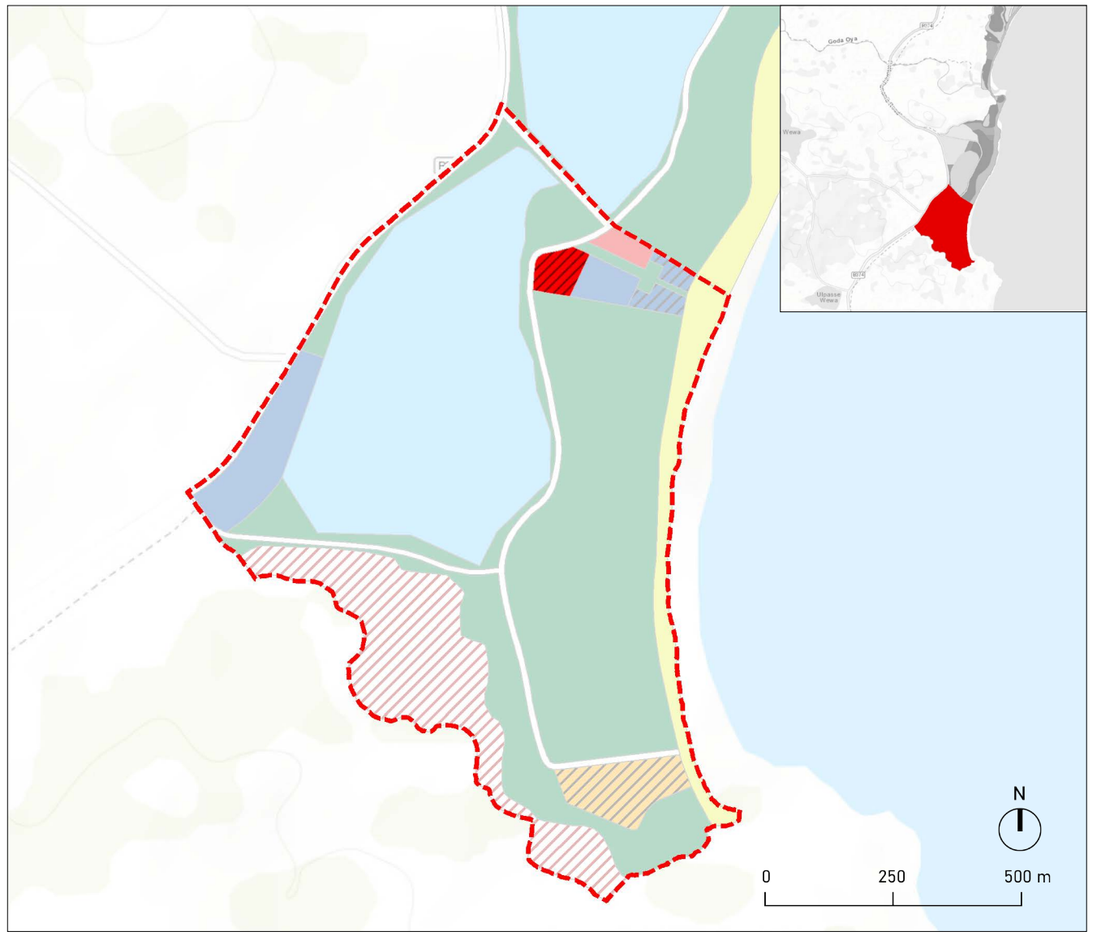
OBJECTIVE

Due to its strategic location, future developments will resemble iconic design and architecture. The edges fronting the green spine will incorporate active and vibrant facade to elaborate the active boulevard.

DEVELOPMENT PROGRAMME

The development includes a information center, souvenir hops and other tourism related facilities.

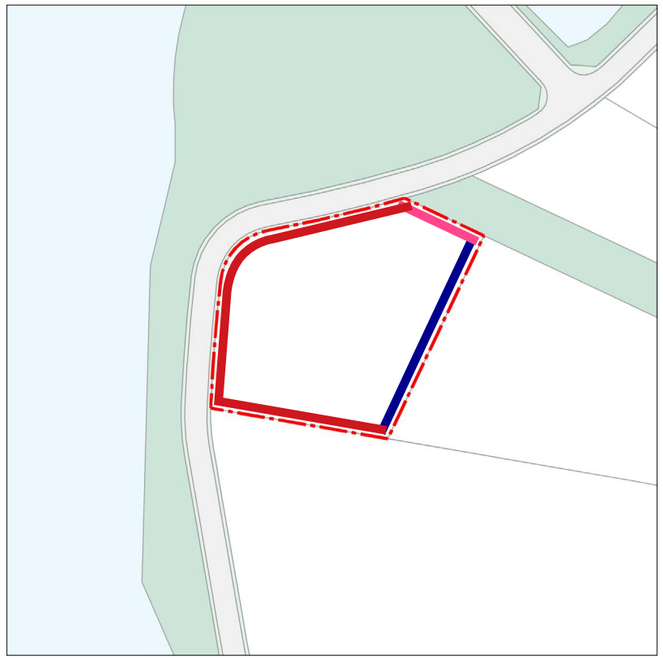
PLANNING PARAMETERS	
PLOT NUMBER	VC-01
ALLOWABLE USE	VISITOR CENTER
PLOT AREA	0.75HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+1





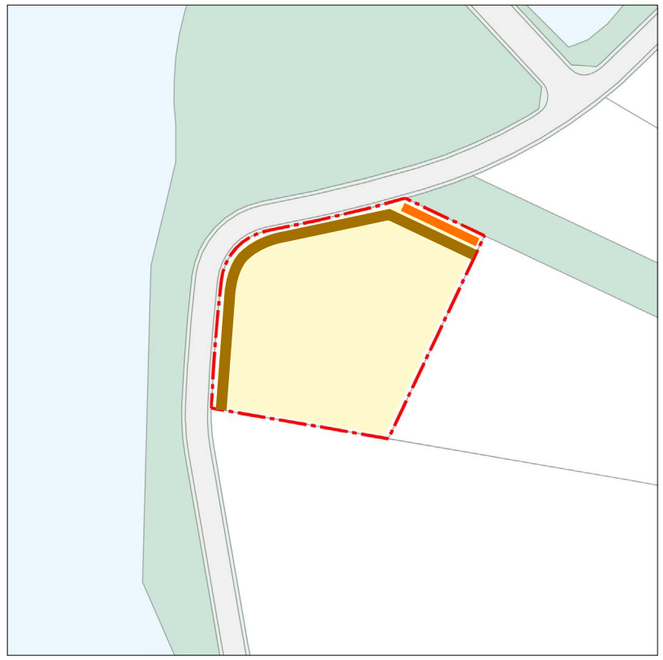
PLOT REGULATION

BUILDING SETBACK



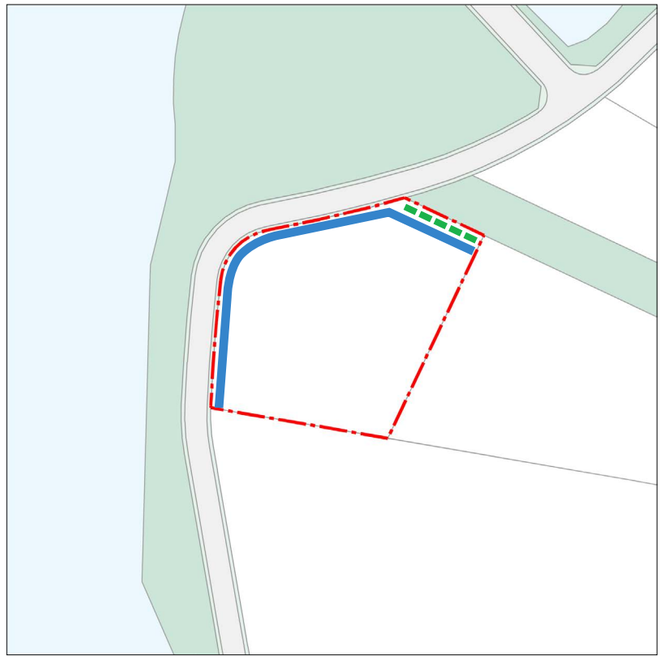
- Planning Area Boundary
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



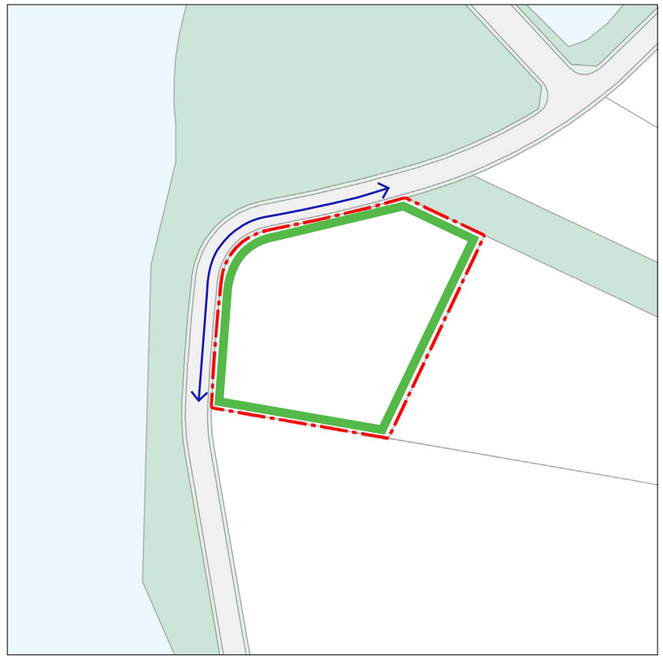
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (30% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



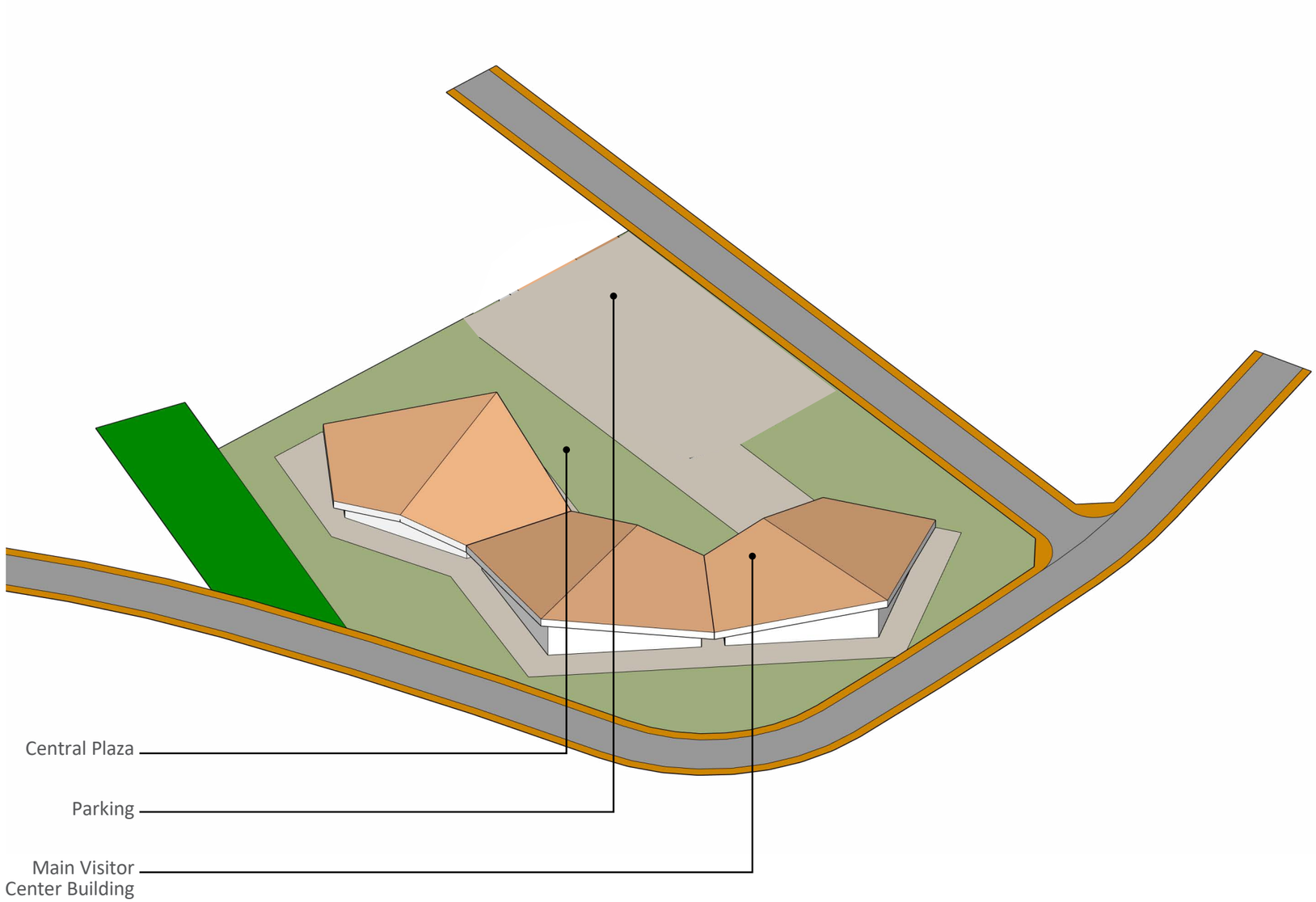
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Visitor Center Parcel- 01
2.	Project Location	Peanut Bay Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	0.75 Ha
4.	Location of the Land	Located at UD intervention area of Peanut Bay Beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Cost of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Support Amenity
10.	Permitted Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Annual Concession Fee (ACF)
14.	Consents for Implementation	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhancing Visitor Experience:** The visitor center aims to provide tourists with a comprehensive and engaging experience by offering information, interactive exhibits, and services that enhance their understanding and enjoyment of the destination. Objective 2 **Promoting Local Culture and Heritage:** A visitor center serves as a platform to showcase the local culture, history, and heritage. This helps preserve and promote the unique aspects of the area while educating visitors about its significance. Objective 3 **Supporting Economic Development:** By attracting more tourists and extending their stay, a visitor center contributes to the local economy. It can also offer opportunities for local businesses to showcase their products and services.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of diverse accommodation 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects Annual Concession Fee (ACF) from the partner
18.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period

19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Promoting sustainable tourism practices 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 0.75Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	0.5 USD Mn
22.	Total Development Cost	3.1 USD Mn
23.	Revenue (30 years)	19.3 USD Mn
24.	IRR for 30 years	13%
25.	IRR for 30 years without land cost	15%
26.	Break even (year)	10 years
27.	Stabilisation period(year)	4 years
28.	Project Outputs	Result/ Benefit for communities • Tourist Attraction: Draws visitors to the area, boosting tourism and local economy. • Information Hub: Provides essential information and resources for tourists, enhancing their experience. • Local Promotion: Showcases local culture, attractions, and businesses. • Economic Impact: Generates revenue and creates jobs in the tourism sector. • Community Engagement: Offers educational programs and events for both tourists and residents. • Enhanced Visitor Experience: Improves visitor satisfaction and length of stay. • Sustainable Tourism: Promotes responsible tourism practices and environmental awareness.
29.	Planned Activities in Achieving Outputs	• Improve Infrastructure: Upgrade roads, utilities, and public services. • Information and Exhibits: Curate and install informative displays, maps, and interactive exhibits about local attractions. • Staff Recruitment: Hire and train staff to provide visitor information and support. • Marketing Campaign: Implement strategies to promote the visitor center and attract tourists. • Partnerships: Collaborate with local businesses and tourism operators for mutual promotion. • Program Development: Create events, tours, and workshops to engage visitors and enhance their experience. • Visitor Feedback: Collect and analyses feedback to improve services and facilities. • Maintenance Plan: Establish a routine for the upkeep and maintenance of the center.
30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities

31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

2. COMMERCIAL PARCEL

SITE CONTEXT

Plot C-01 is a Commercial Center plot located along the main road with a site area of 0.83Ha. This plot benefits from its adjacency to a vibrant pedestrian spine, providing easy access to recreational activities and scenic views. The location's blend of natural beauty and upscale amenities makes it an ideal spot to host tourism and hospitality facilities.

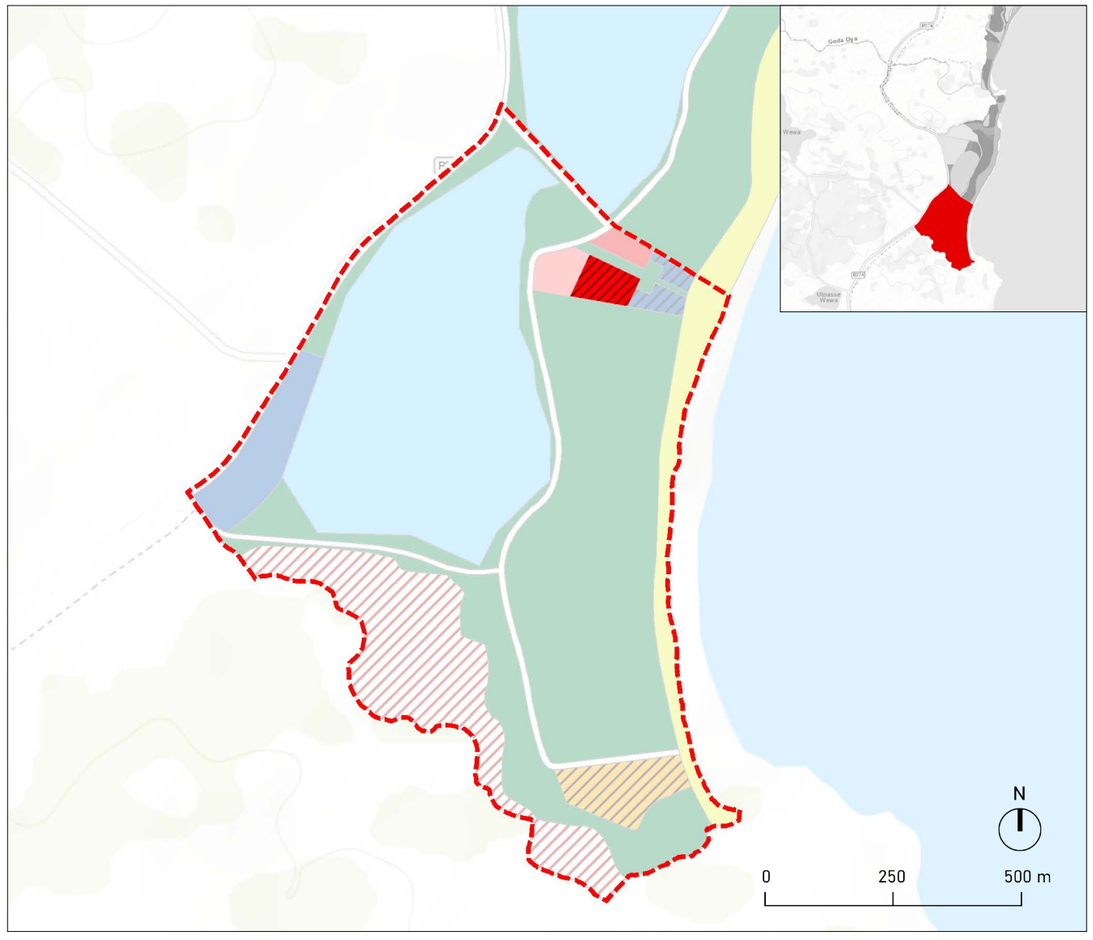
OBJECTIVE

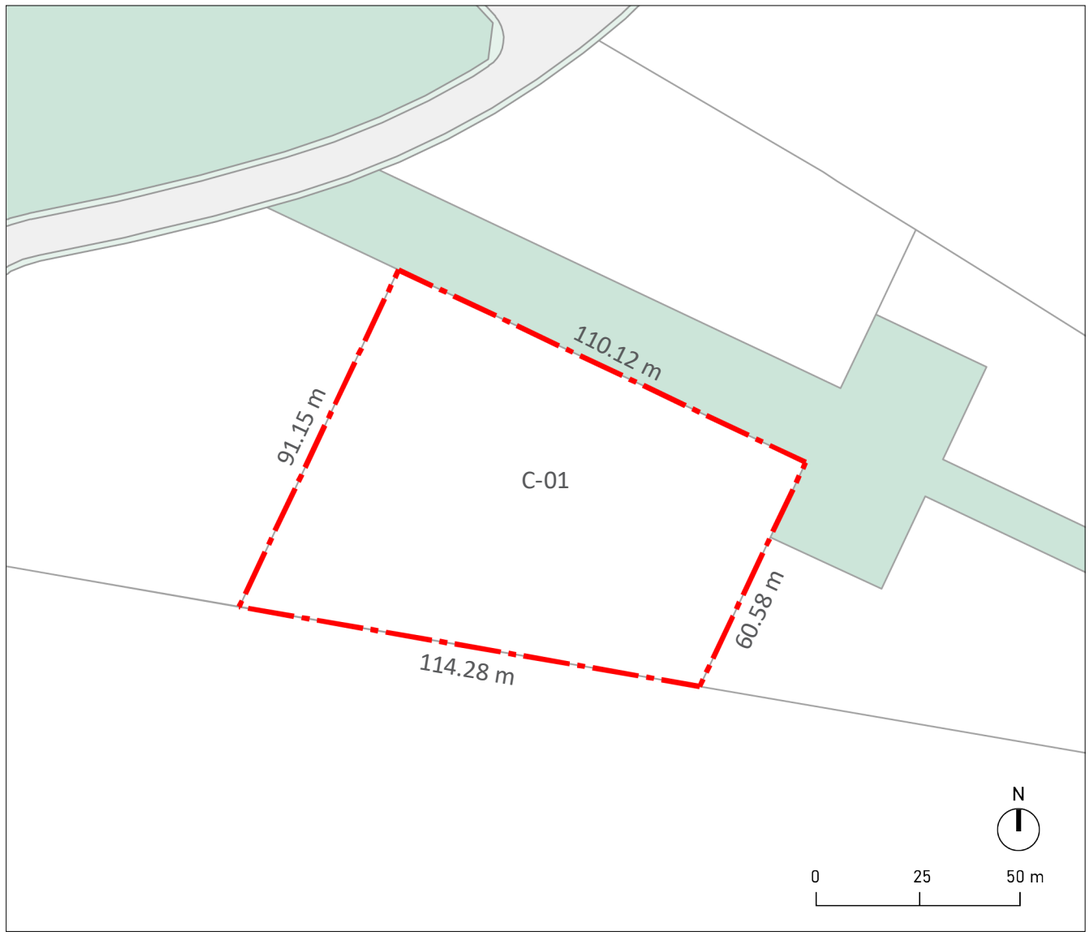
The architecture of Plot C-01 will feature a low-density bazaar-style design with an open plaza, fostering a vibrant and welcoming atmosphere.

DEVELOPMENT PROGRAMME

The development's primary focus will be on F&B and commercial retail facilities.

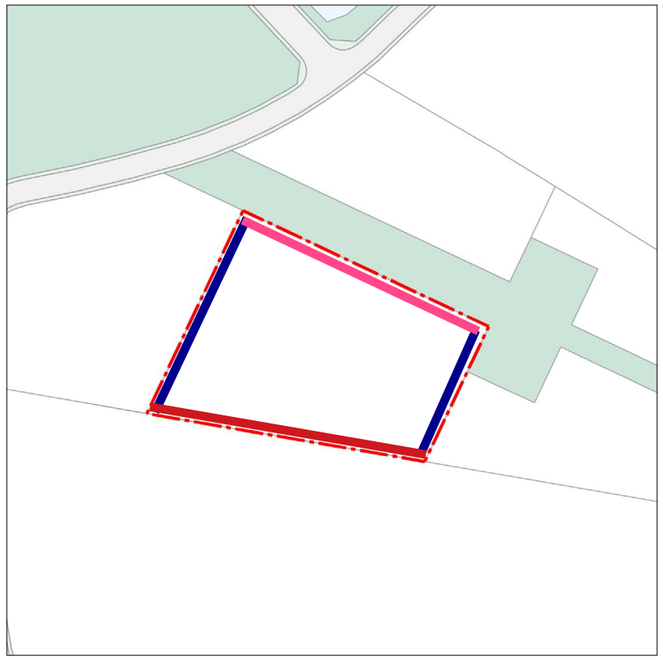
PLANNING PARAMETERS	
PLOT NUMBER	C-01
ALLOWABLE USE	COMMERCIAL
PLOT AREA	0.83 HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+2





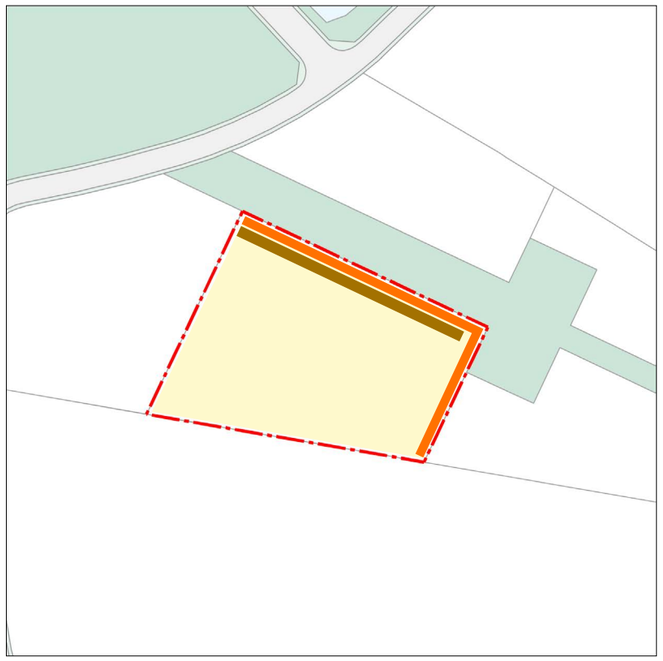
PLOT REGULATION

BUILDING SETBACK



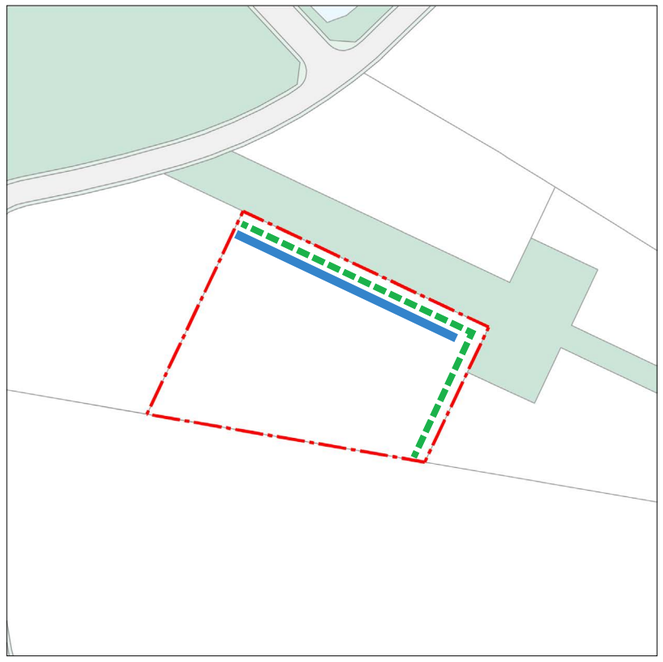
- Planning Area Boundary
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



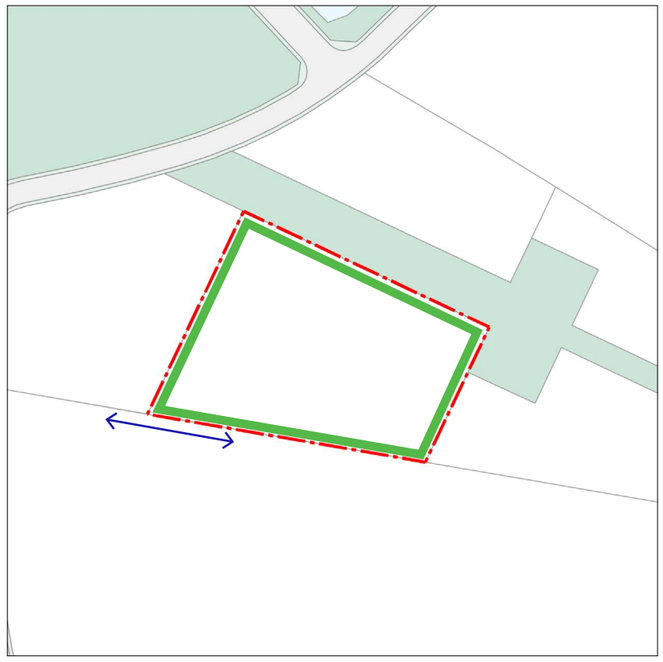
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (30% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Vehicular Ingress/Egress

3. COMMERCIAL (SURFER PARADISE)

SITE CONTEXT

Parcel SP-01, encompassing an area of 1.0 Ha, stands as a major commercial component within the intervention zone. It is positioned along beach front.

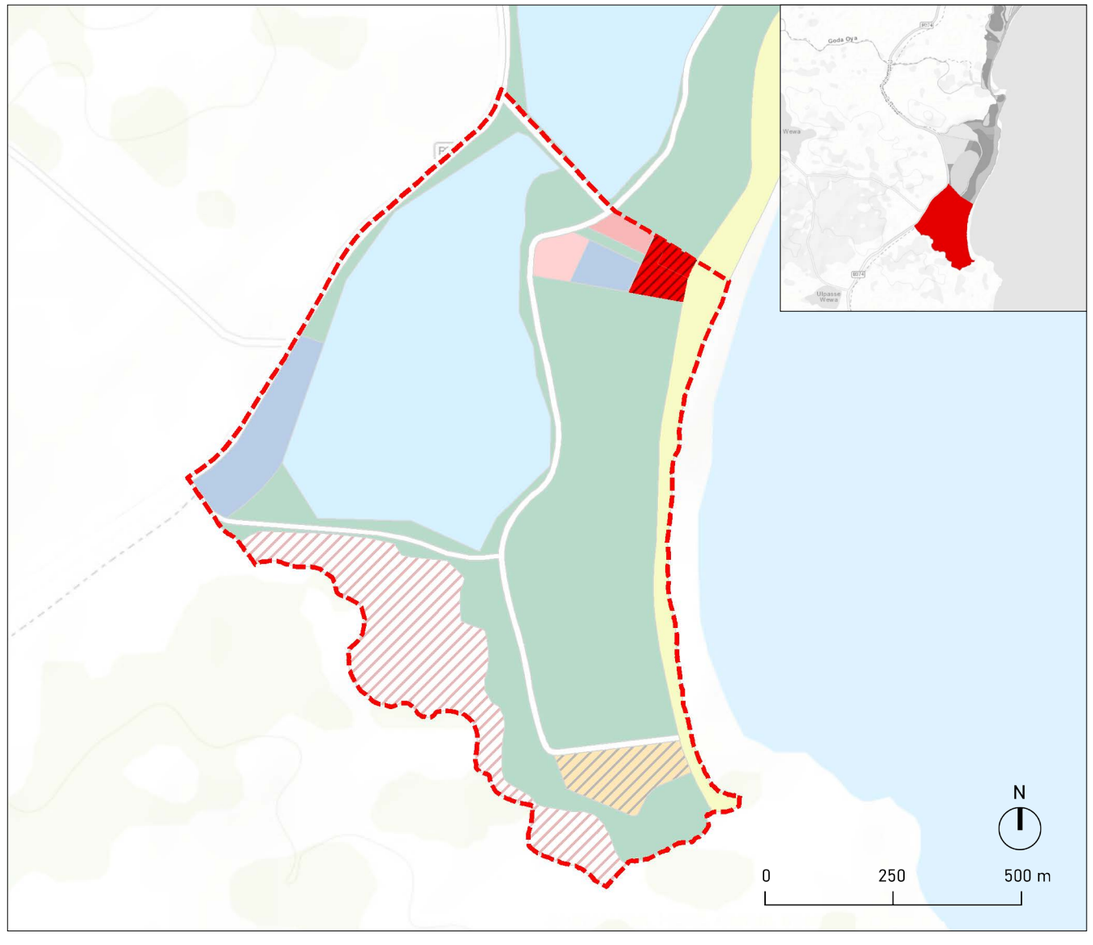
OBJECTIVE

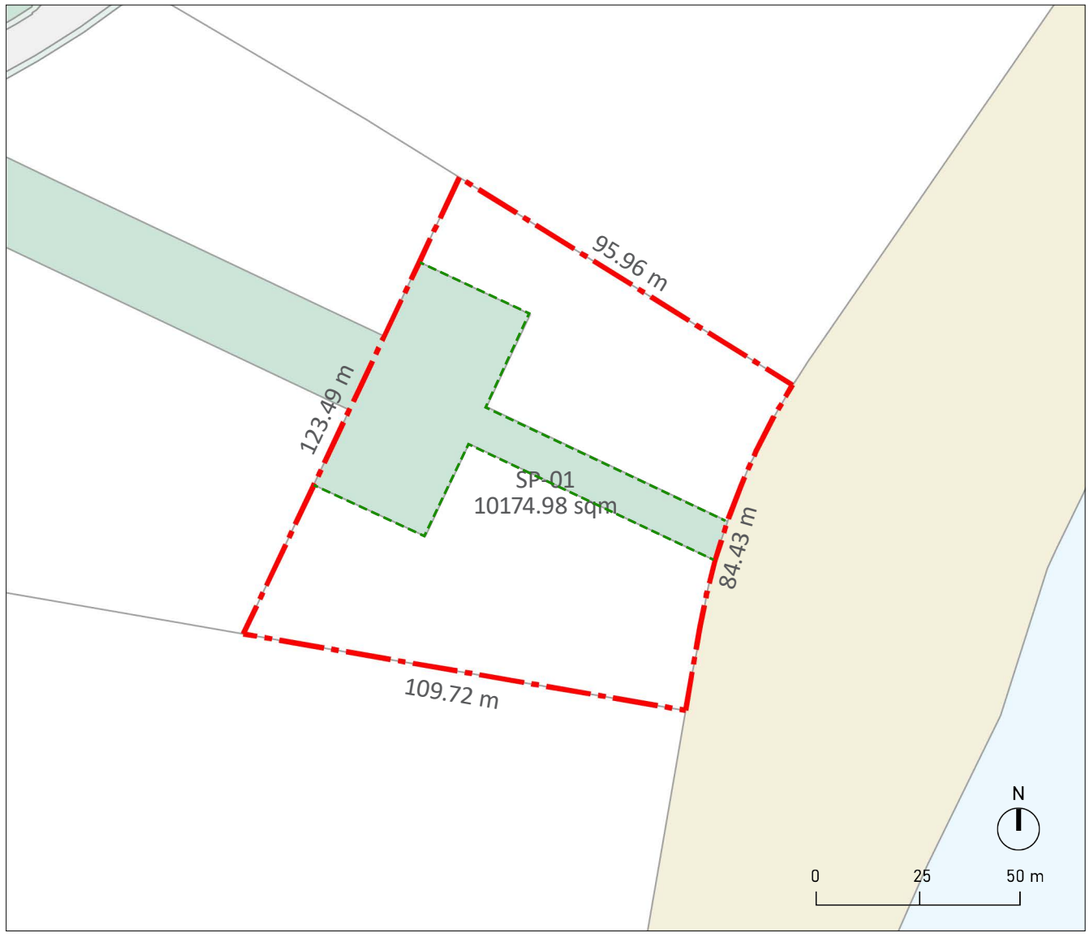
The primary objective of the development is to cater comprehensively to surfers by consolidating all necessary facilities within a single area. This plot will serve as the central hub, effectively accommodating all the needs of surfers.

DEVELOPMENT PROGRAMME

The development primarily focuses on commercial retail tailored to surfing, including supply shops, surf schools, and related services.

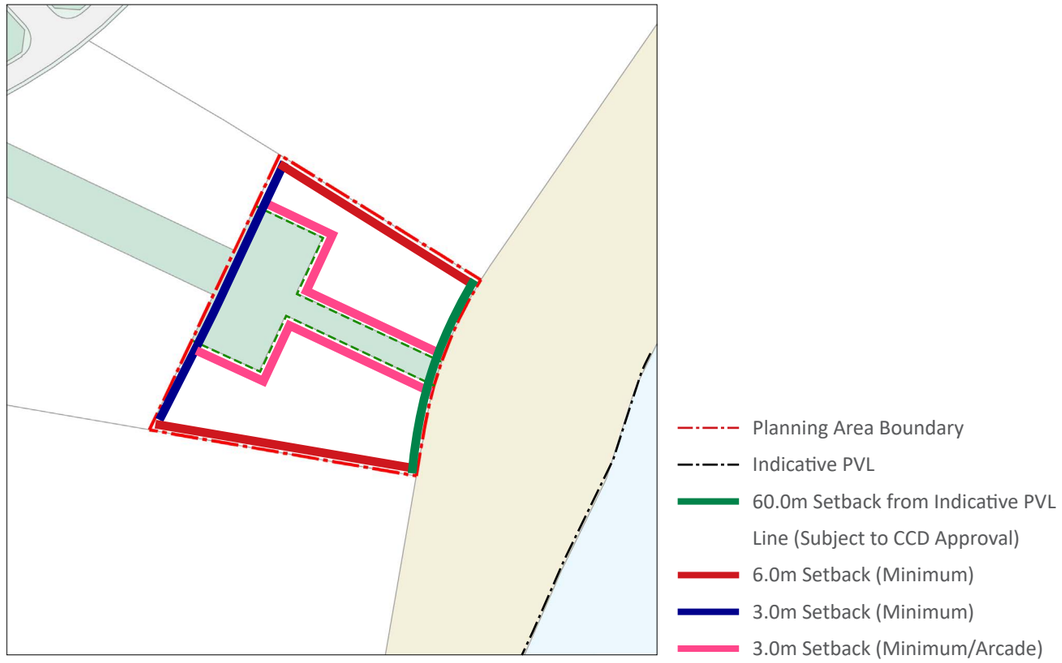
PLANNING PARAMETERS	
PLOT NUMBER	SP-01
ALLOWABLE USE	COMMERCIAL (SURFER PARADISE)
PLOT AREA	1.0 HA
PLOT RATIO	1.0
BUILDING HEIGHT	G+1





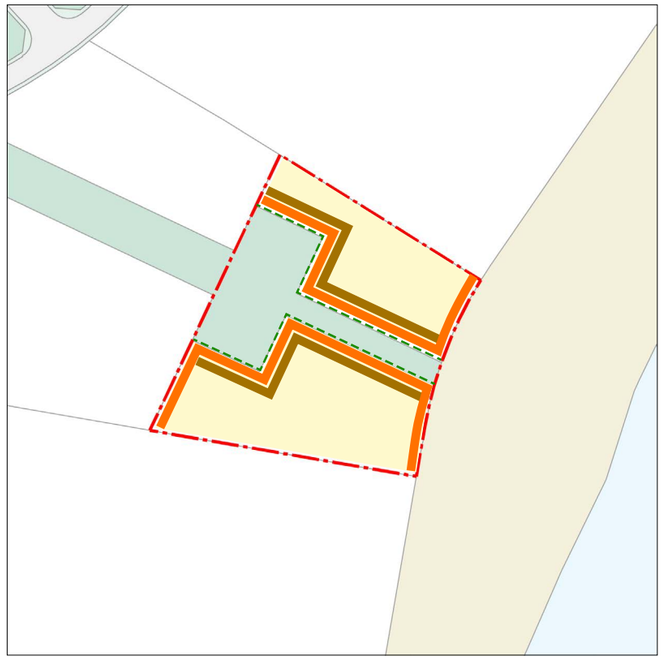
PLOT REGULATION

BUILDING SETBACK



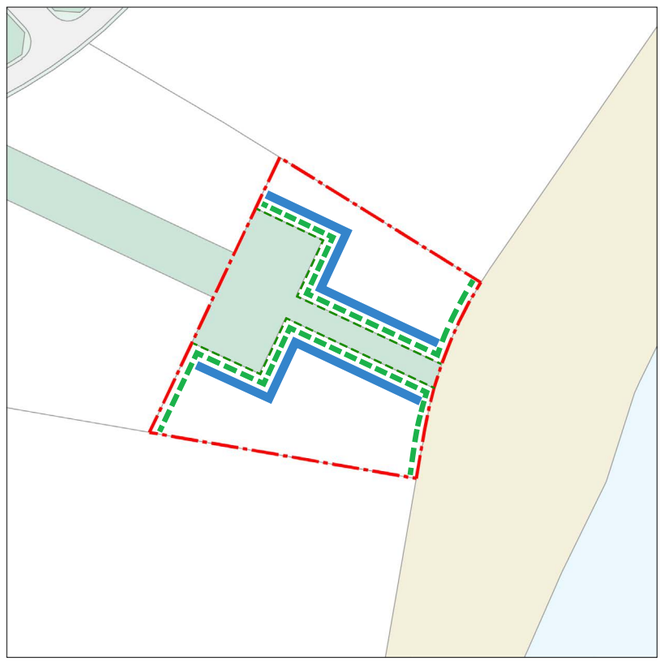
- Planning Area Boundary
- Indicative PVL
- 60.0m Setback from Indicative PVL Line (Subject to CCD Approval)
- 6.0m Setback (Minimum)
- 3.0m Setback (Minimum)
- 3.0m Setback (Minimum/Arcade)

BUILDING USE



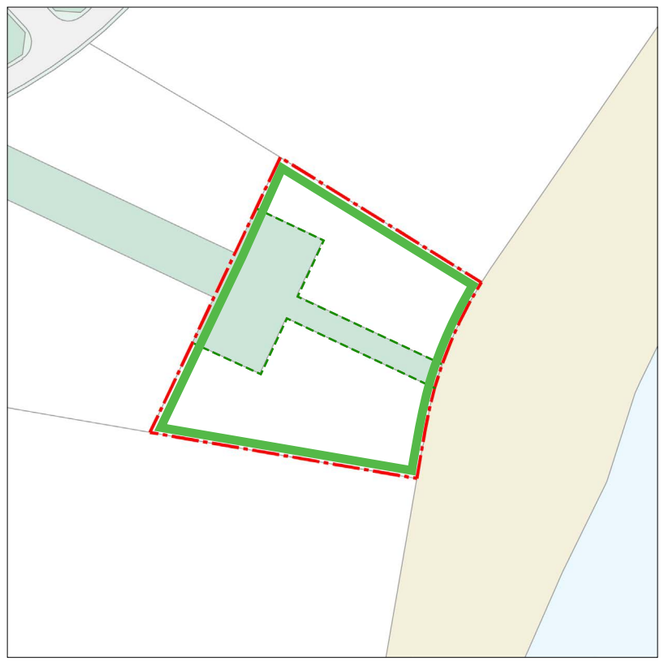
- Planning Area Boundary
- 30% of the Ground Level to be used as Retail and Food Outlets or other activity generating use
- Mandatory Commercial Facade along the Ground Level
- Area Permitted for Outdoor Refreshment Area

BUILDING EDGE & COVERED WALKWAY



- Planning Area Boundary
- Mandatory Building Lines (40% Articulation)
- Covered Pedestrian Walkway (Minimum Width 3.0m)

PUBLIC AND VEHICULAR ACCESS



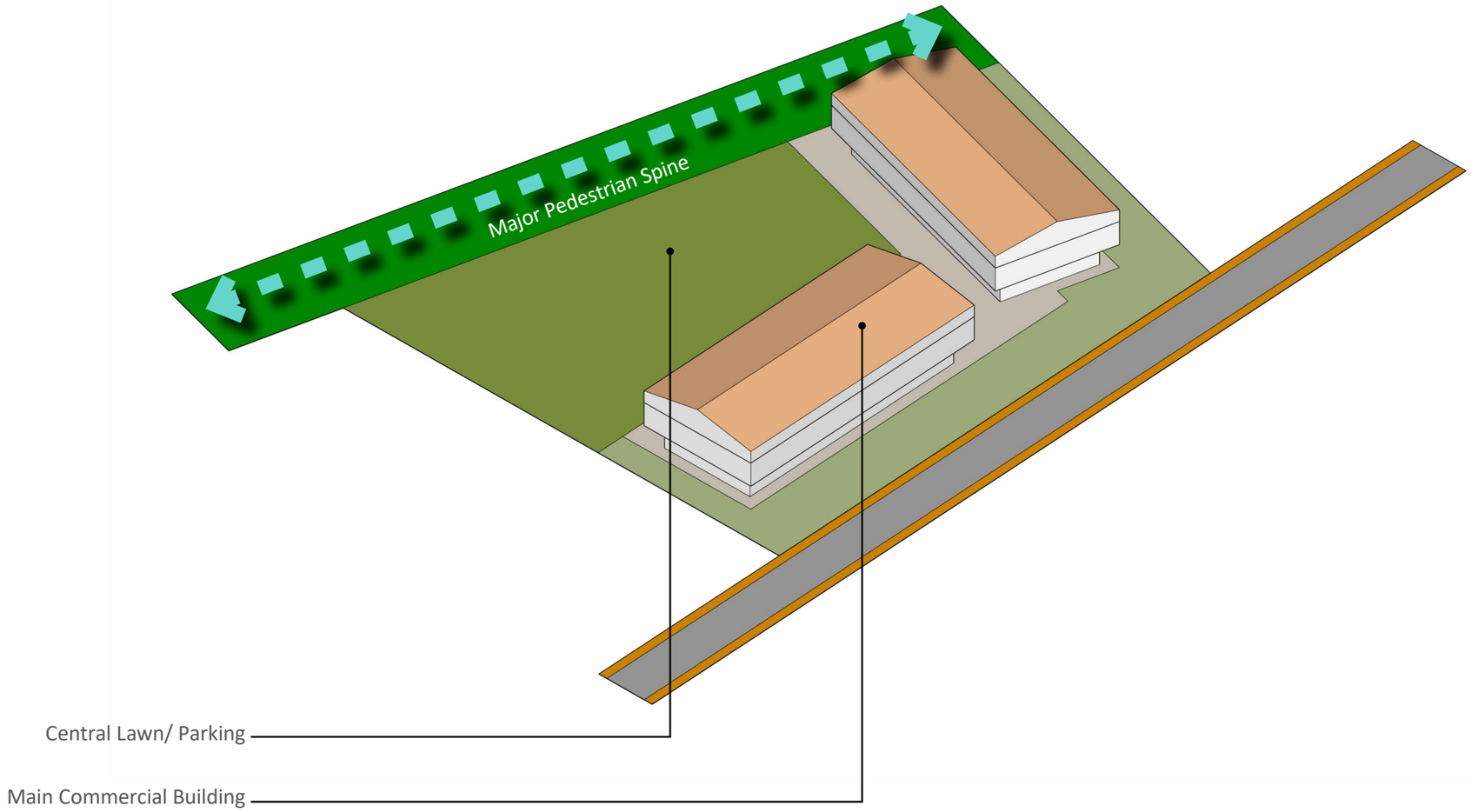
- Planning Area Boundary
- Publicly Accessible Area (No Physical Perimeter Fencing is allowed)
- Proposed Public Access for Pedestrian Linkage (20m. Minimum)
- Vehicular Ingress/Egress

PROJECT BRIEF

1.	Project Title	Commercial Parcel (C-01 & SP-01)
2.	Project Location	Peanut Bay Beach, Ampara District, Eastern Province
3.	Land Requirement for the Project	1.83Ha
4.	Location of the Land	Located at UD intervention area of Peanut Bay Beach
5.	Ownership Detail of the Land	State Owned Land
6.	Proposed Land Need to be Purchased or Acquire	Grant Land/ Lease to private
7.	The Cost of Land if It's to be Purchased/ Acquire	Not Required
8.	Project Preliminary Activities	Feasibility and Detailed Design
9.	Category of Project	Support Amenity
10.	Permitted Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
11.	Prohibited Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
12.	Conditional Uses	Refer Zoning Matrix @ Chapter-7: Zoning Classification and Guidelines
13.	Development Model	Long term lease with Annual Concession Fee (ACF)
14.	Consents for Implementation	Consent required from relevant organizations for project implementation.
15.	Project Objectives	Objective 1 **Enhance Revenue Streams:** Develop a comprehensive range of surfing-related businesses, such as surfing equipment shops, rental services, and certified surfing schools, to attract both novice and experienced surfers. This will boost tourism revenue by catering to niche markets and increasing the average tourist spend. Objective 2 **Boost Tourist Engagement:** Create unique and immersive surfing experiences, and other eco-friendly adventure packages, to attract and retain more tourists. Objective 3 **Strengthen Community Engagement:** Foster local employment by training and hiring local residents for various roles within the surfing industry, including instructors, guides, and retail staff. This objective aims to increase local participation in the tourism economy and improve community well-being.
16.	Rationale of Project	1. Existing Gap/ Deficiency: Lack of commercial activities 2. Project Contribution to existing gap: Job creation, tourism facility 3. Mode of Intervention: Joint venture with revenue share between State and External Developer
17.	Role of Government	• Land ownership lies with the government • Collects Annual Concession Fee (ACF) from the partner
18.	Role of Partner	• Design, build, Fund and Operate the development until the concession • Generates revenue through rentals until the concession period • Returns the land and building to UDA after concession period

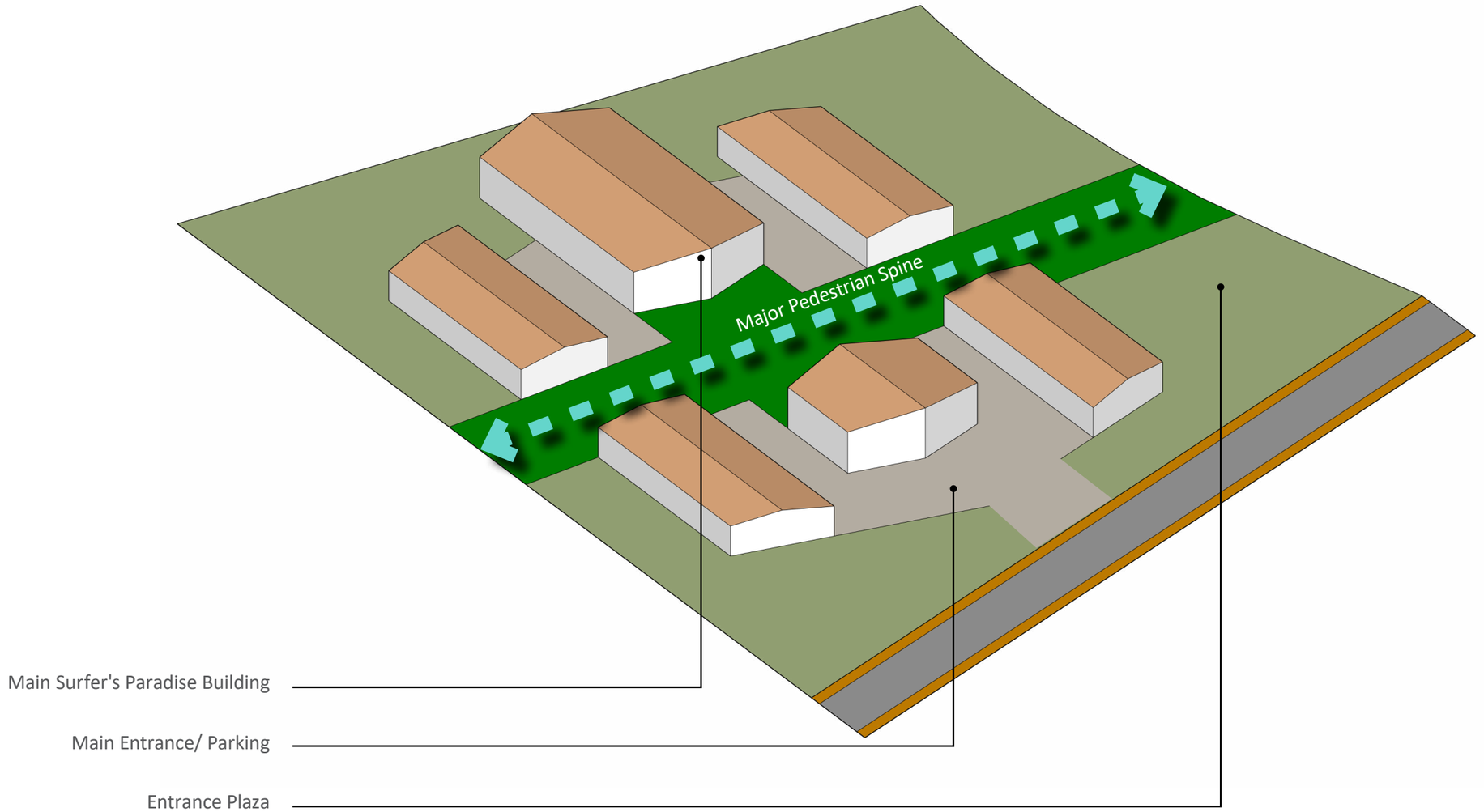
19.	Project Impacts	1. Economic: Job creation, Economic growth 2. Environment: Implement eco-friendly design, Eco-Tourism Promotion 3. Social: Poverty reduction by increasing household income
20.	Project Outcomes	1. Total Land Area: 2.2Ha 2. Phasing Targets: 0-5 years
21.	Land Cost	1.5 USD Mn
22.	Total Development Cost	9 USD Mn
23.	Revenue (30 years)	55 USD Mn
24.	IRR for 30 years	13%
25.	IRR for 30 years without land cost	15%
26.	Break even (year)	10 years
27.	Stabilisation period(year)	5 years
28.	Project Outputs	Result/ Benefit for communities • Economic Growth: Promotes local economy and consumer spending. • Job Creation: Provides new employment opportunities. • Enhanced Services: Improves access to goods and amenities. • Increased Property Values: Raises value of nearby properties. • Promote Tourism: Transforms the surroundings and Attracts visitors through enhanced retail, dining, and entertainment options. • Community Enhancement: Creates social interaction and events. • Tax Revenue: Generates additional funds for public services.
29.	Planned Activities in Achieving Outputs	• Site Assessment: Assess land, environment, and feasibility. • Develop Business Plans: Create detailed plans for commercial spaces and tenant mix. • Secure Funding: Obtain financial support through investments or loans. • Improve Infrastructure: Upgrade roads, utilities, and public services. • Permits and Approvals: Secure necessary permits and ensure regulatory compliance • Attract Tenants: Market spaces to potential businesses and negotiate leases. • Implement Marketing Strategies: Promote the commercial area to attract customers and businesses. • Monitor Operations: Track performance and address operational issues. • Evaluate Performance: Assess the success of the development and its impact on the community.
30.	Relevant Sustainable Development Goals	1- No Poverty 8- Decent Work & Economic Growth 11- Sustainable Cities and Communities

31.	Risk Assumption	Not Required
32.	Mainstreaming the Disaster Risk Reduction (DRR)	Not Required
33.	Project Monitoring Plan	• Set Objectives & KPIs: Define clear goals and performance metrics. • Schedule Reviews: Plan regular progress checks and milestone evaluations. • Create Reporting Procedures: Establish templates and methods for updates. • Track Progress: Monitor budget, time line, and quality metrics. • Identify & Manage Risks: Assess and address potential issues promptly. • Engage Stakeholders: Collect feedback and keep stakeholders informed.
34.	Project Evaluation Plan	• Assess Performance: Analyses data against KPIs and project goals. • Review Outcomes: Evaluate the effectiveness and impact of the project. • Document Findings: Prepare comprehensive reports on project performance. • Identify Lessons Learned: Analyses successes and challenges. • Apply Improvements: Implement lessons learned for future projects.
35.	Method of Financing	Joint Venture with Revenue Share • Provide the land to the developer for free • Design, build, Fund and Operate the development • Generates revenue through rentals • Shares the collected revenue with the government



NOTES

The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution



NOTES
The purpose of the 3 D massing is only to illustrate the intent of the urban design according to the development proposal and programmes It is not to provide an architectural design solution

6.10 FINANCIAL AND PROJECT IMPLEMENTATION MODEL

6.10.1 CASE SCENARIO (AMPARA)

HIGH CASE SCENARIO

For the Whisky Point area, the estimated cost of acquiring land is expected to be between 0.7 to 0.9 million USD per hectare. This estimate is based on current market trends and takes into consideration the desirability of the location, which is known for its potential as a prime hospitality and entertainment destination.

The revenue projections for a 4-star hotel at Whisky Point suggest an average room rent of approximately 100 to 110 USD per night. This pricing is aligned with the quality of service and amenities that a 4-star hotel is expected to offer, catering to both domestic and international tourists. Additionally, revenue from retail spaces, markets, and entertainment venues is anticipated to be in the range of 8 to 11 USD per square meter per month. This estimation reflects the potential for these spaces to attract significant foot traffic from hotel guests and visitors to the area, making it a lucrative opportunity for businesses.

Similarly, in Arugam Bay, the estimated cost of land is projected to be between 0.7 to 0.9 million USD per hectare, comparable to the Whisky Point area. Arugam Bay, renowned for its surfing opportunities, is expected to generate rental income from spaces such as the Surfer's Paradise and visitor's centers. The anticipated rental revenue is estimated to range from 7 to 10 USD per square meter per month. This reflects the unique appeal of Arugam Bay as a premier surfing destination, which attracts a steady flow of tourists, thereby driving demand for commercial spaces in the area.

Cost of Land

- Peanut farm **0.2 – 0.3 Mn USD/ hectare**
- Whiskey point **0.7 – 0.9 Mn USD/ hectare**
- Arugambay **0.7 – 0.9 Mn USD/ hectare**

Revenue Assumptions

Peanut Farm

Rentals – Retail, visitor's center (per sqm per month)

7 – 10 USD

Whiskey Point

4 star resort (Average Room Rent)	**Rentals** – Retail, market, entertainment (per sqm per month)
100 – 110 USD	**8 – 11 USD**

Arugambay

Rentals – Surfer's paradise & visitor's center (per sqm per month)

7 – 10 USD

Beachfront events – **Ticket cost 7 – 10 USD**

Construction cost assumed (USD/ sqm) - 60

Note:

- *Beach front park is not a revenue generating component. Hence IRRs are not calculated. Revenue for beach front park is considered if events are hosted.
- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

Node	Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even (year)	Stabilisation period (year)
Peanut Farm	**SURFERS PARADISE + RETAIL**	3.9	1.5	9	55	**13%**	**15%**	10	5
	VISITOR'S CENTER	0.7	0.5	3.1	19.3	**13%**	**15%**	10	4
	TOTAL	**4.6**	**2**	**12.1**	**74.3**	**13%**	**15%**		
Whiskey Point	**BEACHFRONT ENTERTAINMENT**	1.2	0.97	5	41.4	**16%**	**18%**	9	6
	4 STAR RESORT (50 – 60 rooms)	5.1	2.75	13.4	662	**21.5%**	**24%**	8	6
	NIGHT MARKET & ENTERTAINMENT (Retail shops, Pubs, restaurants)	1.1	0.89	5.4	45	**16.2%**	**18%**	9	5
	RETAIL	1.3	1.05	5.4	45	**16%**	**18%**	9	5
	TOTAL	**8.7**	**5.6**	**29.4**	**793**	**17%**	**20%**		
Arugambay	**SURFER'S PARADISE + VISITORS CENTER**	**2**	**1.9**	**6.1**	**40**	**13%**	**17%**	**11**	**4**
	3 STAR HOTEL (160 – 200 rooms)	**2**	**1.9**	**8.6**	**348**	**19%**	**22%**	**8**	**6**
	BEACHFRONT PARK*	**0.5**	**0.2**	**2.5**	**11.2**	**12%**	**16%**	**8**	**6**
	TOTAL	**4.5**	**4**	**17.2**	**399**	**14%**	**18%**		

Table 6.24 Financial Analysis (High Case Scenario)

Node	Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
Peanut Farm	SURFERS PARADISE + RETAIL	5,000	100%				
	VISITOR'S CENTER	3,500	100%				
Whiskey Point	BEACHFRONT ENTERTAINMENT	6,000	100%				
	4 STAR RESORT (50 – 60 rooms)	10,200	40%	40%	20%		
	NIGHT MARKET & ENTERTAINMENT (Retail shops, Pubs, restaurants)	8,800	100%				
	RETAIL	6,500	100%				
Arugambay	SURFER'S PARADISE + VISITORS CENTER	7,250	100%				
	3 STAR HOTEL (160 – 200 rooms)	8,000	100%				
	BEACHFRONT PARK	3,120	100%				

Table 6.25 Construction Phasing High Case

LOW CASE SCENARIO

For the low-case scenario, the table 6.46 presents the required land area, land cost, total development cost, 30-year revenue estimates, 30-year IRR projections, as well as the estimated break-even point and stabilisation period.

Node	Components	Land area (hectares)	Land cost (USD Mn)	Total Development cost (USD Mn)	Revenue 30 years (USD Mn)	IRR for 30 years	IRR for 30 years without land cost	Break even	Stabilisation period
Peanut Farm	SURFERS PARADISE + RETAIL	0.3	0.26	0.9	6	12%	15%	11	5
	VISITOR'S CENTER	0.3	0.26	0.9	16	12%	15%	11	4
	TOTAL	0.7	0.53	1.8	22	12%	15%		
Whiskey Point	BEACHFRONT ENTERTAINMENT	0.4	0.31	1.5	12	15%	18%	9	6
	4 STAR RESORT (50 – 60 rooms)	5.1	2.73	13.3	629	19%	22%	10	6
	NIGHT MARKET & ENTERTAINMENT (Retail shops, Pubs, restaurants)	0.4	0.31	1	7.2	14%	18%	10	5
	RETAIL	0.4	0.31	1	7.2	14%	18%	10	5
	TOTAL	6.1	3.7	16.5	655	16%	19%		
Arugambay	SURFER'S PARADISE + VISITORS CENTER	1	0.94	4.7	23.4	14%	17%	10	4
	BEACHFRONT PARK*	0.5	0.5	2.2	16	10%	13%	10	4
	TOTAL	1.5	1.4	7	39.4	12%	15%		

Note:

- *Beach front park is not a revenue generating component. Hence IRRs are not calculated. Revenue for beach front park is considered if events are hosted.
- The financial analysis is performed at a strategic level with high level assumptions
- These are undiscounted revenues
- Cost of construction is considered based on similar projects in Colombo and discounted construction cost is considered
- The development cost is applicable only on the built up area of each development

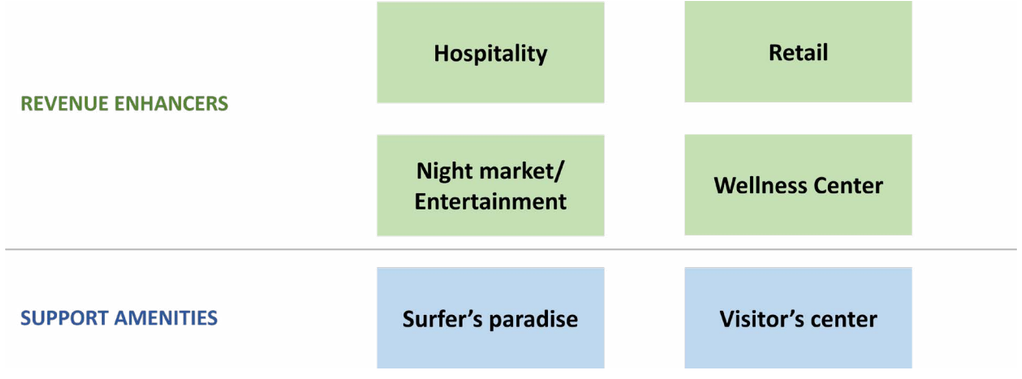
Table 6.26 Financial Analysis (Low Case Scenario)

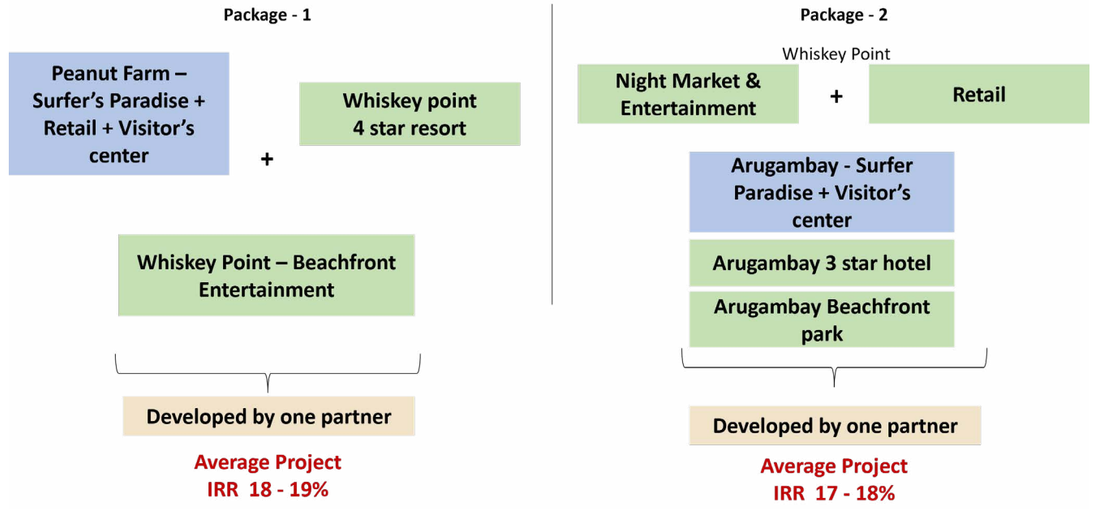
Node	Components	Built up area (sqm)	Y1 2025	Y2 2026	Y3 2027	Y4 2028	Y5 2029
Peanut Farm	SURFERS PARADISE + RETAIL	1,048	100%				
	VISITOR'S CENTER	1,048	100%				
Whiskey Point	BEACHFRONT ENTERTAINMENT	1,750	100%				
	4 STAR RESORT (50 – 60 rooms)	10,000	40%	40%	20%		
	NIGHT MARKET & ENTERTAINMENT (Retail shops, Pubs, restaurants)	1,050	100%				
	RETAIL	1,050	100%				
Arugambay	SURFER'S PARADISE + VISITORS CENTER	5,500	100%				
	BEACHFRONT PARK	2,600	100%				

Table 6.27 Construction Phasing Low Case

6.10.2 IMPLEMENTATION MODEL OF PROJECTS

The IRR for Support components have lower IRR compared to revenue enhancers as they are non-revenue generating and the main source of revenue is through rentals of the stores. Though they are non- revenue generators, they are critical as they form a part of essential tourist amenities and enhance the experience of the tourists.





- Option 2: For self development of the projects by the Authorities, the project IRR without land cost can be considered for returns.

Node	Components	Category of project	Development model	Category of project	
Peanut Farm	Surfers Paradise + Retail Visitor's Center	Support Amenity	Long term lease with Annual Concession Fee (ACF)	• **Land ownership** lies with SLTDA/ EPC • **Collects Annual Concession Fee (ACF)** from the partner	• **Design, build, Fund and Operate** the development until the concession • **Generates revenue** through rentals until the concession period • **Returns the land** and building to UDA after concession period
Whisky Point	Beach front Entertainment 4 Star Resort Night Market & Entertainment Retail	Revenue enhancer	Long term lease with Revenue Share	• **Land ownership** lies with SLTDA/ EPC • **Collects revenue share** from Partner	• **Design, build, fund and operate and generates revenue** until the concession period • **Provides revenue share** to the Government • **Returns the land** and building to UDA after concession period
Arugam Bay	Surfer's Paradise + Visitors Center 3 Star Hotel	Support Amenity	Long term lease with Annual Concession Fee (ACF)	• **Land ownership** lies with SLTDA/ EPC • **Collects Annual Concession Fee (ACF)** from the partner	• **Design, build, Fund and Operate** the development until the concession • **Generates revenue** through rentals until the concession period • **Returns the land** and building to UDA after concession period
	Beach front Park	Self Development Model		• **Land ownership** lies with SLTDA/ EPC • The government **builds, maintains and operate** the beach front park. This is because, the park is not a revenue generating model and a public amenity.	

Table 6.28 Implementation Model of Projects (Ampara)

GENERAL ASSUMPTIONS (HIGH CASE)

SITE	WHISKY POINT				ARUGAM BAY		PEANUT FARM		
PROJECTS	**NIGHT MARKET/ ENTERTAINMENT**	**COMMERCIAL HIGH STREET**	**BEACH FRONT PARK & RETAIL**	**SURFER PARADISE**	**VISITOR CENTRE**	**BEACH FRONT PARK**	**VISITOR CENTRE**	**SURFER PARADISE**	**RETAIL**
General Assumptions									
Land Area (Ha)	1.1	1.3	1.2	1.5	1.5	0.5	0.5	4.45	5.19
Built up Area (sq.m)	8,800	6,500	6,000	4,000	4,000	0	3,500	0	10,500
Cost Assumptions									
Base Cost of Construction (USD per sqm)	695	695	695	695	695	732	695	700	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Escalation in Cost of Construction (per annum)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Revenue Assumptions									
Escalation in Revenues (per annum)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%

Table 6.29 General Assumptions (High Case)

SITE		WHISKY POINT	ARUGAM BAY
General Assumptions		**4 Star Hotel**	**3 Star Hotel**
Land Area	Ha	5.1	2.0
Built-up Area	sqm	10,200	8,000
Cost Assumptions			
Construction Cost (USD per sqm)		1,184	1,014
Escalation in Construction Cost		6.0%	6.0%
Revenue Assumptions			
Average Room Rent (ARR)	USD	105	55
Escalation ARRs	% per annum	5.0%	5.0%
Operating Revenues Assumptions			
Food & Beverage Revenue	% of Room Revenue	60.0%	60.0%
Minor Operating Department Revenue	% of Room Revenue	10.0%	10.0%
Spa & Health Club Revenue	% of Room Revenue	10.0%	10.0%
Other Revenue	% of Room Revenue	0.0%	0.0%
Operating Expenditure Assumptions			
Room Cost	% of Room Revenue	10.0%	10.0%
Food & Beverage Cost	% of F&B Revenue	40.0%	40.0%
Minor Operating Department Cost	% of MOD Revenue	40.0%	40.0%
Spa & Health Club Cost	% of Spa & health Club Revenue	40.0%	40.0%
Other Costs	% of Other Revenue	0.0%	0.0%
Other Overhead Expenditure Assumptions			
Administrative Expenditure	% of Total Revenue	10.0%	10.0%
Maintenance Expenditure	% of Total Revenue	5.0%	5.0%
Payroll Expenses	% of Total Revenue	10.0%	10.0%
Operating Expenses	% of Total Revenue	10.0%	10.0%
Marketing Expenditure	% of Total Revenue	2.0%	2.0%
Base Management Fee	% of Total Revenue	3.0%	3.0%
Management Incentive Fee	% of Gross Operation Profit	2.0%	2.0%

Table 6.30 General Assumptions of 3 Star Hotel (High Case)

GENERAL ASSUMPTIONS (LOW CASE)

SITE	WHISKY POINT				ARUGAM BAY		PEANUT FARM	
PROJECTS	**NIGHT MARKET/ ENTERTAINMENT**	**COMMERCIAL HIGH STREET**	**BEACH FRONT PARK & RETAIL**	**SURFER PARADISE**	**VISITOR CENTRE**	**BEACH FRONT PARK**	**VISITOR CENTER**	**RETAIL**
General Assumptions								
Land Area (Ha)	0.35	0.35	0.35	0.5	0.5	0.5	0.35	0.52
Cost Assumptions								
Base Cost of Construction (USD per sqm)	695	695	695	695	695	732	695	695
Architects and Consultants Fees (% of Construction Costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Margin on Maintenance	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Contingencies (% of Total Costs)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Escalation in Cost of Construction (per annum)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Revenue Assumptions								
Escalation in Revenues (per annum)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Lease Escalation on Renewal	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%

Table 6.31 General Assumptions (Low Case)

SITE		WHISKY POINT
General Assumptions		**3 Star Hotel**
Land Area	Ha	5.05
Cost Assumptions		
Construction Cost (USD per sqm)		1,184
Construction Cost (USD Mn per sqm)		0.06
Escalation in Construction Cost		6.0%
Revenue Assumptions		
Average Room Rent (ARR)	USD	105
Escalation ARRs	% per annum	5.0%
Operating Revenues Assumptions		
Food & Beverage Revenue	% of Room Revenue	60.0%
Minor Operating Department Revenue	% of Room Revenue	10.0%
Spa & Health Club Revenue	% of Room Revenue	10.0%
Other Revenue	% of Room Revenue	0.0%
Operating Expenditure Assumptions		
Room Cost	% of Room Revenue	10.0%
Food & Beverage Cost	% of F&B Revenue	40.0%
Minor Operating Department Cost	% of MOD Revenue	40.0%
Spa & Health Club Cost	% of Spa & health Club Revenue	40.0%
Other Costs	% of Other Revenue	0.0%
Other Overhead Expenditure Assumptions		
Administrative Expenditure	% of Total Revenue	10.0%
Maintenance Expenditure	% of Total Revenue	5.0%
Payroll Expenses	% of Total Revenue	10.0%
Operating Expenses	% of Total Revenue	10.0%
Marketing Expenditure	% of Total Revenue	2.0%
Base Management Fee	% of Total Revenue	3.0%
Management Incentive Fee	% of Gross Operation Profit	2.0%

Table 6.32 General Assumptions of 3 Star Hotel (Low Case)

6.10.3 FINANCIAL IMPLICATIONS

HIGH CASE

REVENUE SHARE MODEL

Node	Components	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Concession period	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Whiskey point	BEACHFRONT ENTERTAINMENT	5%	5	3%	5	30	13%	16%	17%	17%
	4 STAR RESORT	5%	5	3%	5	30	19%	22%	23%	23%
	NIGHT MARKET & ENTERTAINMENT	5%	5	3%	5	30	13%	16%	17%	17%
	RETAIL	5%	5	3%	5	30	13%	16%	17%	17%
Ar Bay	3 STAR HOTEL	5%	5	3%	5	30	17%	20%	21%	21%
	BEACHFRONT PARK	5%	5	3%	5	30	13%	15%	16%	16%

ANNUAL CONCESSION FEE (ACF) MODEL

Node	Components	Annual Concession Fee (ACF)	Escalation in ACF (%)	Frequency (years)	Concession period	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Peanut Farm	SURFERS PARADISE + RETAIL	0.1	5%	3	30	9%	12%	14%	14%
	VISITOR'S CENTER								
Arugamba y	SURFER'S PARADISE + VISITORS CENTER	0.15	5%	3	30	9%	12%	13%	14%

Table 6.33 Plot wise Financial Implementation High Case (Ampara)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• Peanut farm Surfer's Paradise + Retail + Visitor's center • 4 star hotel/ resort • Beachfront & entertainment	15%	18%	19%	19%
Package 2	• Arugambay Surfer Paradise + Visitor's center • Night market/ Entertainment • Commercial high street • 3 star hotel	14%	16%	18%	18%

REVENUE TO AUTHORITY				
Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	4%	9%	12%	13%
Total revenue to Authority (ACF+RS) (USD Mn)	12.9	24.6	42.7	69

Table 6.34 Package wise Financial Implementation and Revenue to Authority High Case (Ampara)

LOW CASE

REVENUE SHARE MODEL

Node	Components	Revenue share %	Start year of revenue share	Increase in revenue share	Frequency (years)	Concession period	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Whiskey point	BEACHFRONT ENTERTAINMENT	5%	5	3%	5	30	13%	15%	16%	17%
	4 STAR RESORT	5%	5	3%	5	30	15%	19%	20%	21%
	NIGHT MARKET & ENTERTAINMENT	5%	5	3%	5	30	13%	16%	17%	17%
	RETAIL	5%	5	3%	5	30	13%	16%	17%	17%

ANNUAL CONCESSION FEE (ACF) MODEL

Node	Components	Annual Concession Fee (ACF)	Escalation in ACF (%)	Frequency (years)	Concession period	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Peanut Farm	SURFERS PARADISE + RETAIL	0.04	5%	3	30	8%	12%	13%	14%
	VISITOR'S CENTER								
Arugambay	SURFER'S PARADISE + VISITORS CENTER	0.15	5%	3	30	7%	11%	13%	14%

Table 6.35 Plot wise Financial Implementation Low Case (Ampara)

Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Package 1	• Peanut farm Surfer's Paradise + Retail + Visitor's center • 4 star hotel/ resort • Beachfront & entertainment	14%	17%	18%	19%
Package 2	• Arugambay Surfer Paradise + Visitor's center • Night market/ Entertainment • Commercial high street	10%	13%	14%	15%

REVENUE TO AUTHORITY				
Revenue to Authority	15 years	20 years	25 years	30 years
IRR to the Authority	4%	9%	12%	13%
Total revenue to Authority (ACF+RS) (USD Mn)	8.2	15	26	41

Table 6.36 Package wise Financial Implementation and Revenue to Authority Low Case (Ampara)

HIGH CASE

Components	15 years	20 years	25 years	30 years
BEACHFRONT ENTERTAINMENT	0.8	1.7	3	5
4 STAR RESORT	4.2	9	17	30
NIGHT MARKET & ENTERTAINMENT	0.9	1.8	3.3	5.6
RETAIL	0.9	1.8	3.3	5.6
3 STAR HOTEL	2.3	4.9	8.9	13.9
BEACHFRONT PARK	0.3	0.5	0.8	1.0
REVENUE TO AUTHORITY THROUGH ACF (USD Mn)				
Components	**15 years**	**20 years**	**25 years**	**30 years**
SURFERS PARADISE + RETAIL & VISITOR'S CENTER	1.5	2.1	2.9	3.6
SURFER'S PARADISE + VISITORS CENTER	2.3	3.3	4.3	5.4

Table 6.37 Project Wise Detail Revenue to Authority High Case (Ampara)

Note:

- The Beach front entertainment, 3&4 star hospitality, night-market & retail are categorized under a revenue-sharing model due to their higher project IRRs. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 5% is proposed to achieve the Partners' IRRs of 17-23%, which is expected to attract global investors to Sri Lanka.
- In contrast, Surfer paradise, Visitor's center serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an Annual Concession Fee model of USD 0.1 - 0.15 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.
- Beach front park is a self-development project by the Government. This is because, the park is not a revenue generating model and a public amenity. Hence limited opportunity & interest for partners to invest and gain profit.

LOW CASE

REVENUE TO AUTHORITY THROUGH REVENUE SHARE (USD Mn)				
Components	15 years	20 years	25 years	30 years
BEACHFRONT ENTERTAINMENT	0.1	0.3	0.5	0.9
4 STAR RESORT	4.1	9	17	30
NIGHT MARKET & ENTERTAINMENT	0.1	0.3	0.5	0.9
RETAIL	0.1	0.3	0.5	0.9
BEACH FRONT PARK	0.3	0.6	1.2	1.8

REVENUE TO AUTHORITY THROUGH ACF (USD Mn)				
Components	15 years	20 years	25 years	30 years
SURFERS PARADISE + RETAIL & VISITOR'S CENTER	1.5	2.1	2.9	3.6
SURFER'S PARADISE + VISITORS CENTER	2.3	3.2	4.3	5.4

Table 6.38 Project Wise Detail Revenue to Authority Low Case (Ampara)

Note:

- The Beach front entertainment, 3&4 star hospitality, night-market & retail are categorized under a revenue-sharing model due to their higher project IRRs. This suggests that these projects are likely to generate more revenue compared to Divers Paradise. Therefore, a revenue share of 5% is proposed to achieve the Partners' IRRs of 17-23%, which is expected to attract global investors to Sri Lanka.
- In contrast, Surfer paradise, Visitor's center serves as a support amenity and is a basic facility necessary for the area. Consequently, it is not anticipated to generate substantial revenue like the hotel or retail projects. Thus, an Annual Concession Fee model of USD 0.04 – 0.15 million has been proposed, providing a steady revenue stream to the Authority, with a planned escalation of 5% every three years.
- Beach front park is a self-development project by the Government. This is because, the park is not a revenue generating model and a public amenity. Hence limited opportunity & interest for partners to invest and gain profit.

6.10.4 NET PRESENT VALUE FOR PROJECTS

WHISKY POINT

WACC Calculation	Cost	Proportion
Debt	17%	60%
Equity	20%	40%
WACC Rate / Discount rate		**18%**
Date of valuation	20th Nov 2024	
Capitalisation year	10th year	

	High case scenario			Low case scenario		
Projects	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**
Night Market/ Entertainment	1	50	45	0.3	8	23
Commercial High street	1	50	38	0.3	8	23
Beachfront entertainment	1	46	38	0.3	8	23
4 star resort	3	64	13	3	64	13

The NPV is higher than the total cost of the land, hence the projects are feasible

Table 6.39 Net Present Value High and Low Case (Whisky Point)

WACC Calculation	Cost	Proportion
Debt	17%	60%
Equity	20%	40%
WACC Rate / Discount rate		**18%**
Date of valuation	20th Nov 2024	
Capitalisation year	10th year	

	High case scenario			Low case scenario		
Projects	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**
Visitor center + Surfer Paradise	1.9	68	34	0.5	17	34
3 star hotel	1.9	28	14	-	-	-
Beachfront park	0.2	13	24.5	0.2	13	24.5

Table 6.40 Net Present Value High and Low Case (Arugam Bay)

The NPV is higher than the total cost of the land, hence the projects are feasible

WACC Calculation	Cost	Proportion
Debt	17%	60%
Equity	20%	40%
WACC Rate / Discount rate		**18%**
Date of valuation	20th Nov 2024	
Capitalisation year	10th year	

	High case scenario			Low case scenario		
Projects	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**	**Total Land cost (USD Mn)**	**NPV (USD Mn)**	**NPV per hectare (USD Mn)**
Visitor center	0.5	20	28	0.3	6	17
Surfer's paradise + Retail	1.5	56	27	0.3	6	16

The NPV is higher than the total cost of the land, hence the projects are feasible

Table 6.41 Net Present Value High and Low Case (Peanut Farm)

6.10.5 ROAD COST ESTIMATION

SITE	PRIORITY PROJECTS SCE-NARIOS	ROAD TYPE	ROAD WIDTH (M)	ROAD LENGTH (M)			COST IN SKR MN			COST IN USD MN		
				NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL	NEW	UPGRADED	TOTAL
WHISKY POINT	HIGH CASE SCENARIO	Secondary road w/ parking	31	56	822	878	15	269	269	0.1	0.9	0.9
		Secondary road w/o parking	21.6	-	336	336	-	92	92	-	0.3	0.3
		Collector road	12	-	488	488	-	62	62	-	0.2	0.2
	LOW CASE SCENARIO	Secondary road w/ parking	31	-	822	822	-	269	269	-	0.9	0.9
		Secondary road w/o parking	21.6	-	336	336	-	92	92	-	0.3	0.3
		Collector road	12	-	488	488	-	62	62	-	0.2	0.2
ARUGAM BAY	HIGH CASE SCENARIO	Primary road	21.5	-	607	607	-	138	138	-	0.5	0.5
	LOW CASE SCENARIO	Primary road	21.5	-	293	293	-	67	67	-	0.2	0.2
PEANUT FARM	HIGH CASE SCENARIO	Secondary road w/ parking	31	-	315	315	-	103	103	-	0.4	0.4
		Collector	12	-	256	256	-	32	32	-	0.1	0.1
	LOW CASE SCENARIO	Secondary road w/ parking	31	-	315	315	-	103	103	-	0.4	0.4
		Collector	12	-	256	256	-	32	32	-	0.1	0.1

The basic data is received from Highway Authority of Sri Lanka.

Table 6.42 Road Cost Estimation

6.10.6 FINANCIAL IMPLICATION FOR ALL NODES

HIGH CASE

Concession period of 30 years has been considered for higher returns for the project

Nodes	Package	15 years	20 years	25 years	30 years
Passikudah	IRR to Authority	0%	5%	8%	9%
Nilaveli & Kuchchweli	IRR to Authority	1%	7%	9%	11%
Ampara	IRR to Authority	15%	19%	20%	21%
		Total revenue to Authority (ACF+RS) (USD Mn)			
Passikudah		9	18.5	33	50
Nilaveli & Kuchchweli		3.5	6.6	10.9	17.1
Ampara		9.2	21.8	40.6	67.4
Total	(USD Mn)	21.7	46.9	84.5	134.5

Table 6.43 Financial Implication for All Nodes (High Case)

PACKAGE WISE (HIGH CASE)

Concession period of 30 years has been considered for higher returns for the project

Nodes	Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Passikudah	Package 1	• Wellness center	14%	16%	16%	17%
	Package 2	• 5 star resort	13%	16%	17%	18%
	Package 3	• Retail/ Night market • Visitor's center	12%	15%	16%	17%
Nilaveli & Kuchchweli	Package 1	• 3 star hotel • Diver's Paradise	13%	16%	17%	18%
	Package 2	• Beachfront park & retail	11%	14%	15%	16%
Ampara	Package 1	• Peanut farm • Whiskey point 4 star resort • Whiskey point Beachfront entertainment	15%	18%	19%	19%
	Package 2	• Arugambay • Whiskey point Night market / Entertainment • Whiskey point Commercial high street • Arugambay 3 star hotel • Arugambay beachfront park	15%	17%	18%	19%

Table 6.44 Package Wise Financial Implication for All Nodes (High Case)

LOW CASE

Concession period of 30 years has been considered for higher returns for the project

Nodes	Package	15 years	20 years	25 years	30 years
Passikudah	IRR to Authority	0%	2%	5%	7%
Nilaveli & Kuchchweli	IRR to Authority	3%	8%	10%	11%
Ampara	IRR to Authority	3%	9%	11%	13%
		Total revenue to Authority (ACF+RS) (USD Mn)			
Passikudah		7.5	15	26	39
Nilaveli & Kuchchweli		3.1	5.6	9	14
Ampara		6.8	14.2	25.2	41.2
Total	(USD Mn)	17.4	34.8	60.2	94.2

Table 6.45 Financial Implication for All Nodes (Low Case)

PACKAGE WISE (LOW CASE)

Concession period of 30 years has been considered for higher returns for the project

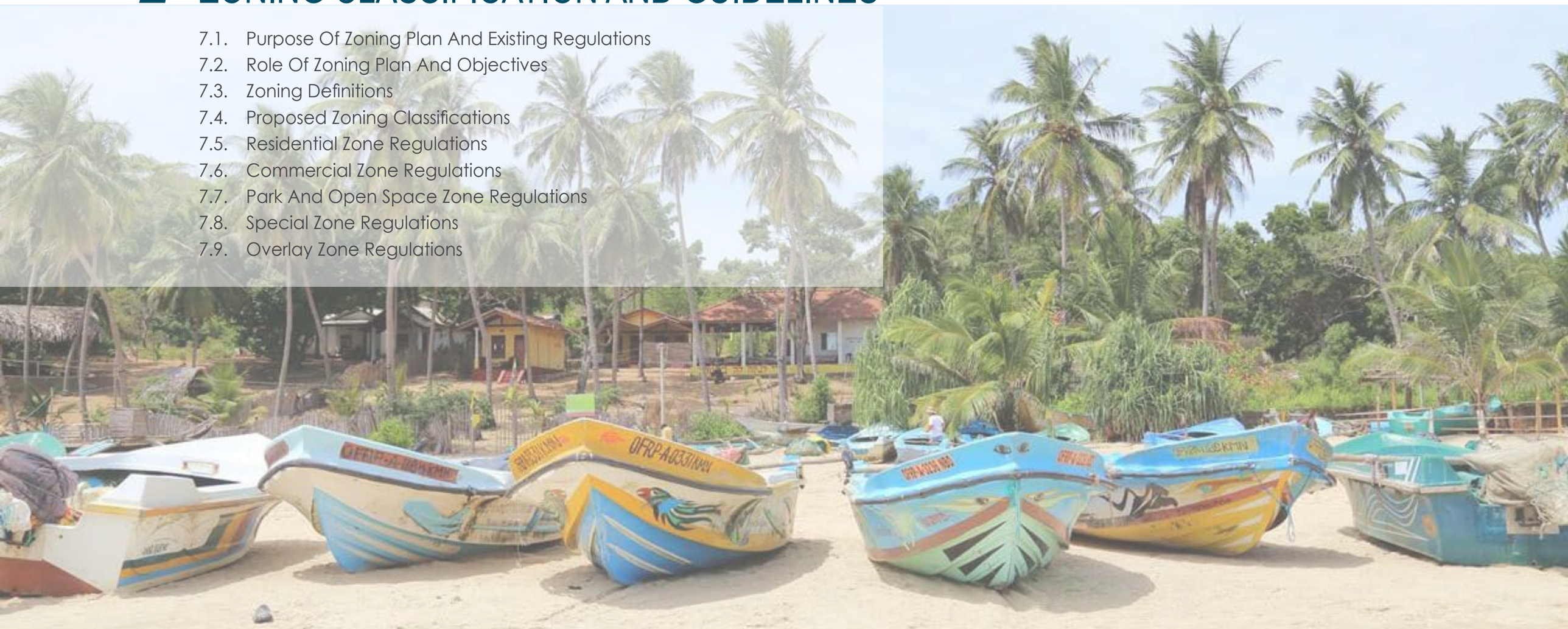
Nodes	Package	Components	Partner IRR 15 yrs	Partner IRR 20 yrs	Partner IRR 25 yrs	Partner IRR 30 yrs
Passikudah	Package 1	• Wellness center	13%	15%	16%	17%
	Package 2	• 5 star resort	13%	16%	18%	18%
	Package 3	• Retail/ Night market • Visitor's center	13%	16%	17%	17%
Nilaveli & Kuchchweli	Package 1	• 3 star hotel • Diver's Paradise	13%	16%	18%	18%
	Package 2	• Beachfront park & retail	11%	14%	15%	16%
Ampara	Package 1	• Peanut farm • Whiskey point 4 star resort • Whiskey point Beachfront entertainment	14%	18%	19%	19%
	Package 2	• Arugambay • Whiskey point Night market / Entertainment • Whiskey point Commercial high street • Arugambay beachfront park	12%	15%	16%	17%

Table 6.46 Package Wise Financial Implication for All Nodes (Low Case)

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7 ZONING CLASSIFICATION AND GUIDELINES

7.1. Purpose Of Zoning Plan And Existing Regulations
7.2. Role Of Zoning Plan And Objectives
7.3. Zoning Definitions
7.4. Proposed Zoning Classifications
7.5. Residential Zone Regulations
7.6. Commercial Zone Regulations
7.7. Park And Open Space Zone Regulations
7.8. Special Zone Regulations
7.9. Overlay Zone Regulations



7.1 ZONING OBJECTIVE

Zoning regulates the types of uses, the development intensity, the setting and height of buildings on any plot. As such, it serves as an effective planning tool to guide development in a logical and orderly fashion. The Zoning Plan is meant to provide landowners and developers with a clear picture of what can and cannot be developed on any particular plot.

The Zoning Plan is made up of a Zoning Map and a set of Zoning Regulations. The Zoning Map identifies specific zones within the planning area based on the predominant land use, and the desired intensity and building height for that area.

The Zoning Regulations classifies the uses into three categories: Permitted, Conditional and Prohibited uses.

Permitted Use

Uses that comply with the intended use for the particular zoning regulation and can be permitted outright within any particular Zone. These developments may have to comply with other context specific additional regulatory restrictions e.g. Urban Design Guidelines, Heritage & Conservation Guidelines, etc.

Conditional Use

Conditional uses are usually activities that may create significant traffic, noise, or other impacts on the surrounding neighborhood. Such identified uses can be permitted “conditionally” within a Zone requiring the development to confirm to a set of conditions and standards as per the regulations which must be met at all times. Each Zone can allow different but compatible developments that are complementary in terms of use and scale.

Prohibited Use

These are uses that are deemed prohibited and include activities that have been found to be incompatible with the particular Zone.

Control Parameters

The Zoning Regulations also stipulate the location of a building on any plot, the overall maximum intensity, as well as the building height. Specific regulations related to overall building form, provision of open space and landscaping, parking, etc are also stipulated in the Zoning Regulations. Zoning Regulations stipulate maximum allowable development for a particular Zone, but flexibility in development is ensured by allowing conditional and permitted developments of lower Zone in the same category in most cases, except for areas where such is specifically mentioned. Understanding of existing parameters and proposed parameters are presented in the table.

Overlay Zone

Overlay zones provide more discretion & flexibility by allowing the Planning Authority to protect certain areas as well as encourage or discourage certain types of development. Overlay Zones are mapped Zones superimposed over the established Zones and can be used to impose supplement restrictions, permit or disallow various forms of density as well as provide bonuses and incentives to achieve the desired planning intent for that particular area. The parcel within the Overlay Zone will be thus subject to the regulations of the underlying zoning as well as the Overlay Zoning requirements. The Airport Restriction Areas, Transit Corridor Overlay, Coastal Zone Overlay, Heritage Conservation Overlay, and Urban Design Overlay are example of Overlay Zones.

UNDERSTANDING OF EXISTING PARAMETERS

	STANDARD CONTROL PARAMETER	UDA COMMON GUIDELINES	PROPOSED ZONING GUIDELINES
PLOT USES	Building Use	• No specific mention	• Permitted Uses according to Land Use & Zoning Classification • Prohibited Uses according to Land Use & Zoning Classification • Conditional Uses according to Land Use & Zoning Classification
	Minimum Plot Size	• Minimum plot size: 150 sqm (for the proposed subdivision, amalgamation or development of land)	• Minimum Plot Size by Zoning Classification
PLOT PARAMETERS	Maximum Building Coverage	• No specific mention	• Allowable building footprint according to Zoning Classification
	Minimum Landscaping Coverage	• No specific mention	• Minimum green area footprint according to Zoning Classification
	Maximum Plot Ratio	• Controlled by Land Extent (150 to 4,000sqm), Zone Factor (1.5 to 4.0) and Road Width (6m to >15m) • Plot Ratio range from 0.8 to 12.0 (Nation Wide Common Regulation)	• Allowable ratio of the total floor area of the building to the area of the site according to Land Use & Zoning Classification • Proposed Plot Ratio of 0.8 to 2 in general, with potential higher FSI for strategic sites under Urban Design.
BUILDING PARAMETERS	Maximum Number of Floors	• Controlled by Land Extent and Density Zone (only for 3.0 and 4.5m wide road)	• Allowable number of floors according to Zoning Classification
	Building Height	• No specific mention	• Maximum building height according to Zoning Classification
	Floor to Floor Height	• No specific mention	• Minimum floor to floor height according to Zoning Classification
	Building Setback	• Controlled by Road Width	• Minimum required separation between a lot line (and/or right-of-way line) and a building or structure according to Zoning Classification
	Minimum Required Parking Stalls	• No specific mention	• Minimum car parking spaces according to Zoning Classification

7.2 ZONING DEFINITIONS

BUILDING
Any covered and enclosed structure with one or more floors that is permanently affixed to the land and is accessible to humans.

PRIMARY BUILDING
Is the building erected on a plot intended for the primary use for which the plot has been zoned.

DETACHED BUILDING
Is a freestanding building that does not abut any other building or adjacent plot and for which open space is provided around all sides of the building and the plot lines.

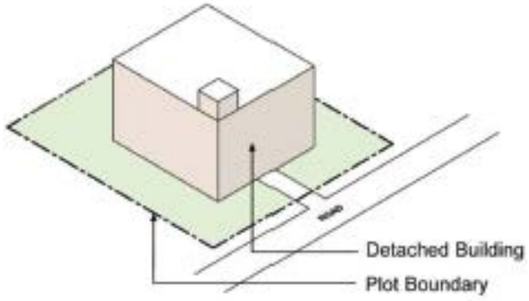


Figure 7.1 Detached Building

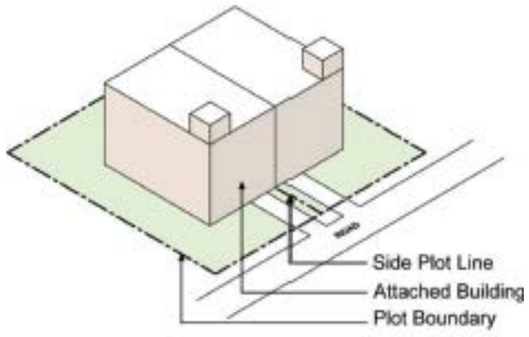


Figure 7.2 Semi-Detached Building

ANCILLARY BUILDING
Is an building erected on a plot that is incidental y to a primary building on the same plot and the use of which is in connection with that primary building.

SEMI-DETACHED BUILDING
Is a building that abuts on one side of the plot line or building on an adjacent plot and for which no side setback is provided.

ATTACHED BUILDING
Is a building that abuts on two side of the plot line or building on an adjacent plot and for which no side setback is provided.

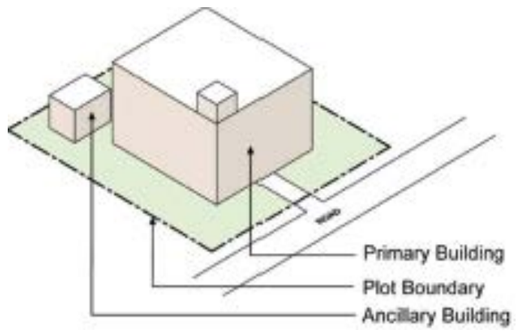


Figure 7.3 Primary Building & Ancillary Building

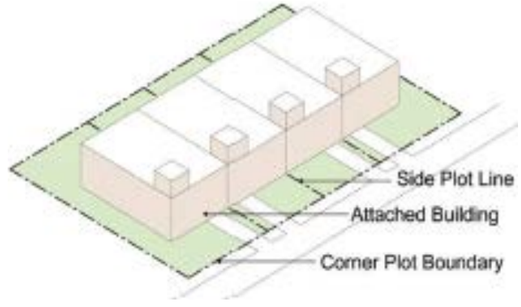


Figure 7.4 Attached Building

BUILDING COVERAGE
The percentage of the plot area occupied by the ground area of the primary and all ancillary buildings on such plot, inclusive of the shadow area created by cantilevered building projections, but do not include the following:

- Bay windows with a projection of 0.5m or less.
- Roof eaves and sun shading projections.
- The shadow area of a building that is from the 3rd storey and above (to encourage viable landscaping at the ground level and shaded communal spaces and promote building articulation and a variety of architectural designs).

Computation of building coverage shall include all existing developments within the plot.

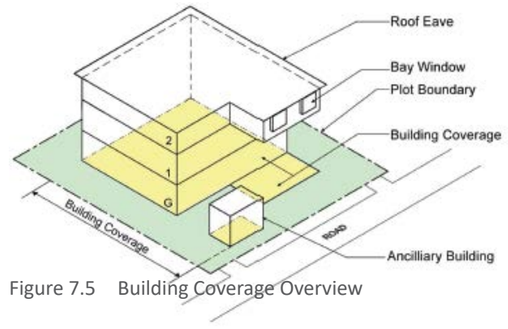


Figure 7.5 Building Coverage Overview

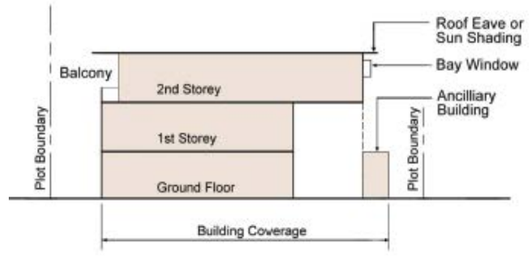


Figure 7.6 Building Coverage Section

BUILDING HEIGHT
The overall height of a building measured from grade or access road to the top of the last storey or the highest point of the building, but does not include:

- External parapets not exceeding 1.5m
- Lift overruns
- Antennae
- Rooftop M&E service rooms and structures. (M&E service room includes spaces such a as lift motor room, overhead water storage tanks etc.)
- Any other permitted structures as may be allowed by the relevant Planning Authority. Along the slopes or along contoured topography the building height is measured as illustrated in the figure below.

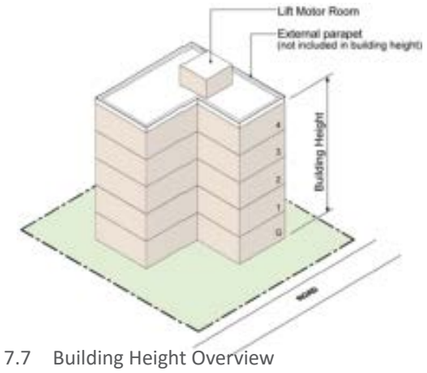


Figure 7.7 Building Height Overview

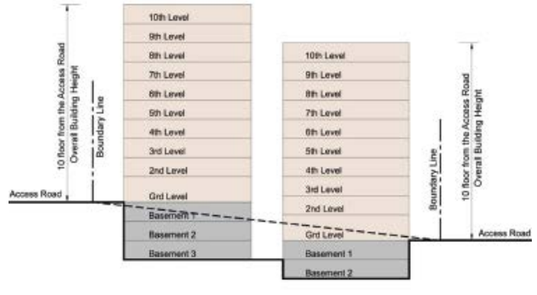


Figure 7.8 Building Height Section

BUILDING SETBACK

The minimum distance (in plan) by which a building must be offset from the plot line, except for any permitted intrusions or structures.

FRONT SETBACK

Means the minimum required setback as measured from the plot line fronting any road to the external main wall of any primary or ancillary building.

REAR SETBACK

Means the minimum required setback as measured from the plot line directly opposite of the front plot line.

SIDE SETBACK

Means the minimum required setback as measured from the plot line that extends between the front and rear plot lines.

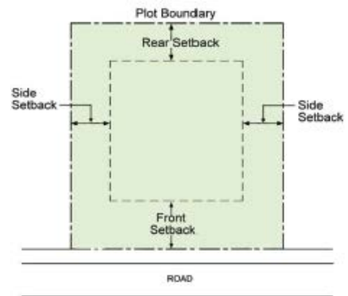


Figure 7.9 Building Setback on Front Road

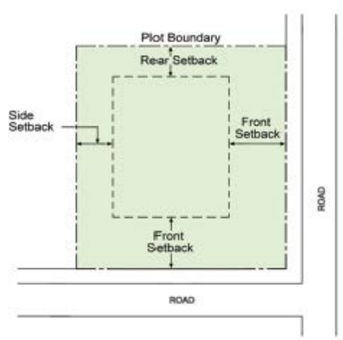


Figure 7.10 Building Setback on Perpendicular Road

APARTMENTS

A multi-storey residential building within a building plot that contains three or more residential units that are capable of strata-subdivision.

FLOOR AREA RATIO (FAR)

The gross floor area of the building or buildings on any plot divided by the plot area.

GROSS FLOOR AREA (GFA)

The sum of the gross horizontal areas of all the floors of a building, measured from the exterior face of exterior walls or mid-point of common or party walls. The “floor area” of a building shall include basement floor area, staircase blocks, planter boxes and ledges, public areas such as landings, and common lobbies. It shall exclude floor area used for parking facilities. Basements not utilized for any habitable or commercial purposes shall be exempt from gross floor area calculations. M&E floors with 1.5m or less headroom can be excluded from gross floor area computation. Balcony, & Bay Window areas are excluded from the GFA Calculation, subject to the condition that all the Balcony and Bay Window area does not exceed 10% of overall GFA quantum of the building Lift shafts and service ducts including the thickness of the walls are counted as GFA once at the ground storey level. Any existing building not affected by the new development should clearly be stated in the existing gross floor area. Calculations of gross floor area for any development shall include the GFA of all existing developments within the plot.

Disclaimer:

It is to be noted that the Zoning Definitions mentioned here are not exhaustive. More detailed and additional definitions could be provided by the relevant Planning Authorities where applicable.

PLOT AREA

The total horizontal area (in square metres) included within the Plot boundary lines.

PLOT COVERAGE

The percentage of a Plot area occupied by the ground area of primary and all ancillary buildings, structures and driveways, aisles and parking spaces.

LANDSCAPE COVERAGE

The percentage of plot area covered by permeable surfaces and meant for aesthetic landscaping and the planting of grass, shrubbery, and trees but may contain such impermeable surface areas that are used as communal gathering spaces, or for landscaping features such as fountains, furniture or shade pergolas.

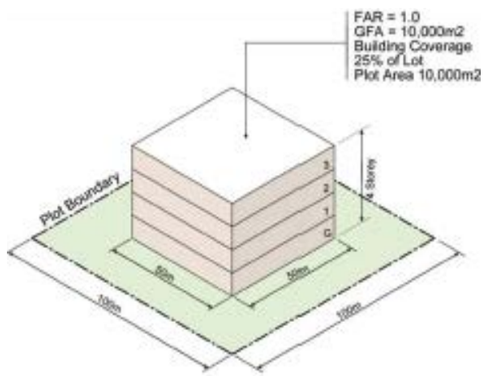


Figure 7.11 Gross Floor Area (GFA) and Floor Area Ratio (FAR)

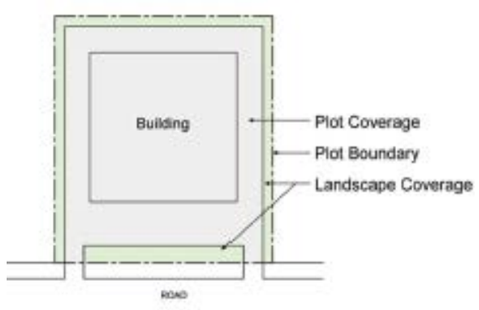


Figure 7.12 Plot Area, Plot Coverage and Landscape Coverage

MEZZANINE STOREY

An intermediate storey between 2 storeys but that is connected only by the storey below it, and which does not occupy more than 50% of the gross floor area of the storey below.

PENTHOUSE

The uppermost storey of a building that is directly connected to, and associated with the use of the storey immediately below it, and which does not occupy more than 30% of the gross floor area of the storey below.

SINGLE-FAMILY HOUSING

A residential building containing only one dwelling unit and occupied by one family.

PUBLIC FACILITIES

All the publicly accessible uses like recreational spaces, religious, cultural, social, educational and health-related uses.

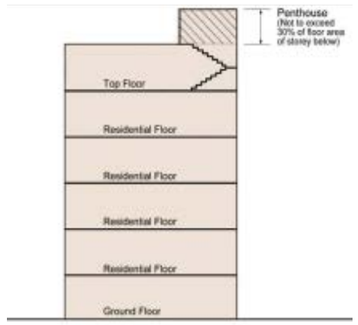


Figure 7.13 Penthouse

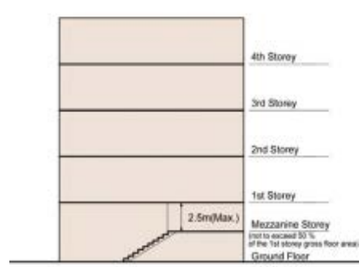


Figure 7.14 Mezzanine Storey

7.3 PROPOSED ZONING CLASSIFICATIONS

1. RESIDENTIAL ZONE



- SINGLE FAMILY RESIDENTIAL (R1)
- SINGLE FAMILY RESIDENTIAL (R2)
- SINGLE FAMILY RESIDENTIAL (R1B)
- SINGLE FAMILY RESIDENTIAL (RURAL) (R2)
- LOW RISE RESIDENTIAL (R3)
- MULTI-FAMILY MEDIUM RISE RESIDENTIAL (R4)
- MULTI-FAMILY HIGH RISE RESIDENTIAL(R5)

2. COMMERCIAL ZONE



- MIXED-USE COMMERCIAL (C1)
- NEIGHBORHOOD CENTER COMMERCIAL (C2)
- TOWN CENTRE COMMERCIAL (C3)
- GENERAL COMMERCIAL (C3A)
- CITY CENTRE COMMERCIAL (C4)
- CITY CENTRE COMMERCIAL (C4A)
- CITY CENTRE COMMERCIAL (C4B)

3. INDUSTRIAL ZONE



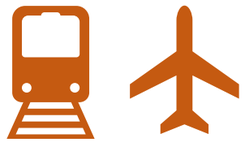
- LIGHT INDUSTRY (I1)
- LOGISTICS/ WAREHOUSE (I2)
- GENERAL INDUSTRY (I3)

4. PARK & OPEN SPACE ZONE



- PASSIVE RECREATION ZONE (P1)
- ACTIVE RECREATION ZONE (P2)
- AGRICULTURE ZONE (P3)
- PROTECTED ZONE (P4)

5. SPECIAL ZONE



- MILITARY/ DEFENSE (SP1)
- UTILITIES (SP9)

6. OVERLAY ZONE



- COASTAL OVERLAY ZONE
- TOURISM MASTERPLAN OVERLAY ZONE

Proposed Zoning	Zoning	Proposed Landuse
255,127,127	C1	Hotel
		Mixed Use
		Museum
		Vocational School
0,77,168	C2	Neighbourhood Ctr
0,77,168	C3	Commercial
		Commercial Diverse Paradise
		Commercial Entertainment
		Commercial Night Market
		Commercial Retail Shopping
		Commercial Surfer Paradise
		Visitor Center
170,255,0	P1	Green Open Space
		Water Park
230,0,169	P2	Resort
		Resort Agro Tourism
		Resort Eco Lodge
		Resort Exclusive
		Resort Hotel 5_star
		Resort Wellness Ctr
		Camp Site
		Visitor Center
255,255,0	R1	Residential Investment
255,192,0	R2	Residential Low Density
228,109,10	R3	Residential Mid Density
255,255,255	RD	Road
168,0,0	SP1	Defence
255,115,223	SP10	Marine Knowledge Hub
	SP9	Public Utilities

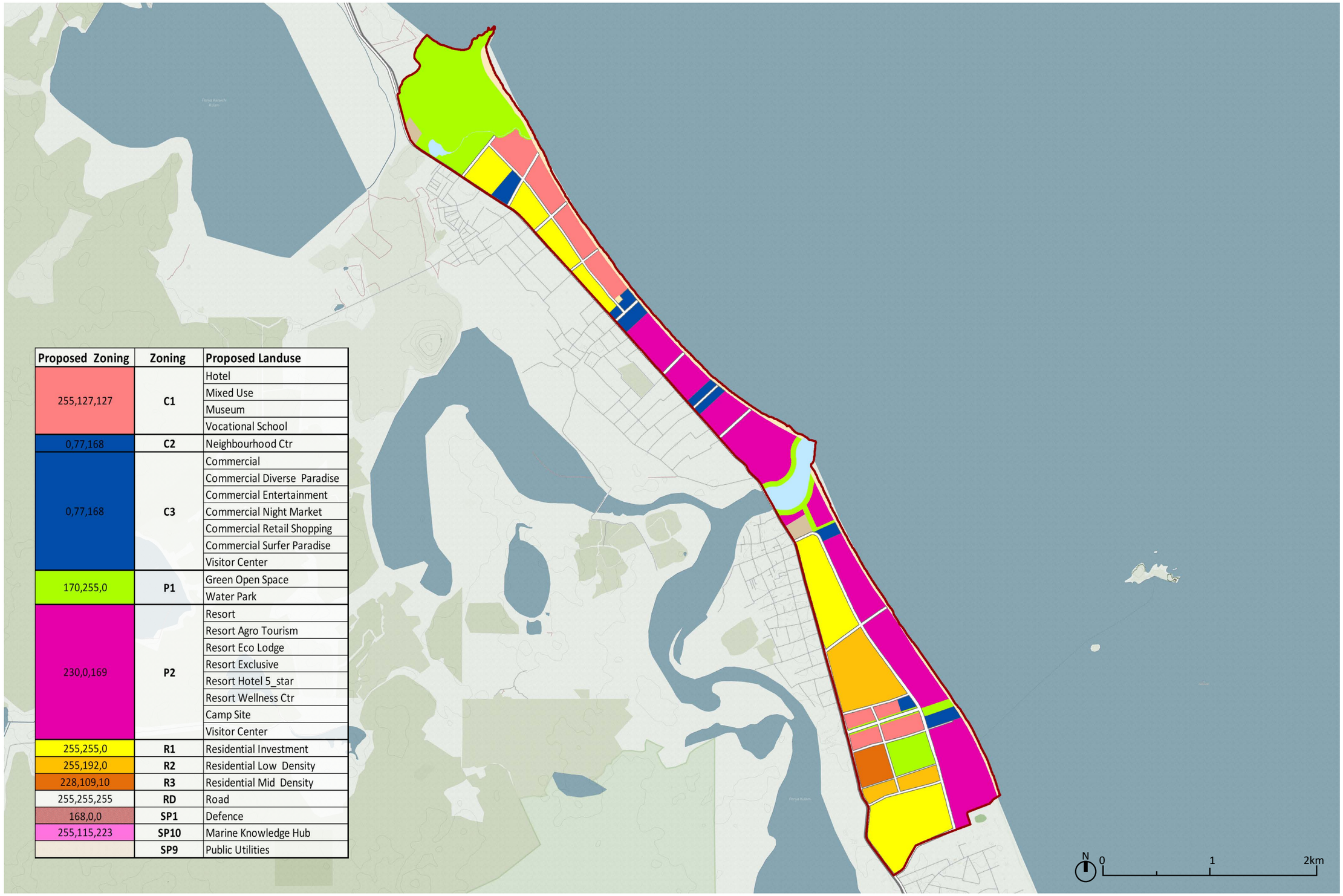


Figure 7.15 Proposed Zoning Map of Kuchchaveli-Nilaveli Study Area in Trincomalee District

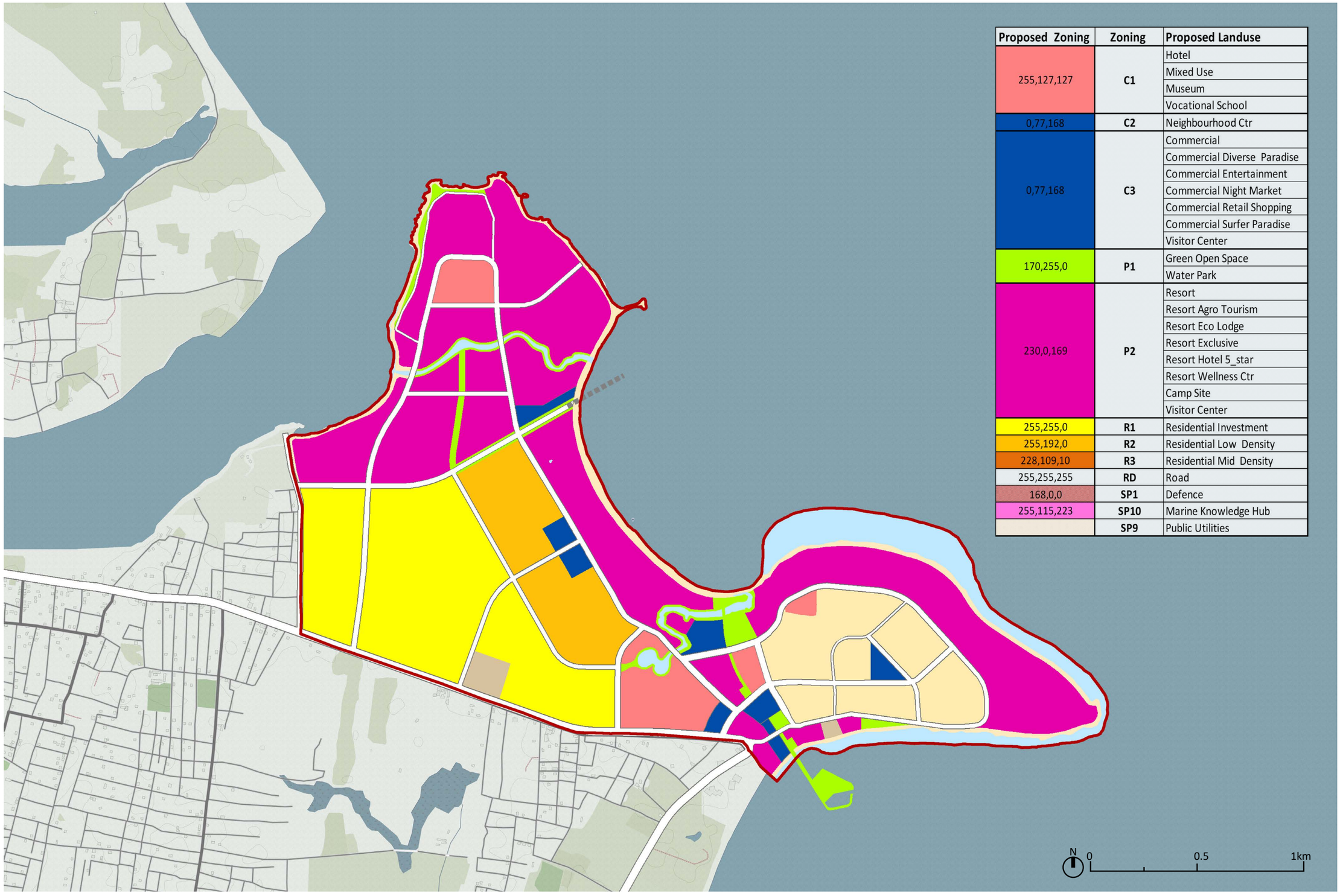


Figure 7.16 Proposed Zoning Map of Pasikudah Study Area in Batticaloa District

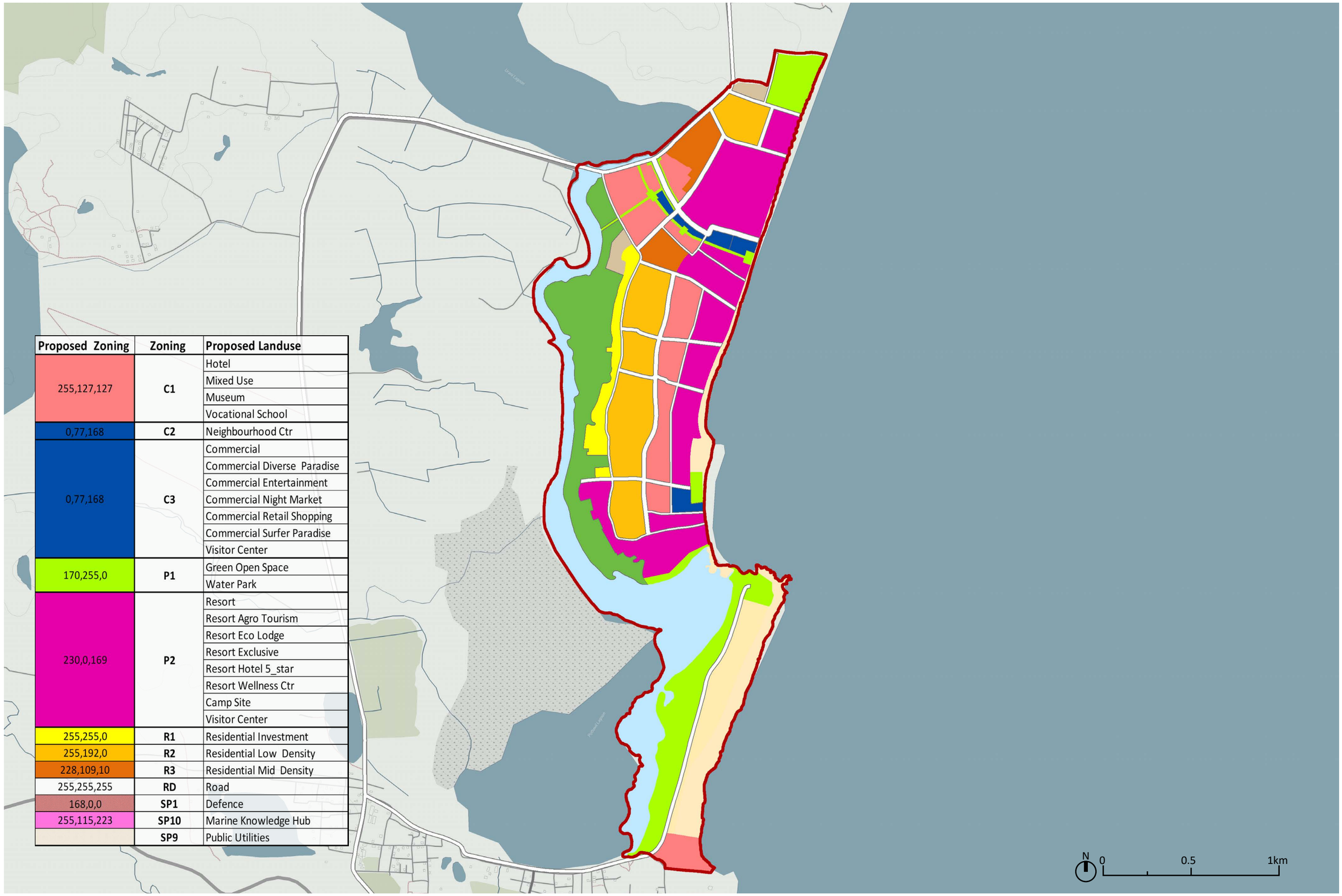
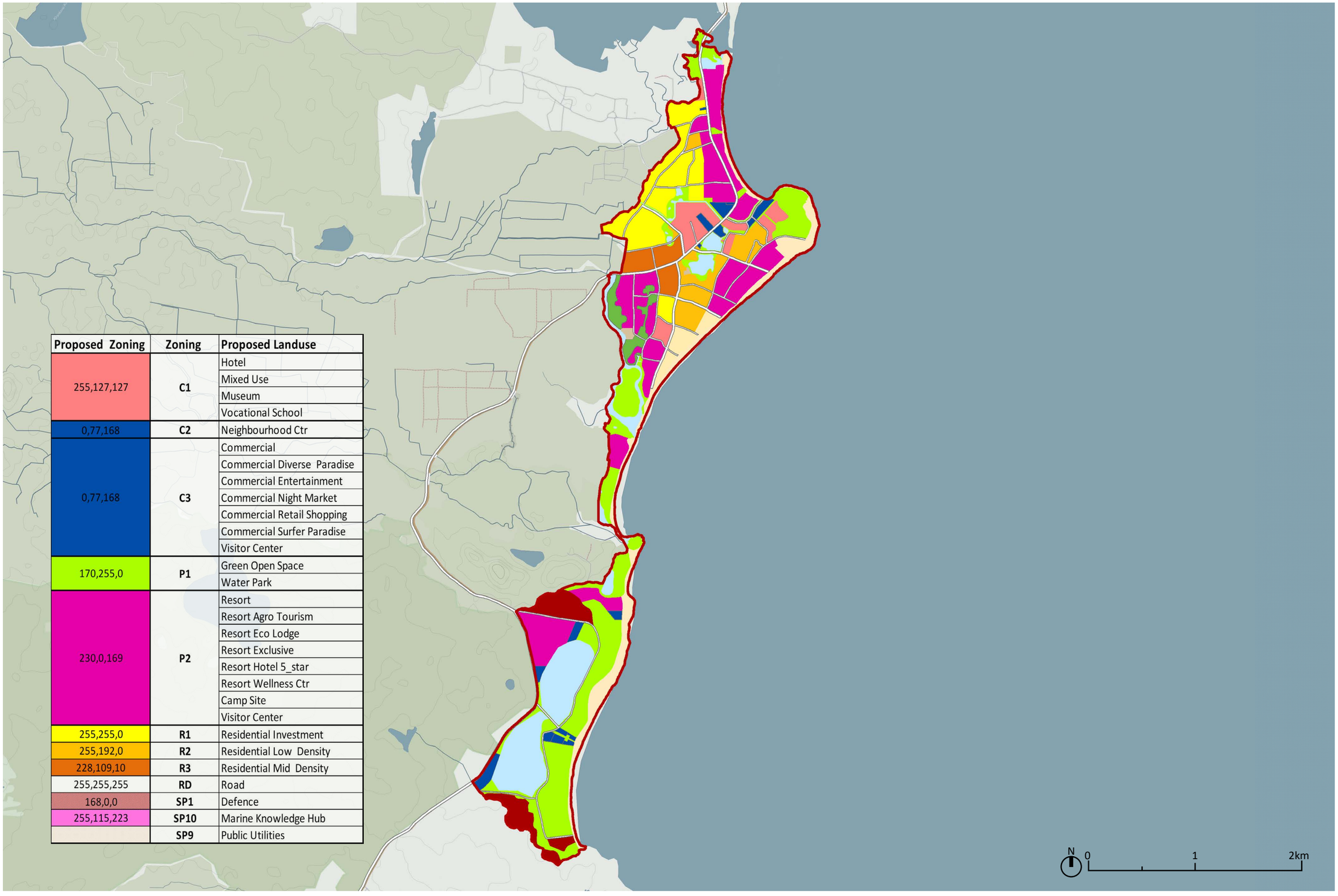


Figure 7.17 Proposed Zoning Map of Whisky Point Study Area in Ampara District



Proposed Zoning	Zoning	Proposed Landuse
255,127,127	C1	Hotel
		Mixed Use
		Museum
		Vocational School
0,77,168	C2	Neighbourhood Ctr
0,77,168	C3	Commercial
		Commercial Diverse Paradise
		Commercial Entertainment
		Commercial Night Market
		Commercial Retail Shopping
		Commercial Surfer Paradise
		Visitor Center
170,255,0	P1	Green Open Space
		Water Park
230,0,169	P2	Resort
		Resort Agro Tourism
		Resort Eco Lodge
		Resort Exclusive
		Resort Hotel 5_star
		Resort Wellness Ctr
		Camp Site
		Visitor Center
255,255,0	R1	Residential Investment
255,192,0	R2	Residential Low Density
228,109,10	R3	Residential Mid Density
255,255,255	RD	Road
168,0,0	SP1	Defence
255,115,223	SP10	Marine Knowledge Hub
	SP9	Public Utilities

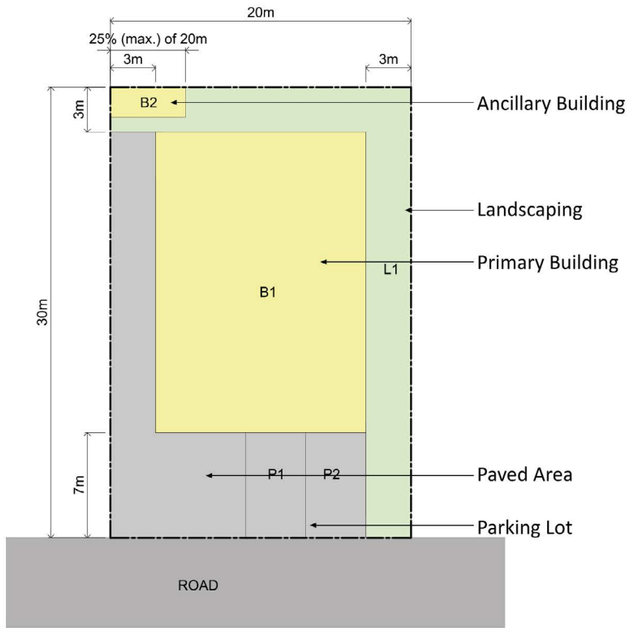
Figure 7.18 Proposed Zoning Map of Arugam Bay - Peanut Farm Study Area in Ampara District

7.4 RESIDENTIAL ZONE REGULATIONS

- SINGLE FAMILY RESIDENTIAL (R1)
- SINGLE FAMILY RESIDENTIAL (R2)
- LOW RISE RESIDENTIAL (R3)
- MULTI-FAMILY MEDIUM RISE RESIDENTIAL (R4)

SINGLE FAMILY RESIDENTIAL ZONE - VILLAS (R1)

The Single Family Residential Zone (R1) is intended for good quality residential enclaves (villas) with complementary public facilities. The minimum lot areas in the R1 Zone are larger to distinguish the R1 Zone as a low density good class residential neighborhood with a spacious character and lush greenery.



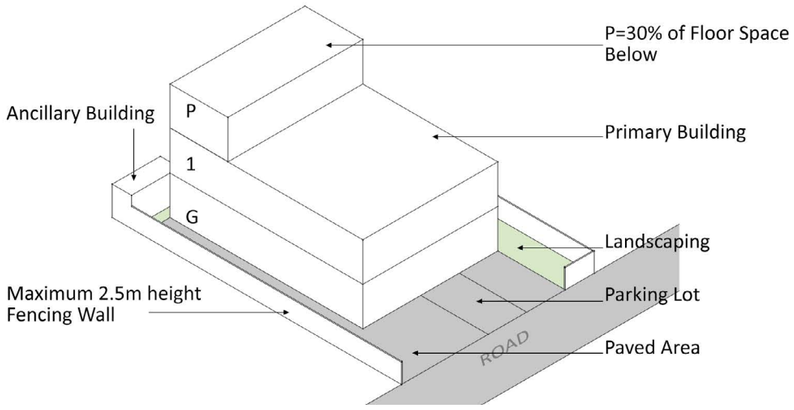


Figure 7.19 illustration - Single Family Residential Zone (R1)

Table 7.1 Single Family Residential Zone – Villas (R1) Regulations

REGULATIONS	
USES	
This regulations apply to all new and redevelopment residential uses within the R1 zone.	
Permitted Use	• Single Family Residence Uses (Detached Villas only) • Convenience store, Market, Retail shops (20 sqm) • Bank, Sale Offices (<25 sqm), Club, Resorts, Holiday Home, Guest House <1200 sqm • Other permitted uses (Refer to Zoning Land use Matrix)
Prohibited Uses	• Semi-detached, Attached houses and Apartment • Shopping Centre, Shopping Mall, Hyper Mart & Super Mart • General office (<500 sqm), Corporate Office (>500 sqm) • Showroom, Exhibition Hall, Convention/ Conference Centre • Hotel • Hospital, Referral/ Multispecialty Hospital • Polytechnic, Vocational, Technical School, College, University • Abattoir • Workshop/ Cottage Industries, Logistic Centre, General Industry • Sport Field, Sport Complex, Golf course, Zoo • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Restaurant/ Café/ Bar • Nightclub/ Entertainment • Cinema Hall, Cultural Centre, Museum • Embassy/ High Commission • Religious Site • Petro Station • Other conditional uses (Refer to Zoning Land use Matrix)
Minimum Plot Size	• 600 m^2
COVERAGE	
Maximum Building Coverage	• 40%
Minimum Landscaping Coverage	• 30%
Maximum Plot Ratio	• 0.8 maximum (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+1
Building Height	• 8.5 m
Floor to Floor Height	• Ground Floor - 4.5 m maximum • Other Floor - 3.6 m maximum
BUILDING SETBACK	
Building Setback	• Front: 6 m; Side: 3m; Rear: 3m
PARKING	
Minimum Required Parking	• Villa (Detached) –2 Parking Lot per unit shall be provided • Food outlet -1 Parking Lot per 10 seats shall be provided • Resorts -1 Parking Lot per 200 sqm shall be provided





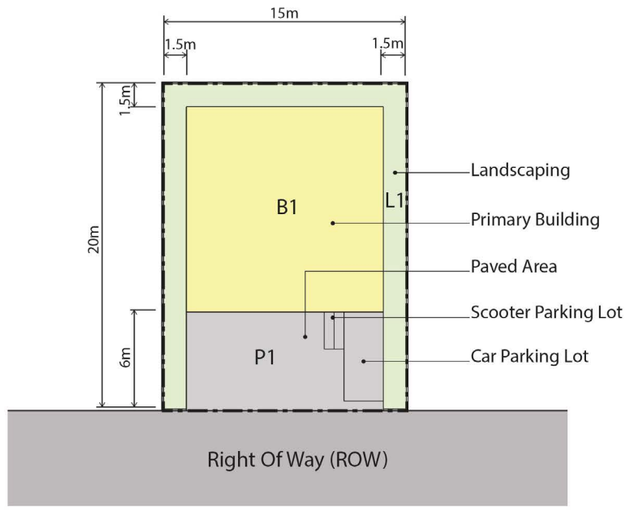






SINGLE FAMILY RESIDENTIAL ZONE (R2)

Single Family Residential Zone (R2) is a residential district for single-family and low-rise developments that represents majority of existing residential plots. The R2 Zone is intended to offer decent quality low rise housing and complementary public facilities as needed. The minimum lot areas in the R2 Zone are smaller than that found in Single Family Residential Zone (R1) in order to distinguish the different characteristics and to offer different housing typologies. The purpose is to allow for the intensification of the existing low-rise housing to optimise development potential of the land whenever individual landowners willing to develop their vacant plots/ redevelop already built-up plots.



Schematic Plan (Not to scale)

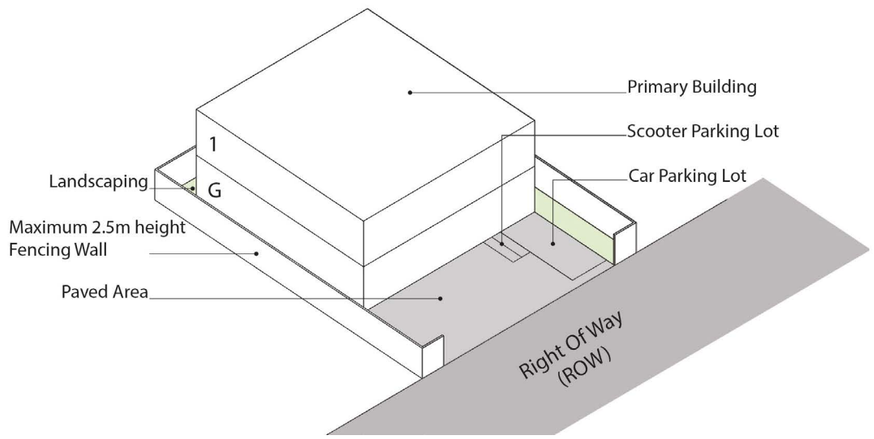
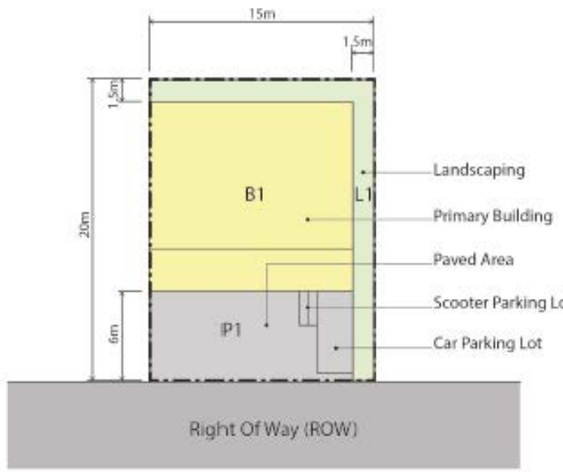


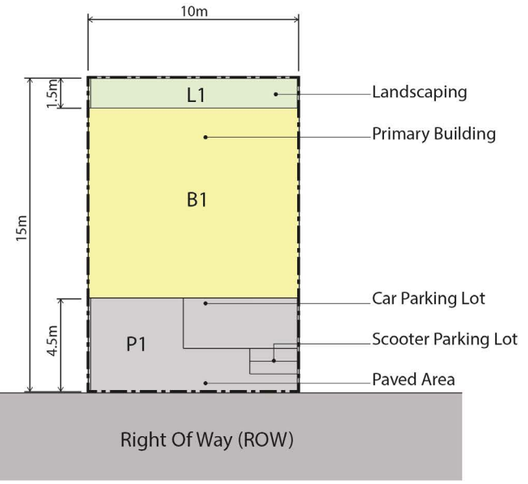
Figure 7.20 Illustration - Single Family Residential Zone (R2 Detached)

Table 7.2 Single Family Residential Zone - (R2) Regulations

REGULATIONS	
USES	
This regulations apply to all new and redevelopment residential uses within the R2 zone.	
Permitted Use	• Detached, Semi Detached, Attached (Duplex, Row houses) • Convenience store, Market, Retail shops (20 sqm) • Bank, Sale Offices (<25 sqm), Club, Resorts, Holiday Home, Guest House <1200 sqm • Other permitted uses (Refer to Zoning Land use Matrix)
Prohibited Uses	• Apartment • Shopping Mall, Hyper Mart & Super Mart • General office (<500 sqm), Corporate Office (>500 sqm) • Showroom, Exhibition Hall, Convention/ Conference Centre • Hotel • Hospital, Referral/ Multispecialty Hospital • Polytechnic, Vocational, Technical School, College, University • Abattoir • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Restaurant/ Café/ Bar • Nightclub/ Entertainment • Cinema Hall, Cultural Centre, Museum • Embassy/ High Commission • Religious Site • Petro Station • Other conditional uses (Refer to Zoning Land use Matrix)
Minimum Plot Size	• Detached - <300 m2 • Attached - <300 m2 • Semi-Detached - <300 m2
COVERAGE	
Maximum Building Coverage	• 60%
Minimum Landscaping Coverage	• 10%
Maximum Plot Ratio (FAR)	• 1.0 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+1
Building Height	• 8.5 m
Floor to Floor Height	• Ground Floor - 4.5 m maximum • Other Floor - 3.6 m maximum
BUILDING SETBACK	
Building Setback	• Detached : Front: 6m, Side:1.5m, Rear:1.5m • Semi-detached: Front: 6m, Side:1.5m, Other side:0m, Rear:1.5m • Attached/ Terrace: Front: 6m, Side: 0m, Rear: 3m For all types, corner plot requires side setback 1.5m
PARKING	
Minimum Required Parking	• Villa (Detached) –2 Parking Lot per unit shall be provided • Food outlet -1 Parking Lot per 10 seats shall be provided • Resort -1 Parking Lot per 200 sqm shall be provided



Schematic Plan (Not to scale)



Schematic Plan (Not to scale)

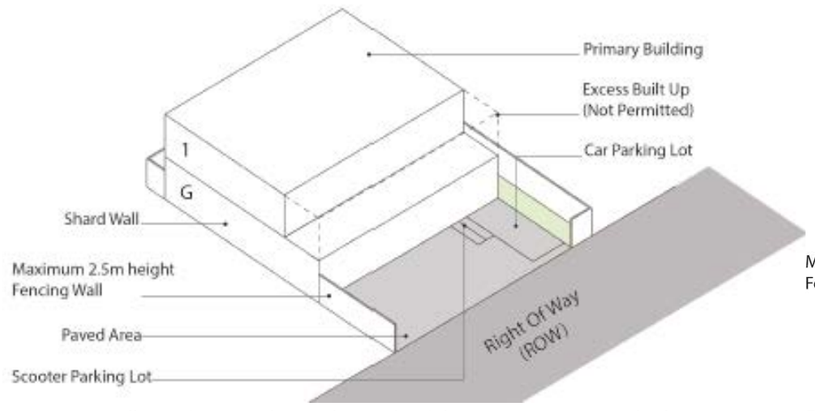


Figure 7.21 Illustration - Single Family Residential Zone (R2 Semi-Detached)

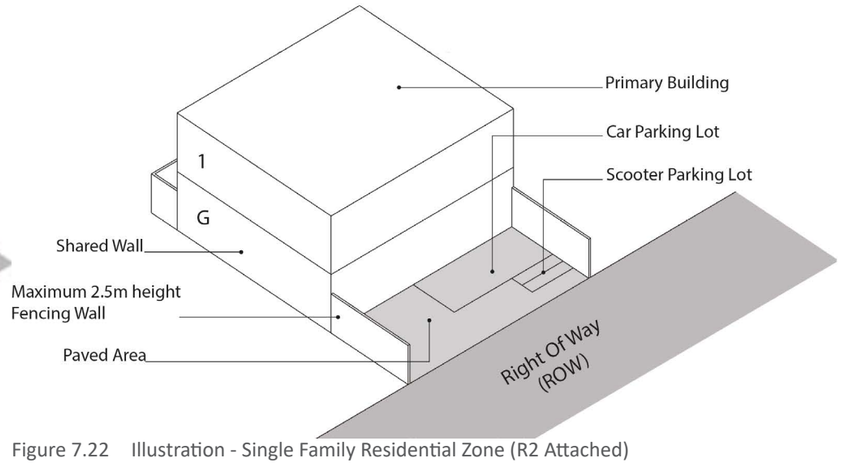
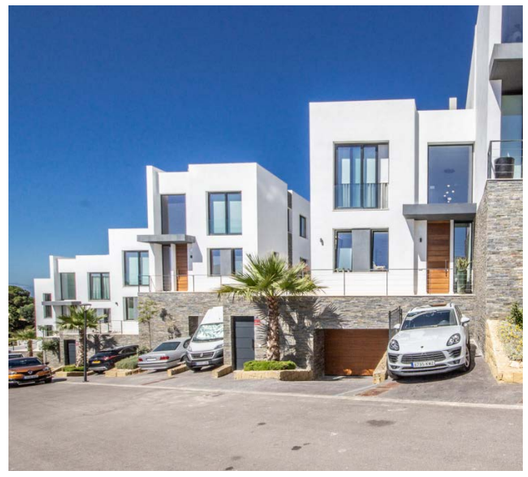


Figure 7.22 Illustration - Single Family Residential Zone (R2 Attached)



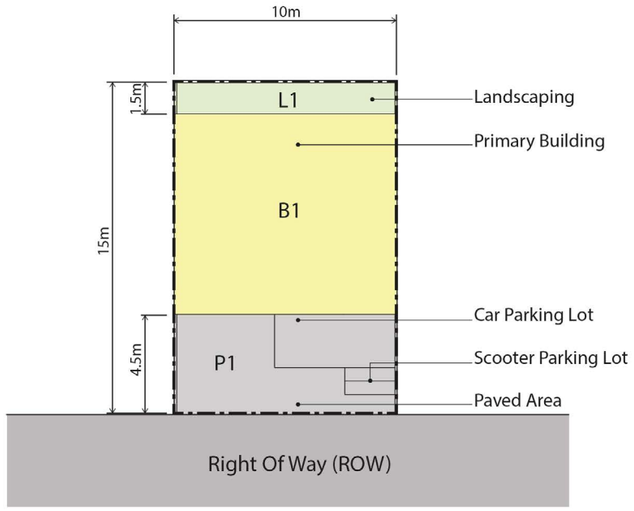




LOW RISE RESIDENTIAL ZONE (R3)

The Low-Rise Residential Zone (R3) is established to allow for intensification, redevelopment and improvement to existing settlements where lot sizes are below 150 sqm/ 6 perch.

Planning strategy is to allow such lots to remain but when individual landowners are willing to redevelop such lots, they must confirm to R3 Zoning Regulations. It will ensure that minimum light, ventilation, and parking provisions are adhered that are lacking in case of developments on such lots.



Schematic Plan (Not to scale)

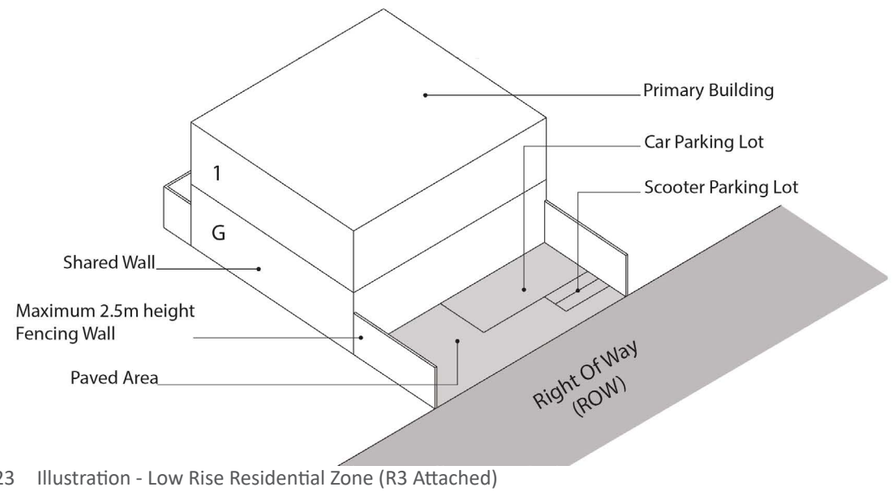


Figure 7.23 Illustration - Low Rise Residential Zone (R3 Attached)

Table 7.3 Low Rise Residential Zone (R3) Regulations

REGULATIONS	
USES	
This regulations apply to all new and redevelopment residential uses within the R3 zone.	
Permitted Use	• Detached, Semi Detached, Attached (Duplex, Row houses) • Convenience store, Market, Retail shops (20 sqm) • Bank, Sale Offices (<25 sqm), Club, Resorts, Holiday Home, Guest House <1200 sqm • Other permitted uses (Refer to Zoning Land use Matrix)
Prohibited Uses	• Shopping Mall • General office (<500 sqm), Corporate Office (>500 sqm) • Showroom, Exhibition Hall, Convention/ Conference Centre • Hotel • Hospital, Referral/ Multispecialty Hospital • Polytechnic, Vocational, Technical School, College, University • Abattoir • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Hyper Mart & Super Mart • Restaurant/ Café/ Bar • Nightclub/ Entertainment • Cinema Hall, Cultural Centre, Museum • Embassy/ High Commission • Religious Site • Petro Station • Other conditional uses (Refer to Zoning Land use Matrix)
Minimum Plot Size	• Attached - <150 m2
COVERAGE	
Maximum Building Coverage	• Detached house - 60% • Semi-Detached – 60% • Attached – 60%
Minimum Landscaping Coverage	• 10%
Maximum Plot Ratio (FAR)	• 1.2 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+2
Building Height	• 9m
Floor to Floor Height	• Ground Floor - 4.5 m maximum • Other Floor - 3.6 m maximum
BUILDING SETBACK	
Building Setback	• Detached & Semi-Detached: Front: 4.5m, Side: 0m, Rear: 1.5m • Corner plot requires side setback 1.5m
PARKING	
Minimum Required Parking	• 1 Parking Lot per Unit shall be provided • Food outlet -1 Parking Lot per 5 seats shall be provided • Resort -1 Parking Lot per 100 sqm shall be provided





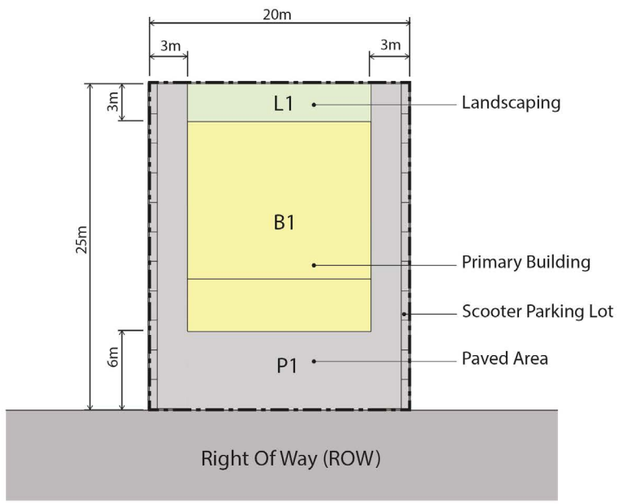






MULTIFAMILY- MEDIUM RISE RESIDENTIAL ZONE (R4)

Multifamily- Medium Rise Residential Zone (R4) is established to create well planned medium rise affordable housing with adequate amenities and open spaces. R4 is located within 1km radius from proposed BRT route and key employment centres to promote walkability to these destinations; and to reduce dependence on automobiles. This zone will accommodate future population in proposed urban expansion areas as well as redevelopment of existing settlements.



Schematic Plan (Not to scale)

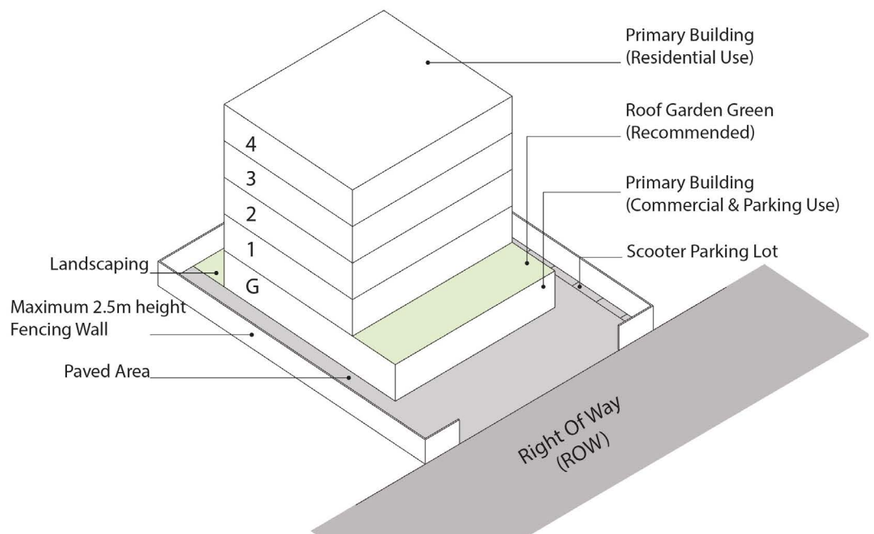


Figure 7.24 Illustration - Multifamily- Medium Rise Residential Zone (R4)

Table 7.4 Multi-Family Medium-Rise Residential Zone (R4) Regulations

REGULATIONS	
USES	
This regulations apply to all new and redevelopment residential uses within the R4 zone.	
Permitted Use	• Attached (Semi-detached, Row houses)
	• Apartments
	• Convenience store, Market, Retail shops (20 sqm)
	• Bank, Sale Offices (<25 sqm), Club, General Offices (<500 sqm), Resorts, Holiday Home, Guest Houses <1200 sqm
	• Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Shopping Mall
	• General office (<500 sqm), Corporate Office (>500 sqm)
	• Showroom, Exhibition Hall, Convention/ Conference Centre
	• Hotel
	• Hospital, Referral/ Multispecialty Hospital
	• Polytechnic, Vocational, Technical School, College, University
	• Abattoir
	• Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Hyper Mart & Super Mart
	• Polytechnic, Vocational, Technical School, College, University
	• Restaurant/ Café/ Bar
	• Nightclub/ Entertainment
	• Cinema Hall, Cultural Centre, Museum
	• Embassy/ High Commission
	• Religious Site
	• Petro Station
	• Other conditional uses (Refer to Zoning Land use Matrix)
Minimum Plot Size	• Attached/ Terrace - < 500 m2
	• Apartments - 500 m2
COVERAGE	
Maximum Building Coverage	• Attached - 50%
	• Apartments - 50%
Minimum Landscaping Coverage	• 20%
Maximum Plot Ratio (FAR)	• 1.8 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• Apartments - G+4
Building Height	• 20m
Floor to Floor Height	• Ground Floor - 4.5 m maximum
	• Other Floor - 3.6 m maximum
BUILDING SETBACK	
Building Setback	• Front: 6m, Side: 3m, Rear: 3m (Multifamily Apartment Complex)
	• Front: 6m, Side: 3m, Rear: 3m (Single Family house< 500 sqm)
	• Front: 6m, Side: 0m, Rear: 3m (Attached/ Semi-detached)
PARKING	
Minimum Required Parking Stalls	• Attached (Single Family) - 1 Parking Lot per Dwelling Unit
	• Apartments - 1 Parking Lot per 1 Dwelling Units
	• Food Outlet - 1 Parking Lot per 10 seats shall be provided
	• Resort - 1 Parking Lot per 200 sqm shall be provided







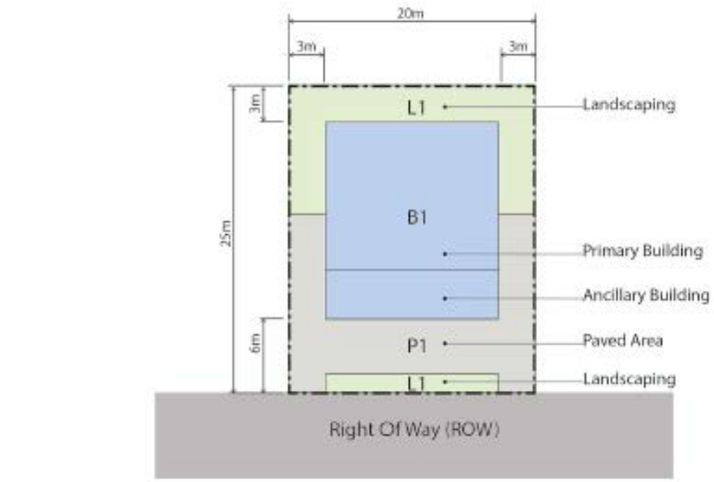


7.5 COMMERCIAL ZONE REGULATIONS

- MIXED-USE COMMERCIAL (C1)
- NEIGHBORHOOD CENTER COMMERCIAL (C2)
- GENERAL COMMERCIAL (C3A)

MIXED-USE COMMERCIAL ZONE (C1)

The Mixed-Use Commercial Zone (C1) is established to mix commercial use within residential development so that residents can walk to commercial development to meet their commercial needs. This planning strategy envisaged to promote compact, walkable, safe and vibrant neighborhoods. The zone may offer commercial development at ground floor and residential use above or as a separate stand-alone buildings. However, in any case commercial built-up area shall not exceed 30% of total built-up area, permitted on any particular lot zoned as C1.



Schematic Plan (Not to scale)

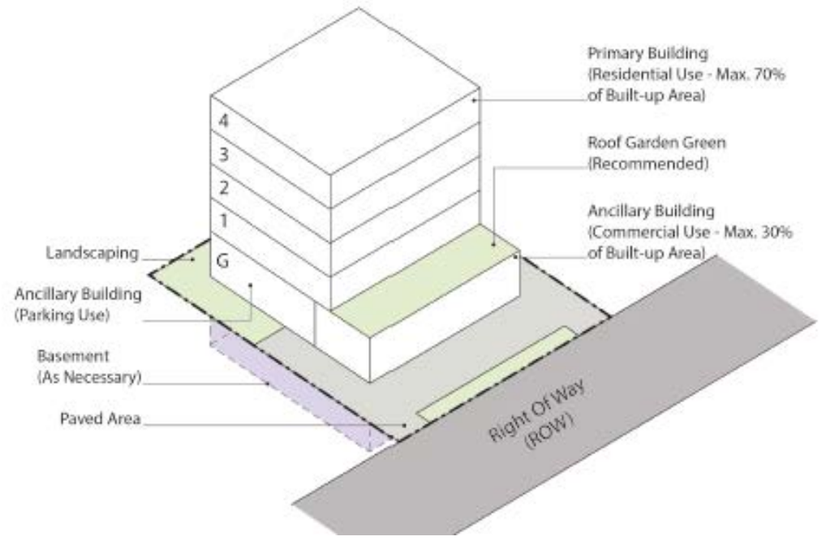


Figure 7.25 Illustration - Mixed Use Commercial Zone (C1 Detached)

Table 7.5 Mixed Use Commercial Zone (C1) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redevelopment commercial uses within the C1 Zone.	
Permitted Use	• Apartment • Convenience store, Market, Retail shops (20 sqm) • Bank, Sale Offices (<25 sqm), Club, General Offices (<500 sqm), Hotel, Guest Houses <1200 sqm • Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Detached, Semi-detached, Attached Residential • Exhibition Hall, Exhibition Hall, Convention/ conference Centre • University • Abattoir • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Shopping Mall • Polytechnic, Vocational, Technical School, College • Religious Site • Other conditional uses (Refer to Zoning Land Use Matrix)
Minimum Plot Size	• 500 m²
COVERAGE	
Maximum Building Coverage	• 50%
Minimum Landscaping Coverage	• 15%
Maximum Plot Ratio	• 1.5 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+4
Building Height	• 20m
Floor to Floor Height	• Ground Floor – 5.0 m maximum • Other Floors – 3.6 m maximum
BUILDING SETBACK	
Building	• Front: 6m,Side: 3m, Side:0m (Attached) Rear: 3m
PARKING	

REGULATIONS	
Minimum Required Parking	• Commercial - 1 Parking Lot for 100 m2 commercial space
	• Apartment – 1 Parking Lot per Dwelling Units
	• Food Outlet - 1 Parking Lot per 10 seats
	• Hotel – 1 parking lot per 200 sqm shall be provided





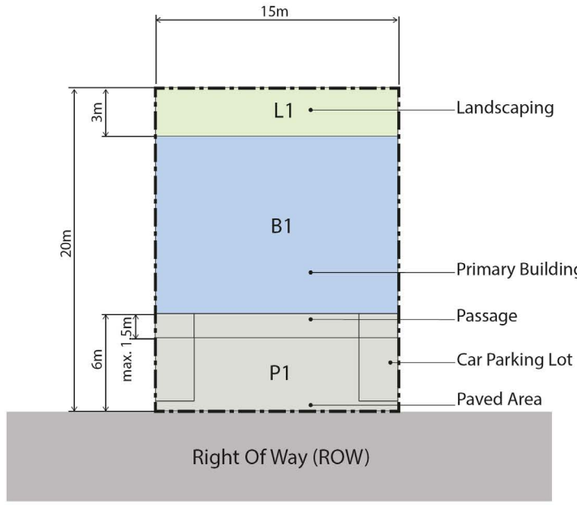






NEIGHBORHOOD CENTRE COMMERCIAL ZONE (C2)

Neighborhood Centre Commercial Zone (C2) creates attractive small mixed-use developments to cater commercial and public facilities required for a catchment of 15-25,000 population.



Schematic Plan (Not to scale)

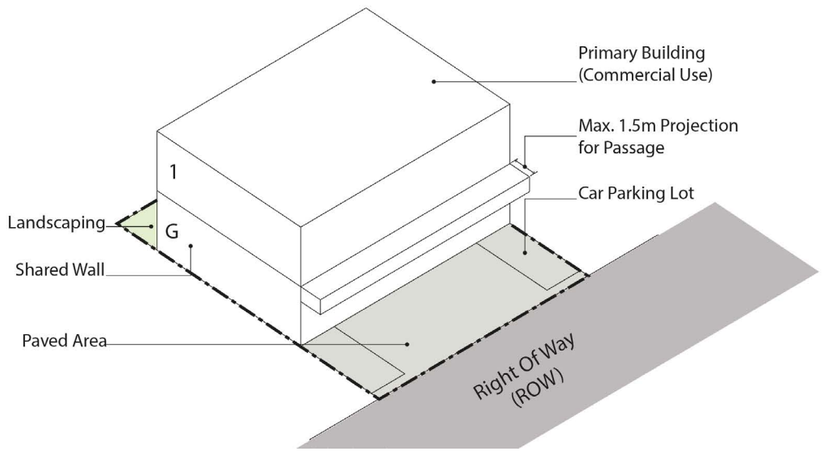


Figure 7.26 Illustration - Neighborhood Centre Commercial Zone (C2 Detached)

Table 7.6 Neighborhood Centre Commercial Zone (C2) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redevelopment commercial uses within the C2 Zone.	
Permitted Use	• Attached Residential, Apartment
	• Convenience store, Market, Retail shops (20 sqm)
	• Bank, Sale Offices (<25 sqm), Night Clubs, Entertainment, General Offices (<500 sqm), Guest Houses <1200 sqm
	• Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Detached, Semi-detached Residential
	• Corporate Offices (<500 sqm), Show Room, Exhibition Hall, Exhibition Hall, Convention/ conference Centre, Hotel, Resort
	• University
	• Abattoir
	• Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Polytechnic, Vocational/ Technical School, College
	• Religious Site
	• Other conditional uses (Refer to Zoning Land Use Matrix)
Minimum Plot Size	• 300 m^2
COVERAGE	
Maximum Building Coverage	• 60%
Minimum Landscaping Coverage	• 15%
Maximum Plot Ratio	• 1.0 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+1
Building Height	• 9m
Floor to Floor Height	• Ground Floor - 5.0 m maximum
	• Other Floors – 4.0 m maximum
BUILDING SETBACK	
Building Setback	• Front: 6m, Side: 3m, Rear: 3m (Attached)
	• Front: 6m, Side: 6m, Rear: 3m (Detached)
PARKING	
Minimum Required Parking	• Commercial - 2 Parking Lot for 200 m2 commercial space
	• Commercial space and 1 parking lot per subsequent 200m commercial space
	• Food Outlet - 1 Parking Lot per 10 seats
	• Residential – 1 parking lot per dwelling unit







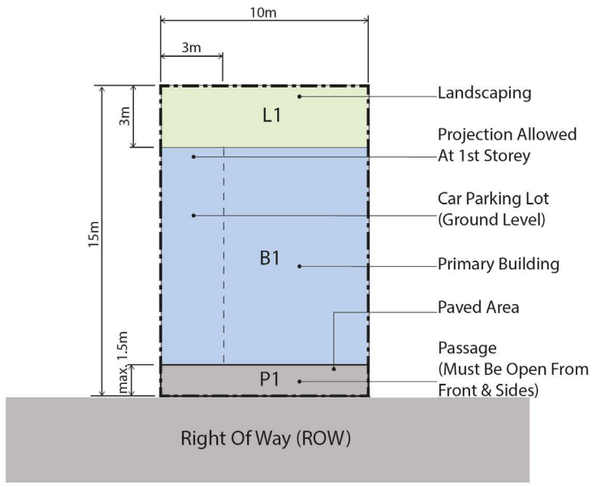



GOOSEBUMP


STOP

GENERAL COMMERCIAL ZONE (C3)

General commercial zone is a special zone such as tourism established to create vibrant commercial street character in newly planned areas when lots zoned under C3 will be developed by individual land owners The purpose is to ensure an intimate human scale and a continuous shopping street environment with unique character.



Schematic Plan (Not to scale)

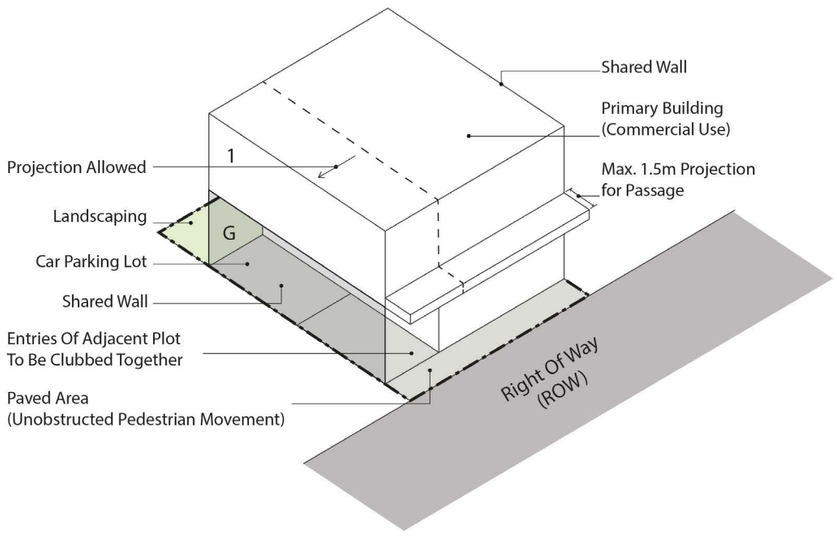


Figure 7.27 Illustration - General Commercial Zone (C3)

Table 7.7 General Commercial Zone (C3A) Regulations

REGULATIONS	
USES	
Permitted Use	• Commercial Uses • Retail, F&B & Restaurants • Entertainments • Tourism supporting services • Hotel and hostel • Night Market • Parking Lot
Prohibited Uses	• Industrial Development • Major Infrastructure • Cemetery or Crematorium • Warehousing • Slaughtering of animals • Animal Husbandry
Conditional Uses	• Public Facilities • Light industries with floor area less than 20 m² • Cottage Industries • Taxi and bus terminals
Maximum Plot Size	• 150 m²
COVERAGE	
Maximum Building Coverage	• 50%
Minimum Landscaping Coverage	• 10%
Maximum Plot Ratio	• 1.0 (Note: Any additional local guidelines, including environmental regulations, are subject to review by the relevant authorities.)
BUILDING	
Maximum Number of Floors	• G+1
Building Height	• 8.5 m
Floor to Floor Height	• Ground Floor - 5.0 m maximum • Ground Floor - 3.6 m maximum
BUILDING SETBACK (MINIMUM)	
Building	• Max frontage: 7.5 m • Attached: Front: 1.5 m; Side: 3m; Other Side: 0m; Rear: 3m
PARKING	
Minimum required parking	• Commercial - 1 Parking Lot for 100 m2 • Apartment – 1 Parking Lot per 1 Dwelling Units • Food outlet - 1 Parking Lot per 10 seats
	• Hotel/Hostel - 1 parking lot






VILLAGE




ELM ST



7.6 PARKS AND OPEN SPACE ZONE REGULATIONS

- PASSIVE RECREATION ZONE (P1)
- ACTIVE RECREATION ZONE (P2)
- AGRICULTURE ZONE (P3)
- PROTECTED ZONE (P4)

PASSIVE RECREATION ZONE (P1)

Passive Recreation Zone (P1) covers existing and proposed parks such as neighborhood/town/city level parks. It also covers areas marked as buffer for various purpose. These parks may include certain percentage of commercial or public facilities to complement recreation activities. P1 zone may allow Urban Farming in buffer areas, if it serves community interest, on case by case basis.





Table 7.8 Passive Recreation Zone (P1) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redeveloped park uses within P1 zone.	
Permitted Use	• Open Space in Housing Cluster, Neighborhood Park • Community park, Recreational Park, City/ Central Park • Sport Field, Stadium • Green Buffer, Reserve Land • Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Detached, Semi-Detached, Attached, Apartment Residential • Sport Complex, Camping Site • Protected Forest, Wetland • Industrial, Warehousing, Logistic Centre • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Restaurant/ Cafe/ Bar • Power Plant, Water Treatment Plant • Other conditional uses (Refer to Zoning Land Use Matrix)
Maximum Plot Size	• As per public facility provision standards proposed in growth nodes
COVERAGE	
Maximum Building Coverage	• N/A
Minimum Landscaping Coverage	• N/A
Maximum Plot Ratio	• N/A
BUILDING	
Maximum Number of Floors	• G+1
Building Height	• N/A
Floor to Floor Height	• N/A
BUILDING SETBACK (MINIMUM)	
Building Setback	• N/A
PARKING	
Minimum Required Parking	• Commercial - 1 Parking Lot per 100 sqm built-up • Restaurants- 1 Parking Lot per 50 sqm built-up • Reception halls/ night clubs- 1 Parking Lot per 250 sqm built-up • Cultural centres – 1/50 sqm of built-up • Parks and Open Space – 1/1000 m2 of park area. • Tourism and culture related commercial uses – 1/50 sqm of built-up

Active Recreation Zone (P2)

Active Recreation Zone (P2) covers existing and proposed active recreational sporting activities such as sports complex, swimming pool complex, theme parks/ amusement parks, resorts, golf course, race course, clubs etc. P2 zone offers parks with higher built-up coverage than P1 Zone. While structures within the parks are allowed, the general character of the Active Recreation Zone (P2) shall remain as green and recreational.





Table 7.9 Active Recreation Zone (P2) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redeveloped park uses within P2 zone.	
Permitted Use	• Open Space in Housing Cluster, Neighborhood Park
	• Community park, Recreational Park, City/ Central Park
	• Sport Field, Stadium, Zoo, Theme Park
	• Green Buffer, Reserve Land
	• Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Detached, Semi-Detached, Attached, Apartment Residential
	• Urban Farming
	• Farmland, Forestry
	• Industrial, Warehousing, Logistic Centre
	• Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Night Club, Entertainments
	• Power Plant, Water Treatment Plant
	• Other conditional uses (Refer to Zoning Land Use Matrix)
Maximum Plot Size	• As per public facility provision standards proposed in growth nodes
COVERAGE	
Maximum Building Coverage	• 20%
Minimum Landscaping Coverage	• N/A
Maximum Plot Ratio	• Subject to relevant Planning Authorities
BUILDING	
Maximum Number of Floors	• Subject to relevant Planning Authorities
Building Height	• N/A
Floor to Floor Height	• N/A
BUILDING SETBACK (MINIMUM)	
Building Setback	• 10m- setback for any building from residential uses
	• 25m- setback for stadium/public assembly from residential uses
	• 10m- setback for any road
PARKING	
Minimum Required Parking	• Commercial - 1 Parking Lot per 100 sqm built-up
	• Restaurants- 1 Parking Lot per 50 sqm built-up
	• Reception halls/ night clubs- 1 Parking Lot per 250 sqm built-up
	• Cultural centres – 1/50 sqm of built-up
	• Parks and Open Space – 1/1000 m2 of park area
	• Tourism and culture related commercial uses – 1/50 sqm of built-up
	• Sports Complex / Stadium - 1/30 seats
	• Cinema/ theaters/auditoriums/ Amusement- 1 Parking Lot per 20 seats up to 100 seats and additional for every 50 sqm
	• Hotels/ Guest Houses/ Clubs- 1 Parking Lot per 100 sqm built-up or 1 Parking Lot for 5 rooms/ 1 per suite whichever is more

AGRICULTURE ZONE (P3)

Agriculture Zone (P3) covers existing and proposed farmlands and aquaculture areas. Agriculture Zone is included in Zoning so as to preserve productive and irrigated farmlands where farming is practiced; and also the land which has a potential for high value agriculture being located in the fertile watershed of rivers. P3 Zone also includes existing rural settlements which are allowed to continue. In case of new residential developments in P3 Zone, Zoning Regulations of R2 Zone shall be applicable. Other than residential developments, all other developments shall be assessed by the Review Committee and approval may be given on case by case basis.





Table 7.10 Agriculture Zone (P3) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redeveloped park uses within P3 zone.	
Permitted Use	• Detached, Semi-Detached, Attached Residential
	• Community park, Recreational Park, City/ Central Park
	• Farmland, Urban Farming, Forestry
	• Convenience Store
	• Green Buffer, Reserve Land
	• Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Apartment Residential
	• Market, Retail Shop (20 sqm), Shopping centre, Shopping Mall
	• Sport Field, Stadia, Zoo, Theme Park, Golf Course
	• Industrial, Warehousing, Logistic Centre
	• Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Power Plant, Water Treatment Plant
	• Other conditional uses (Refer to Zoning Land Use Matrix)
Maximum Plot Size	• As per public facility provision standards proposed in growth nodes
COVERAGE	
Maximum Building Coverage	• N/A
Minimum Landscaping Coverage	• N/A
Maximum Plot Ratio	• Subject to relevant Planning Authorities
BUILDING	
Maximum Number of Floors	• Subject to relevant Planning Authorities
Building Height	• N/A
Floor to Floor Height	• N/A
BUILDING SETBACK (MINIMUM)	
Building Setback	• N/A
PARKING	
Minimum Required Parking	• N/A

PROTECTED ZONE (P4)

Protected Zone (P4) is established to protect all natural areas, including wetlands, lakes, forests, steep slopes, environmentally sensitive areas, and wildlife habitats, for other strategic purposes.





Table 7.11 Protected Zone (P4) Regulations

REGULATIONS	
USES	
These regulations shall apply to all new and redeveloped park uses within P4 zone.	
Permitted Use	• Community park, Recreational Park, City/ Central park • National Reserve, Green Buffer, Camping sites, Reserve Land, Protected Forest • Other permitted uses (Refer to Zoning Land Use Matrix)
Prohibited Uses	• Detached, Semi-detached, Attached, Apartment Residential • Market, Retail Shop (20 sqm), Shopping centre, Shopping Mall • Sport Complex, Theme Park, Golf Course • Industrial, Warehousing, Logistic Centre • Other prohibited uses (Refer to Zoning Land Use Matrix)
Conditional Uses	• Water Treatment Plant • Other conditional uses (Refer to Zoning Land Use Matrix)
Maximum Plot Size	• As per public facility provision standards proposed in growth nodes
COVERAGE	
Maximum Building Coverage	• N/A
Minimum Landscaping Coverage	• N/A
Maximum Plot Ratio	• Subject to relevant Planning Authorities
BUILDING	
Maximum Number of Floors	• Subject to relevant Planning Authorities
Building Height	• N/A
Floor to Floor Height	• N/A
BUILDING SETBACK (MINIMUM)	
Building Setback	• N/A
PARKING	
Minimum Required Parking	• N/A

Table 7.12 Proposed Zoning Matrix

	ZONES	Detached	Semi Detached	Attached	Apartment	Convenience Store	Market	Retail Shops (20 sqm)	Shopping Center	Shopping Mall	Hyper Mart	Super Mart	Banks	Small Offices (<25 sqm)	General Offices (<500 sqm)	Corporate Offices (>500 sqm)	Showroom	Restaurant/ Café/ Bar	Exhibition Hall	Discothequs/ Night Clubs (Entertainment)	Clubs	Convention/ Conference Center	Guest House <1200 sqm	Hotel	Resorts/ Chalets / Holiday Home	Kindergarten	Primary School	Secondary School	Primary + Secondary School	Polytechnic	Vocational Training / Technical School	College	University	Health Center	Hospital	Referral/ Multispecialty Hospital	Library	Community/ Multi-purpose Hall	Cinema Hall	Cultural Center	Museum	Police station	Embassy/ High Commission	Government Offices	Religious Site	Abattoir
R1	Single Family Residential (R1)	Y	N	N	N	Y	Y	Y	N	N	N	N	Y	Y	N	N	N	C	N	C	Y	N	Y	N	Y	Y	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	C	C	C	Y	C	Y	C	N
R2	Single Family Residential (R2)	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	Y	N	N	N	C	N	N	Y	N	Y	N	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	C	C	C	Y	C	Y	C	N
R3	Mid Density Low Rise Residential (R3)	Y	Y	Y	Y	Y	Y	Y	Y	N	C	C	Y	Y	N	N	N	C	N	C	Y	N	Y	N	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	C	C	C	Y	C	Y	C	N
R4	Mid Density Medium Rise Residential (R4)	N	N	Y	Y	Y	Y	Y	Y	N	C	C	Y	Y	Y	N	N	C	N	C	Y	N	Y	Y	N	Y	Y	Y	Y	C	C	C	N	Y	N	N	Y	Y	C	C	C	Y	C	Y	C	N
C1	Mixed use Commercial (C1)	N	N	N	Y	Y	Y	Y	Y	C	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	Y	C	C	C	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	N
C2	Neighborhood Centre Commercial (C2)	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	N	N	Y	Y	Y	Y	C	C	C	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	C	N
C3A	General Commercial (C3)	N	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	N	N	N	Y	N	Y	C	N
P1	Passive Recreation (P1)	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	C	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	Y	N	N	N	N
P2	Active Recreation (P2)	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	Y	Y	C	Y	Y	N	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	Y	N	Y	N	N	Y	N	N	N	N
P3	Agriculture Area (P3)	Y	Y	Y	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N
P4	Protected Area (P4)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N
SP1	Military/ Defence (SP1)	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N
SP9	Utilities (SP9)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

	Allowed
	Prohibited
	Conditional

Table 7.13 Proposed Zoning Matrix

	ZONES	Petro Stations	Car Wash	Automotive Repair Shop	Workshop/ Cottage Industries	Dry Cleaning & Laundry	Logistics Centre/ Establishment	Bakery	Warehouses/ Godown	General Industries	Open Space in Housing Cluster	Neighborhood Park	Community park	District/ Recreation Park	City/ Central park	Play Field/ Multi-Purpose Court	Sports Field and Stadia	Sport complex	Golf Course	Zoo/ Theme Park	National Reserve	Green Belt/ Buffer	Picnic/ Camping Sites	Reserve Land	Protected Forest	Other Forest	Wetland/ Marshy Areas	Beach	Farmland	Urban Farm	Afforestation/ Forestry	Bus Terminal/ Truk Terminal	Parking Lots	Railway Stations	Roads	Electric Substation/ Power Plant	Service Reservoir/ Waster Water Treatment Plant	Dumping Site/ Sanitary Landfill	Sewage Treatment Plant	ICT Infrastructure	Defence	Prison	Port	Airport	Quarry land/ Mining	Cemetery
R1	Single Family Residential (R1)	C	Y	Y	N	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	C
R2	Single Family Residential (R2)	C	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	N	Y	N	N	N	N	N	Y	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	C
R3	Mid Density Low Rise Residential (R3)	C	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	C
R4	Mid Density Medium Rise Residential (R4)	C	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	C
C1	Mixed use Commercial (C1)	Y	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	N	N	N	N	N	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	N
C2	Neighborhood Centre Commercial (C2)	Y	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	N	N	N	N	N	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	N
C3A	General Commercial (C3)	Y	N	N	N	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	N	Y	N	N	N	N	N	N	N	N	Y	N	Y	C	C	N	N	Y	N	N	N	N	N	N
P1	Passive Recreation (P1)	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	N	Y	N	N	N	N	N	N	N	N	N	N	C	C	N	N	Y	N	N	N	N	N	N	N
P2	Active Recreation (P2)	N	N	N	N	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	C	C	N	N	Y	N	N	N	N	N	C
P3	Agriculture Area (P3)	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	C	C	C	N	N	N	N	N	N	N	C	Y
P4	Protected Area (P4)	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	C	N	C	N	C	N	N	N	N	N	N	N	N	Y
SP1	Military/ Defence (SP1)	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y
SP9	Utilities (SP9)	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N

	Allowed
	Prohibited
	Conditional

7.7 SPECIAL ZONE REGULATIONS



- MILITARY/ DEFENSE (SP1)
- UTILITIES (SP9)

COASTAL ZONE OVERLAY

The purpose of the guidelines is:

- To protect the natural environment, its ecosystems and biodiversity
- To protect the development from hazardous conditions
- To establish objectives for the form and character of development

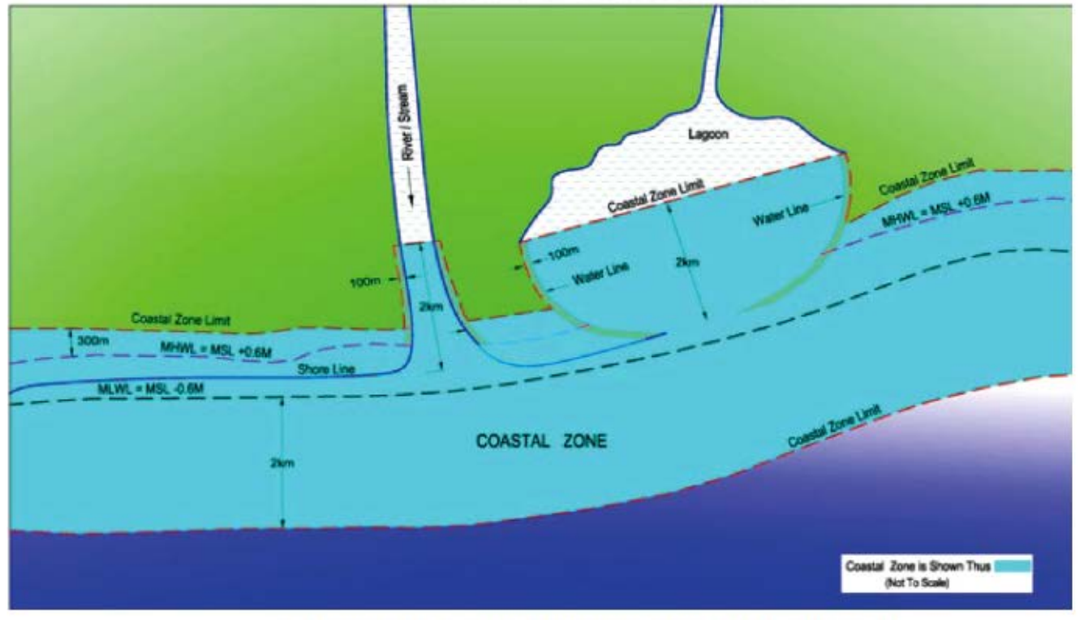
As per Coastal Zone Management Plan, landward side buffer of 300m from Mean High Water line is imposed by Coast Conservation Department (CCD) to safeguard the coastal environment. Coastal Zone Overlay demarcates 300m buffer measured from coastline, since Mean High Water line (GIS) is not available.

Table 7.14 Coastal Zone Overlay Regulations

REGULATIONS
These regulations shall apply to: Areas falling within the coastal zone overlay
CRITERIA FOR ASSESSING DEVELOPMENTS IN COASTAL ZONE OVERLAY
As stipulated in Coastal Zone Plan by CCD
GENERAL GUIDELINES
For planning new residential / commercial development along coastal Zone , the following guidelines are applicable: Following development are permissible in Coastal Overlay Zone: • Minimum lot size for above development are applicable as per Zoning Regulations • Planning requirements related with minimum width of right of ways (ROWs), proposed strategic landuses and public facilities reservations are applicable as per Zoning Regulations • Solid waste, refuse management and rain water harvesting is mandatory at plot level • Above developments shall maintain at least 6m wide vehicular access to beach. The beach shall be publicly accessible throughout • Above development are allowed provided that • Original beach line is maintained; • Exclude area with sand dunes; • Exclude Government declared buffer zones for aquaculture development; • Excludes any form of water body; • Excludes any archaeological site/ monument/ heritage structure/ scenic site; and • It does not affect critical coastal habitats. • Hotels/ Resorts/Theme Park and developments to be located in Special Management Area/ Area of Particular Concern are allowed subject to approval by Review Committee • Infrastructure developments for protection of above mentioned Zones/ uses is allowed subject to approval by Review Committee
REGULATIONS

REGULATIONS
Following development are not permissible in Coastal Overlay Zone: • Industrial, Logistics/ Warehouse, Mining activities are not allowed within the area marked under the Coastal Zone Overlay. Existing Industries may be allowed to continue if such establishment practice 100% waste recycling on site /discharge at sanitary landfill site proposed in Trincomalee District Master Plan 2018 • Development located in coastal belt near Archaeological Sites/ Monuments • Developments denuding beach front vegetation • Development located in environmentally sensitive areas such as coastal dunes, mangroves, salt marshes, estuaries, lagoons • Development located in unauthorized filled area • Premises for which demolition order has been issued

GRAPHIC ILLUSTRATION OF THE COASTAL ZONE & ITS LIMITS



"COASTAL ZONE" THE NEW DEFINITION (ILLUSTRATED)
(As per the Coast Conservation and Coastal Resource Management Act, No. 57 of 1981 as amended by the Act, No. 49 of 2011)

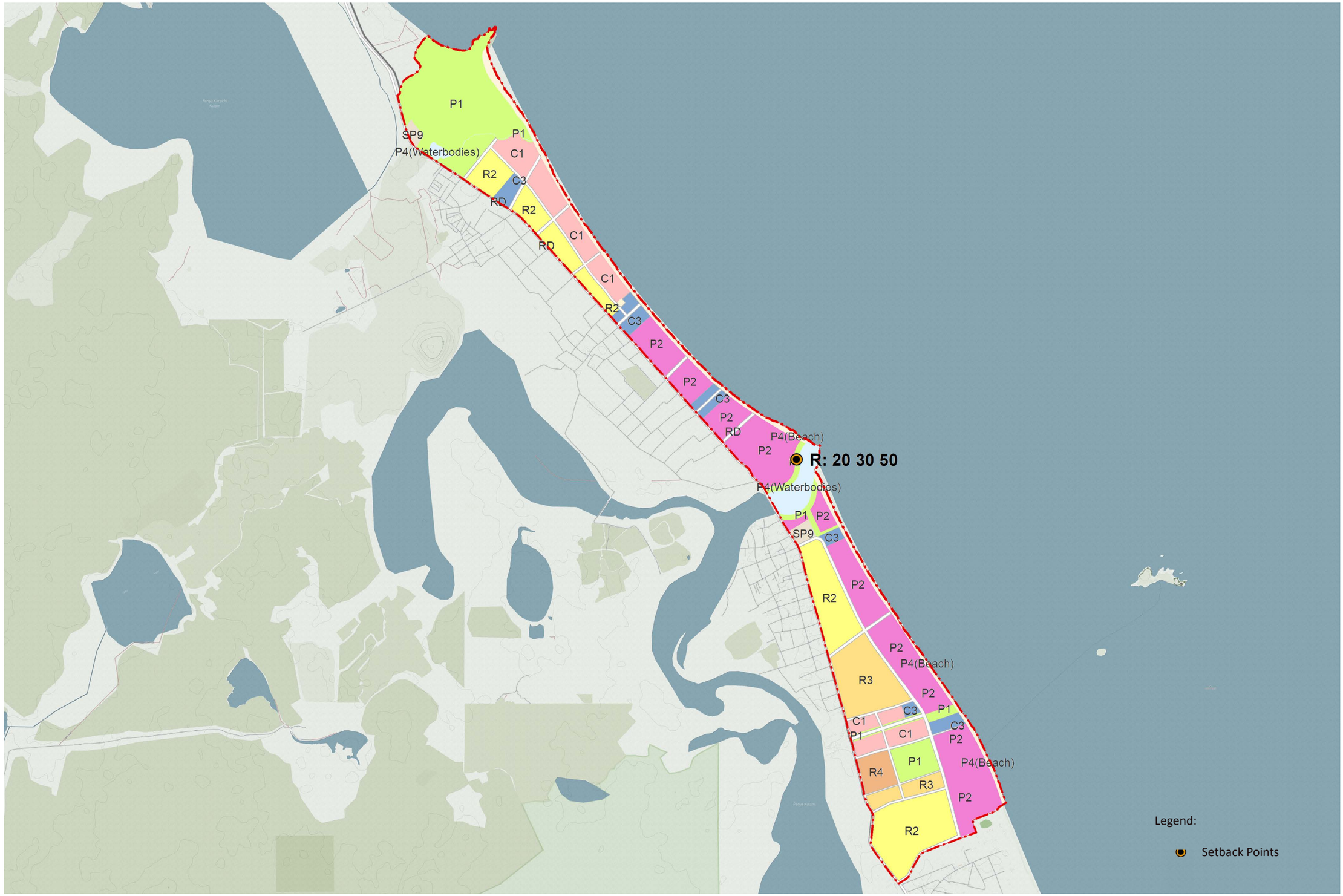


Figure 7.28 Kuchchaveli-Nilaveli Study Area Zoning Regulation: Coastal Zone Overlay

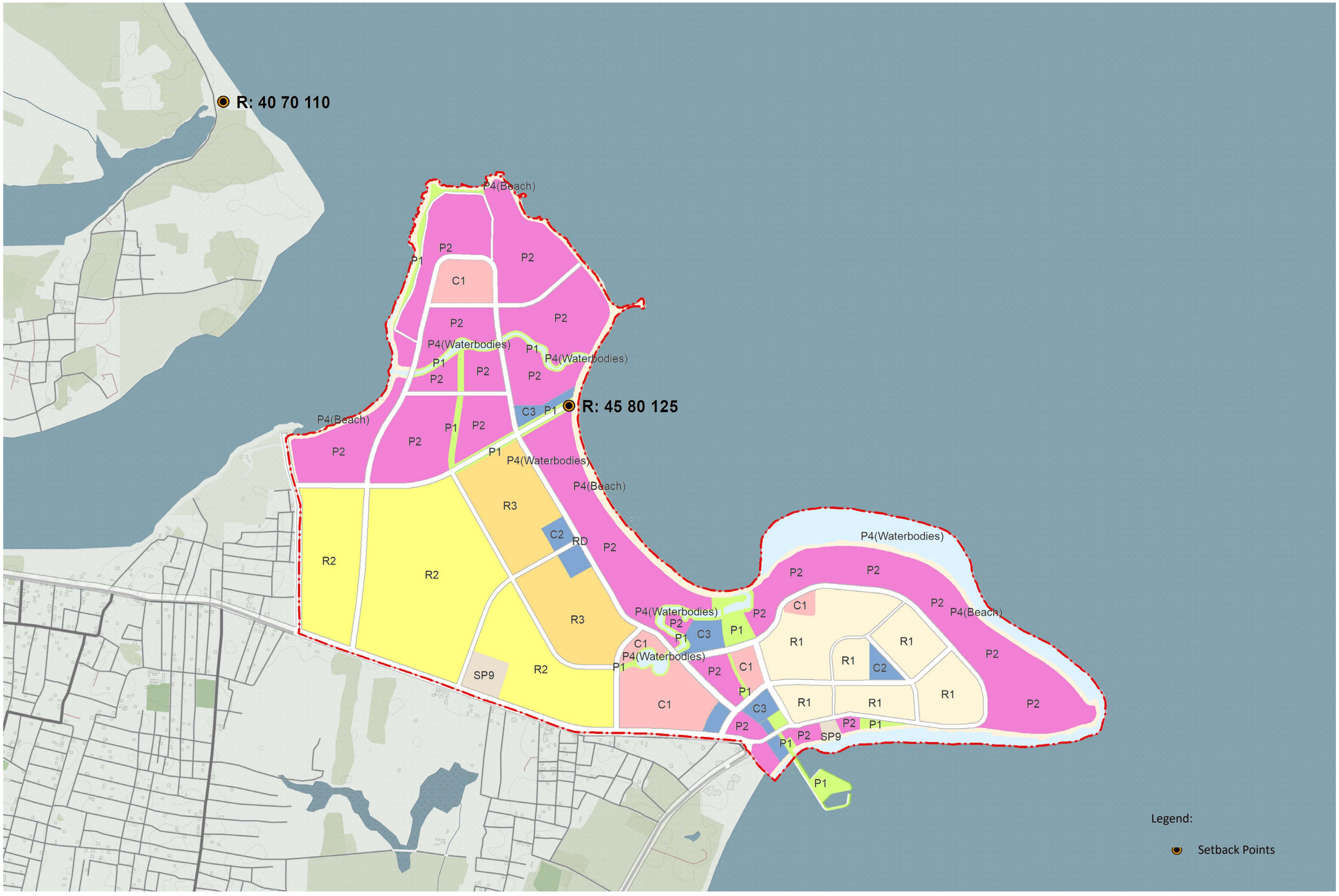


Figure 7.29 Pasikudah Study Area Zoning Regulation: Coastal Zone Overlay

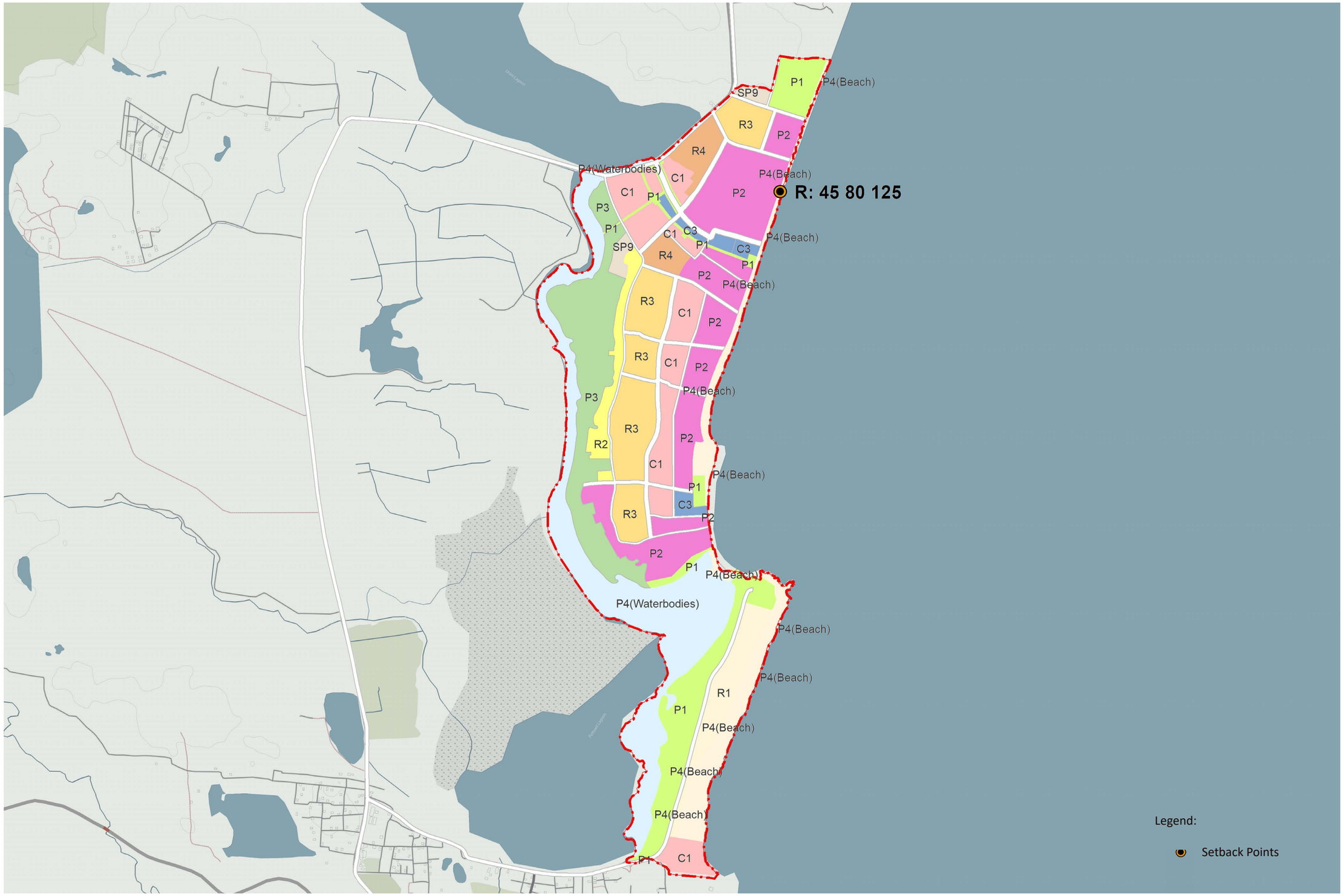


Figure 7.30 Whisky Point Study Area Zoning Regulation: Coastal Zone Overlay

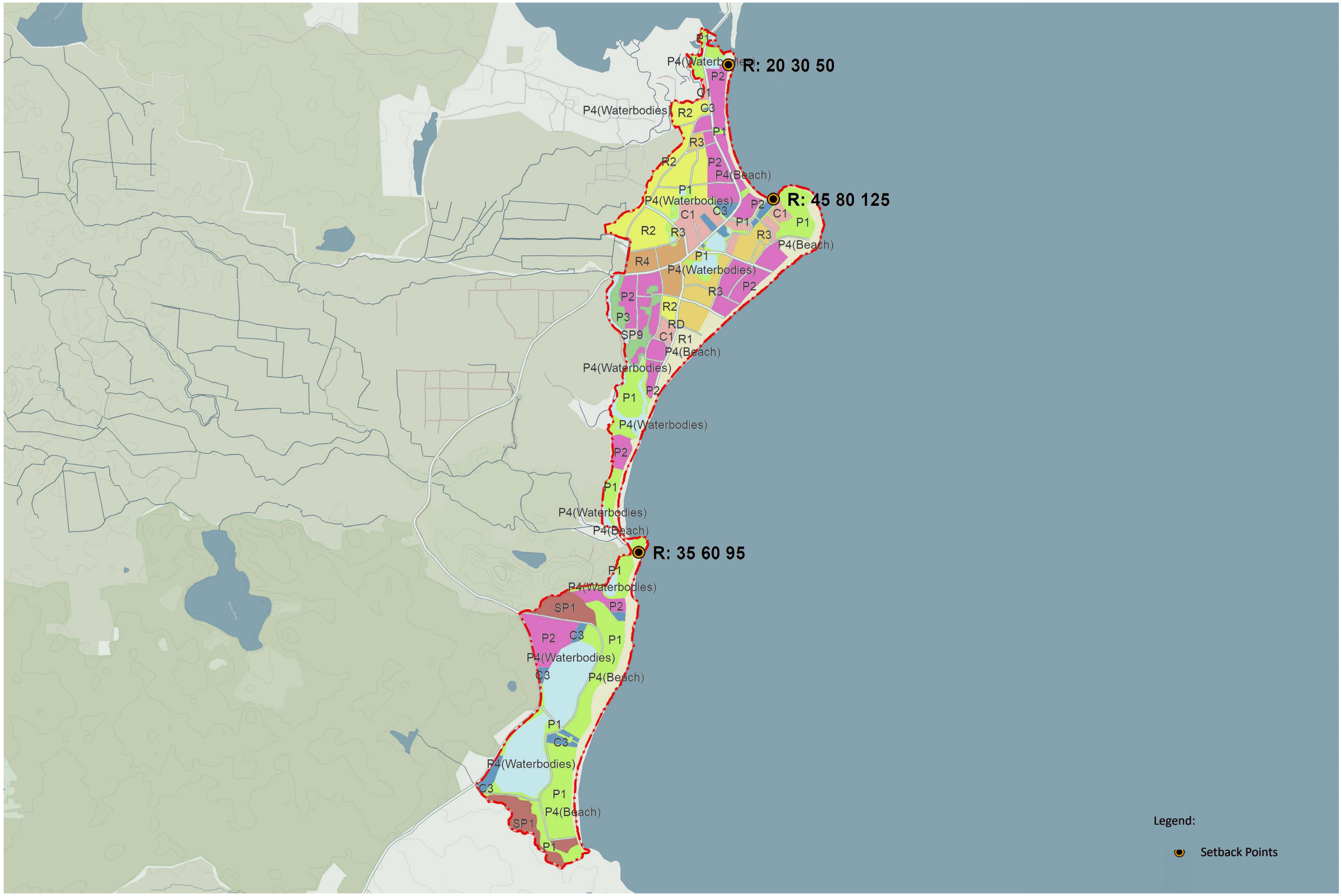


Figure 7.31 Arugam Bay - Peanut Farm Study Area Zoning Regulation: Coastal Zone Overlay



7.8 OVERLAY ZONE REGULATIONS

- COASTAL OVERLAY ZONE
- TOURISM MASTERPLAN OVERLAY ZONE

ARUGAM DISTRICT TOURISM MASTER PLAN OVERLAY ZONE

Within the Arugam District, 14 zones have been identified, each governed by specific zoning regulations under the Arugam Bay Development Planning Area, which has been designated as an Urban Development Area through gazette notification. Among these, three zones fall within the proposed study area boundaries of the Eastern Strategic Master Plan Project:

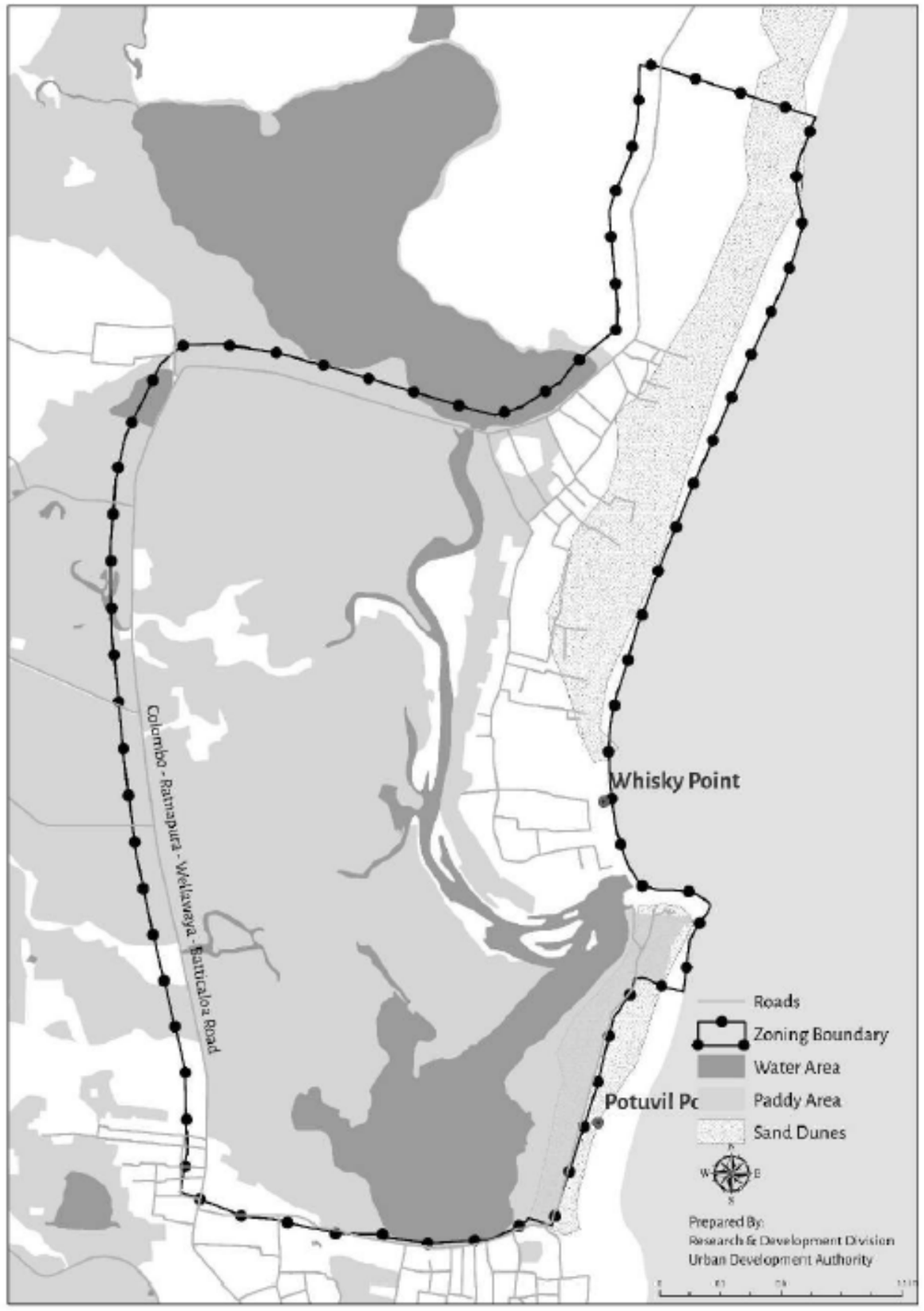
- Whisky Point: Zone 1- Pothuvil High Density Tourism Zone
- Arugam Bay: Zone 5- Arugam Bay Medium Density Tourism Zone
- Peanut Farm : Zone 11- Panama Low Density Residential Zone

Overlay Zones are specialized zones that are superimposed on the established zones. They can impose additional restrictions, allow or disallow various forms of density, and offer bonuses or incentives to achieve the specific planning objectives for each area. Parcels within an Overlay Zone are subject to both the underlying zoning regulations and the Overlay Zone requirements. These Overlay Zones will be studied in conjunction with the proposed zoning guidelines and will require review and approval by the relevant authority.

1. POTHUVIL HIGH DENSITY TOURISM ZONE OVERLAY

Pottuvil High Density Tourism Zone is promoted for high-end and relatively high dense tourist accommodation developments. Whiskey Point Resort Area located within this zone is regulated with a special set of guidelines.

REGULATIONS	
USES	
Permitted Use	• Refer to 7.14
Prohibited Uses	• Refer to 7.14
Conditional Uses	• Refer to 7.14
COVERAGE	
Plot Coverage	• 65%
	• 50% of remaining open spaces shall be permeable without any paving
Minimum Plot size	• Hotel/ Guest Houses/ Restaurants: 40P
	• Commercial: 10P
	• Other: 12P
BUILDING	
Building Height	• 6m
	• If not specified or controlled by a special regulation area, as per the zone factor



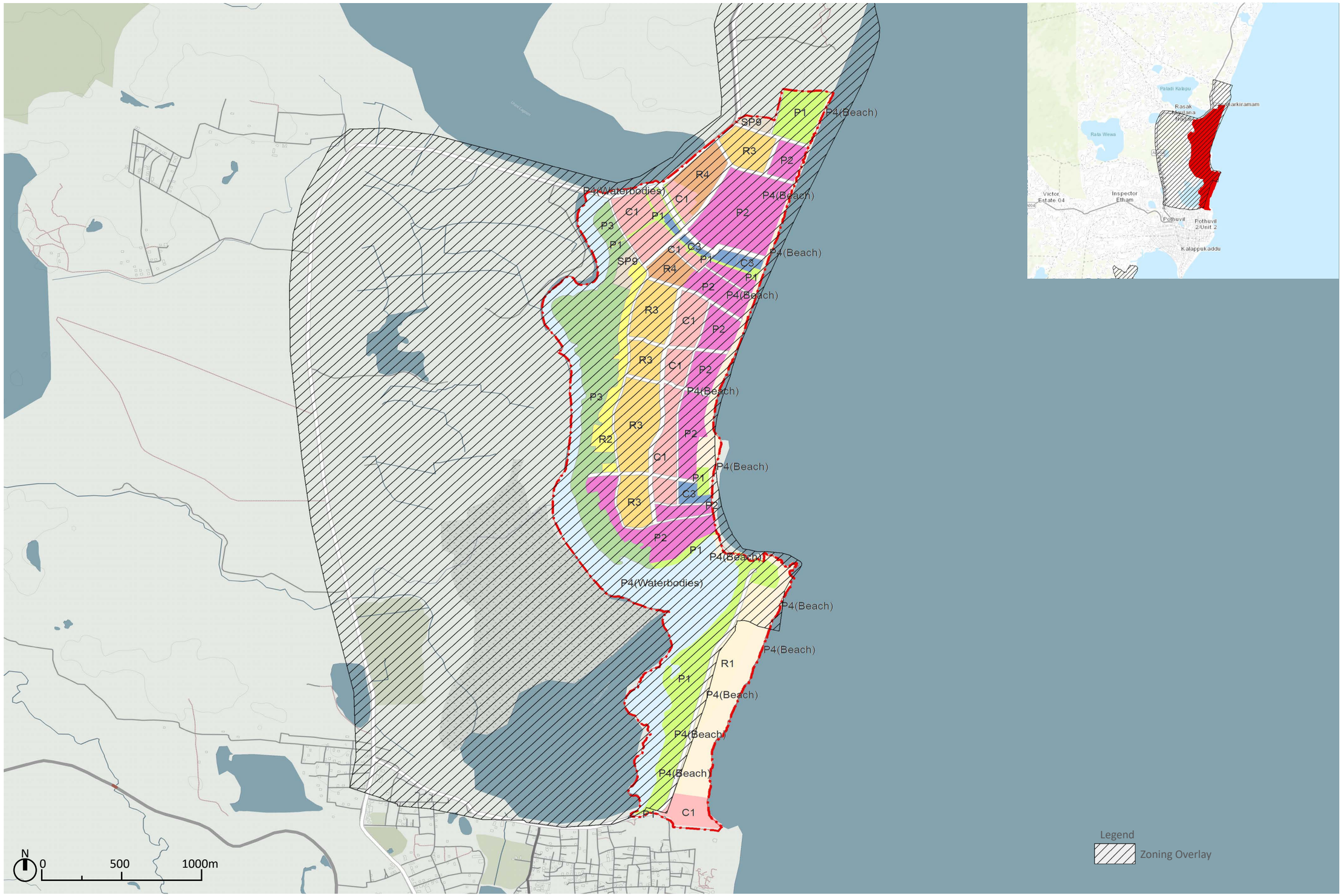


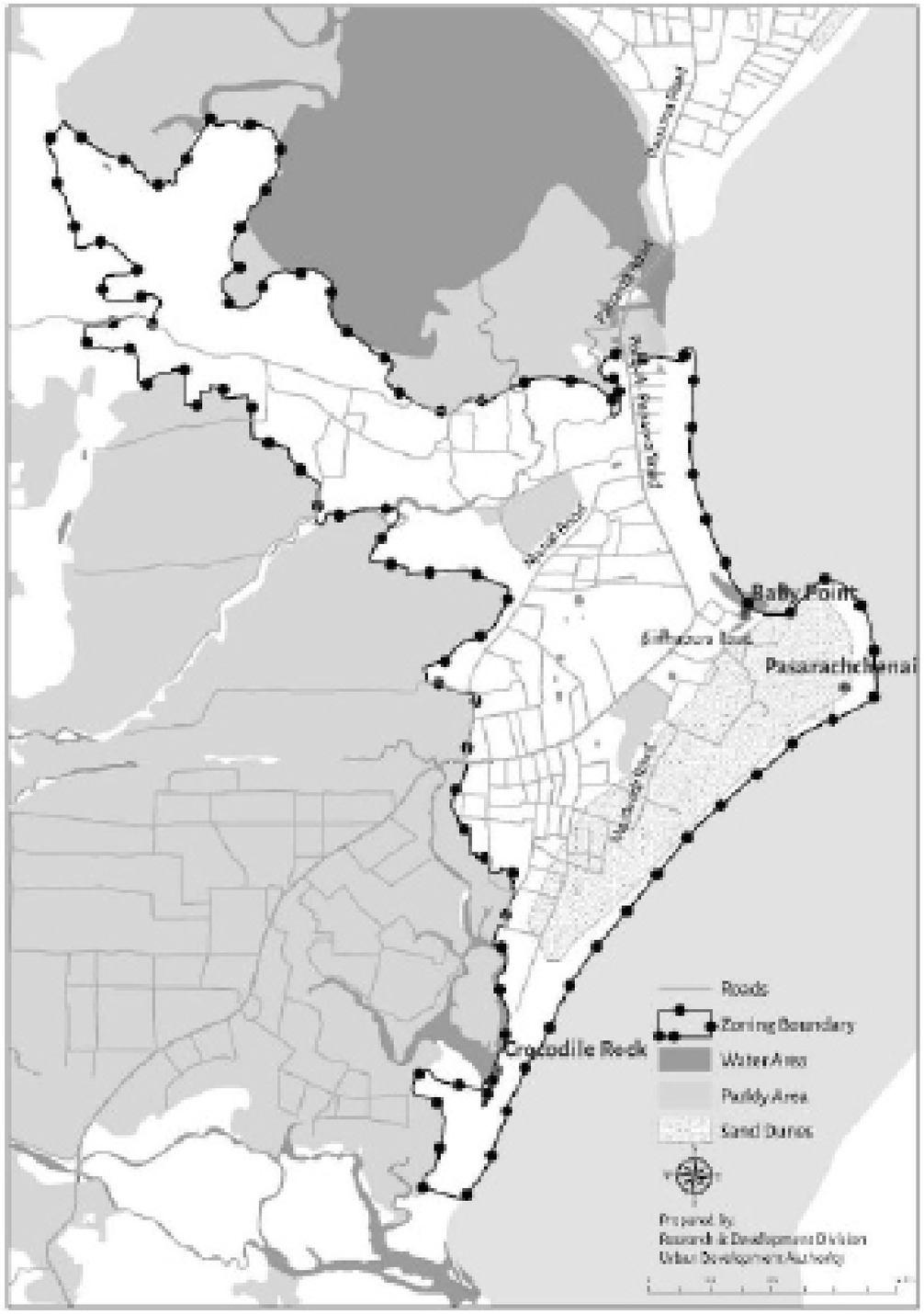
Figure 7.32 Whisky Point Study Area: Pothuvil High Density Tourism Zone Overlay

2. ARUGAM BAY MEDIUM DENSITY TOURISM ZONE OVERLAY

Arugam Bay Medium Density Tourism Zone is promoted as a moderate density zone with tourism as the predominant use category. In Arugam Bay Tourism Master Plan regulations, this area has special building form and facade guidelines for three categories of land blocks/lots;

1) lands facing the Arugam Bay Main Street,
2) lands facing the alley ways connecting the Main Street and the Beach and
3) lands facing the Beach.

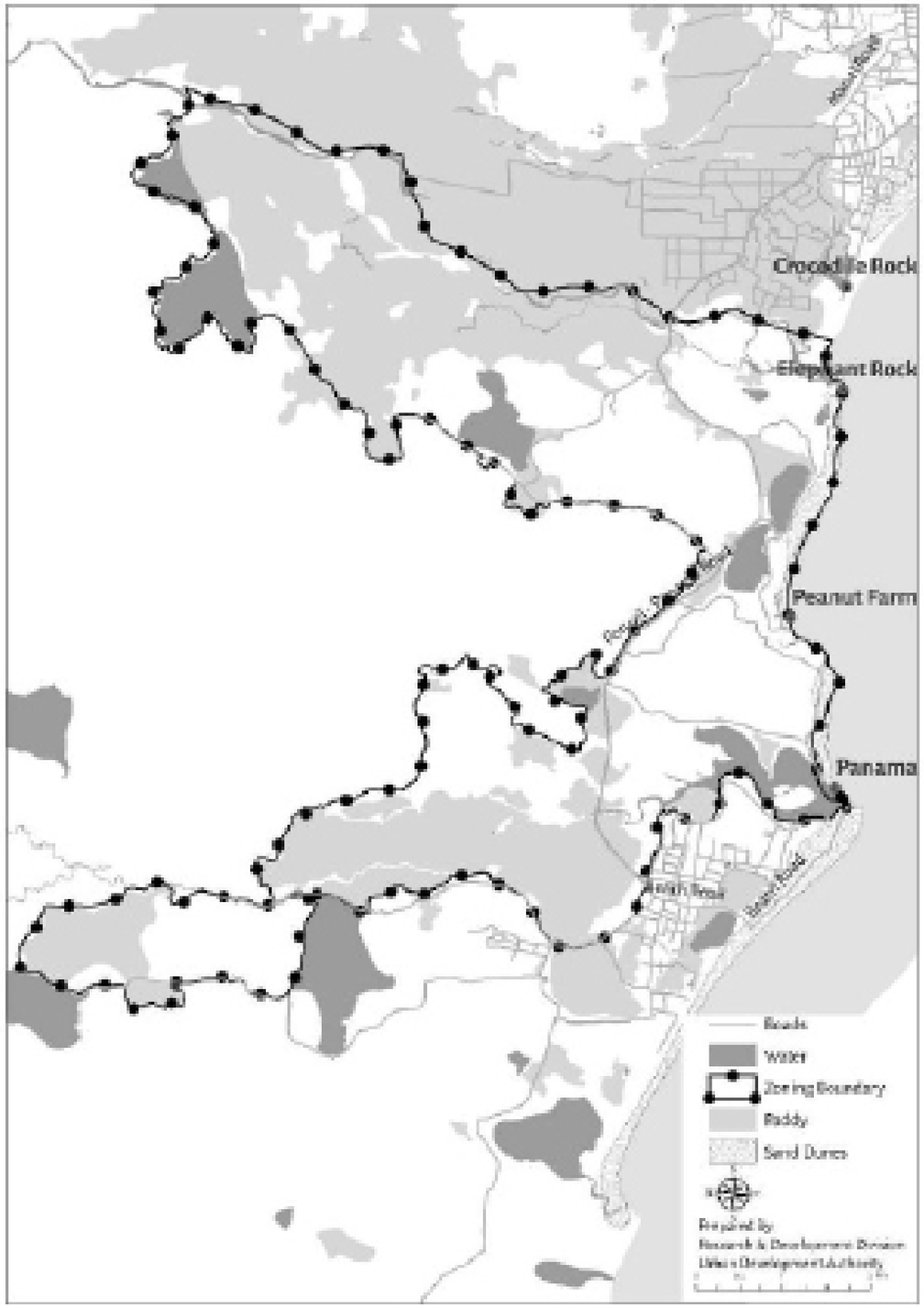
REGULATIONS	
USES	
Zone Factor	• 0.5
Permitted Use	• Refer to 7.14
Prohibited Uses	• Refer to 7.14
Conditional Uses	• Refer to 7.14
COVERAGE	
Plot Coverage	• 65%
	• 50% of remaining open spaces shall be permeable without any paving
Minimum Plot size	• Hotel/ Guest Houses/ Restaurants: 40P
	• Commercial: 10P
	• Other: 12P
BUILDING	
Building Height	• 6m (Building facing the Beach)
	• If not specified or controlled by a special regulation area, as per the zone factor



3. PANAMA LOW DENSITY RESIDENTIAL ZONE OVERLAY

Considering the environment and cultural sensitivity, it is proposed to maintain a low density character in this area with residential and agriculture as the predominant uses. The regulations are introduced to conserve the green character of the area.

REGULATIONS	
USES	
Zone Factor	• 0.5
Permitted Use	• Refer to 7.14
Prohibited Uses	• Refer to 7.14
Conditional Uses	• Refer to 7.14
COVERAGE	
Plot Coverage	• 50%
	• 50% of remaining open spaces shall be remained open space as home garden.
Minimum Plot size	• 20P
BUILDING	
Building Height	• If not specified or controlled by a special regulation area, as per the zone factor



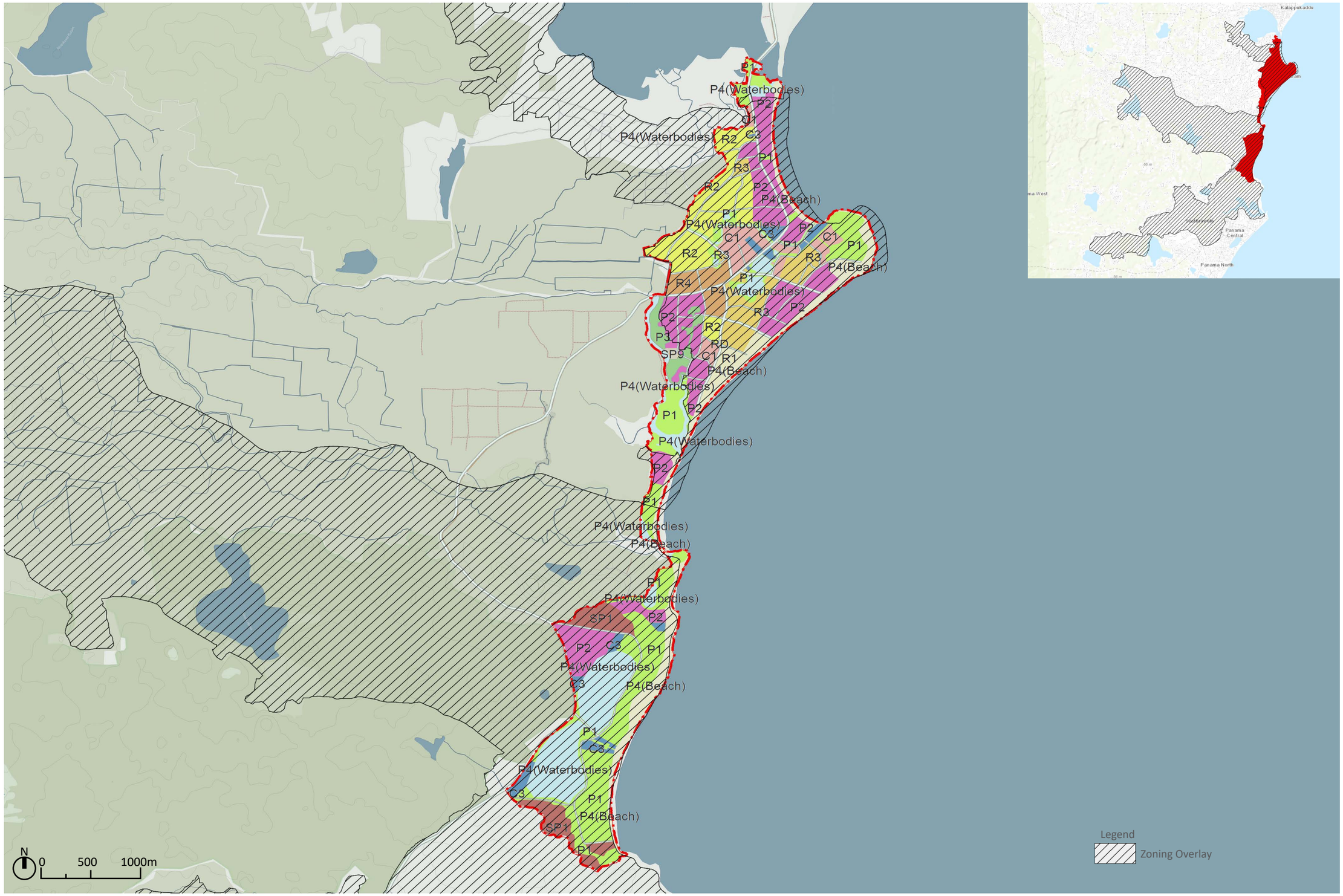


Figure 7.33 Arugam Bay - Peanut Farm Study Area Zoning Regulation: Coastal Zone Overlay

Table 7.15 Arugam Bay Tourism Development Master Plan - Zoning Matrix

	USES	ZONE 1 Pothuwil High Density Tourism Zone	ZONE 5 Arugambay Medium Density Tourism Zone	ZONE 11 Panama Low density Residential Zone
RESIDENTIAL	Single Houses			
	Apartments / Flats			
	Accommodations, Hostels, Boarding Houses			
	Quarters			
	Government Hospitals			
HEALTH	Nursing Homes			
	Private hospitals			
	Medical Laboratories, OPD & similar activities			
	Medical Consultation Channeling Centers including OPD & other services			
	Medical Centers Maternity Clinics			
	Pharmacy			
	Animal Clinic			
EDUCATIONAL	Per Schools, Day care centers			
	Government School			
	Private schools & International schools			
	Private campus			
	Higher Educational Institutes			
	Government Universities			
	Private Tuition classes			
	Libraries			
OFFICES	Banks, Financial Institutes			
	Professional offices, Consultancy Services			
	Project Offices, Government offices			
	Professional Institutes			
COMMERCIAL	Retail shops / Groceries and Similar uses			
	Whole sale activities			
	Shopping complex			
	Shopping Malls (Excluding cinema, Restaurant & other special activities)			
	Super market, Food city			
	Public markets			
	Departmental Stores			
	Vehicle Show Rooms			
	Tool, Equipment & Machinery Show Rooms			
	Home Base Item Show Rooms (lighting, Electrical, Tile)			
	Mini Hardware shops (Without construction materials ex. sand ,metal)			
	Hardware shops (With construction materials ex. sand, metal)			
	Cinema halls, Theaters			
	Indoor Public assembly places, Auditorium and similar uses			
	Bakery Items, Food out lets			

	USES	ZONE 1 Pothuwil High Density Tourism Zone	ZONE 5 Arugambay Medium Density Tourism Zone	ZONE 11 Panama Low density Residential Zone
	Spa			
COMMERCIAL	Saloon			
	Beauty paler			
	Tailor Shops			
	Pubs, Taverns, & cocktail lounges			
	Filling Stations (Minimum 40P Required)			
	Vehicle spare part shops			
	Funeral Parlor			
	Dedicated Economic centers			
	Plant nurseries			
	Recycling centers			
	ATM Centers			
INDUSTRY	Domestic Industries			
	Micro Industries (1-50sqm)			
	Small Industries (50-250sqm)			
	Medium Industries (251-1500sqm)			
	Large Industries (more than 1501sqm)			
RECREATIONAL/ SOCIAL ACTIVITIES	Stores with commercial			
	Stores with commercial (Up to 500sqm)			
	Stores with commercial (More than 500sqm)			
	Sport Complexes			
	Commercial Swimming pools, GYM, Fitness centers, Indoor Sport halls			
	Stadiums			
	Theme parks			
	Public parks			
	Museums			
	Cemetery			
	Religious centers			
	Religious Education Centers			
TOURISM	Restaurant, Café			
	Holiday resorts			
	City hotels			
	Guest houses			
	Tourist Hotels			
	Reception Hall			
	Tourist Information Centers			
	Lodges/ Cabanas			
	Watching Huts/Towers			
	Travel Agencies			
	Vehicle Hiring Centers			

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8 WAYFORWARD



WAY FORWARD

This Final Report presents the key proposals for the Local Area Plan defining the vision, development concepts, and the various land use distributions to support the intended urban development and spin off economic activities in identified planning areas in Trincomalee, Batticaloa and Ampara Districts of Eastern Province.

The report includes detailed infrastructure and transport proposals for each node, aimed at enhancing transport systems and infrastructure to support sustainable development. Throughout the planning process, we have engaged with stakeholders and the steering committee at every stage to integrate valuable feedback into the vision, concepts, and overall tourism master Plan.

Supporting the Master Plan, SJ have developed comprehensive development guidelines, aligned with existing policies and refined to ensure consistent urban growth in the planning areas. Additionally, urban design proposals, complete with 3D visualizations, have been prepared to highlight key placemaking strategies that will establish a new urban identity for these local areas.

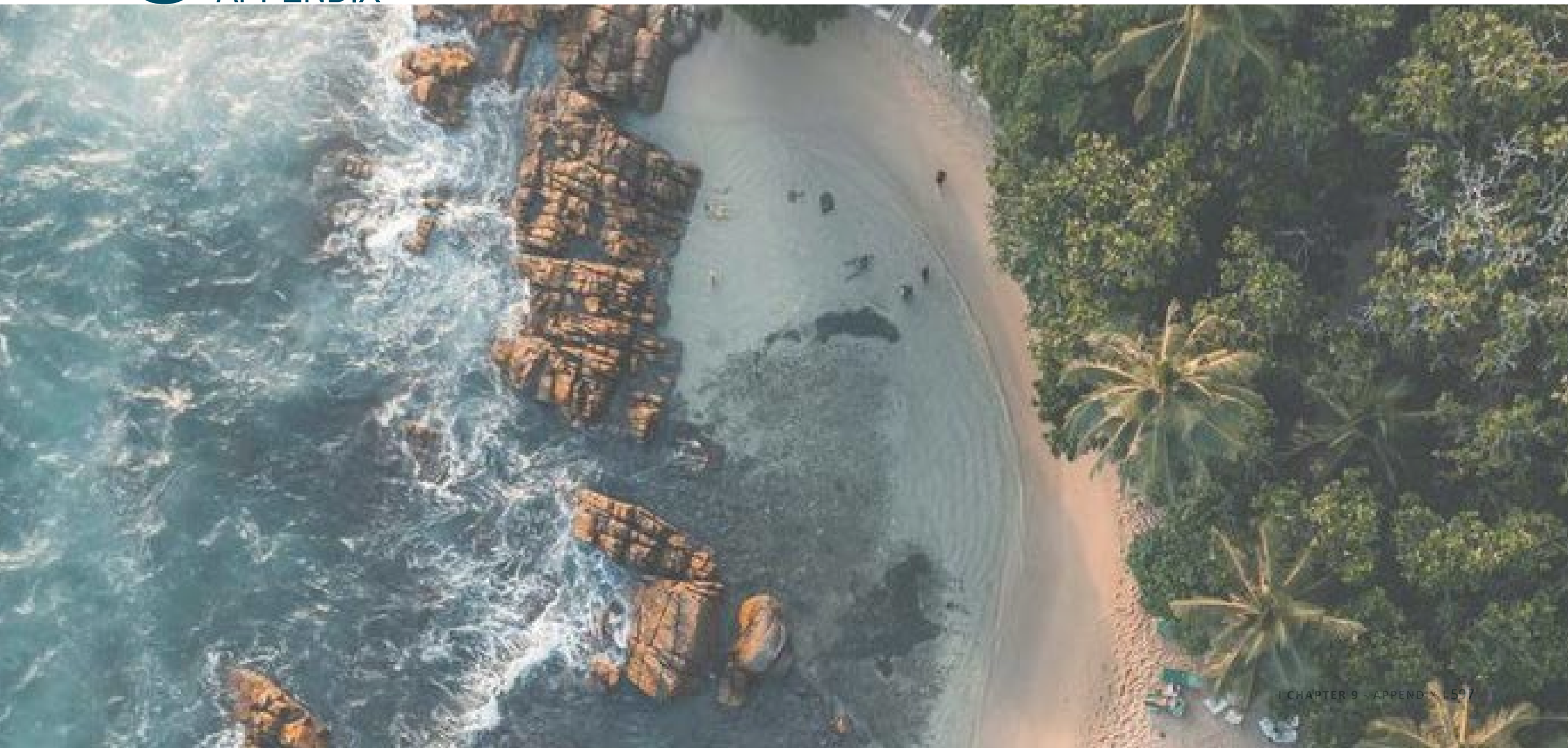
The report also outlines phasing strategies, priority projects, and implementation plans, along with a feasibility study for selected key projects. These elements are intended to guide the initial and advanced phases of development in Phase 1, enabling effective allocation of infrastructure investments and the realization of catalytic projects in key community, industrial, and tourism precincts.

This report is being submitted as the final city master plan along with zoning regulations, which will now be required to be adopted and approved by the authorities. Meanwhile, Eastern Province shall work together with respective local and national authorities to finalize the necessary policy frameworks, and engage strategic partners for critical infrastructure and catalytic projects in Kuchchaveli, Nilaveli, Pasikudah, Whiskey Point, Arugam Bay, and Peanut Farm.

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9 APPENDIX



9.1 RECOMMENDATIONS | COASTAL REGULATORY DEVELOPMENTS - SRI LANKA



Coastal Regulatory Developments Of Sri Lanka

Classification of Coastal segments by level of Vulnerability and Setback distances (in meters)

	Level of Vulnerability	Reservation Area	Restricted Area	Total Setback
	Low (-)	10	25	35
	Low	15	25	40
	Low (+)	15	30	45
	Medium (-)	20	30	50
	Medium	20	35	55
	Medium (+)	25	35	60
	High (-)	25	40	65
	High	30	50	80
	High (+)	35	60	95
	Very High	40	70	110
	Extremely High	45	80	125

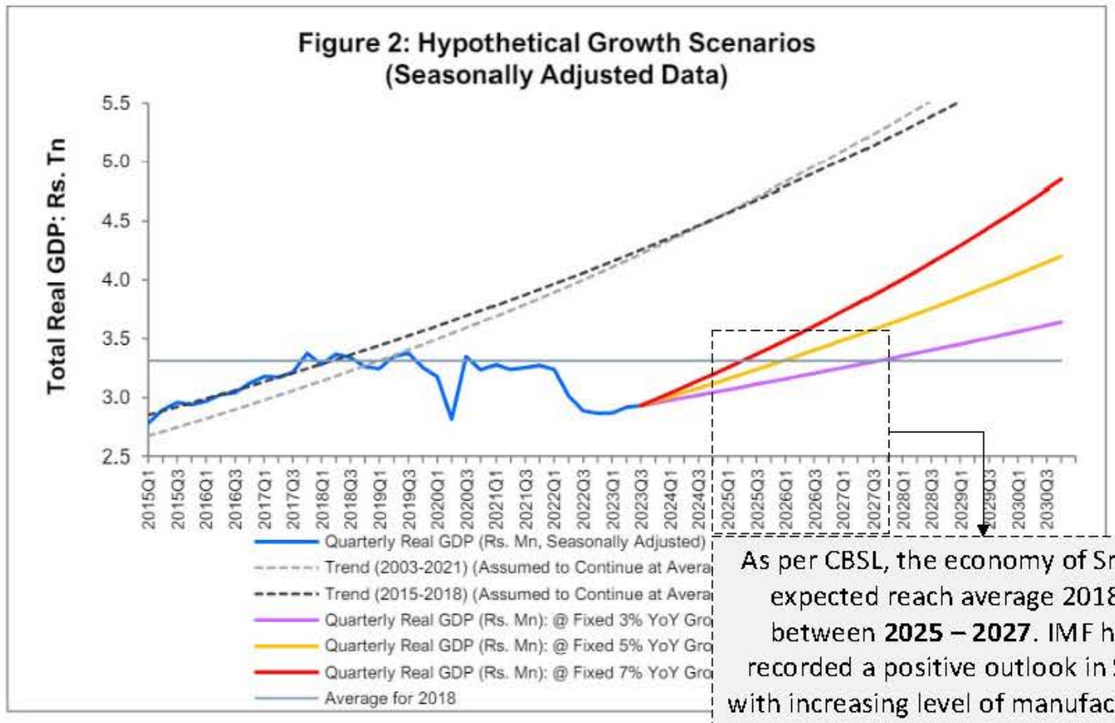
Parameters	Sensitive Area	Non-UDA declared area	UDA declared area
Room – Land ratio *(No. of rooms permissible per hectare)*	25 Nos.	40 Nos.	50 Nos.
Plot Coverage	20%	30%	30%
Building Height	12 m or angular height of 30° from the Hight Tide Line(HTL) whichever is low	12 m	12 m

Conditions for obtaining Environmental Clearance

- Construction of Hotels or resorts exceeding 99 rooms or 40 hectares
- Reclamation of land, wetland area exceeding 4 hectares
- Clearing of land areas exceeding 50 hectares
- Any development activity within 1 mile from the boundary of any National Reserve

9.2 TOURISM FORECAST AND DEVELOPMENT MIX

SRI LANKA - ECONOMIC RECOVERY



Sources: Central Bank Staff Calculations

As per CBSL, the economy of Sri Lanka is expected reach average 2018 levels between **2025 – 2027**. IMF has also recorded a positive outlook in Sri Lanka with increasing level of manufacturing and export activity. However the existing **Ukraine war** poses a threat for rapid economic recovery of Sri Lanka

Could the resumption of external debt servicing result in another balance of payments crisis?

- Sri Lanka's total debt servicing would have reached over 38 per cent of GDP by 2026 in the absence of any debt treatment (IMF Country Report - 2022). However, under the baseline scenario of debt restructuring, the same assessment conducted in 2023 revealed that the total debt servicing could be as low as 22 per cent of GDP by 2026, and more importantly, the external debt servicing would be as low as 3.3 per cent of GDP by 2026. Figure 1 shows a notable positive impact of debt restructuring on Sri Lanka's debt servicing. Under the debt sustainability targets, foreign currency debt serving is expected to be maintained below 4.5 per cent of GDP over the medium term

IMF Outlook on Sri Lanka

IMF Staff Concludes Visit to Sri Lanka

January 19, 2024

End-of-Mission press releases include statements of IMF staff teams that convey preliminary findings after a visit to a country. The views expressed in this statement are those of the IMF staff and do not necessarily represent the views of the IMF's Executive Board. This mission will not result in a Board discussion.

- The economic reform program implemented by the Sri Lankan authorities is yielding the first signs of recovery with positive real GDP growth in the third quarter of 2023, low inflation, increased revenue collection, and a build-up of external reserves.
- Staying the course on the reform agenda is necessary for this stabilization to evolve into broad-based and stable growth that will ensure a full and lasting economic recovery benefitting the people.
- Progress in meeting key commitments under the IMF-supported program will

Sri Lanka's Economic Reform Program is Starting to Work —Keep at It for a Full Recovery

Op-ed by IMF's Krishna Srinivasan and Peter Breuer
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February 22, 2024

Sri Lanka is emerging from an unprecedented economic crisis that imposed significant hardships on its people, especially the most vulnerable. We saw some of these effects in our own travels around the country, as well as some signs of recovery, as we work to help rebalance the economy.

The economy grew 1.6 percent from a year earlier in the third quarter of 2023, the first expansion in a year and a half. Inflation has moderated significantly and other economic indicators, such as those for manufacturing and services, add to signs of a broadening recovery. We recently projected that the economy will expand this year and that growth will accelerate next year.

SOURCE MARKET ANALYSIS

INDIA

301,434
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

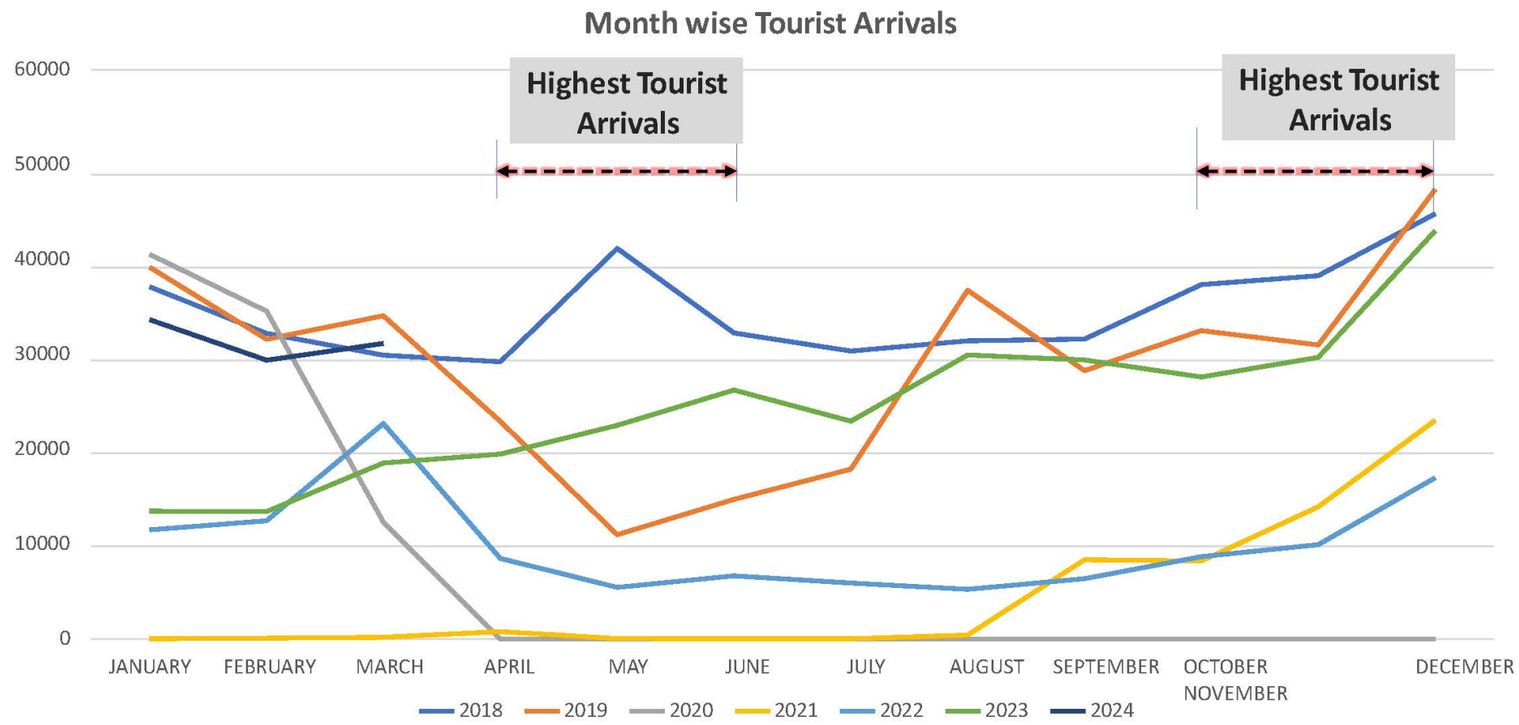
18.7%
% Share
(Avg 2018-2023)

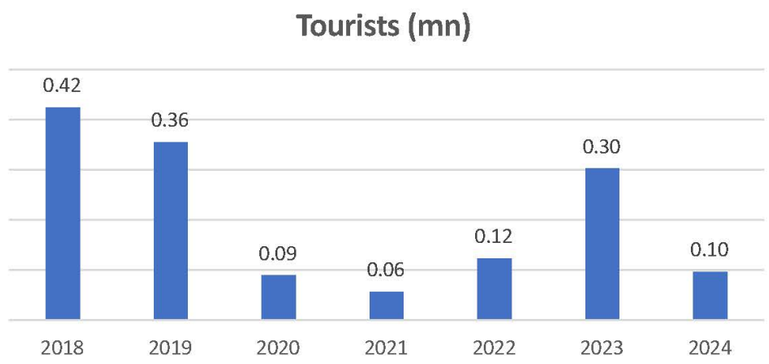
6.5 Days
Duration of Stay
(2018)

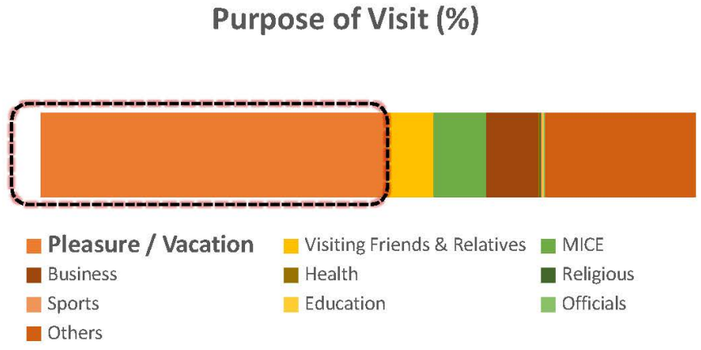
Vacation (53%)
Purpose of Visit
(Jan 2024)

-6.5%
CAGR
(2018-2023)

-29%
% of Change
(2018 & 2023)







Source: SLTDA

SOURCE MARKET ANALYSIS

CHINA

126,833
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

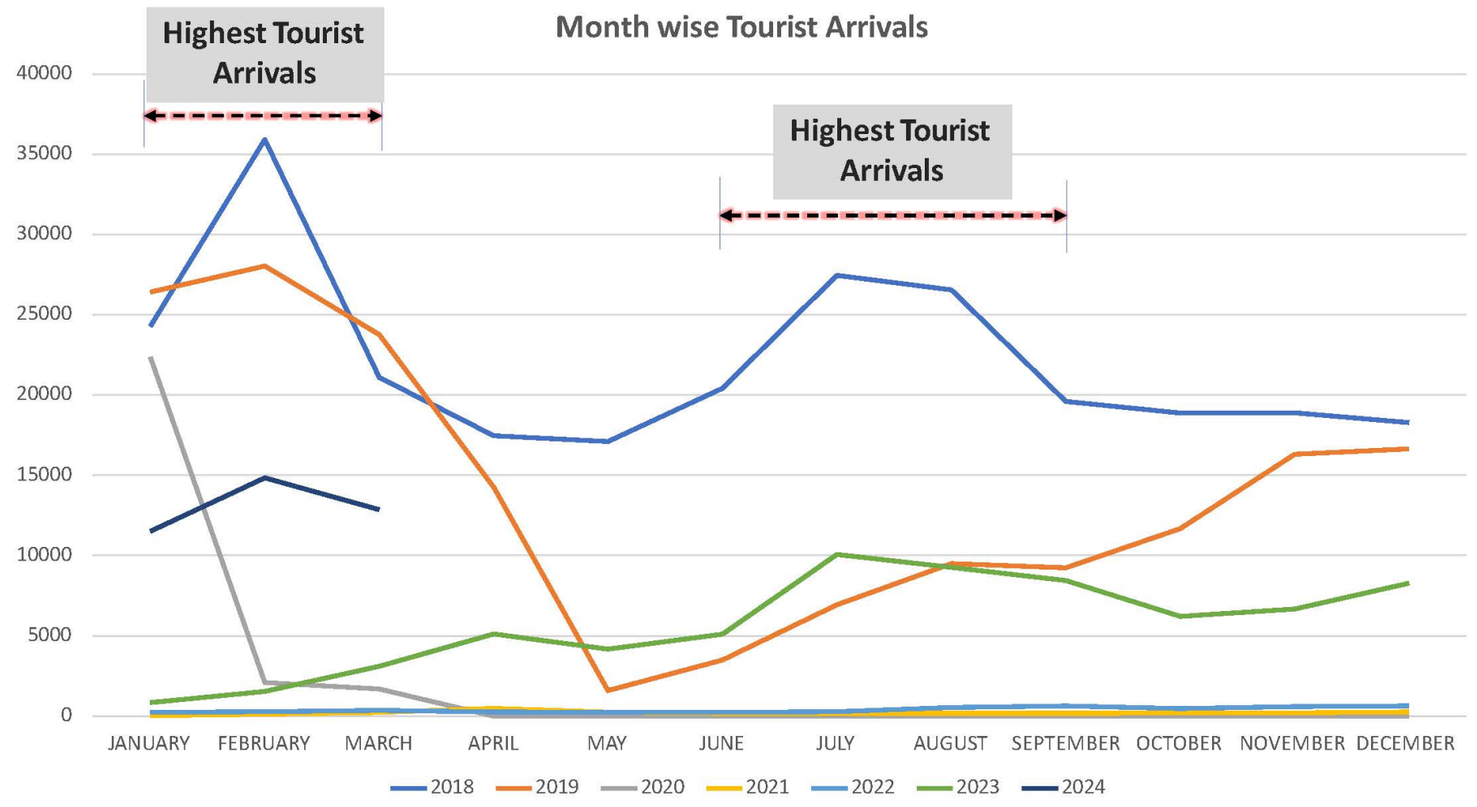
7.86%
% Share
(Avg 2018-2023)

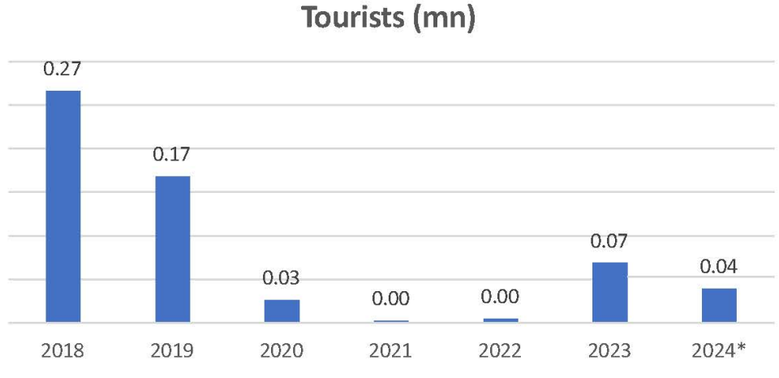
7 Days
Duration of Stay
(2018)

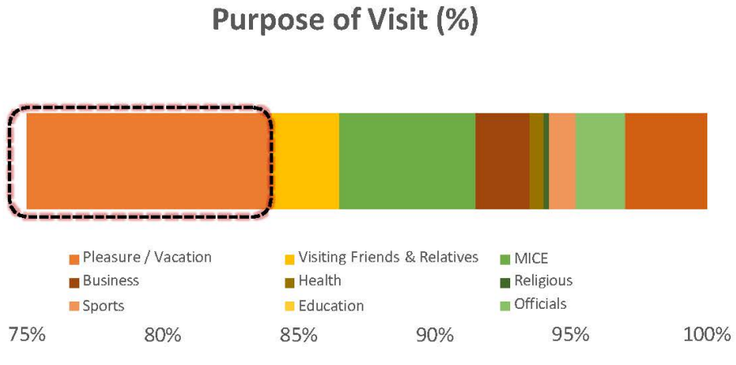
Vacation (82%)
Purpose of Visit
(Jan 2024)

-23.7%
CAGR
(2018-2023)

-74%
% of Change
(2018 & 2023)







Source: SLTDA

SOURCE MARKET ANALYSIS

RUSSIA FEDERATION

109,954
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

6.8%
% Share
(Avg 2018-2023)

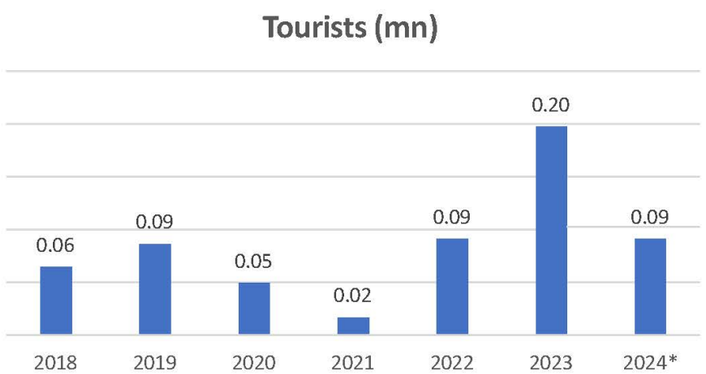
3.2 Days
Duration of Stay
(2018)

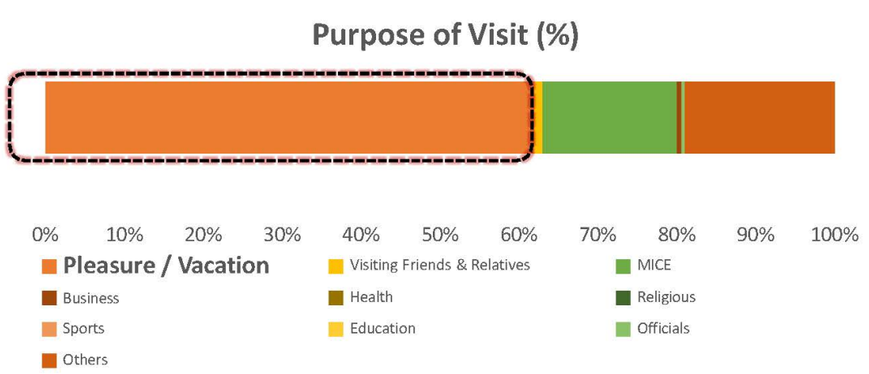
Vacation (62%)
Purpose of Visit
(Jan 2024)

-25.1%
CAGR
(2018-2023)

-206%
% of Change
(2018 & 2023)







SOURCE MARKET ANALYSIS

UNITED KINGDOM

167,057
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

10.35%
% Share
(Avg 2018-2023)

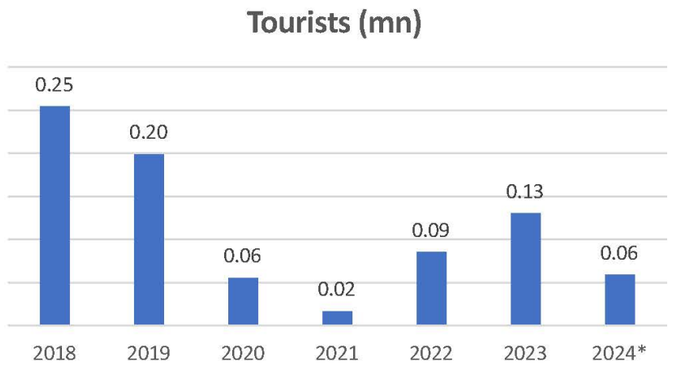
4.1 Days
Duration of Stay
(2018)

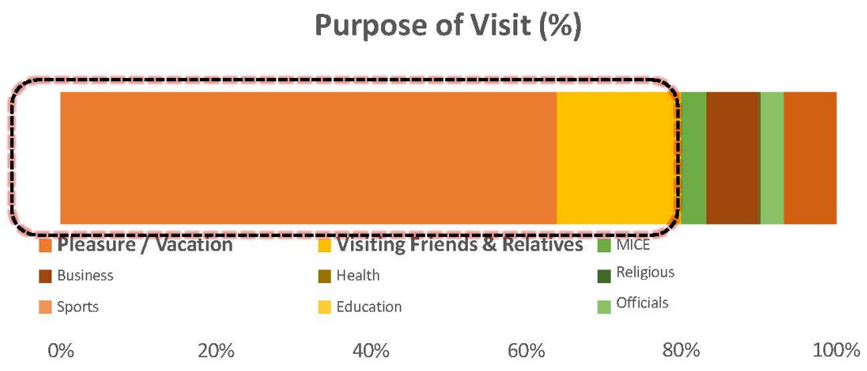
Vacation (64%)
Purpose of Visit
(Jan 2024)

-12.5%
CAGR
(2018-2023)

-49%
% of Change
(2018 & 2023)







SOURCE MARKET ANALYSIS

UNITED STATES

53,179
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

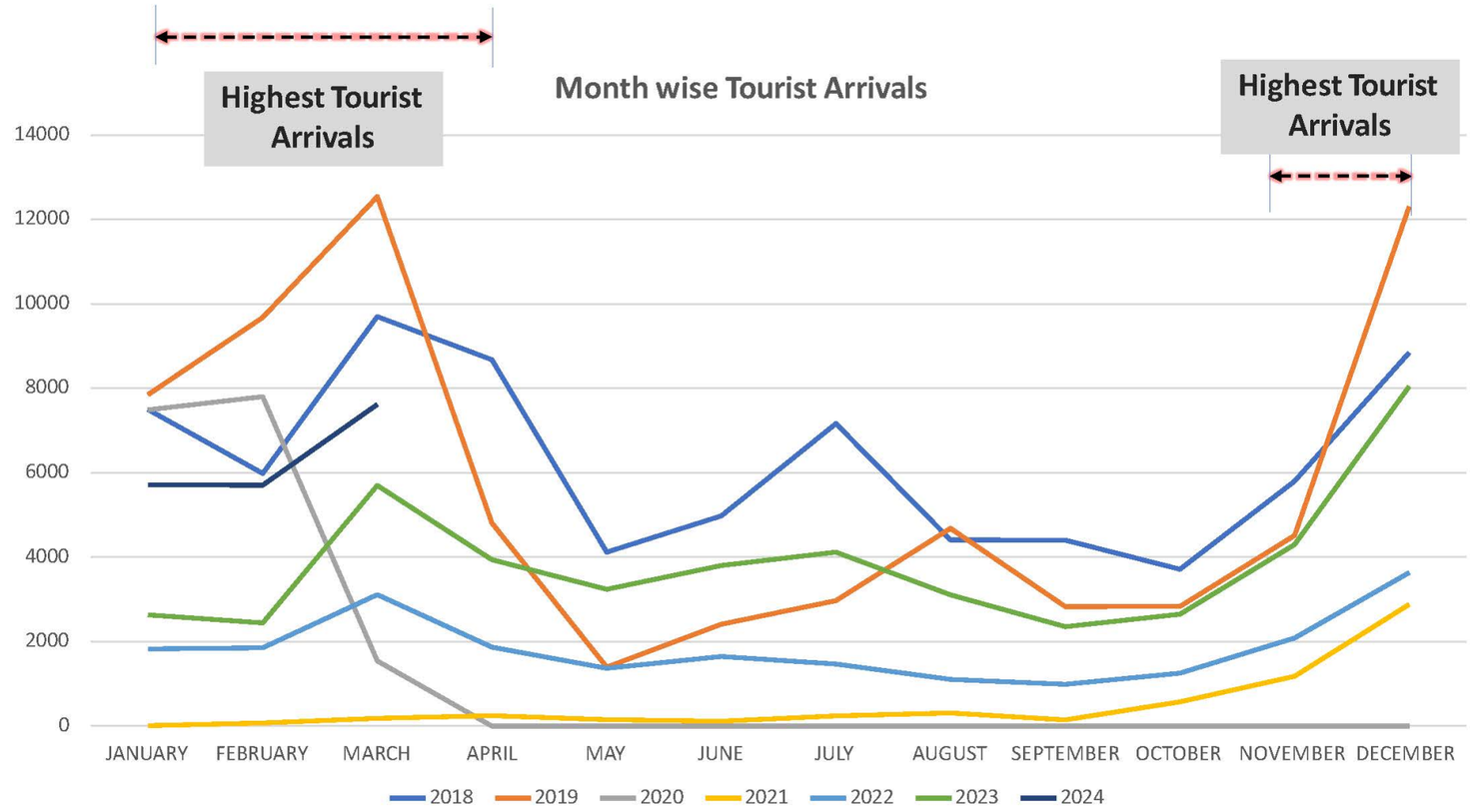
3.3%
% Share
(Avg 2018-2023)

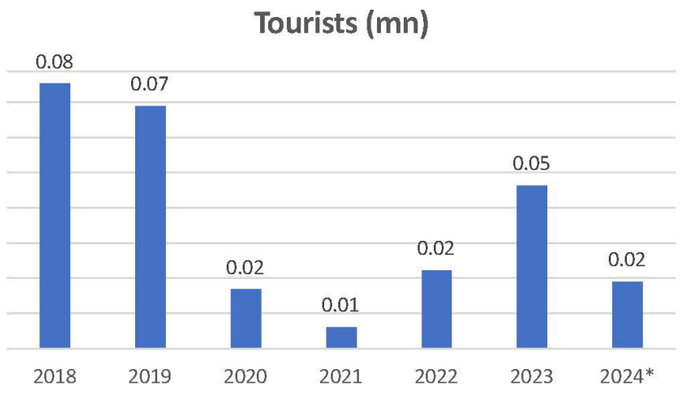
3.2 Days
Duration of Stay
(2018)

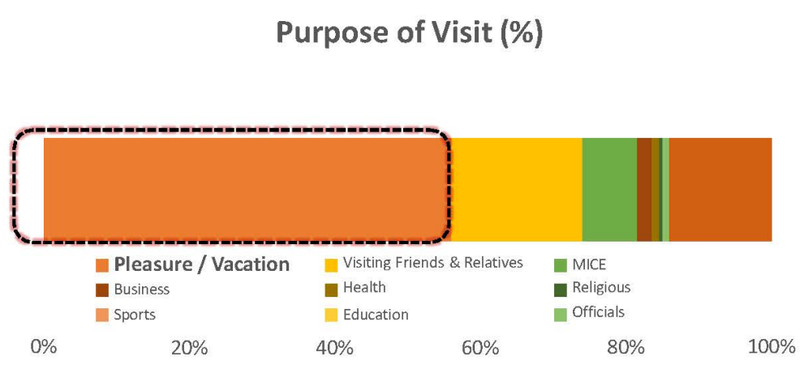
Vacation (56%)
Purpose of Visit
(Jan 2024)

-9.3%
CAGR
(2018-2023)

-38%
% of Change
(2018 & 2023)







SOURCE MARKET ANALYSIS

FRANCE

71,451
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

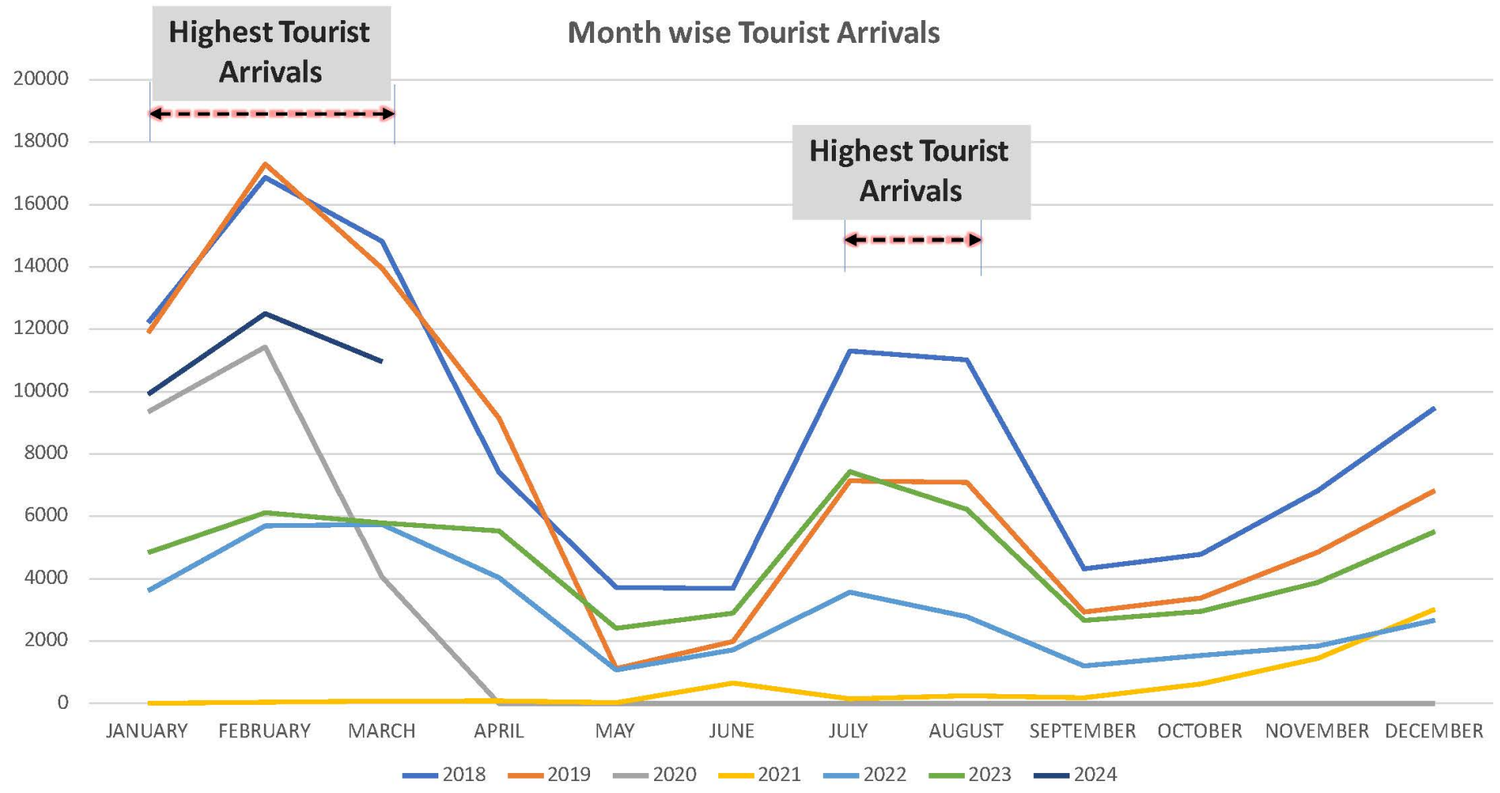
4.4%
% Share
(Avg 2018-2023)

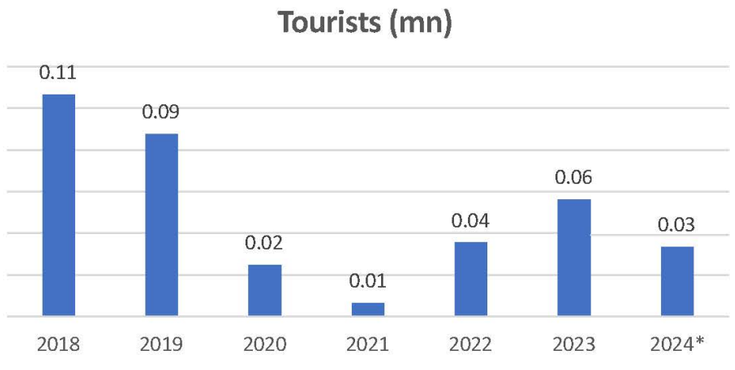
4.5 Days
Duration of Stay
(2018)

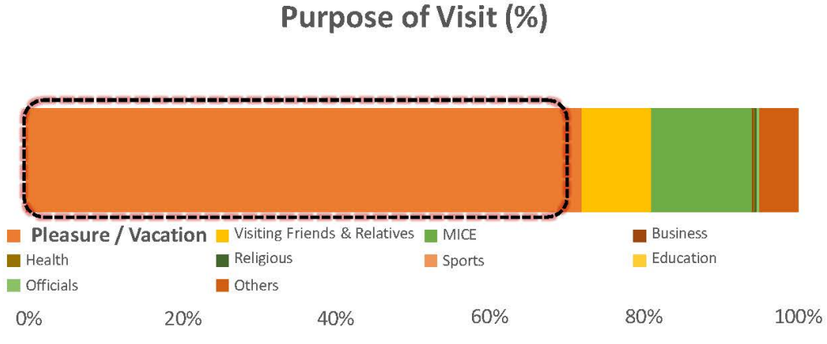
Vacation (72%)
Purpose of Visit
(Jan 2024)

-12%
CAGR
(2018-2023)

-47%
% of Change
(2018 & 2023)







2.9 SOURCE MARKET ANALYSIS

GERMANY

112,467
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

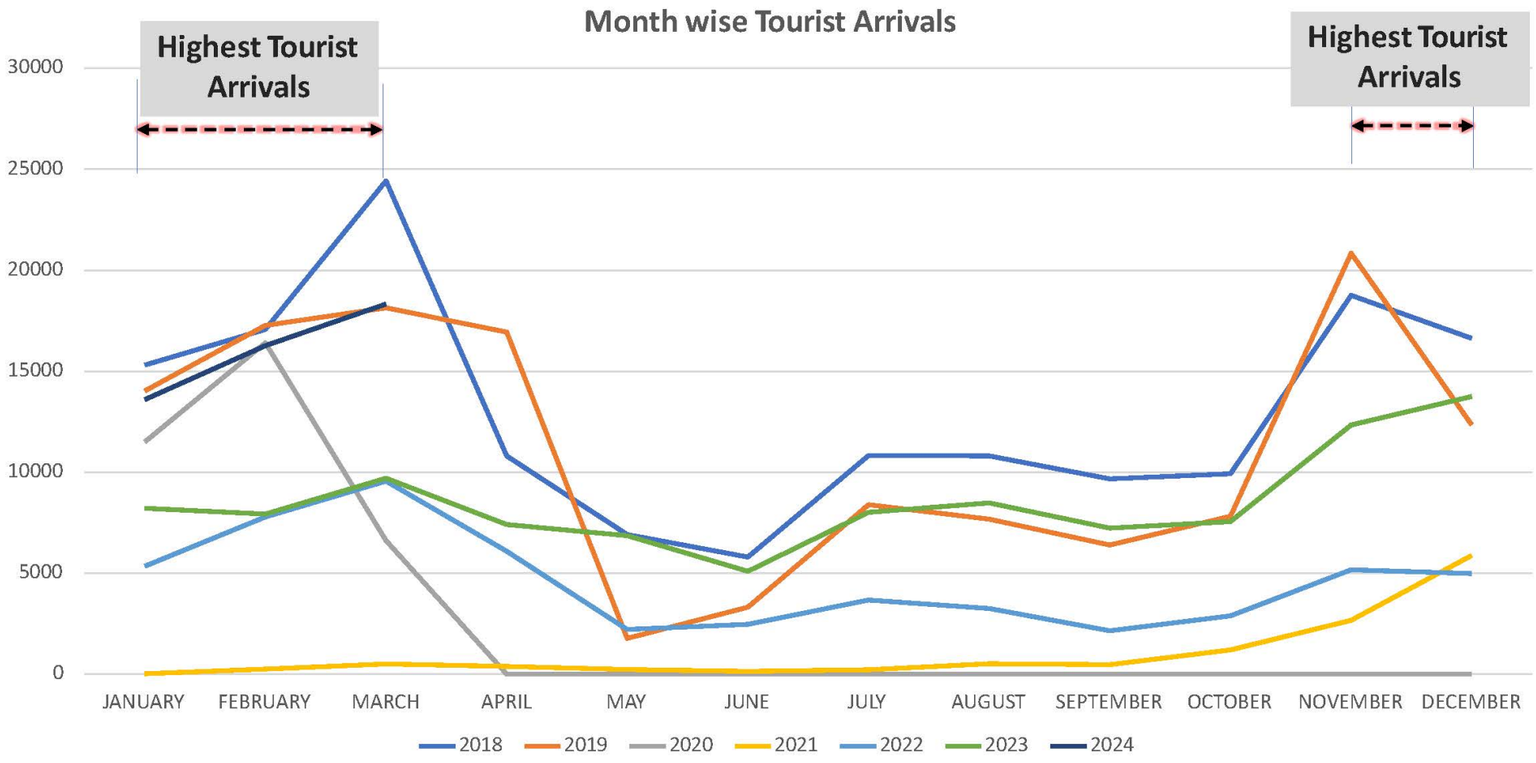
7.0%
% Share
(Avg 2018-2023)

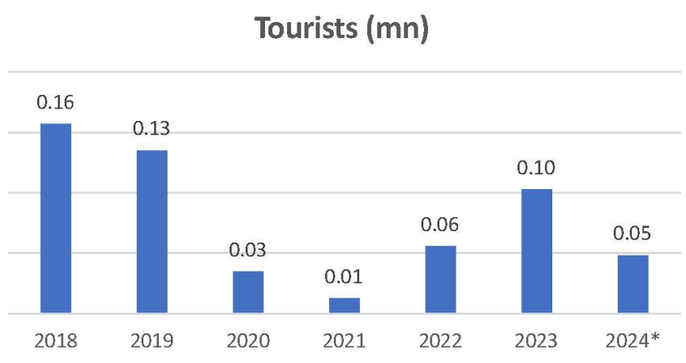
3.8 Days
Duration of Stay
(2018)

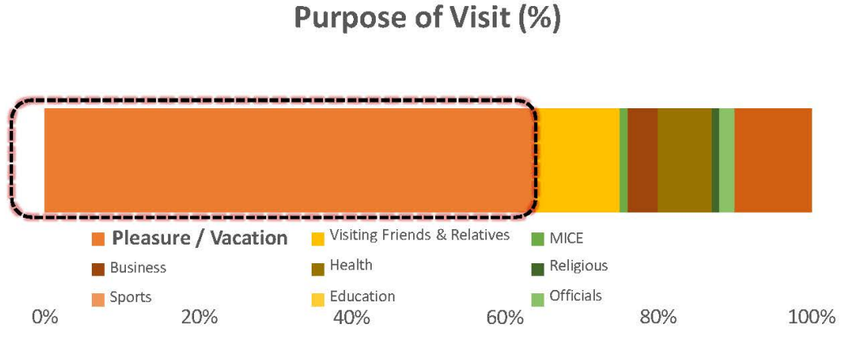
Vacation (64%)
Purpose of Visit
(Jan 2024)

-8.2%
CAGR
(2018-2023)

-35%
% of Change
(2018 & 2023)







SOURCE MARKET ANALYSIS

AUSTRALIA

75,491
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

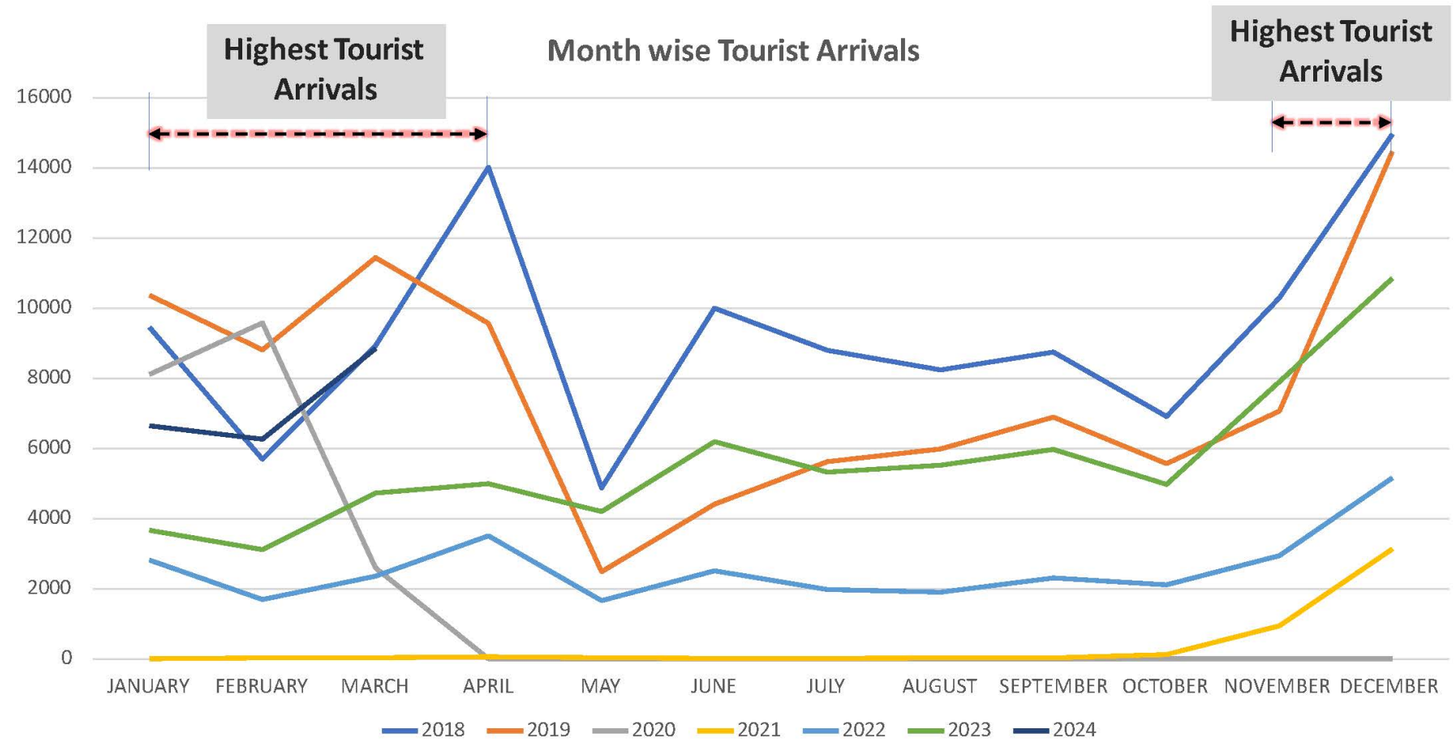
4.7%
% Share
(Avg 2018-2023)

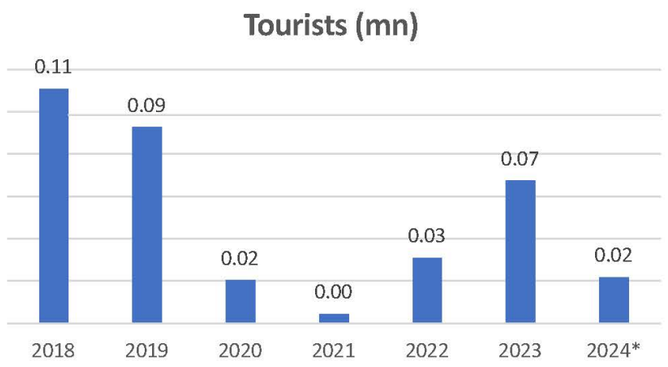
5.7 Days
Duration of Stay
(2018)

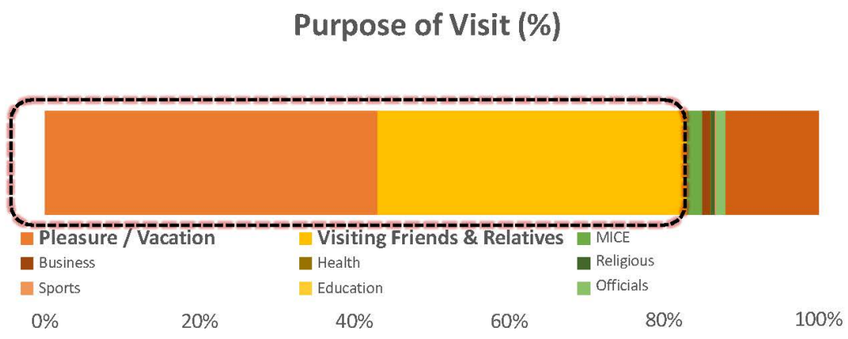
Vacation (43%)
Purpose of Visit
(Jan 2024)

-9.5%
CAGR
(2018-2023)

-39%
% of Change
(2018 & 2023)







SOURCE MARKET ANALYSIS

MALDIVES

48,149
Avg. Tourist Arrival
(Avg 2018-23 Exclusive of 2020-2021)

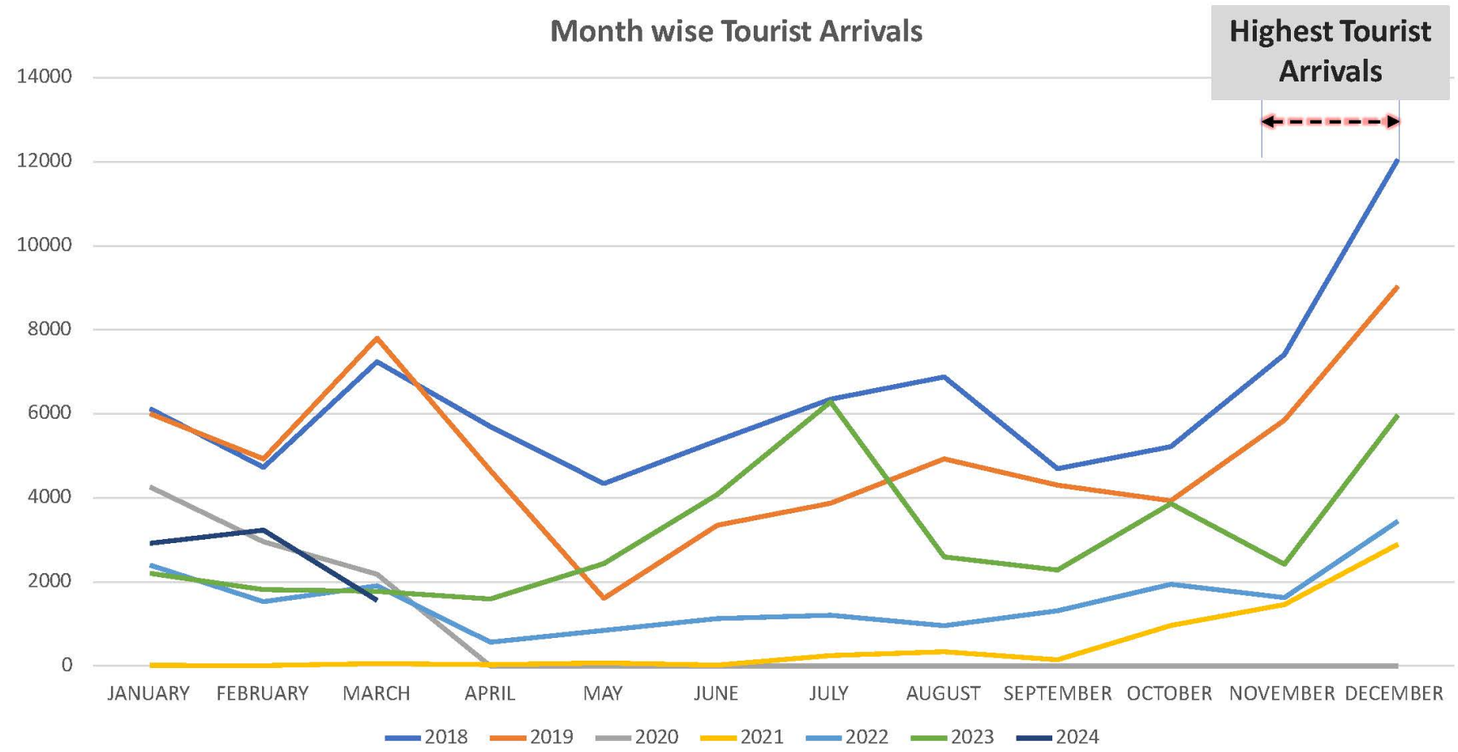
2.98%
% Share
(Avg 2018-2023)

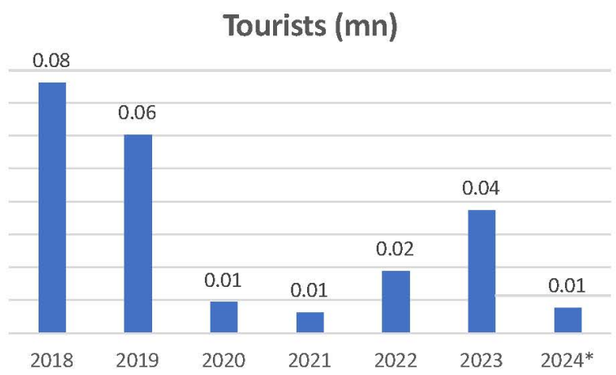
5.2 Days
Duration of Stay
(2018)

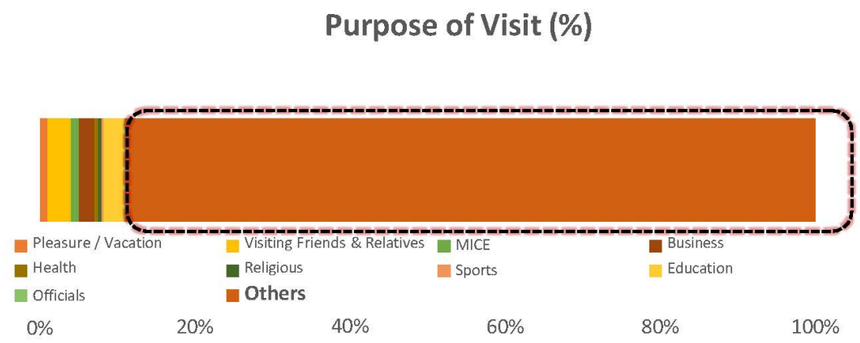
Reason not Stated (89%)
Purpose of Visit
(Jan 2024)

-13.3%
CAGR
(2018-2023)

-51%
% of Change
(2018 & 2023)







TOURISM POLICY

Tourism Department - Policy Statement

Integrated Governance	Inclusive and sustainable tourism	Informed Stakeholders	Incentive Strategies
Reform of the governance of the sector macro	Harmonizing the regulatory frameworks for tourism to achieve SDGs	Improved data collection, analysis and access	Improve competitive positioning of the business environment
Restructure the sub national governance of the sector	Sustainable use and conservation of natural , cultural and other tourism assets	Review of National HRD Strategy for tourism	Incentive for sustainable and responsible tourism
Restructuring of para public institutions to be effective and relevant	Standards and ethics that guide product and services development	Re-strategize the marketing philosophy	Transforming the visitor experience including measures for safety and security of visitors
Reform of the crisis management system	A regulatory framework and globally accepted standards for sustainability certification		
Realignment of the private sector representation and role in the sector			

Source: Draft National Policy on Tourism for Sri Lanka

STRATEGIC PLAN FOR TOURISM

"You will come back for more"

A tourism development promotion proposed by SLTPB during the year 2023 by laying a five-year recovery plan in which the Country aims to target **5 million** tourist arrivals by **2029**

VISION

To be recognised as the world's finest island for memorable, authentic and diverse experiences

MISSION

To be a high-value destination offering extraordinary experiences that reflect Sri Lanka's natural and cultural heritage, are socially inclusive and environmentally responsible, and provide economic benefits to communities and the Country.

Highest Contributing industry *to GDP by 2030*

Achieve a target foreign exchange ***earnings of $5 bn*** *from tourism by 2025*

Increase daily tourist in-country spend ***to $185-225***

Increase the ***share of tourist room*** *nights spent, in previously underserved areas from 6% to 15% by 2025*

Modernise training delivery *to target 10,000 trainees annually, with at least 30% women participation*

Ensure new tourist product meets ***environmental regulations by 2024*** *& enhance existing assets by 2025*

9.3 PROPOSED ROAD CLASSIFICATION & ROAD SECTIONS

PROPOSED ROAD CLASSIFICATION & ROAD SECTIONS

In the context of urban development and planning, an effective transportation network is pivotal. The proposed schematic transport plan is designed to enhance connectivity, facilitate efficient movement, and support the dynamic land uses of the study area. Emphasizing the critical role of road hierarchy in urban planning, this scheme addresses the needs of tourism, commercial activities, residential areas, and future developments, ensuring a comprehensive and sustainable transportation infrastructure.

Road Hierarchy and Classification

The road network within the study area is strategically designed to cater to the diverse needs of the region, influenced heavily by the prominence of tourism, as well as existing and anticipated commercial and residential developments. To streamline traffic flow and optimize accessibility, the road system is categorized into three (3) primary classifications:

- **Primary Arterial Roads:** Serve as the main thoroughfares facilitating high-speed and high-volume traffic flow across significant distances. They are critical for connecting major points of interest, including tourist attractions, large commercial hubs, and transit gateways. Access is fully controlled to prevent disruptions, ensuring smooth transit for commuters and goods.
- **Secondary Arterial Roads**: These roads function as critical distributors, channeling traffic from primary arteries to collector roads. They effectively balance the dual requirements of providing access to local destinations and maintaining efficient through traffic. This is achieved by accommodating moderate traffic volumes and access demands in a manner that does not compromise safety or impede traffic flow.

Table 1: Road Hierarchy and Characteristics

Parameter/Road Element		Primary Arterial	Secondary Arterial	Collector
Access Control		• Strict access control to maintain high service levels and safety. • Direct property access is generally prohibited to avoid traffic disruption. • Access is typically via service roads or local roads connecting at designated interchanges or intersections.	• More flexible than primary arterials, allowing some direct land access but still prioritizing through traffic. • Includes controlled access points like right-in/right-out configurations and median barriers to manage traffic flow.	• Balances land access and traffic mobility, providing substantial access to properties while managing through traffic. • Features include lower speeds, frequent intersections, and traffic calming measures to safely integrate local and through traffic.
Traffic Flow Characteristics		Uninterrupted flow except at intersections	Interrupted flow	Interrupted flow
Recommended Maximum Design Speed (kmph)		80	60	50
Recommended Posted Speed (kmph)		60	50	40
Linkage to		Highway Capacity Corridor (HCC) and Secondary Arterial	Primary Arterial and Collector	Secondary Arterial and Local Streets
Junction Types		Fully signalized with/without slip roads		Fully signalised junction
Road Gradient	Flat	≤ 5%	≤ 7%	≤ 9%
	Rolling	≤ 7%	≤ 9%	≤ 10%
Recommended Junction Spacing (m)		1.5-2.5	1.0-1.5	0.5-1.0
No. Lanes		6 Lane Divided	4 Lane Divided + Parking	3 Lane Undivided
Multifunction Zone (Utilities and Non-Motorised Transport Path) (m)		3.5	2.8	2.5
Footpath Width (m)		3.5	3.1	3.0
Median Width (m)		1.5	1.0	-
Right of Way (ROW) (m)		38.5	33.8	23.6

- **Collector Roads:** Designed to collect traffic from local streets and channeled it into the arterial road network. Collectors are essential in residential and smaller commercial areas, providing direct access to properties while still facilitating smooth traffic movement towards major roads.

According to the recommendations in the Trincomalee District Master Plan, the optimal road gradient for the area's development is proposed to range between 6% and 10%. This gradient is considered ideal for maintaining efficient traffic flow while ensuring road safety and structural integrity within the urban and surrounding landscapes.

Road Cross Section

The proposed road cross-sections for each hierarchical category have been designed in accordance with the Geometric Design Standards of Roads by the Road Development Authority (1998). However, the original standards were found to be deficient in integrating pedestrian pathways and Non-Motorized Transport (NMT) facilities. To address this gap, it has been proposed to extend each road category by an additional space of 3.5m meters on both sides. This expansion is intended to facilitate pedestrian and NMT infrastructure, which will also include utility lines beneath the NMT tracks. Detailed proposed cross-sections are illustrated from Fig 1 to Fig 3.

Primary Arterial

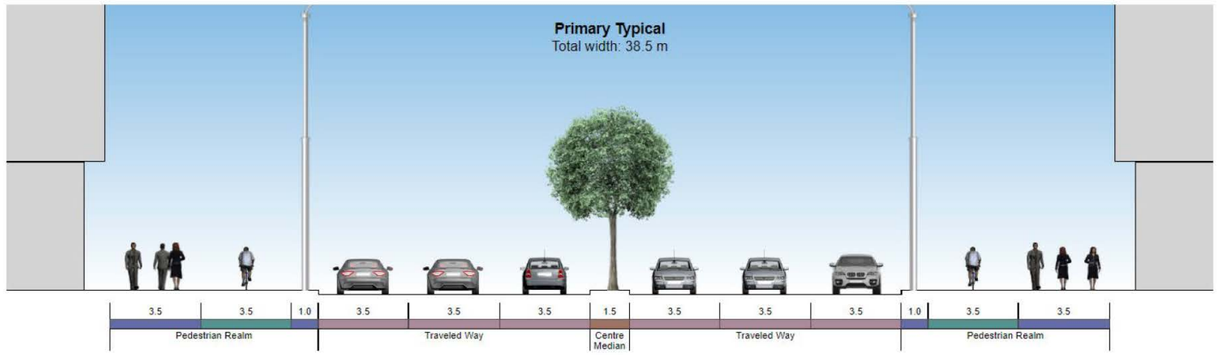
Primary arterials are designed to accommodate six-lane dual carriageway, incorporating dedicated lanes for pedestrian, NMT and utility lines as depicted in Fig 1.

Within the study area, the current predominant road configuration consists of 2-lane dual carriageways. This sets the baseline from which the proposed expansions and enhancements will be developed to meet future transport demand and improve traffic management.

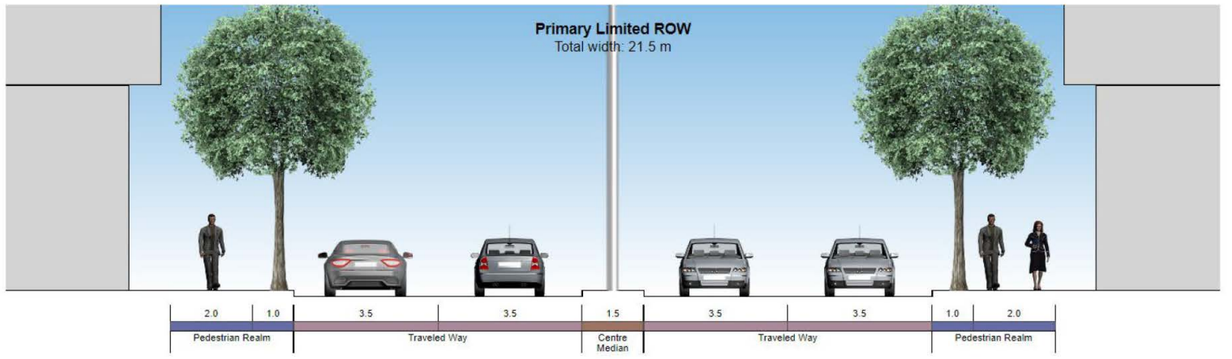
Figure 1: Primary Arterial Road

Primary Arterial	
Typical	Limited ROW Availability
Dual-three (total width - 38.5m with 8m service corridor)	Dual-two (total width 21.5m with 3m service corridor)

Typical 38.5m
For core area
8.0m service corridor



With Limited ROW 21.5m
3.0m service corridor



In areas where the Right of Way (ROW) is constrained, a modified design is implemented to optimize the available space. This configuration ensures that the primary arterial roads can accommodate significant traffic volumes while maintaining pedestrian and NMT facilities.

Secondary Arterials

Secondary arterials are engineered to support a four-lane divided configuration, which includes parking availability to enhance local accessibility. These roads are equipped with multifunctional zones for utilities and non-motorized transport, improving safety and connectivity for all users as outlined in the proposed cross-section.

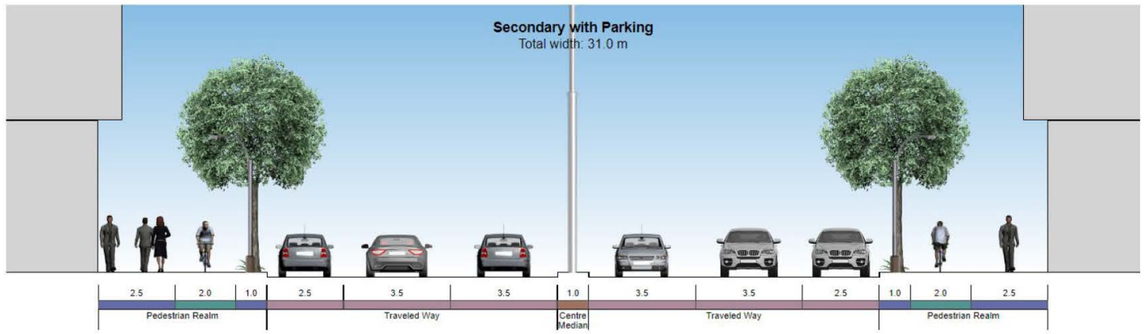
In the designated study area, the current road infrastructure primarily features less complex road systems. The existing layout predominantly consists of narrower, undivided roadways. This foundational infrastructure sets the stage for significant enhancements. The proposed development of secondary arterials will expand these thoroughfares to accommodate dual-direction traffic with improved access control measures such as right-in/right-out configurations and median barriers. These changes are intended to streamline traffic flow, manage access more effectively, and meet the rising transport demands of the area. The upgrade from simpler configurations to more structured four-lane arterials is aimed at boosting traffic efficiency and safety, supporting the region's evolving transportation needs and urban development plans.

Figure 2: Secondary Arterial Road

With Parking 31.0m

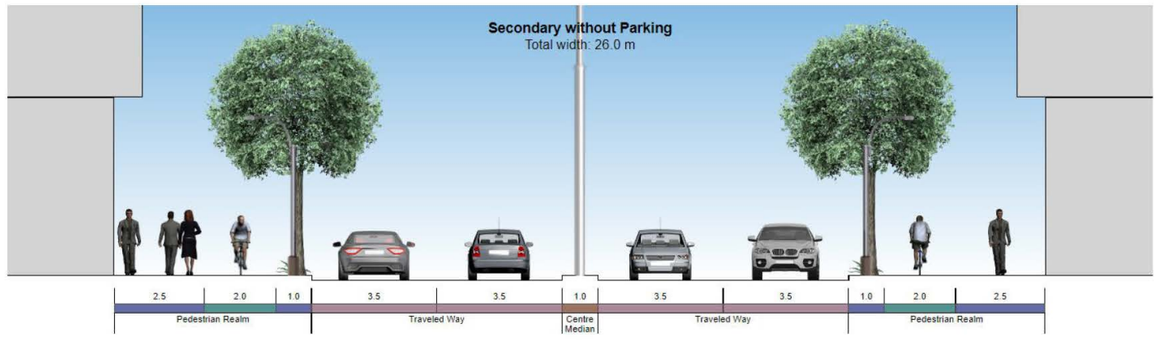
For core area

5.5m service corridor



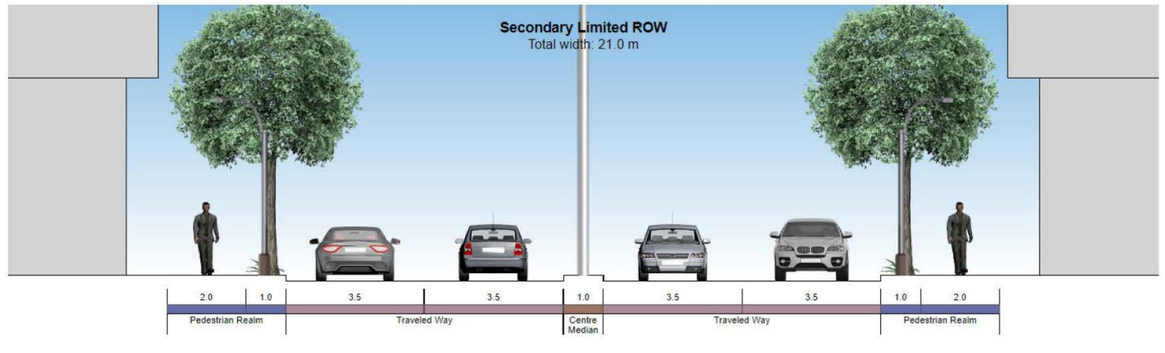
With Parking 26.0m

5.5m service corridor



With limited ROW 21.0m

3m service corridor



Collector

Collector roads are designed to facilitate efficient movement within urban areas, employing a two-lane undivided configuration. This setup is aimed at handling moderate traffic volumes efficiently while providing direct access to adjacent properties, essential for supporting local communities. The configuration is particularly suited for areas where space constraints prevent the implementation of divided roadways or where traffic volumes do not justify more complex infrastructures.

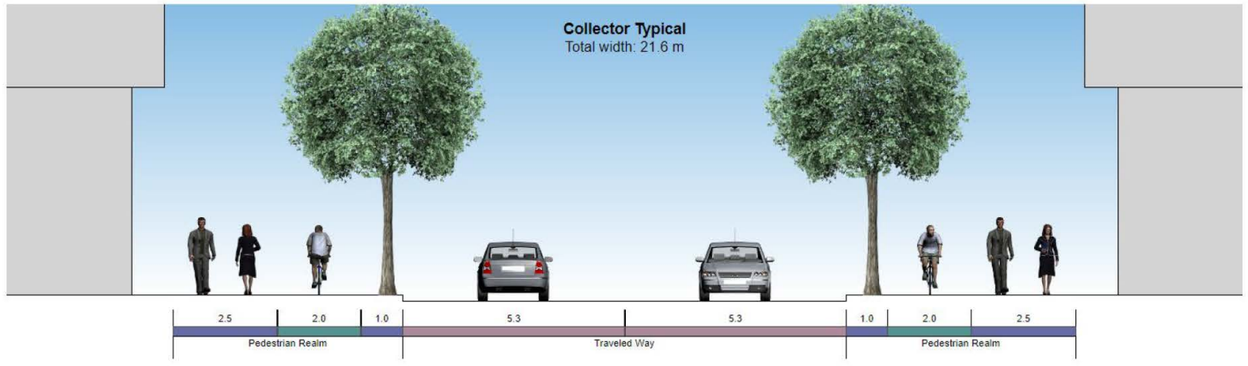
Within the designated study area, the existing road infrastructure typically includes basic, narrower roads that may not adequately meet the growing needs of the community. The current two-lane undivided format of collector roads, while functional for low to moderate traffic, often lacks the necessary features to safely manage both pedestrian and vehicular traffic. The planned enhancements for these collector roads involve not just maintaining the two-lane undivided setup but also integrating crucial safety improvements and traffic calming measures.

The proposed development plans include enhancing the road surface quality, clearly marking lanes, and adding pedestrian-friendly features such as wider sidewalks and designated bike lanes where possible. These improvements are designed to increase safety, reduce traffic congestion, and enhance the overall efficiency of the road network. Upgrading from the simpler configurations to a more structured and well-equipped two-lane undivided system aims to support the future increasing transportation demands and contribute positively to urban development goals, ensuring a balanced approach to mobility and accessibility.

Figure 3: Collector Road

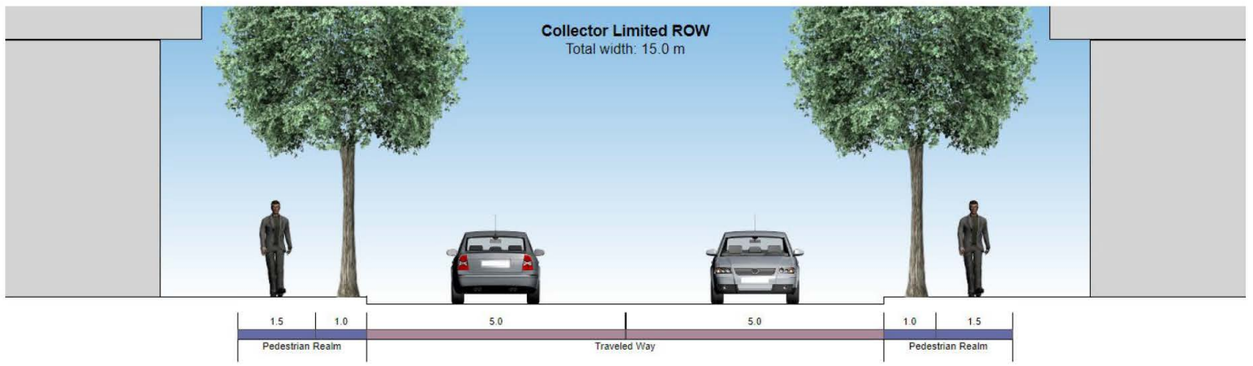
Typical 21.6m

5.5m service corridor



With limited ROW 15.0m

2.5m service corridor



9.4 CONSOLIDATED CASHFLOW HIGH CASE

KUCHHAVELI-NILAVELI

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025 Year 0	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2030 Year 6	2031 Year 7	2032 Year 8	2033 Year 9	2034 Year 10	2035 Year 11	2036 Year 12	2037 Year 13	2038 Year 14	2039 Year 15	2040 Year 16	2041 Year 17	2042 Year 18	2043 Year 19	2044 Year 20	2045 Year 21	2046 Year 22	2047 Year 23	2048 Year 24	2049 Year 25	2050 Year 26	2051 Year 27	2052 Year 28	2053 Year 29	2054 Year 30
Land Cost																															
Ni Diver's Paradise		(1.01)																													
Ni Beachfront Park & Retail		(1.55)																													
Nilaveli & kuchchveli 3 star hotel		(0.67)																													
Development Cost																															
Ni Diver's Paradise	-	-	(3.8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ni Beachfront Park & Retail	-	-	(5.9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Ni Diver's Paradise	-	-	-	0.1	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.5
Ni Beachfront Park & Retail	-	-	-	0.4	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.7	1.7	1.8	1.9	1.9	2.0	2.2	2.2	2.4	2.5	2.5	2.7

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Hospitality																															
Hospitality - Development Cost																															
Nilaveli & kuchchveli 3 star hotel	-	-	(2.1)	(2.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																															
Nilaveli & kuchchveli 3 star hotel	-	-	-	-	(0.8)	(0.9)	(1.3)	(2.1)	(3.0)	(3.1)	(3.3)	(3.4)	(3.6)	(3.8)	(4.0)	(4.2)	(4.4)	(4.6)	(4.8)	(5.1)	(5.3)	(5.6)	(5.9)	(6.2)	(6.5)	(6.8)	(7.2)	(9.4)	(9.9)	(10.4)	(10.9)
Hospitality - Revenues																															
Nilaveli & kuchchveli 3 star hotel	-	-	-	-	1.2	1.3	2.0	3.2	4.5	4.7	4.9	5.2	5.5	5.7	6.0	6.3	6.6	7.0	7.3	7.7	8.1	8.5	8.9	9.3	9.8	10.3	10.8	14.2	14.9	15.6	16.4
Total	**(0.00)**	**(3.23)**	**(11.86)**	**(1.82)**	**1.50**	**1.76**	**2.08**	**2.57**	**3.03**	**3.19**	**3.38**	**3.50**	**3.68**	**3.90**	**4.04**	**4.25**	**4.50**	**4.66**	**4.90**	**5.19**	**5.38**	**5.65**	**5.99**	**6.21**	**6.52**	**6.91**	**7.16**	**8.49**	**8.98**	**9.32**	**9.80**

PASSIKUDAH

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Pa Visitor Center		(1)																													
Pa Retail/ Night Market		(1)																													
Passikudah 5 star resort		(6)																													
Passikudah Wellness Centre		(1)																													
Development Cost																															
Pa Visitor Center	-	-	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa Retail/ Night Market	-	-	(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Passikudah Wellness Centre	-	-	(2)	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Revenues																															
Pa Visitor Center	-	-	-	0.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
Pa Retail/ Night Market	-	-	-	0.2	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Passikudah Wellness Centre	-	-	-	0.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Hospitality																															
Hospitality - Development Cost																															
Passikudah 5 star resort	-	-	(6)	(7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																															
Passikudah 5 star resort	-	-	-	-	(2)	(3)	(3)	(4)	(5)	(7)	(7)	(7)	(8)	(8)	(9)	(9)	(9)	(10)	(10)	(11)	(12)	(12)	(13)	(13)	(14)	(15)	(15)	(14)	(15)	(15)	(16)
Hospitality - Revenues																															
Passikudah 5 star resort	-	-	-	-	3	4	5	6	8	10	11	11	12	12	13	14	14	15	16	17	17	18	19	20	21	22	23	21	22	23	25
Total	**(0)**	**(9)**	**(18)**	**(8)**	**3**	**4**	**4**	**5**	**5**	**6**	**7**	**7**	**7**	**8**	**8**	**8**	**9**	**9**	**9**	**10**	**10**	**11**	**11**	**12**	**12**	**13**	**13**	**13**	**13**	**14**	**14**

WHISKEY POINT

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Wh Night Market/ Entertainment		(1)																													
Wh Commercial High Street		(1)																													
Wh Beachfront Entertainment		(1)																													
Whiskey point 4 star resort		(3)																													
Development Cost																															
Wh Night Market/ Entertainment	-	-	(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wh Commercial High Street	-	-	(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wh Beachfront Entertainment	-	-	(5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Wh Night Market/ Entertainment	-	-	-	0.4	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Wh Commercial High Street	-	-	-	0.4	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Wh Beachfront Entertainment	-	-	-	0.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Hospitality																															
Hospitality - Development Cost																															
Whiskey point 4 star resort	-	-	(5)	(5)	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																															
Whiskey point 4 star resort	-	-	-	-	-	(4)	(4)	(5)	(8)	(11)	(11)	(12)	(13)	(13)	(14)	(14)	(15)	(16)	(17)	(18)	(18)	(19)	(20)	(21)	(22)	(24)	(25)	(26)	(27)	(29)	(30)
Hospitality - Revenues																															
Whiskey point 4 star resort	-	-	-	-	-	5	7	7	12	16	17	18	19	20	21	22	23	24	25	27	28	29	31	32	34	36	38	39	41	43	46
Total	**(0)**	**(6)**	**(21)**	**(4)**	**(0)**	**4**	**5**	**5**	**7**	**9**	**9**	**9**	**10**	**11**	**11**	**12**	**12**	**13**	**13**	**14**	**15**	**15**	**16**	**17**	**18**	**19**	**19**	**21**	**22**	**22**	**24**

PEANUT FARM

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Pe Visitor Center		(1)																													
Pe Retail		(2)																													
Development Cost																															
Pe Visitor Center	-	-	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pe SurferParadise	-	-	(0.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pe Retail	-	-	(9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Pe Visitor Center	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pe Retail	-	-	-	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	4
Total	**(0)**	**(2)**	**(12)**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**5**

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Ar Visitor Center		(0.5)																													
Ar Surfer Paradise		(1.4)																													
Arugambay 3 star hotel		(1.9)																													
Arugambay Beachfront park		(0.2)																													
Development Cost																															
Ar Visitor Center	-	-	(3.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ar Surfer Paradise	-	-	(3.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arugambay Beachfront park	-	-	(2.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Ar Visitor Center	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ar Surfer Paradise	-	-	-	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Arugambay Beachfront park			-	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Hospitality - Development Cost																															
Arugambay 3 star hotel	-	-	(9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost	-	-	-	(1)	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(6)	(6)	(7)	(7)	(7)	(8)	(8)	(9)	(9)	(9)	(10)	(10)	(11)	(12)	(12)	(13)	(13)	(14)	(15)	(15)
Hospitality – Revenues	-	-	-	2	2	3	4	6	8	8	9	9	10	10	11	11	12	12	13	14	14	15	16	17	17	18	19	20	21	22	23
Cashflow	**(0)**	**(4)**	**(17)**	**2**	**2**	**2**	**3**	**3**	**4**	**4**	**4**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	**7**	**7**	**7**	**8**	**8**	**9**	**9**	**9**	**10**	**10**	**10**	**11**

9.5 CONSOLIDATED CASHFLOW LOW CASE

KUCHHAVELI-NILAVELI

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Ni Diver's Paradise		(1.01)																													
Ni Beachfront Park & Retail		(1.55)																													
Nilaveli & kuchchveli 3 star hotel		(0.67)																													
Development Cost																															
Ni Diver's Paradise	-	-	(3.8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ni Beachfront Park & Retail	-	-	(5.9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Ni Diver's Paradise	-	-	-	0.1	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.5
Ni Beachfront Park & Retail	-	-	-	0.4	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.7	1.7	1.8	1.9	1.9	2.0	2.2	2.2	2.4	2.5	2.5	2.7

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025 Year 0	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2030 Year 6	2031 Year 7	2032 Year 8	2033 Year 9	2034 Year 10	2035 Year 11	2036 Year 12	2037 Year 13	2038 Year 14	2039 Year 15	2040 Year 16	2041 Year 17	2042 Year 18	2043 Year 19	2044 Year 20	2045 Year 21	2046 Year 22	2047 Year 23	2048 Year 24	2049 Year 25	2050 Year 26	2051 Year 27	2052 Year 28	2053 Year 29	2054 Year 30	2055 Year 31	2056 Year 32	2057 Year 33	2058 Year 34	2059 Year 35
Hospitality																																				
Hospitality - Development Cost																																				
Nilaveli & kuchchveli 3 star hotel	-	-	(6)	(7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																																				
Nilaveli & kuchchveli 3 star hotel	-	-	-	-	-	(1)	(1)	(2)	(3)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(4)	(5)	(5)	(5)	(5)	(6)	(6)	(6)	(6)	(7)	(7)	(8)	(8)	(8)	(9)	(9)	(10)	(10)	(11)	(11)
Hospitality - Revenues																																				
Nilaveli & kuchchveli 3 star hotel	-	-	-	-	-	1	2	3	4	5	5	5	5	6	6	6	7	7	7	8	8	8	9	9	10	10	11	11	12	13	13	14	14	15	16	17
Total	**(0)**	**(2)**	**(11)**	**(7)**	**1**	**1**	**1**	**2**	**2**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**4**	**4**	**4**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**7**	**7**	**7**	**8**	**8**	**8**

PASSIKUDAH

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025 Year 0	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2030 Year 6	2031 Year 7	2032 Year 8	2033 Year 9	2034 Year 10	2035 Year 11	2036 Year 12	2037 Year 13	2038 Year 14	2039 Year 15	2040 Year 16	2041 Year 17	2042 Year 18	2043 Year 19	2044 Year 20	2045 Year 21	2046 Year 22	2047 Year 23	2048 Year 24	2049 Year 25	2050 Year 26	2051 Year 27	2052 Year 28	2053 Year 29	2054 Year 30
Land Cost																															
Pa Visitor Center		(1)																													
Pa Retail/ Night Market		(1)																													
Passikudah 5 star resort		(6)																													
Passikudah Wellness Centre		(1)																													
Development Cost																															
Pa Visitor Center	-	-	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa Retail/ Night Market	-	-	(4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Passikudah Wellness Centre	-	-	(1)	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Revenues																															
Pa Visitor Center	-	-	-	0.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
Pa Retail/ Night Market	-	-	-	0.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3
Passikudah Wellness Centre	-	-	-	0.2	0.3	0.4	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Hospitality																															
Hospitality - Development Cost																															
Passikudah 5 star resort	-	-	(6)	(7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																															
Passikudah 5 star resort	-	-	-	-	(2)	(3)	(3)	(4)	(5)	(6)	(7)	(7)	(8)	(8)	(9)	(9)	(9)	(10)	(10)	(11)	(12)	(12)	(13)	(13)	(14)	(15)	(15)	(16)	(17)	(18)	(19)
Hospitality - Revenues																															
Passikudah 5 star resort	-	-	-	-	3	4	5	6	8	9	11	11	12	12	13	14	14	15	16	17	17	18	19	20	21	22	23	24	26	27	28
Total	**(0)**	**(8)**	**(15)**	**(7)**	**3**	**3**	**4**	**4**	**5**	**5**	**6**	**6**	**6**	**7**	**7**	**7**	**8**	**8**	**8**	**9**	**9**	**9**	**10**	**10**	**11**	**12**	**12**	**12**	**13**	**14**	**14**

WHISKEY POINT

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025 Year 0	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2030 Year 6	2031 Year 7	2032 Year 8	2033 Year 9	2034 Year 10	2035 Year 11	2036 Year 12	2037 Year 13	2038 Year 14	2039 Year 15	2040 Year 16	2041 Year 17	2042 Year 18	2043 Year 19	2044 Year 20	2045 Year 21	2046 Year 22	2047 Year 23	2048 Year 24	2049 Year 25	2050 Year 26	2051 Year 27	2052 Year 28	2053 Year 29	2054 Year 30
Land Cost																															
Wh Night Market/ Entertainment		(0.3)																													
Wh Commercial High Street		(0.3)																													
Wh Beachfront Entertainment		(0.3)																													
Whiskey point 4 star resort		(3)																													
Development Cost																															
Wh Night Market/ Entertainment	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wh Commercial High Street	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wh Beachfront Entertainment	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Wh Night Market/ Entertainment	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5
Wh Commercial High Street	-	-	-	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5
Wh Beachfront Entertainment	-	-	-	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Hospitality																															
Hospitality - Development Cost																															
Whiskey point 4 star resort	-	-	(5)	(5)	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospitality - Operating Cost																															
Whiskey point 4 star resort	-	-	-	-	-	(2)	(2)	(4)	(5)	(6)	(7)	(9)	(12)	(13)	(14)	(14)	(15)	(16)	(17)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(25)	(26)	(27)	(28)	(30)
Hospitality - Revenues																															
Whiskey point 4 star resort	-	-	-	-	-	4	4	6	7	10	11	14	19	20	21	22	23	24	25	26	28	29	31	32	34	35	37	39	41	43	45
Total	**(0)**	**(4)**	**(8)**	**(5)**	**(2)**	**2**	**2**	**3**	**3**	**4**	**5**	**6**	**7**	**7**	**8**	**8**	**9**	**9**	**9**	**10**	**10**	**11**	**12**	**12**	**13**	**13**	**14**	**15**	**15**	**16**	**17**

PEANUT FARM

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Land Cost																															
Pe Visitor Center		(0.3)																													
Pe Retail		(0.3)																													
Development Cost																															
Pe Visitor Center	-	-	(0.9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pe Retail	-	-	(0.9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Pe Visitor Center	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Pe Retail	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Total	**(0.0)**	**(0.5)**	**(1.8)**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.7**

All numbers are in USD Million

Consolidated EBITDA Net Cash Flows	2025 Year 0	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	2030 Year 6	2031 Year 7	2032 Year 8	2033 Year 9	2034 Year 10	2035 Year 11	2036 Year 12	2037 Year 13	2038 Year 14	2039 Year 15	2040 Year 16	2041 Year 17	2042 Year 18	2043 Year 19	2044 Year 20	2045 Year 21	2046 Year 22	2047 Year 23	2048 Year 24	2049 Year 25	2050 Year 26	2051 Year 27	2052 Year 28	2053 Year 29	2054 Year 30
Land Cost																															
Ar Visitor Center		(0.47)																													
Ar Surfer Paradise		(0.47)																													
Arugambay Beachfront		(0.47)																													
Development Cost																															
Ar Visitor Center	-	-	(2.6)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ar Surfer Paradise	-	-	(2.0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arugambay Entertainment	-	-	(2.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues																															
Ar Visitor Center	-	-	-	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.1
Ar Surfer Paradise	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0
Arugambay Entertainment	-	-	-	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0
Cashflow	**(0.00)**	**(1.41)**	**(6.84)**	**0.67**	**0.80**	**0.94**	**1.04**	**1.06**	**1.08**	**1.19**	**1.22**	**1.24**	**1.37**	**1.40**	**1.43**	**1.58**	**1.61**	**1.64**	**1.82**	**1.85**	**1.89**	**2.09**	**2.13**	**2.17**	**2.40**	**2.45**	**2.50**	**2.76**	**2.82**	**2.87**	**3.18**

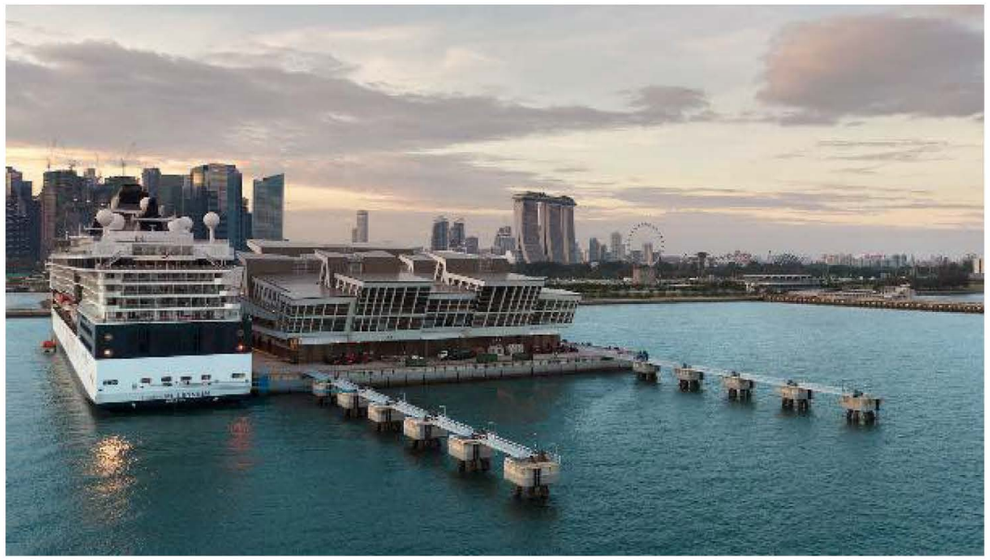
9.6 BENCHMARKING

CRUISE PORT | Marina Bay Cruise Centre, Singapore

Situated in one of the most prosperous countries in the world, Singapore Cruise Port is also one of the world's busiest and largest ports, as well as the gateway to the Malay Peninsula. Home to two harbours—Singapore Cruise Centre and Marina Bay Cruise Centre—it's a jumping-off point to explore many of Singapore's top sites after docking here. The Marina Bay Cruise Centre Singapore (MBCCS) is a luxury cruise terminal located on the waterfront, with the Singapore skyline as its backdrop.

PARAMETERS	DETAILS
Area	**14.82 acres**
Date of Operation	October 2012
Real estate activities	Arrival & Departure Halls – 28,000 sqm (120 checkin counters) Transportation area (Car park & coach bay) – 32000 sqm Design load – 6800 passengers
Positioning	Luxury cruise dock
Footfalls	1,379,753
Certifications	BCA Green mark





YACHT BERTH | Palmarina Bodrum, Turkey

Palmarina Bodrum, a beautiful Turkey yacht charter destination, which has been bought and re-constructed by Palmali Group was the first mega yacht project in the country. Eager to offer high quality service in all manners, the superyacht marina is continuing to welcome local as well as foreign guests and sailors coming from all over the world, all year long.

PARAMETERS	DETAILS
Area/ Capacity	**400 yacht (50 m long)** 710 yacht (100m long) – expansion plan
Date of Operation	June 2013
Real estate activities	Berth – 620 yachts Sailor's pub, a beach club, duty free shopping, a fitness centre and a heliport, amusement island with a sea water pool, the Billionaire Club, the Billionaire Beach with a swimming pool of 700 m², gourmet Italian restaurants and Billionaire Couture, a centre for beach fashion
Positioning	Luxury cruise dock
Footfalls	1,379,753
Certifications	5 BLUE STAR MARINA certification





WELLNESS TOURISM| Gwinganna Lifestyle resort, Australia

With a vision for Holistic health, the Care program offers detoxification, full-spectrum liquid nutrition, yoga and meditation, emotional healing and well-being and spiritual connection. Each piece supports and reinforces the others. The program includes nutritious drinks and supplements that contain ingredients like Spirulina, wheat grass, and barley. Spa treatments using anything from essential oils to LED therapy, provide powerful, long-lasting results that target specific recovery systems in your body.

PARAMETERS	DETAILS
Area	**500 acres**
Date of Operation	2006
Real estate activities	33 Spa & 18 Medical treatment rooms No. of treatment offered – 75 Min. length of stay – 2 days
Positioning	Lifestyle/ Medical spa
Accommodation	60 guests
Activities	Yoga, Pilates, qi gong, stretching and meditation, creative dance, aqua sessions, challenging hikes, bosu, fitball classes, boxing, indoor cycling, pool workouts plus our hikes and 16 different walks, tennis





WELLNESS TOURISM| COMO Shambhala Estate, Bali, Indonesia

COMO Shambhala Estate is a residential health retreat combining holistic wellness with state-of-the-art facilities and accommodation. Specialists in yoga and Pilates provide inspiration and nurture, working in harmony with guides for mountain biking, hiking, climbing, whitewater rafting and outdoor circuit training. Life is village- based, and largely rural, the landscape made up of rice paddies, distant volcanoes and forest, with COMO Shambhala Estate located above a jungle-covered gorge beside the River Ayung.

PARAMETERS	DETAILS
Area	**22 acres**
Date of Operation	2005
Real estate activities	30 rooms, suites and villas No. of treatment - 9 (3 of them for couples)
Positioning	Ayurvedic retreat
Accommodation	40 guests
Activities	Outdoor hydrotherapy area with vitality pool, Male/female sauna and steam room, Yoga pavilion and Yoga bale, Pilates studio, Consultation rooms, Chemical-free natural Springwater pools, Tennis Court.

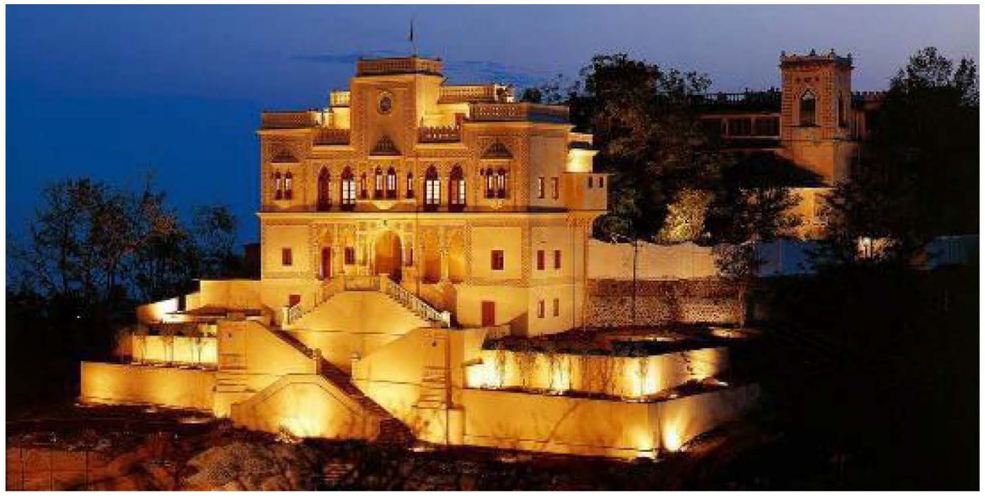


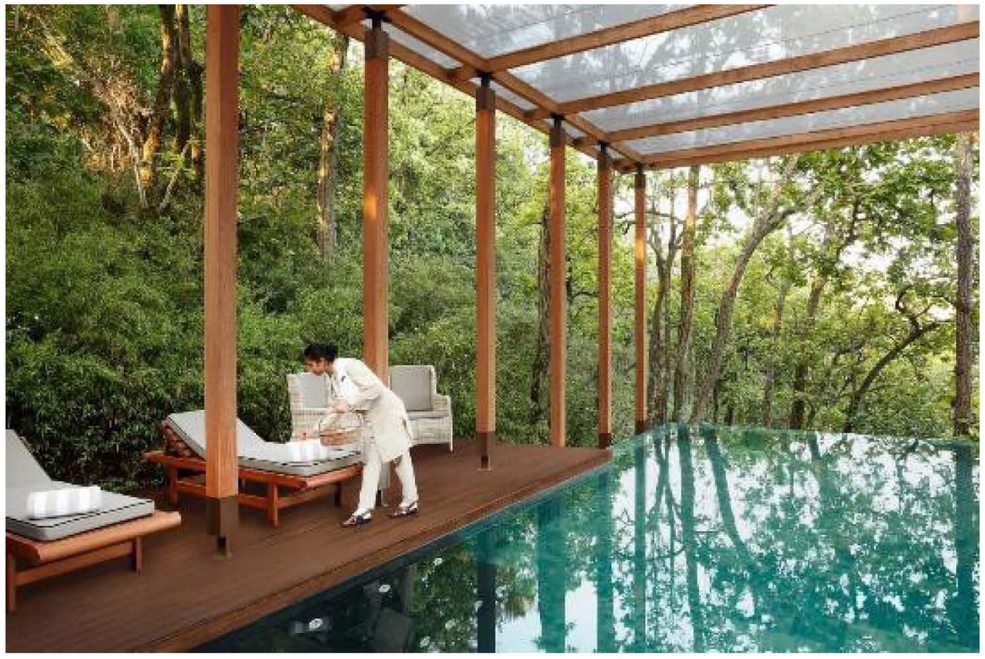


WELLNESS TOURISM| Ananda Wellness Resort, Tehri, India

Ananda was opened in 2000 and is located on a 100-acre Maharaja's Palace Estate in the Himalayan foothills, in northern India. It aims to blend the ancient remedies, practices, and wisdom of Indian culture, with top international practices.

PARAMETERS	DETAILS
Area	**100 acres**
Date of Operation	2000
Real estate activities	70 deluxe rooms, 5 suites and 3 villas No. of treatment - 12
Positioning	Medical/ Lifestyle spa
Accommodation	78 guests
Activities	Temple tours and devotional rituals, 6- hole golf course, snooker, Yoga, The Himalayan Adventure (Safari, Bird watching, Water rafting, Deep meditative experience in the wild).





ENTERTAINMENT ZONES| Trans Studio Makassar, Indonesia

Trans Studio Makassar is the 9th largest indoor entertainment center in the world located in Makassar, the capital of South Sulawesi, Indonesia. Trans Studio has four play zones with 22 rides and games in a 290,501 sf indoor theme park inside a 20 story building built on 30 acres at a cost of $104 million. It can accommodate 5,000 people at one time.

PARAMETERS	DETAILS
Area	**6.7 acres**
Date of Operation	2009
Real estate activities	a shopping mall, supermarket, hotel, offices, residential, a recreational beach and the first monorail in Indonesia
Positioning	Television/ on screen experience centre
Accommodation	5000 at a time
Activities	22 rides, Hollywood experience, theatre, studio tour, Hollywood bumper car, flying bike, rimba express, etc.





WATER SPORTS ACADEMY | Pro Dive Cairns, Australia

Pro Dive Cairns offers excellent value for money liveaboard diving to the Outer Great Barrier Reef, Australia, aboard the M/V ScubaPro I, II or III. Perfect for the budget and time-conscious diver, the fully-equipped ScubaPro liveaboards are identical purpose-built dive boats designed to handle all the varying weather conditions to offer a smooth and comfortable journey to the Great Barrier Reef.

PARAMETERS	DETAILS
Loaction	Great barrier reef, Queensland
Date of development	1969
Real estate activities	14 AC twin share bunk-bed cabins and 2 double-bed cabins with large indoor salon and dining room
Positioning	Budget dive & snorkel training
Accommodation	Upto 32 passengers
Activities	3 – 5 day package - 11 dives are available, including 2- night dives during the 2-night/3-day diving and snorkeling itinerary with Nitrox available, dive shop in the mainland
Certifications	PADI certified





WATER SPORTS ACADEMY | Neilson Holidays, Greece

Vassiliki is a popular windsurfing destination, and Neilson Watersports Academy provides excellent training facilities and coaching for windsurfing and other water sports. Neilson is a different holiday company offering all you can do holiday packages with over 20 activities, 55 hr free courses from experts, good food etc.

PARAMETERS	DETAILS
Loaction	Greece, Croatia, Sardinia
Date of development	1978
Real estate activities	Ski & board, sailing, beach clubs in 8 locations
Positioning	Holiday company
Footfall/ Guests	80,000 annually
Activities	Dinghy sailing, water skiing and wakeboarding, wind surfing, paddle boarding, kayaking, kite surfing, wake surfing, wing foiling,

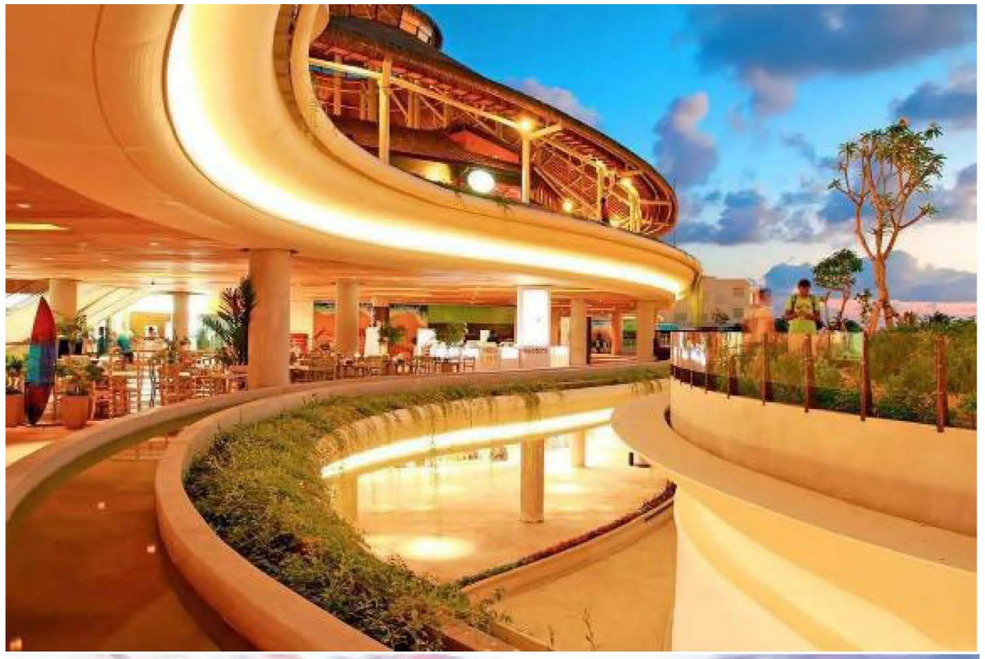




TOURIST SHOPPING ZONES| Kuta Beachwalk, Bali, Indonesia

Kuta Beachwalk is both a modern landmark and a premier leisure destination in Kuta. The mall occupies 3.7 hectares of land and a 250-meter sidewalk near the end of the Jalan Pantai Kuta beach road. This striking complex houses numerous shops, restaurants and entertainment facilities bearing international brands and franchises.

PARAMETERS	DETAILS
Area	9.1 acres
Date of development	2012
Real estate activities	Flagship retail stores with a wide selection of international fashion brands, beauty, dining, lifestyle & entertainment, cineplex, concierge, currency exchange, a supermarket and several salons, etc.
Positioning	Iconic Resort Lifestyle Destination
Footfall/ Guests	3 Mn monthly





BEACH BASED ADVENTURE TOURISM| Tarifa, Spain

Tarifa is a Spanish municipality in the province of Cádiz, Andalusia. Located at the southernmost end of the Iberian Peninsula, it is primarily known as one of the world's most popular destinations for wind sports. Tarifa lies on the Costa de la Luz ("coast of light") and across the Strait of Gibraltar facing Morocco.

PARAMETERS	DETAILS
Area	558 acres
Date of development	2000s
Real estate activities	Wildest beaches, sand dunes, kite surf, wind surf, wing foil, surfing, efoil, scuba diving, biking, golf club, whale watching, bird watching, boat & ferry, restaurants, tapas bars, beach bars with tours, excursions, cultural visits etc.
Positioning	Adventure tourism destination
Footfall/Guests	1 Mn monthly



BEACH BASED ADVENTURE TOURISM| Bora Bora, Pacific

With its dramatic green mountains, clear blue water, and white sand beaches, Bora Bora is a quintessential tropical paradise. Within its protected lagoon, vibrant coral forms an underwater playground for fish, reef sharks, and snorkelers. Meanwhile its lush jungle is full of life and welcomes hikers. Many visitors come for the blissful vacation vibes, but the outdoor activities in Bora Bora are a perfect way to discover the islands' natural beauty.

PARAMETERS	DETAILS
Area	7550 acres
Date of development	1960
Real estate activities	Snorkelling and scuba diving, manta-ray dives, shark- feeding dives,glass bottom boat tours, cultural island tour, Eco Shark & Ray Snorkel Safari, Jeep Safari and Motu Picnic Excursion, ATV adventures, Jet ski, aqua safari, sunset cruises etc.
Positioning	Island - Adventure tourism destination
Footfall/ Guests	2,00,000 annually





BEACH BASED ADVENTURE TOURISM| Bora Bora, Pacific

The Australian Institute of Marine Science (AIMS) is a tropical marine research centre located primarily at Cape Ferguson in the locality of Cape Cleveland, City of Townsville Queensland, Australia. AIMS is committed to the protection and sustainable use of Australia's marine resources. Its research programs support the management of tropical marine environments around the world, with a primary focus on the Great Barrier Reef World Heritage Area, the pristine Ningaloo Marine Park in Western Australia and northwest Australia.

PARAMETERS	DETAILS
Area	512 acres (3 facilities)
Date of establishment	1972
Real estate activities	sophisticated laboratories, operational workshops, extensive collections, National Sea Simulator, marine observational equipment, reef works etc.
Areas of research	Climate change, coral bleaching, dredging, marine microplastics, ocean acidification, in addition to the monitoring of water quality, sea temperature, various Australian reefs, and marine life
Enrolments/ staffs	280 – Full time staffs | 82 doctoral candidates



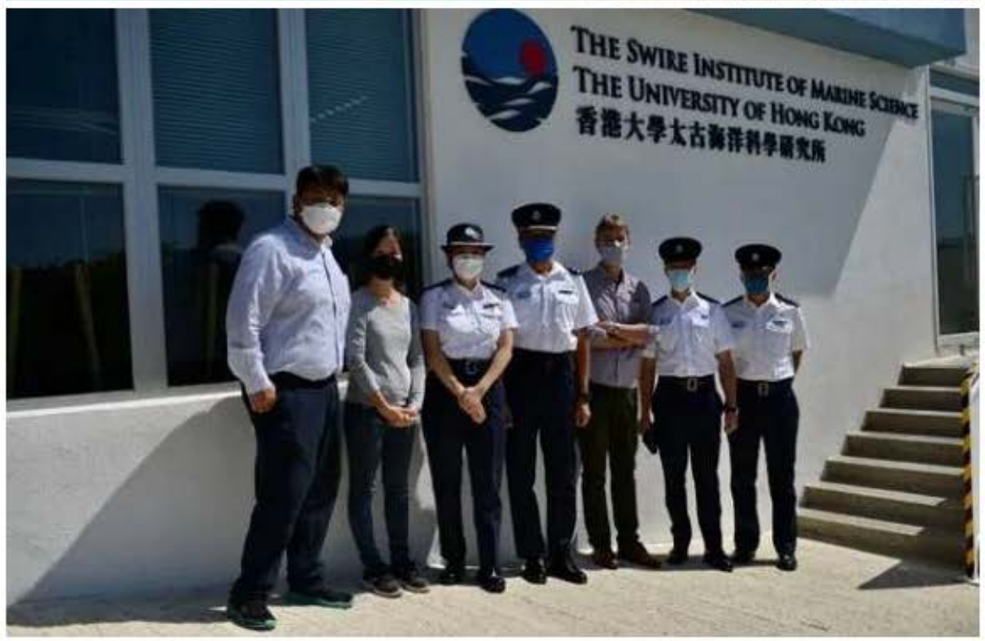


BEACH BASED ADVENTURE TOURISM| Bora Bora, Pacific

The Swire Institute of Marine Science (SWIMS) is a research facility of The University of Hong Kong, situated on the Cape d'Aguilar peninsula, on the shores of Hong Kong's only Marine Reserve. It aims to develop an internationally acclaimed research centre focusing on marine science in SE Asia and the NW Pacific. SWIMS is well positioned as a MarineGEO observatory for climate change, and the effects of environmental gradients and multiple stressors.

PARAMETERS	DETAILS
Area	3.7 acres
Date of establishment	1989
Real estate activities	MarineGEO observatory, two residential blocks, indoor and outdoor aquaria, state-of-the-art experimental indoor aquarium and outdoor mesocosm systems, enhanced clean and molecular laboratory, biodiversity museum and outreach hub, new offices, and expanded seminar room
Areas of research	Biodiversity censuses using ARMS, and integrated analysis of biodiversity, ecosystem functioning, and environmental data, earth sciences, chemistry, architecture, and a core strength in marine community ecology
Enrolments/ staffs	13 – Full time staffs | 80 doctoral candidates

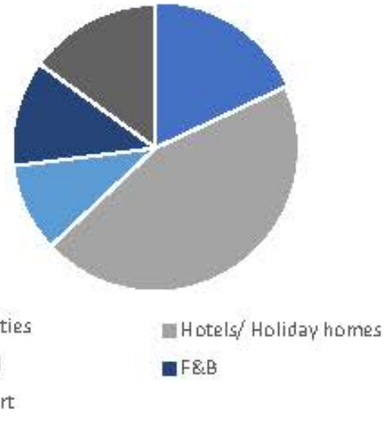




LAGOON DEVELOPMENT| Hamilton island, Australia

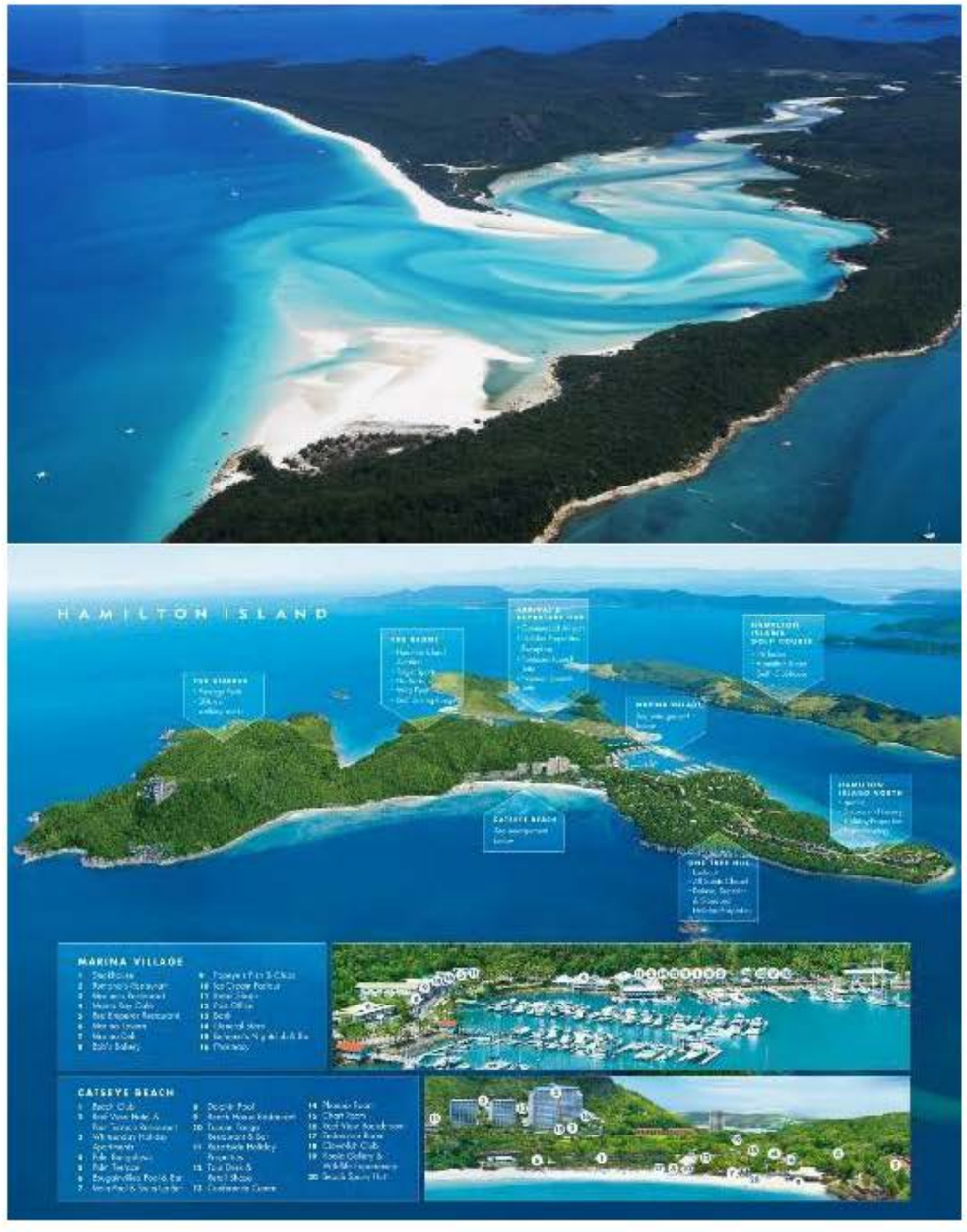
Situated in the heart of the Great Barrier Reef, Hamilton Island in Australia is the perfect base for exploring everything the reef has to offer. The Great Barrier Reef is the world's largest coral reef, and home to the most diverse plant and animal life on the planet - including spectacular coral formations, hundreds of species of fish, turtles, manta rays and even visiting dolphins and whales.

PARAMETERS	DETAILS
Area	**740 Hectares**
Date of development	2019
Real estate activities	Villas, beach clubs, bungalows, snorkelling clubs, ferry & yacht club, eateries, golf club
Positioning	Island development
Footfall	1.1 Mn annually
Activities	scenic helicopter flight, tour of Heart Reef, snorkelling equipment and light catering.



The island has a yacht club and marina, where water activities like sailing, fishing, and diving are organized. Surrounded by vibrant coral reefs, making it an ideal spot for fishing as it is a home to a variety of fish species, making it a popular destination for fishing enthusiasts.

Hamilton Island offers a range of fishing experiences
such as:
Reef Fishing: Red Emperor, Coral Trout, and Sweetlip.
Sport Fishing: Marlin, Tuna, and Mahi Mahi.
Guided fishing tours: There are several companies on Hamilton Island that offer guided fishing tours.



LAGOON DEVELOPMENT| Hamilton island, Australia

The majestic Miniloc Island lagoon called Big Lagoon is located in El Nido, Palawan. Greeted by the crystal-clear blue water, the ray of light peeking through the top of the cliffs, and the luscious calcareous formation. The Big Lagoon of El Nido island hopping tour A has become popular for its breathtaking natural structure as seen from drone shots to kayak views in several movies and postcards.

PARAMETERS	DETAILS
Area	**5250 sqm (Lagoon) 400 sqkm (El Nido)**
Date of development	2008
Real estate activities	Limestone cliffs, docks , beach, resorts, corals, fishes
Positioning	Lagoon development & Tour A, B, C, D to different lagoons
Footfall	1,527,159 annually
Activities	Kayaking/ Boating to three Lagoons at Miniloc Island, Shimizu Island, Secret Lagoon Snorkel with turtles at Seven Commando Beach, BBQ Lunch, Swimming





KAPRI ISLAND| Hikkaduwa, Galle, Sri Lanka

Kapri Island is an exclusive residential island located 5 mins from Hikka beach and 15 mins from Southern Expressway exit

KAPRI ISLAND	
Developer	Home Lands holding (P) Ltd
Project Location	Hikkaduwa, Galle
Land Area (in Acres)	7.81
Total No. of plots	26
No. of plots available	1
Launch Year	2022
Size of Plots	40 Perches (10,890 sft)
Launch Price (LKR per sft)	3,300
Last quoted Price (LKR per sft)	5,500
Land Agreement/ Ownership	100% ownership
Facilities	Water, Private road, Electricity and Lagoon view
USP	• Private Island development • Pre-designed Villa Plan • Tranquil lifestyle in scenic surrounding
% share of foreign buyers	15%







Source: CBRE research

THE SAND | Tangalle, Hambantota, Sri Lanka

THE SAND is sophisticated luxurious lifestyle residential development located on Tangalle beach one side and Lagoon on the other side. The site also offer great connectivity ~ 1.5 Km from Tangalle city, Hambantota.

THE SAND	
Developer	Prime Group
Project Location	Tangalle, Hambantota
Land Area (in Acres)	5.37
Total No. of plots	17
No. of plots available	17
Launch Year	2024
Size of Plots	23 Perches (6,260 sft)
Launch Price (LKR per sft)	6,000
Last quoted Price (LKR per sft)	6,000
Land Agreement/ Ownership	100% ownership
Facilities	Water, Private road, Electricity
USP	• Private Island development • White sand beach • Access to lagoon and beach from either sides of the site
% share of foreign buyers	-







CENTRAL PARK| Ja Ela, Colombo

The Central Park is strategically located in Ja-Ela at an extent of 15 acres currently under development. The project consist of 400 units combined with majority of buyers as Srilankan's.

CENTRAL PARK	
Developer	Prime Group
Project Location	Ja Ela, Colombo
Land Area (in Acres)	15
Total No. of plots	Apartments – 200 Villa – 200
No. of plots available	Apartments – 60 Villa - 50
Launch Year	2021
Size of Plots	3 BHK – 4 Perch (1525 sft) 4 BHK – 6 Perch (2,362 sft)
Launch Price (LKR per sft)	17,500
Last quoted Price (LKR per sft)	21,000
Land Agreement/ Ownership	100% ownership
Facilities	Gym, Garden, natural pond, Supermarket, Day care and Cafe
USP	• High end community • Close Proximity to all leading school, hospitals and transit hubs
% share of foreign buyers	7%







BENCHMARK FINDINGS ON HOSPITALITY SECTOR

CATEGORY WISE AVERAGE SIZE OF ROOM KEYS BASED ON BENCHMARKS

Category of Hotel/Resort	No. of room keys
5-Star	100
4-Star	60
3-Star	80

CATEGORY WISE AVERAGE LAND AREA BASED ON BENCHMARKS (IN HECTARES)

Category of Hotel/Resort	Land Area
5-Star	8
4-Star	5
3-Star	1

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