FUTURE BARBUDA

CONCEPT DESIGN, STRATEGIES & PLANS

VOLUME 3

#FUTUREBARBUDA

INTRODUCTION

This is Volume 3 of a 5-Volume Task II draft Development Plan, based on the Government of Antigua and Barbuda contract Terms of Reference for Task I and Task II. The final agreed version of the Master Development Plan is scheduled to be completed as part of a separate contract as Task III of the Master Plan. Task III is scheduled to start after the completion of Task II, at the discretion of the Government of Antigua and Barbuda.

This volume is informed from consultations and data sources referenced in the following Volume(s) of the Existing Conditions Assessment (Task I Phase 3 of the Master Development Plan contract):

- Volume I: Methodology and Approach of the Existing Conditions Assessment.
- Volume II: Natural Systems.
- Volume III: Space, Place & Structures.
- Volume IV: Infrastructure.
- Volume V: Services.
- Volume VI: Summary of Findings.

The data collection methodology and approach are described in Volume I, which includes commentary on the challenges of completing the Existing Conditions Assessment during the COVID-19 Global Pandemic.

This Volume also uses information reported in the accompanying:

- Social and Economic Investment Plan report.
- Climate Vulnerability Impact Assessment report.

This project is funded by the Caribbean Development Bank under the Rehabilitation and Reconstruction Loan Hurricane Irma Project, with the report tailored for the Government of Antigua and Barbuda (GOAB), Barbuda Council, and Barbuda residents.

VOLUME 1: GOVERNING POLICY

Translating the vision into policies and strategies guided by principles of sustainability and resilience.

VOLUME 2: DRAFT DESIGN BRIEF

The emerging Design Brief for Codrington and defined local areas outlining the design goals and objectives, constraints, special analysis.

VOLUME 3: CONCEPT DESIGN, STRATEGIES & PLANS

A series of plans presenting the concept design for Barbuda, Land Use, Built Form and strategies.

VOLUME 4: PUBLIC AND PRIVATE REALM GUIDANCE

Codes and policies governing the public and private realms, shaping the physical environment.

VOLUME 5: THE RESULTS FRAMEWORK

The implementation and institutional framework utilising One Planet as a providing objectives, actions and responsibilities.

CONTENTS

Volume 3

CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

DRAFT
NOVEMBER 2023

3

CONCEPT DESIGN & RESILIENT APPROACH FOR LAND USE

Volume 3 presents the emerging Concept Design and Strategies for Barbuda, serving as a vital tool in realizing the objectives outlined in the SIRMZP. This Concept Design not only establishes a foundational framework for future proposals but also outlines key elements within the Design Brief. These elements encompass critical aspects such as land use, major services, open spaces, amenities, facilities, recreation options, ecology, biodiversity preservation, circulation, sustainable transportation methods, as well as sustainable water and energy usage. Additionally, the Concept Design introduces an approach to the built form.

The Strategies delve into key areas in greater detail, which will be developed collaboratively with the community to bring about a transformative change for Barbuda.

Together, these components constitute the heart of the masterplan, steering the sustainable development of Barbuda in harmony with its distinctive character and long-term aspirations.

ENVIRONMENTAL RISK

Flooding, Tropical Storms, Hurricanes, Earthquake, Sea Level Rise and Rising Sea Temperatures

Barbuda, like many coastal regions, faces a range of environmental risks, including flooding, hurricanes, sea-level rise, and rising temperatures. In this context, a comprehensive planning approach becomes imperative to mitigate these threats and safeguard the island's communities and ecosystems.

This planning approach not only seeks to identify and assess these environmental risks but also aims to develop proactive strategies and policies. It is designed to enhance resilience, minimize vulnerabilities, and ensure the sustainable development of Barbuda. By analysing past occurrences, current vulnerabilities, and future projections, this approach provides a roadmap for informed decision-making when considering future growth.

100-YEAR SEA LEVEL RISE

Avoid development in areas at risk of sea-level to build climate resilience.

Rising sea levels can lead to coastal erosion, increased flooding, and salt-water intrusion into freshwater sources. This poses a significant threat to the island's infrastructure, natural habitats, and overall stability.

EXTREME WEATHER CONDITIONS CAT 5 STORM / HIGH TIDE AND STORM SURGE

Implement zoning and land use regulations that restrict or limit development in high-risk flood zones. Avoid constructing critical infrastructure and housing in these areas whenever possible. Avoid sleeping spaces at ground floor and encourage raising buildings and flood-resistant landscaping.

Climate change can result in more intense hurricanes and tropical storms. Barbuda is prone to these extreme weather events, and the increased intensity can lead to more damage to property, ecosystems, and communities.

100-YEAR SEA LEVEL RISE + EXTREME WEATHER CONDITIONS CAT 5 STORM / HIGH TIDE AND STORM SURGE + SEA LEVEL RISE

Understand the long term environmental risk from both extreme weather events and sea level rise. The information modelled shows the combined impact of sea level rise with extreme weather, such as a CAT 5 hurricane.

MARINE PROTECTION AREAS

Design and expand marine protected areas to conserve and protect vulnerable ecosystems, such as wetlands, coral reefs and sea-grass beds. These areas can serve as refuges for marine life, helping to preserve biodiversity and enhance resilience to temperature-induced stress.

Rising sea temperatures can cause coral bleaching, which threatens the health of coral reefs surrounding Barbuda. These reefs are crucial for protecting the coastline from erosion, supporting marine biodiversity, and sustaining the local fishing industry.

RISING SEA TEMPERATURES / CHANGING CLIMATE

Create actionable policy to address issues arising from climate change, such as dangerous high temperatures, increased frequency of extreme weather events, such as hurricanes and tropical storms, increased rainfall and flooding, dangerous high temperatures, coastal erosion and salt-water intrusion and longer dry seasons and shorter wet seasons.

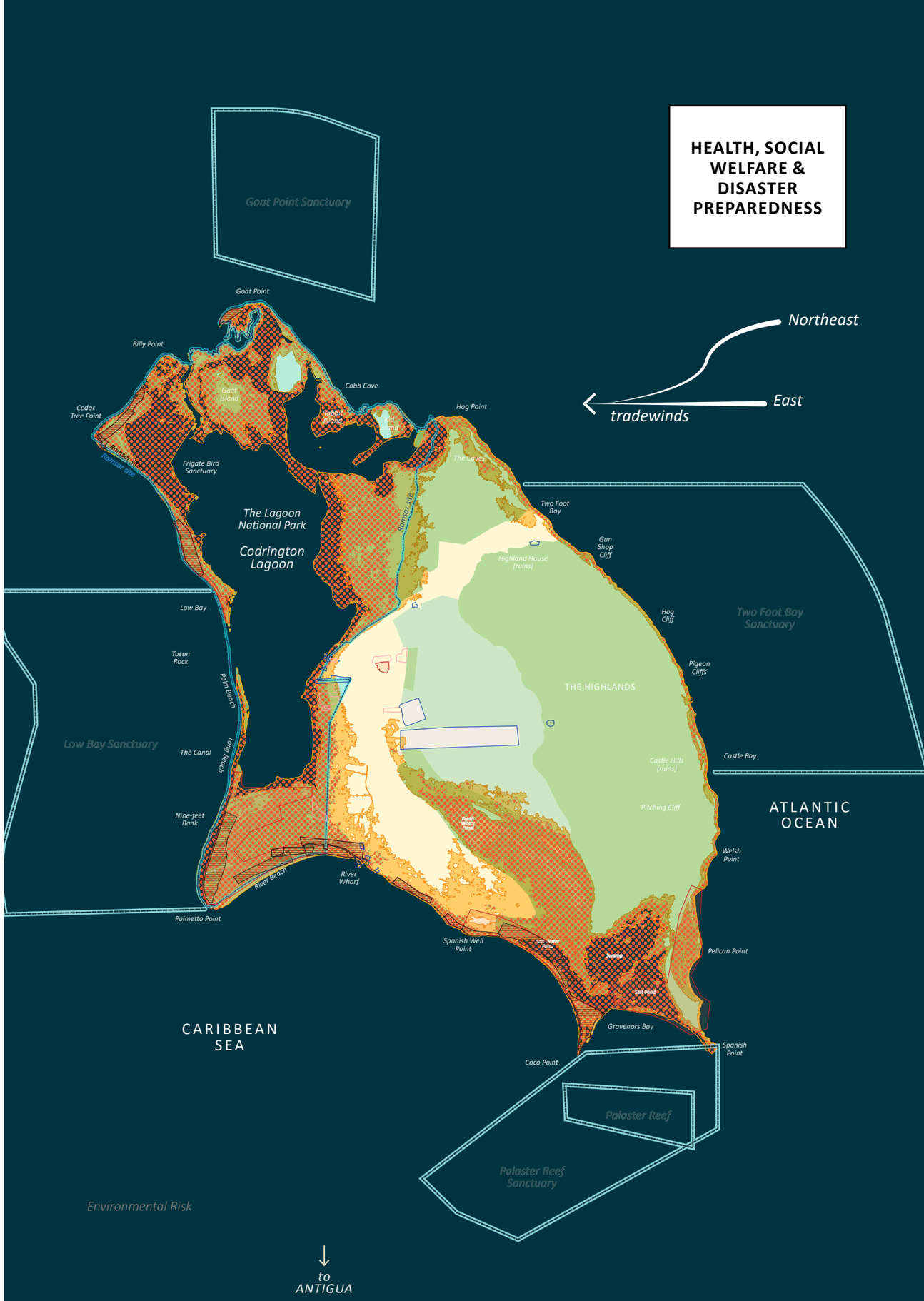
Increased carbon dioxide levels in the atmosphere are leading to ocean acidification, which can harm marine life and disrupt the delicate balance of marine ecosystems.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS



ENVIRONMENTAL RISK

Flooding, Tropical Storms, Hurricanes, Earthquake, Sea Level Rise and Rising Sea Temperatures

Flooding in Autumn 2022

ACKNOWLEDGE SHIFTING COASTLINE

The shifting coastline in Barbuda, influenced by factors such as sea-level rise and coastal erosion, poses an ongoing challenge for the island's communities and necessitates adaptive measures for sustainable coastal management.

Property at Coco Point

Sunset Hotel (image from barbudaful.net)

Lighthouse Bay Resort (image from barbudaful.net)

Elevated property to allow for flooding

IMPLEMENT FLOOD-RESILIENT DESIGN

Implement flood-resilient design practices, such as using flood-resistant materials and building techniques. This includes elevating utilities and critical infrastructure above flood levels, designing buildings to withstand flood forces, and using flood-resistant landscaping.

Hotel property damaged by Hurricane Irma

SAFEGUARDING CRITICAL INFRASTRUCTURE

Designing structures including dwelings to withstand flood, wind and earthquakes.

ADDRESS POST-DISASTER RESPONSIBILITY

In the aftermath of hurricanes, Barbuda bears the scars of abandoned hotels, resorts, and homes, once vibrant but now left in disrepair, requiring significant reconstruction efforts to revitalize its tourism industry and local economy.

Abandoned property

ENVIRONMENTAL DESIGNATION / SENSITIVE FOOTPRINTS

Marine and Terrestrial Protection Areas for Ecology and Biodiversity and Common Resource

A 'Ridge to Reef' approach aims to maintain and enhance ecosystem integrity, while supporting a continued tradition of communal land management. The approach looks to conserve physical green space connections through agricultural lands and inhabited areas connecting to the sea. These green corridors, or eco-tones, are areas of steep transition between ecological communities, ecosystems, or ecological regions along an environmental gradient. The combination of environmental protection areas and ecotones will provide recreational amenity and wild life corridors throughout the island.

There are two designated Protected Areas in Barbuda namely Palaster Reef Marine Park and The Codrington Lagoon National Park Ramsar site.

The following wetlands are protected on Barbuda:

- *Bull Hole and Fresh Water Pond.*
- *Spanish Point Flash.*
- *Welches's Flashes.*
- *Castle Hill; and*
- *Two Foot Bay.*

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS

ENVIRONMENTAL RESOURCE AREAS AGRICULTURE

Protect agricultural land to ensure sustainable food production. Recognising and harnessing the value of sustainable agriculture, encouraging natural pest control, water regulation, soil fertility, climate resilience, and research opportunities while conserving biodiversity and supporting eco-tourism.

ENVIRONMENTAL RESOURCE AREAS COMMON LANDS

Establish protection for watersheds and groundwater sources on Barbuda through the amendment of environmental legislation. Watersheds and groundwater sources on Barbuda need to be protected through the amendment of environmental legislation.

Protect and enhance nature reserves and highlands. Registration of areas of special scientific interest for Barbuda is required to protect the islands natural environment.

Establish sustainable and active management of hunting areas, wild animals, salt ponds, rivers, and waterways through policy and enforcement.

FLOOD RISK AREAS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

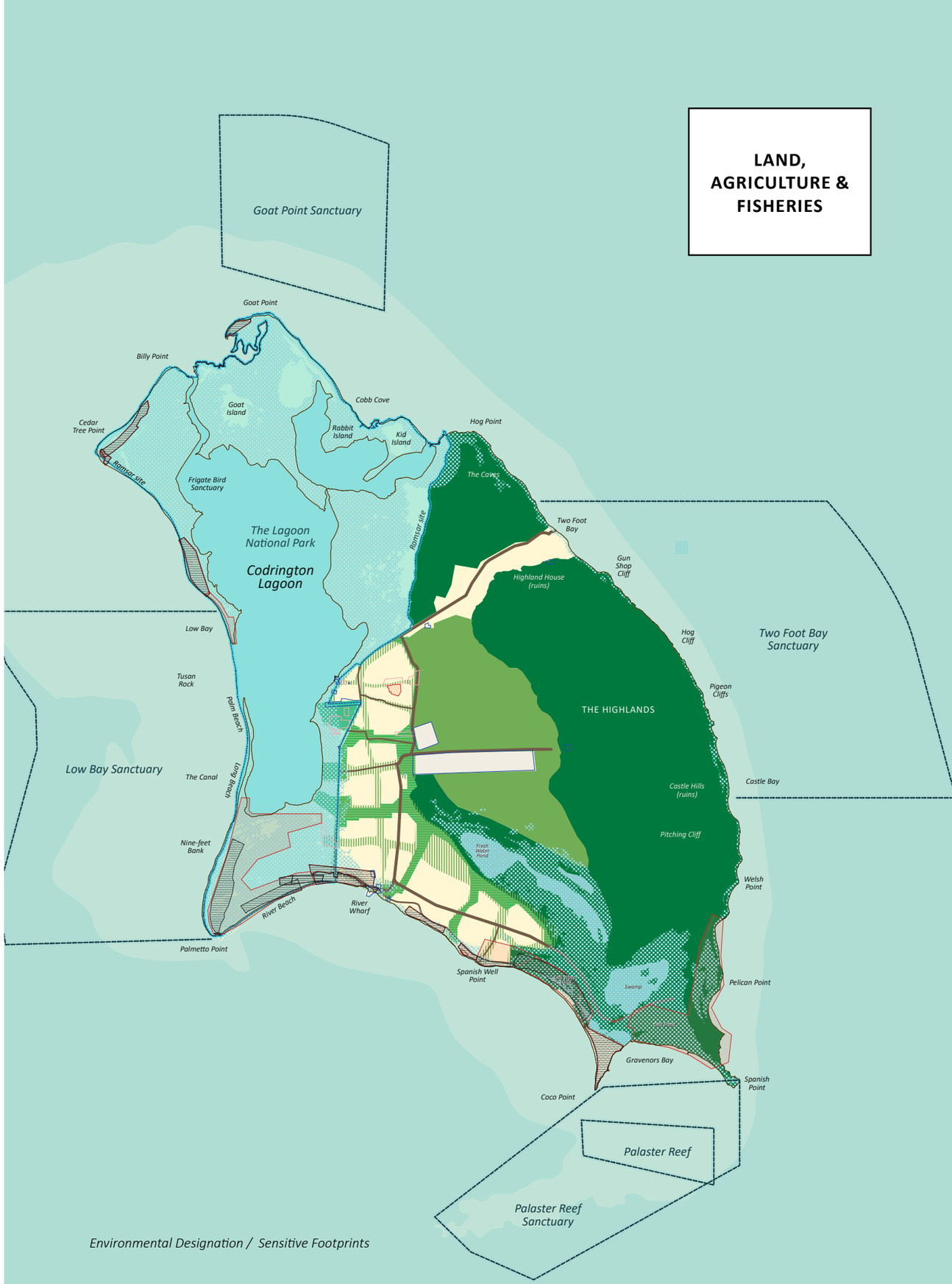
Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.

RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

Identify ecological corridors connecting ridge to reef that will define villages and built areas and provide access to nature.

MARINE PROTECTION AREA

Design and expand marine protected areas to conserve and protect vulnerable ecosystems, such as wetlands, coral reefs and sea-grass beds. These areas can serve as refuges for marine life, helping to preserve biodiversity and enhance resilience to temperature-induced stress.



ENVIRONMENTAL DESIGNATION / SENSITIVE FOOTPRINTS

Marine and Terrestrial Protection Areas for Ecology and Biodiversity and Common Resource

Ramsar designation not respected at Palmetto Point Image showing sand mining and destruction of natural vegetation (glanlaw.org)

INCREASE PROTECTION

There are 7 proposed Protected Areas:

- Frigate Bird Reserve.
- Goat Island Wildlife Reserve.
- Highland Cliffs and Caves Reserve.
- Bull Hole Wetland Reserve. s
- Castle Bay Salt Pond Reserve.
- Gravenor Bay Reserve.
- Palmetto Point Reserve.

These locations are not currently protected in law.

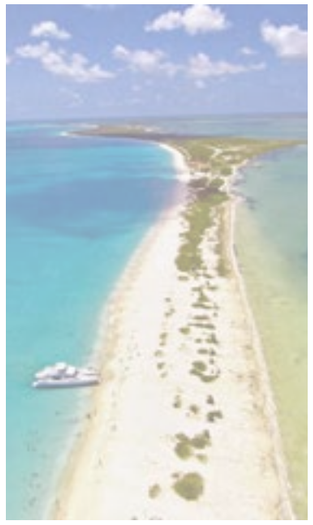
Marine Protection Areas - Codrington Lagoon - Ramsar site

Geo-bag, brackish water and deposit of sand and debri at Palmetto Point in Ramsar. (image from glanlaw.org)

Aerial view of the sandbar protecting the Codrington Lagoon. (Photo by John Mussington)

MONITOR SANDBAR BREACH

Need to address the ongoing breaches in the sandbar protecting the Codrington Lagoon. Restore the lagoon's ecological integrity, safeguard local livelihoods, and mitigate disaster risks while fostering the growth of new ecosystems through advanced techniques like electro-deposition and coral reef regeneration. Secure grant funding to pioneer and implement these solutions effectively.



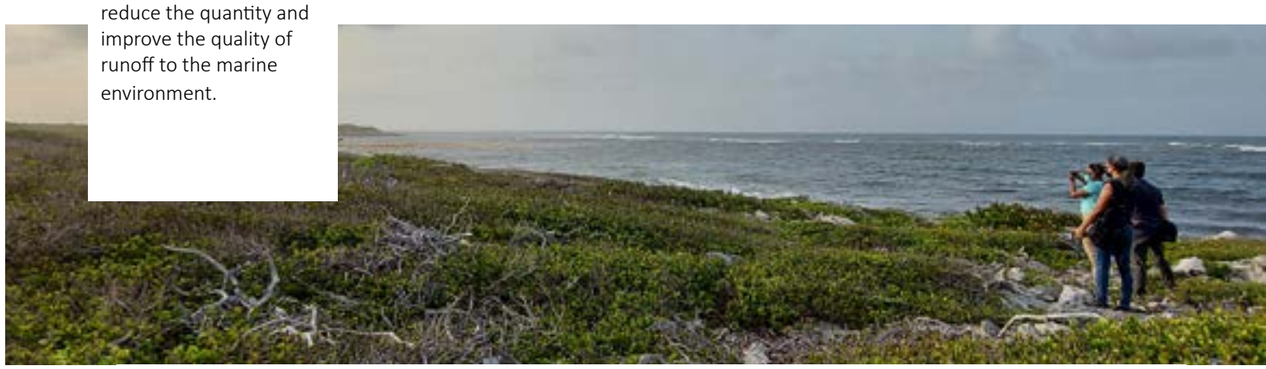
Sandbar before 2017. A breach occurred in the sandbar after Category 5 Hurricane Irma. (Photo by Goodwin)

IMPROVE WATER CAPTURE AND RETENTION

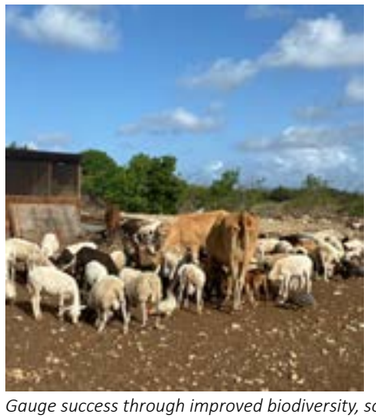
The islands open space network should capture and retain water. Open spaces should include drainage swales, bio-swales, water catchment landscapes and artisanal wells where possible which will all contribute to aquifer re-charge and reduce the quantity and improve the quality of runoff to the marine environment.

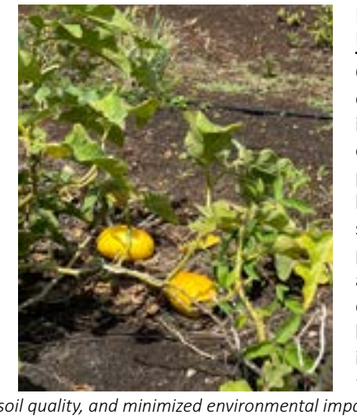
ESTABLISH ECO-TONES

From the preserves, eco-tones (green corridors) will be created and maintained to reach out and go through communities to create a connective element throughout the island and connect "ridge to reefs" and people to their cultural and natural resources.



Two Foot Bay - The open space network to provide for local and tourism recreation.





Gauge success through improved biodiversity, soil quality, and minimized environmental impact.

ENCOURAGE REGENERATIVE FARMING

Consideration of regenerative and organic farming techniques could be included in the agricultural strategy on the island to provide healthy produce, repair and restore the land. Rotational grazing of animals should be included in the land use planning. The issue of roaming animals in Barbuda is interesting as it does conflict with productive island landscapes. However, a bountiful island should be able to provide for "all of its residents".

Preserve distinctive locations while ensuring public accessibility.(Photo by Mohammid Walbrook)

Keep natural resources as communal assets, such as Salt Ponds and quarry

Critical and Retained Public Infrastructure & Services

MOVEMENT

WORKS & GENERAL PURPOSES

The concept design establishes an approach for sustainable movement in Barbuda. Investment in transport infrastructure is needed for pedestrians and cyclists, as well as vehicles. The approach looks to establish a new primary 'island road' to connect key destinations and avoids flood risk areas.

Secondary streets are enhanced to encourage slow vehicle speeds, while supporting walking and cycling. Roadways should look to include landscape spaces for scenic value, human comfort and to facilitate local commerce and social gathering - A Caribbean cultural phenomena of socializing and carrying out commerce on roadways should be supported through considered as part of the roadspace.

PRIMARY ROUTE ARTERIAL ROAD

Develop new primary arterial road connecting Codrington to River Port, the new airport and beyond. The road should be located outside of area at flood risk and designed to sustain extreme weather events.

SECONDARY STREET
ACTIVE STREET

Enhance street design with careful interventions, such as tree planting, carriage width, to naturally slow speeds. Address issues of dust. Provide shade with structures and street tree planting to make for a more welcoming environment. Consider how road can better accommodate active ground floor uses with space for vendors and cafe space.

Attention will be required to develop new design ideas to facilitate this traditional aspect of road use while providing for increased safety and environmental health.

SECONDARY STREET
THROUGH STREET

Develop plan to improve through streets to balance needs of pedestrians and cyclists with vehicles. Encourage tree planting to slow speeds and provide shade.

ACTIVE ROUTE
WALKING AND CYCLING ROUTE WITH LOW TRAFFIC

Rethinking River Road, Planting for shade / Separate Cycle Way or pedestrian / cycle priority.

FLOOD RISK AREAS

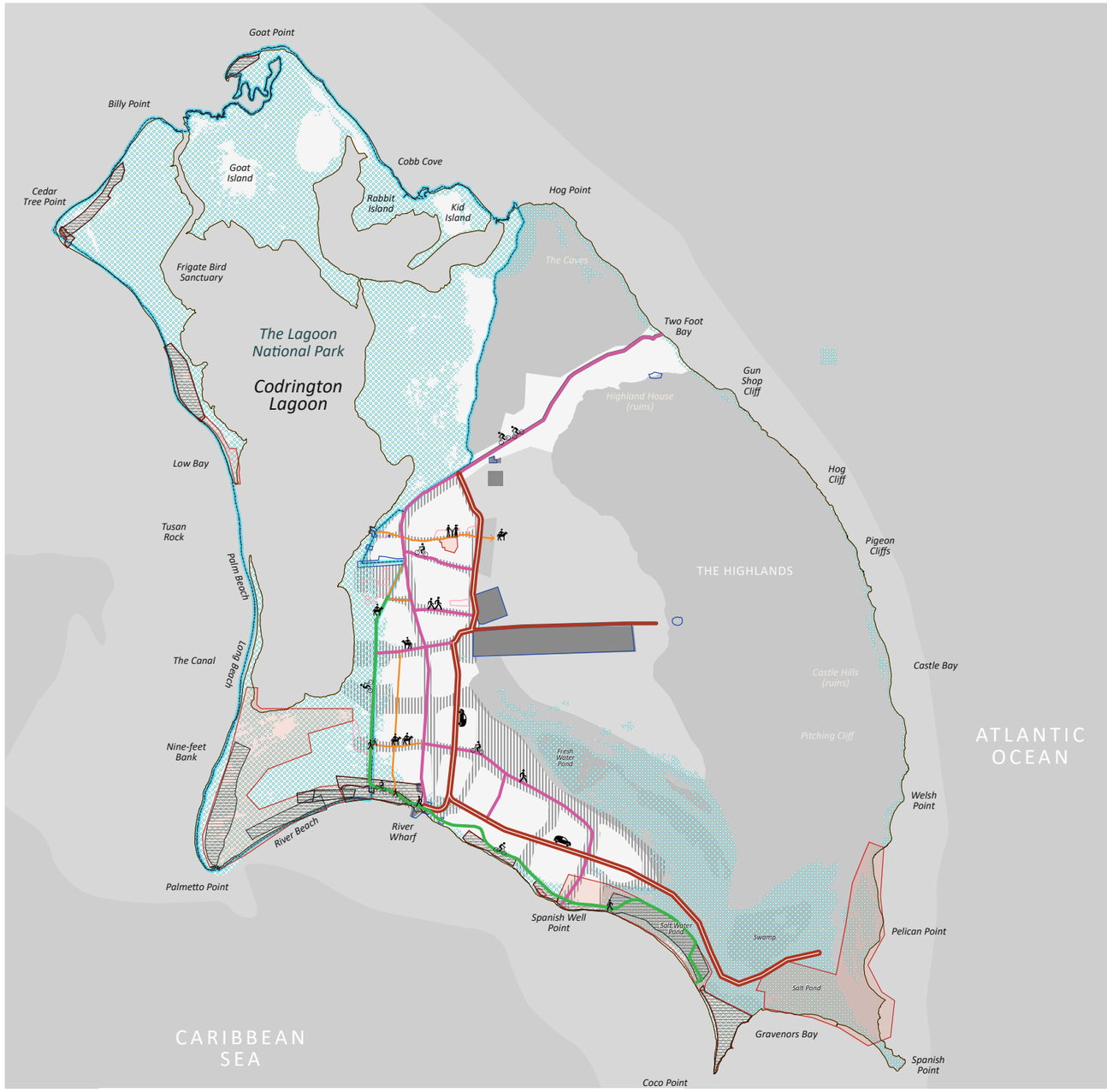
Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS



Movement Hierarchy

Critical and Retained Public Infrastructure & Services

MOVEMENT

ESTABLISH WALKING AND CYCLING ROUTES

Recognise the opportunity of re-purposing River Road as a sustainable movement corridor that encourages walking, cycling and micro-mobility e-scooters and bikes) and how this could better connect Barbudans of all ages, while providing a valuable for visitors.

River Road the current primary road is prone to flooding

IMPROVE PUBLIC REALM

Consider enhancements, such as tree planting, incorporating swales, addressing dust, that will improve the quality of the street.

Lagoon Street - a secondary, through street

Managing animal movement and waste for a safer and cleaner street.

Need to reduce dust and provide shade and shelter for street vendors and pedestrians.

SUPPORT STREET ACTIVITY

Create spaces for outdoor vendor with supporting amenity to create a vibrant street scene.

Street vendors create an active street

Example of tertiary road / neighbourhood street

Critical and Retained Public Infrastructure & Services

UTILITY & SERVICES

UTILITIES

WORKS & GENERAL PURPOSES

The concept design for Utility & Services is geared towards enhancing resilience and advancing sustainability. Please note that the presented locations are merely illustrative, and further comprehensive studies are imperative. In Volume 4, you'll find additional guidance on energy, waste, and recycling.

Of significant importance is the critical interplay between the airport and landfill; any disruptions could have repercussions on certification. Therefore, a comprehensive study is essential to address potential concerns.

Furthermore, the introduction of recycling practices at the port aligns with a comprehensive strategy for solid waste processing in Antigua, fostering sustainability and integrated waste management.

This holistic approach strives to ensure the seamless and sustainable operation of essential public infrastructure and services, benefiting both the community and the environment.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS

SOLAR PLANT

Ongoing improvement of the resilience of the electricity distribution network in Barbuda. Provide more inclusive access to modern electricity services. Underground transmission and distribution mains; provide backup power for key public buildings by installing hybrid solar systems; and provide reconnection support for customers who remain disconnected following the 2017 hurricane.

MICRO-GENERATION

Incorporate solar panels on public structures like government buildings, council facilities, community centres, and hospitals. Future plans include extending this initiative to schools, contributing to energy security for the Government of Antigua and Barbuda (GOAB). Additionally, there's a focus on encouraging private homeowners to join this sustainable energy movement.

COMMUNITY COMPOSTING

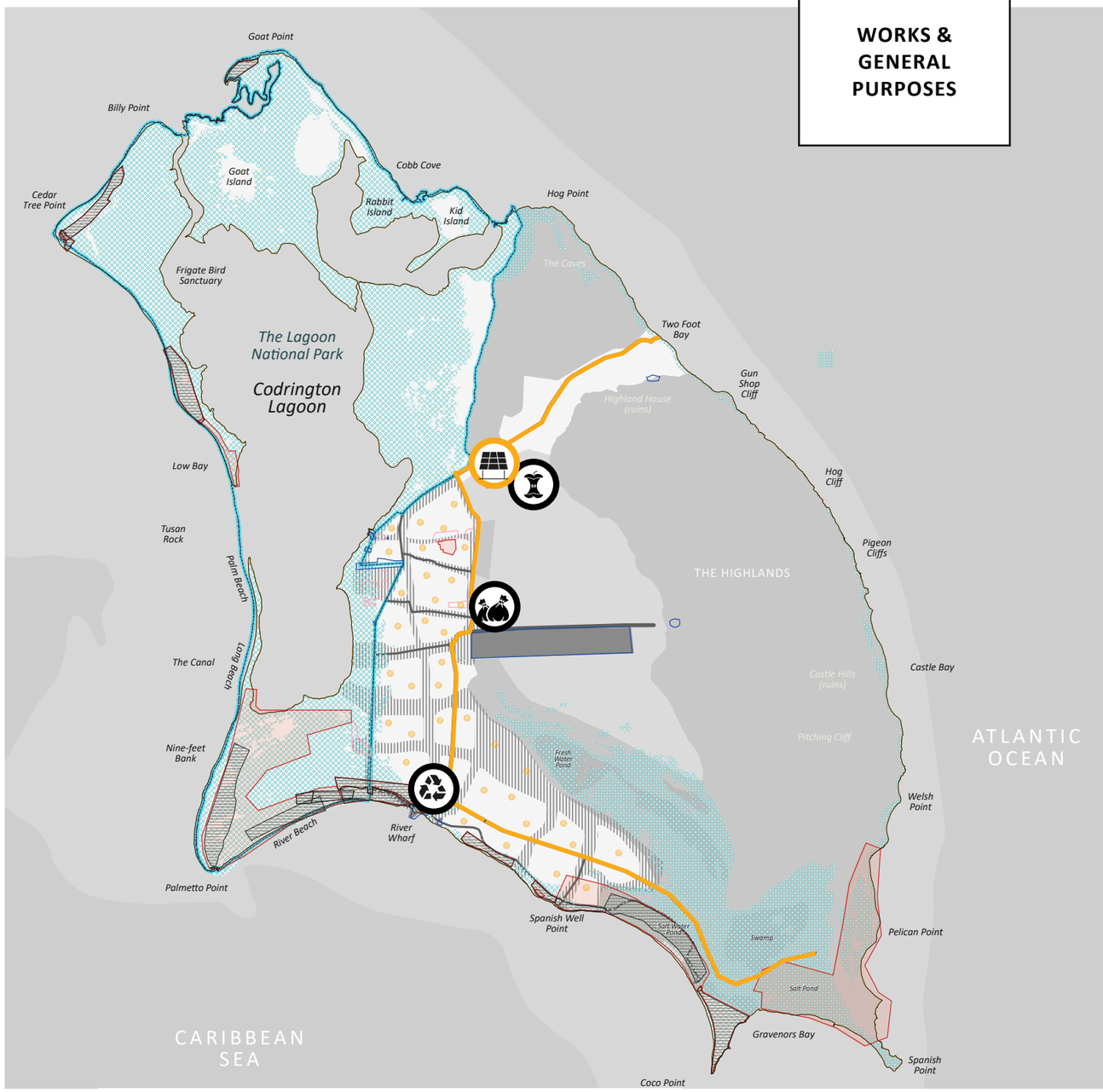
Locate green and food waste away from flight paths, enforcing strict disposal regulations, implementing bird deterrence, and conducting an environmental assessment.

RECYCLING FACILITY

Establish recycling in Barbuda to create opportunities for selling or shipping materials off the island or for local processing and up-cycling. This initiative aims to foster both economic growth and environmental sustainability. Recycling facility at port for ease of transport of baled recyclables by barge to Antigua.

LAND FILL

Establish efficient waste management, including responsible collection and landfill practices.
Carry out comprehensive study regarding relation of landfill and with airport to prevent potential certification issues.



Strategy for Utility & Services

Critical and Retained Public Infrastructure & Services

EMERGENCY SERVICES

HEALTH, SOCIAL WELFARE & DISASTER PREPAREDNESS

Improving Emergency Services within Barbuda needs to be considered as a critical part of the Development Plan. The plan adjacent shows a conceptual strategy for provision of emergency services. It emphasizes the importance of central, accessible locations while ensuring they are safeguarded from flooding risks to enhance their effectiveness and responsiveness.

RELOCATE HOSPITAL / HEALTH CENTRE

Develop a new Hospital / Health Centre in a flood-resistant location.

Establish a mobile/periodic health clinic with a preference for a fixed service.

EMERGENCY CENTRES / COMMUNITY SHELTERS

Identify and prepare safe shelters and zones where people can seek refuge from the storm in close proximity to homes. These facilities should be designed to withstand extreme winds and flooding. Ensure they are well-stocked with essential supplies and provide adequate medical support.

PERMANENT POLICE STATION

Locate permanent space for Police Service in resilient location.

FIRE STATION

Locate Fire Station with welfare facilities in central location with assesses to primary island road located and in an area not at risk from flooding. Consider response time.

TENDER LOCATION

Ensure efficient service provision and accessibility, three distinct tender sites should be identified: one in the northeast, one in the east to facilitate airport-related operations, and one in the southwest near the port facilities, streamlining the flow of goods and services and catering to the respective needs of these crucial areas.

FLOOD RISK AREAS

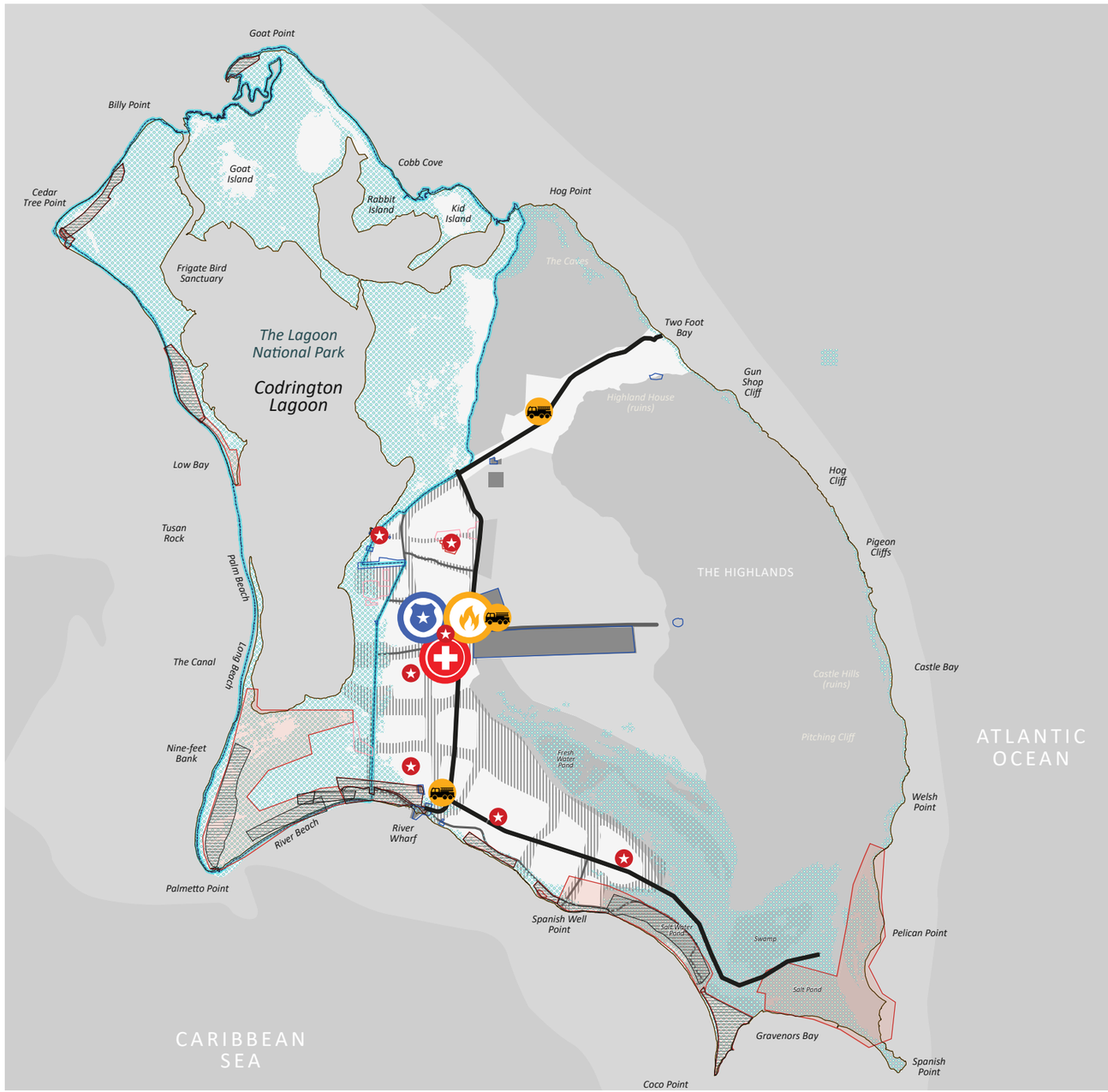
Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS



Strategy for Emergency Services

Critical and Retained Public Infrastructure & Services

EMERGENCY SERVICES

ENHANCE HEALTH AND WELL-BEING FACILITIES

Improve healthcare facilities, including the Hanna Thomas Hospital, by ensuring they are well-equipped, staffed, and maintained. Consider expanding healthcare services and facilities to meet the needs of the population.

Ambulances at Hanna Thomas Hospital

Hanna Thomas Hospital comprised of three (3) doctors, five (5) Registered Nurse and Midwives.

ESTABLISH EMERGENCY RESPONSE AND EVACUATION PLANS

Establish and regularly update emergency response and evacuation plans for flood-prone areas. Ensure that residents and local authorities are well-prepared to respond to flood events.

INVEST IN EARLY WARNING SYSTEMS

Invest in flood monitoring and early warning systems to provide residents and authorities with timely information about impending flood, fire or other events. This allows for evacuation and preparation.

Barbuda Police Station

UPGRADE PUBLIC SAFETY SERVICES

Rebuild the Police Station to enhance public safety and law enforcement services. Consider establishing a village Fire Station to improve emergency response capabilities.

CULTURAL SPACE & PLACE

Historic neighbourhoods, historic buildings, sites, wells, caves, camp sites, community buildings

TOURISM & CULTURE

'Living Heritage' is the ideal approach for Barbuda, as it places the Barbudan community and its rich history at the forefront. This approach not only highlights the island's unique cultural legacy but also underscores the significance of preserving and celebrating it. Within this framework, we emphasize the importance of safeguarding historic neighbourhoods, significant sites, hidden caves, valued camp sites, and community buildings.

HISTORIC BUILDINGS & MONUMENTS

1. *Martello Tower (River Fort)*
2. *Taylor House*
3. *Spanish Point Castle Fort*
4. *The Village*
5. *Castle*
6. *Highland House*
7. *Wardens East Coast House*
8. *Wardens House (Old Government House)*
9. *The Ginnery*
10. *Holy Trinity Church*
11. *Lime Kilns*
12. *Gun Shop (Two Foot Bay)*
13. *Walled Wells*
14. *Village Wall*
15. *Old Bakery*
16. *Small-Scale Houses*

HISTORIC CODRINGTON

Preserve heritage and historic sites. Establish series of cultural of events. resource

LAGOON ECOSYSTEM

Recognise Codrington Lagoon's cultural significance. Develop initiatives to celebrate traditional practices and storytelling. Create visitor experiences, including guided tours, cultural events, and eco-friendly activities.

AGRICULTURE

Preserve and promote traditional agriculture in Barbuda as an integral element of our cultural heritage and a key attraction for tourism, ensuring its sustainability and contributing to our cultural identity and economic growth.

SALT PONDS

Protect and harness the cultural and economic potential of Barbuda's salt pond by preserving its historical significance, sustaining traditional salt production.

TRADITIONAL PRODUCTS

Access to culturally significant sites that contain traditional materials so cultural traditions can be taught and preserved.

CAMP SITES

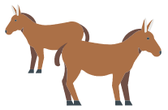
Designate traditional camp sites in Barbuda as protected land, recognising their cultural significance and tourism potential.

SPORTS

Invest in sport, such as cricket, horse racing, basketball and other spectator sports, as a unifying activity that bring the community together.

PUBLIC BEACHES

Protect public beach access including Princess Diana Beach.

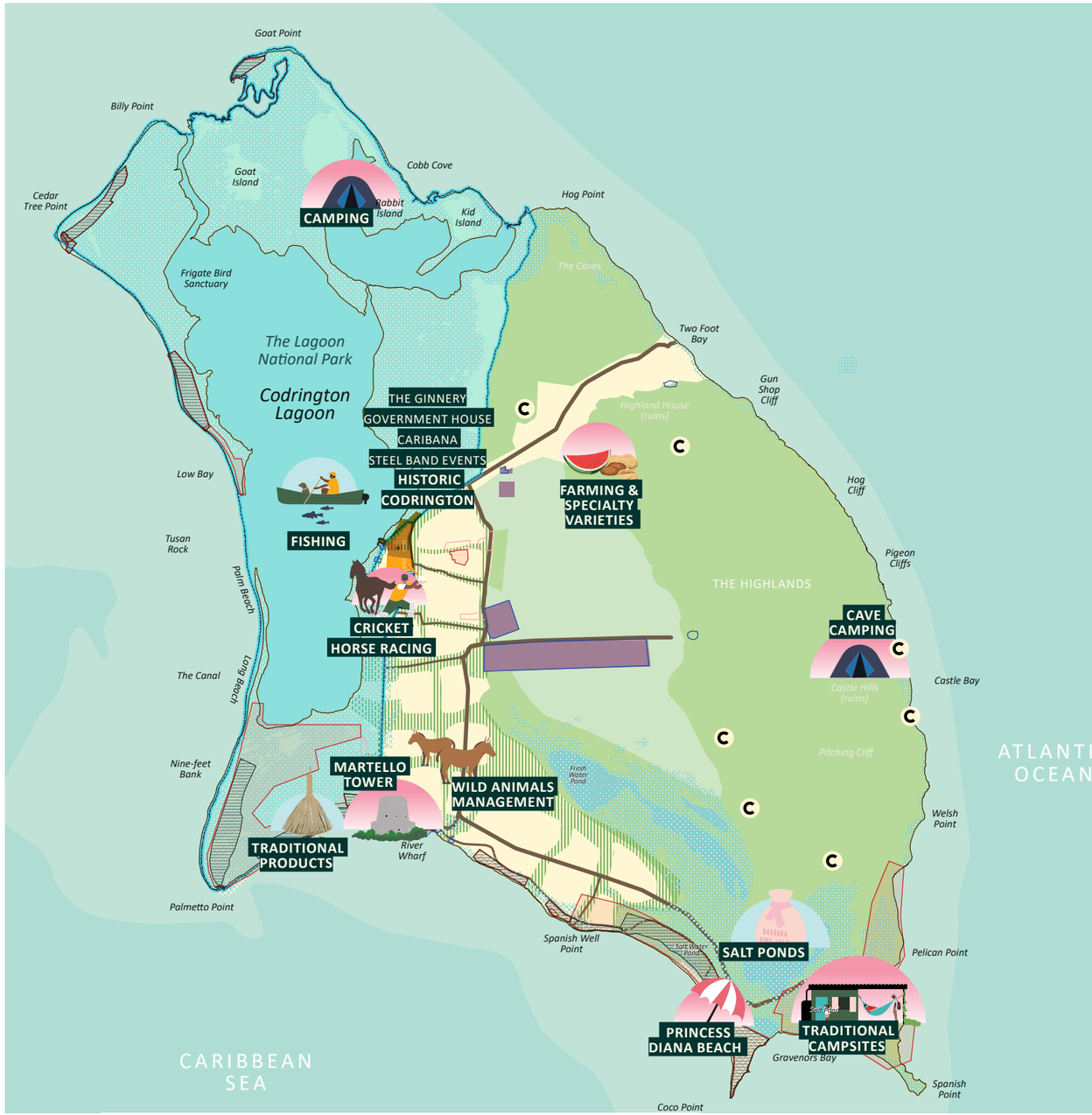


ANIMAL MANAGEMENT

Address Barbuda's wild donkeys, goats and other livestock by ensuring their well-being and responsible management, contributing to our local culture and tourism economy and creating a safe and welcoming environment.

CAVES / GEOLOGICAL FORMATIONS

Create management plan for caves and other distinctive geological formations, such as Darby Sinkhole.



Cultural Space and Place

CULTURAL SPACE & PLACE

Historic neighbourhoods, historic buildings, sites, wells, caves, camp sites, community buildings

Traditional camp-site near Spanish Point

PROTECT CULTURAL SPACE

The intrinsic connection between the island of Barbuda and its rich cultural heritage cannot be overstated. From its pristine beaches to cherished campsites, the Highlands to Codrington Lagoon, these spaces hold immense value and are woven into the fabric of daily life for Barbudans.

Caves used for camping

Codrington Lagoon protects a vast estuary.

Public beach access is important to Barbudans

Performance at the Fisheries

Lobster trapping is a vital part of the Barbudan economy

Darby Sink Hole - a miniature rainforest

Coco Palm used for making brooms

Coccoloba uvifera serves as a dune stabilizer and protective habitat for small animals such as sea turtles

Salt Ponds - a sureal space

PRESERVE UNIQUE LANDSCAPES

Barbuda's diverse and unique landscapes offer visitors the opportunity to become immersed in a multifaceted experience, extending far beyond the allure of its beaches.

Barbuda Horse Racing (Photo by Mohammid Walbrook)

MANAGE WILD ANIMALS

Promote the cultural significance of Barbuda's wild donkeys by ensuring their well-being and responsible management, contributing to our local culture and tourism economy.

Scope to establish donkey sanctuary

HERITAGE SPACE & PLACE

Historic sites and areas of archaeological interest

TOURISM & CULTURE

There are fundraising efforts to repair several historically significant buildings towards the establishment of a museum dedicated to the archaeology and heritage of Barbuda as well as facilitate the continued passing of tradition to future generations of Barbudans.

Most impressively, the River Fort (Martello tower), the Ginnery and the Warden's House (Old Government House) are three such structures which remain in fairly good condition.

Other medium to large scale buildings across the island (Castle, Highland House, Taylor House to name a few) have been the subject of archaeological investigation, the results of which are published in a number of journals.

HISTORIC CODRINGTON

Preserve heritage and historic sites. The historic importance of Codrington village cannot be underestimated.

HISTORIC WELLS

Acknowledge that non-functional historic wells can still be culturally and historically significant.

Options include preservation, adaptive reuse, education, art, restoration, community use, and forming a management group.

THE RIVER FORT MARTELLO TOWER

Establish 40m+ buffer around site.

Protect panoramic views to sea to maintain feeling of watch tower and navigation aid.

Explore creation of a formal open space around Martello Tower.

Create a preservation plan and improving signage. Explore complementary uses like art gallery, nature centre, accommodation, restaurant, events space, or educational venue.

PRE COLUMBIAN

Designate protection with 40m buffer

Identify, protect, research, and conserve pre-Columbian heritage, involving local communities and promoting tourism.

POST COLUMBIAN SITES

Designate protection with 40m buffer

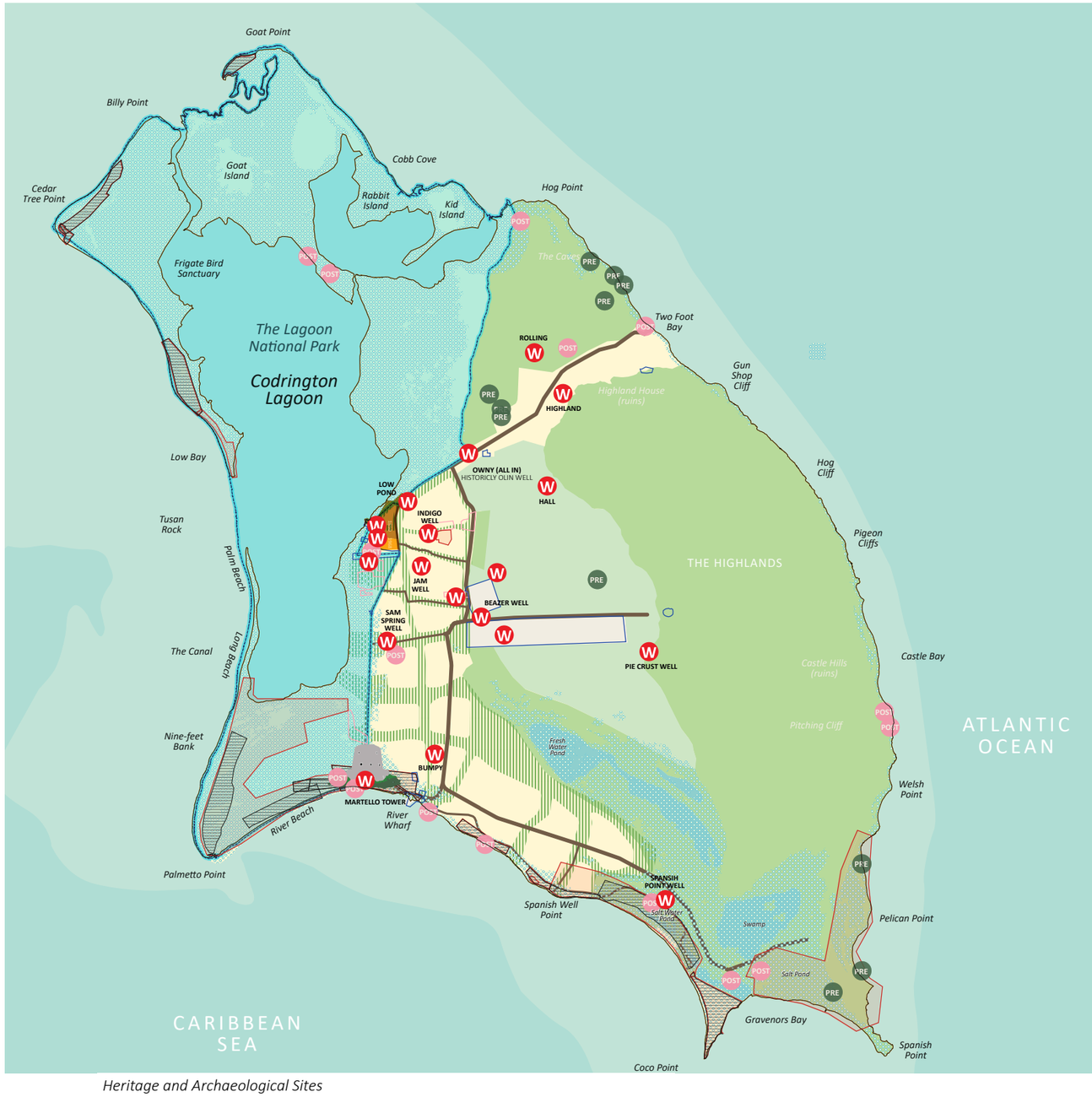
Document, safeguard, study, and restore post-Columbian sites, engaging communities, and supporting sustainable tourism.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS



Heritage and Archaeological Sites

HERITAGE SPACE & PLACE

Historic sites and areas of archaeological interest

ESTABLISH LIVING HERITAGE TOURISM

Develop plans to promote heritage tourism, showcasing these historic sites as part of Barbuda's cultural heritage. Create guided tours and educational materials to attract visitors interested in the island's history.

Holy Trinity Church

Highlands House was the highest building in Barbuda.

PLANNING GAIN

Prioritise cultural heritage projects of importance for local tourism and develop planning gain instruments to provide finance for restoration and management.

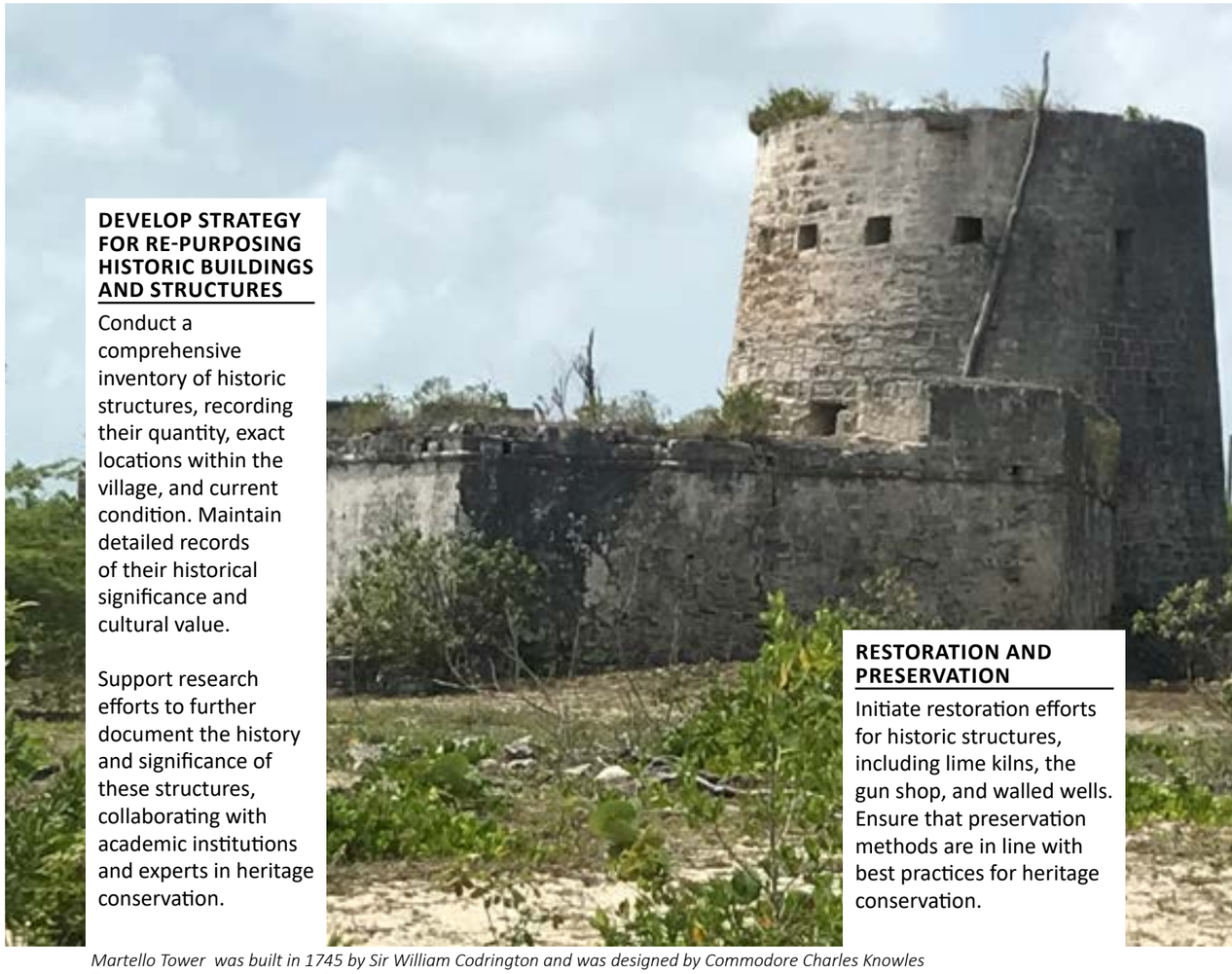
Wardens House (photo 2021) dates from 1694 and was built as the residence of the island 'Wardens'

The Ginnery was built ~1906 from stones salvaged from the castle.

DEVELOP STRATEGY FOR RE-PURPOSING HISTORIC BUILDINGS AND STRUCTURES

Conduct a comprehensive inventory of historic structures, recording their quantity, exact locations within the village, and current condition. Maintain detailed records of their historical significance and cultural value.

Support research efforts to further document the history and significance of these structures, collaborating with academic institutions and experts in heritage conservation.



Martello Tower was built in 1745 by Sir William Codrington and was designed by Commodore Charles Knowles RN4 as a defence base for the British

RESTORATION AND PRESERVATION

Initiate restoration efforts for historic structures, including lime kilns, the gun shop, and walled wells. Ensure that preservation methods are in line with best practices for heritage conservation.

(Photo by Mohammid Walbrook)

COMMUNITY ENGAGEMENT

Involve the local community in the restoration and maintenance of these structures. Encourage community members to contribute to the preservation efforts and raise awareness about the importance of Barbuda's heritage.

ENSURE LONG-TERM SUSTAINABILITY

Create a strategy for the ongoing preservation and safeguarding of historical sites. Evaluate their potential for restoration or retrofitting. Maintain their significance in Barbuda's cultural heritage by implementing considerate improvements and appropriate utilization within the local culture.

COMMUNITY INFRASTRUCTURE

Open Space, Amenities, Facilities, Recreation and Education

CODRINGTON **THE ISLAND CENTRE**

Consider re-purposing space and funding a multi-purpose, cultural centre with museum, library, arts centre, library of things (tools, equipment, toys, baby stuff, bikes)

- Communal space in front of Fisheries Complex
- Sports Complex
- Madison Square and Green Door Bar

POTENTIAL SECONDARY CENTRE

PARK / PLAY SPACE

Designate locations for future parks and open space. Evaluate position Consider potential for combining spaces with historic buildings

RUINS GARDENS

Evaluate and select “hurricane ruins” to be re-purposed as a system of green park systems transecting developed lands and could allow for village forestry, community farming, social gathering and commerce.

RECREATIONAL SPACES

Consider including the horse racing track, cricket pitch, school grounds as part of the open space system and incorporate planting and design to accommodate greater biodiversity and ecological benefits.

- Outdoor gym
- Solar powered shelter
- Designated park / playground
- DIY parks / Adventure playgrounds where locals can build forts, gardens, BMX track.
- Space for women and girls (gardens, shaded tables)
- Defined public events space

ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

Provide green routes that connect to coastlines include parking, pubic facilities and alternative transportation modalities (bikes, electric tram, etc.)

Identify eco-tones that will transect built areas along open spaces, transportation corridors, roadways, trails, public parks, recreational spaces, drainage and utility corridors and outdoor civic spaces.

RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

Identify ecological corridors that will define built areas and provide access to nature.

KNOWLEDGE INFRASTRUCTURE FROM EARLY YEARS TO LIFELONG LEARNING

Develop provision of early childhood development centres, special education facilities, and creative/arts spaces.

Support extended learning and skills training programs.

Strengthen fishing industry education and agricultural development courses exploring a more collaborative and organised approach.

INFRASTRUCTURE / UTILITY

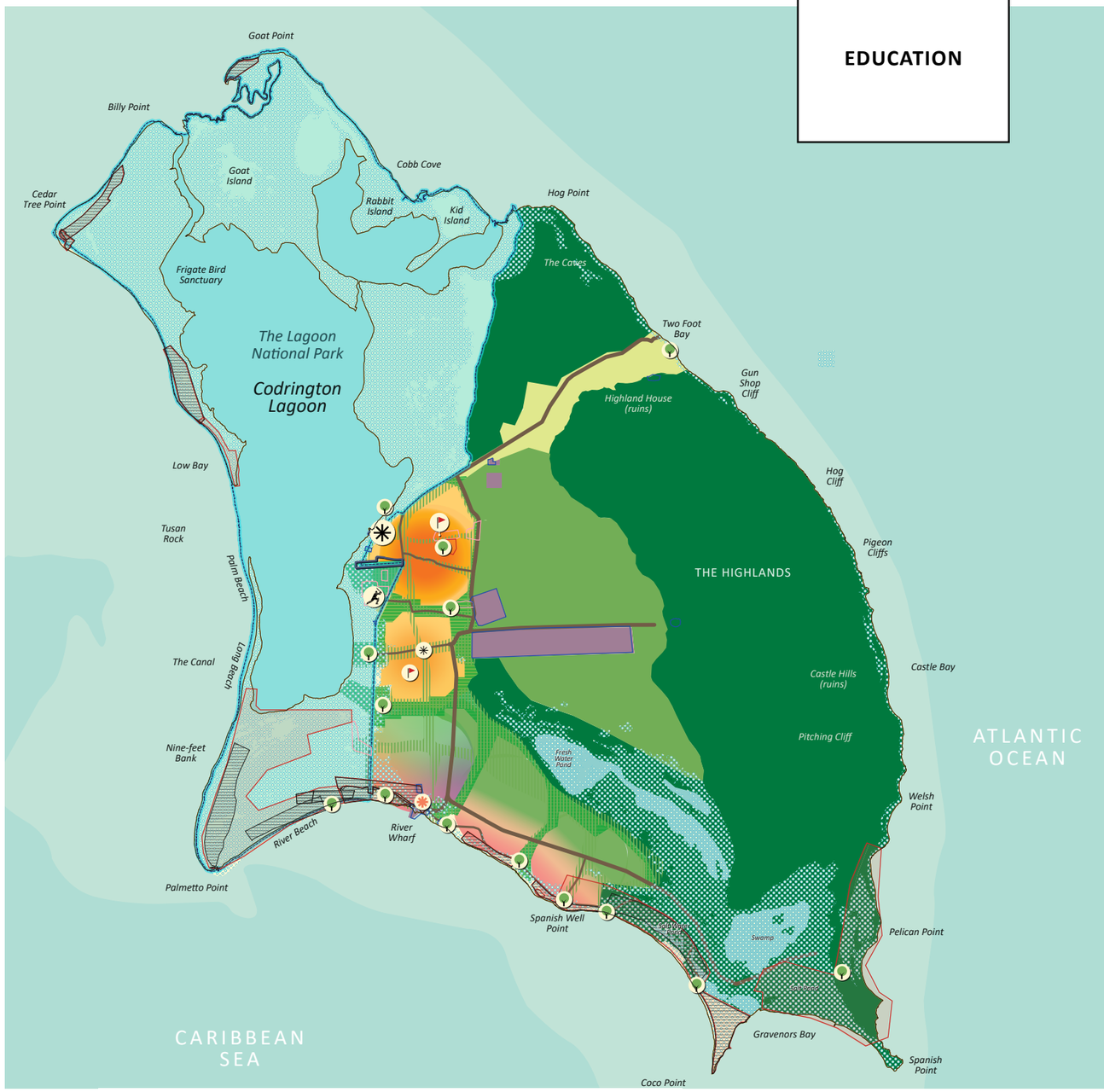
INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS

SPORTS, & YOUTH AFFAIRS

EDUCATION



Community Infrastructure

COMMUNITY INFRASTRUCTURE

Open Space, Amenities, Facilities, Recreation and Education

ENHANCE CODRINGTON AS THE CULTURAL HEART

Promote the cultural significance and tourism potential of Barbuda's wild donkeys by ensuring their well-being and responsible management, contributing to our local culture and tourism economy.

PROMOTE LIFELONG LEARNING AND COLLABORATION

Create a hub that links schools and learning spaces, promoting lifelong learning and interdisciplinary education with shared facilities. This collaborative environment encourages innovation, economic growth, resource efficiency, and a strong sense of community, providing flexible learning opportunities for all age groups.

A GROWING COMMUNITY

Island Agriculture could include a system of homesteads, urban farms, public productive landscaping and marine aquaculture. Specialised products could also include high technology techniques of hydroponics and containerized farming.

REVITALIZE THE RIVER DOCK

Explore opportunities to revitalize the River Dock to improve transportation and trade connections with the mainland. Consider shelter structures and storage facilities to enhance its functionality.

ESTABLISH A MUSEUM, PUBLIC LIBRARY, ARTS CENTRE

Preserve and showcase Barbuda's rich history and culture in a physical space. These institutions can serve as educational resources and cultural hubs for residents and visitors alike.

DEVELOP SPORTS AND RECREATION FACILITIES

Repair and upgrade the Sports Complex to provide a safe and functional space for sports and community events. Promote physical activity and community engagement through sports and recreation programs.

SUPPORT LOCAL BUSINESSES

Create a conducive environment for local businesses by providing commercial spaces and improving access to banking facilities. Develop a central business district to promote economic activity.

DEVELOPMENT PLAN

Designations

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

KNOWN LEASEHOLDINGS

HISTORIC AREA

Listed Buildings

Historic Conservation Areas

COMPACT SETTLEMENT

Supporting infill / brown-field development where possible

Targeting 10-20 du/acre

FUTURE GROWTH AREA

Once existing settlement areas are at capacity and need has been identified, these areas may be made available for development. This is provided that there is investment in essential infrastructure, the establishment of resilience measures, and the carrying capacity of island is not exceeded.

INDUSTRIAL USES

Transport, Manufacturing, Waste, Energy Infrastructure

SUSTAINABLE RURAL SETTLEMENT - AGRICULTURE / NURSERIES

Large Lot - 0 to 1 du/acre

COMMON LANDS ENVIRONMENTAL RESOURCE AREAS

Protection of environment, including watershed, ecology and biodiversity, as well as cultural traditions, including hunting lands and camping and communal land.

AGRICULTURE ENVIRONMENTAL RESOURCE AREAS

Protection of prime agricultural lands and watershed.

FLOOD RISK FROM EXTREME WEATHER CONDITIONS

Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

ECO-TONES / GREEN INFRASTRUCTURE ENHANCED GREENING

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

Provide green routes that connect to coastlines include parking, pubic facilities and alternative transportation modalities (bikes, electric tram, etc.)

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RIDGE TO REEF CORRIDORS DEFINING VILLAGES / CREATING ECOLOGICAL CORRIDORS

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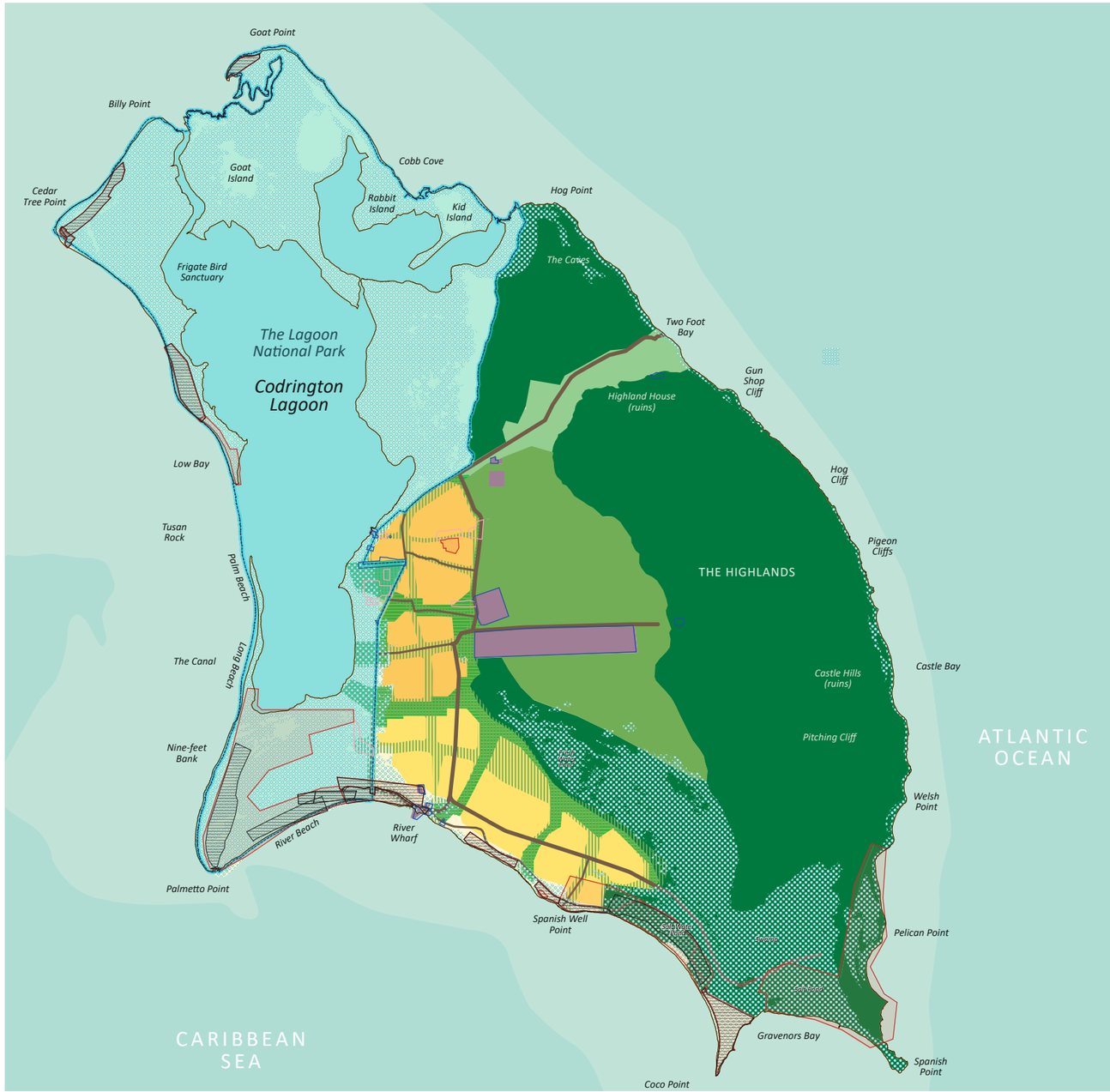


DEVELOPMENT PLAN

Designations

River Road

SUPPORT INFILL DEVELOPMENT

Encourage the responsible and sustainable utilization of existing urban areas to accommodate growth and development while preserving the island's natural environment and cultural heritage.

ESTABLISH HISTORIC NEIGHBOURHOODS

Improve historic neighbourhoods as an element of living heritage in Codrington; recognise housing density and walkable streets as a precedent for future development.

Older neighbourhoods support walking and a mix of uses

Larger lots, further from centre lead to increased car dependance and higher infrastructure costs

PROMOTE COMPACT, EFFICIENT GROWTH

Embrace smart growth principles, which prioritize sustainability, resource efficiency, and community livability. This includes minimizing urban sprawl and conserving natural resources.

SHORT TERM APPROACH

Encourage infill and brownfield sites first

BARBUDA TODAY

Newer neighbourhoods further apart on larger lots

INADEQUATE INFRASTRUCTURE

Homes further apart are more expensive to provide adequate roads and services

POOR SERVICES

Harder to provide robust electricity, water, phone network, emergency services

POOR ROADS

More road to build and maintain. Note that roads need to significant investment every 25-30 years

INCREASED CAR DEPENDENCY

Further distances to shops and services makes car ownership more necessary

'STRONG' BARBUDA

Need for policy and land use planning supporting efficient development on already serviced land

SUSTAINABLE MOVEMENT

Micro mobility / public transport become more viable

ACTIVE STREETS

More vibrant mix of uses and active streets with more people in the local area, businesses benefit

EFFICIENT INFRASTRUCTURE

Homes closer together requires fewer roads and less infrastructure and therefore lower costs and better maintenance standard.

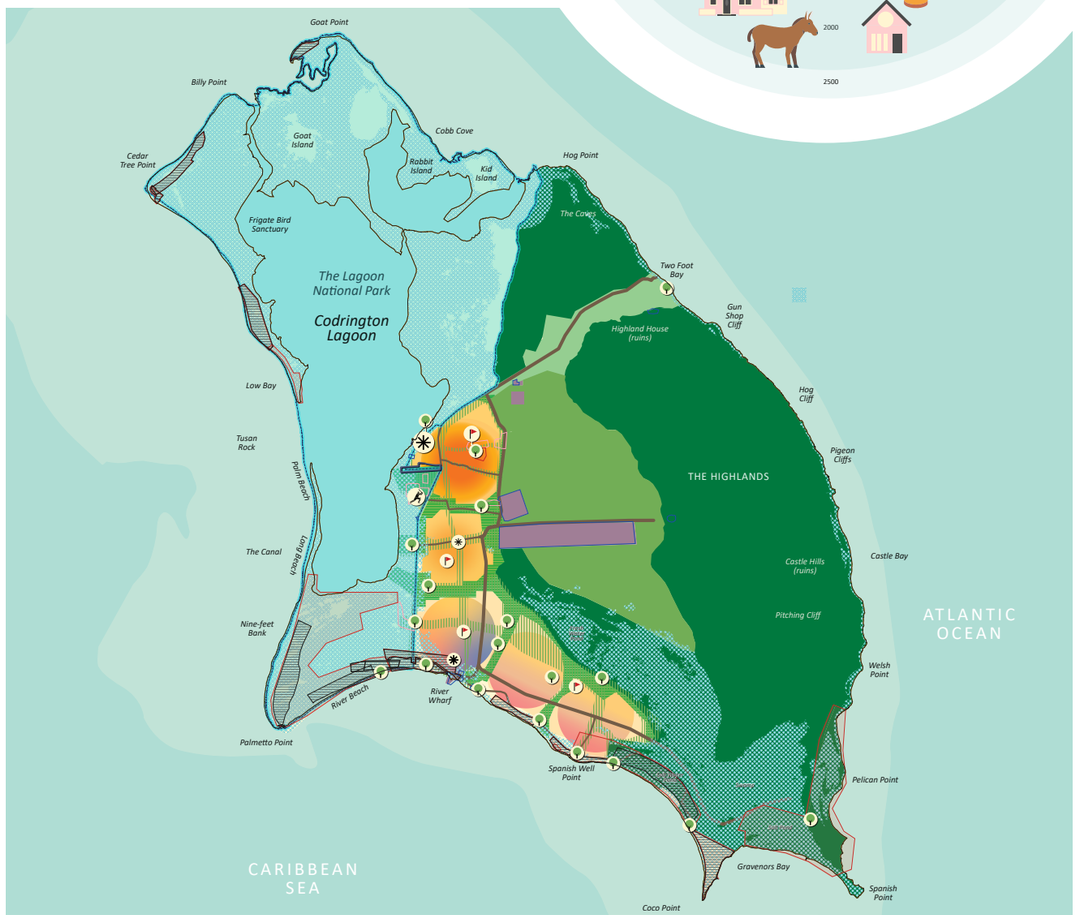
HOUSING DIVERSITY

Denser housing types such as apartments / townhomes allow for better use of land. Consider infill property for rental income.

LONG TERM PLANNING

Establish walkable, mixed use neighbourhoods as an objective for long term growth

Defining 15-minute neighbourhoods in Barbuda's future development policy offers numerous benefits. It enhances residents' quality of life by reducing the need for long commutes, promotes sustainable movement, stimulates local economic growth, preserves natural resources, and fosters community engagement. The potential for five such neighbourhoods presents a unique opportunity for a more sustainable and people-centred development approach.



Long term Planning - The potential for five 15-minute communities in a long term scenario with significant population increase connected by beautiful open spaces, walking and cycling routes

LAND USE / MAJOR SERVICES

Codrington - Draft Local Area Plan

HISTORIC AREA

Establish concept of Living Heritage; Develop guidelines and incentives for preservation. Implement compatible zoning and land use regulations; Upgrade infrastructure while preserving historic character; Create educational opportunities and promote local arts; Establish a fund for ongoing maintenance; Regularly assess the plan's effectiveness.

LISTED BUILDINGS / HISTORIC SITES

- *Wardens House (Old Government House)*
- *The Ginnery*
- *Holy Trinity Church*
- *Walled Wells*
- *Village Wall*
- *Old Bakery*
- *Small-Scale Houses*

POTENTIAL FUTURE REDEVELOPMENT SITE

1. *Holy Trinity School site*
2. *BBQ Former airstrip*
3. *Hanna Thomas Hospital site*

KNOWN DEVELOPMENT AREAS

4. *Wa'omoni Cottages*

SUSTAINABLE RURAL SETTLEMENT
AGRICULTURE / NURSERIES

0 to 1 du/acre - Large Lot

OPEN SPACE

Scope for formal open space including square, playground, gardens

ECO-TONES / GREEN CORRIDORS
PROTECTED NATURE CORRIDORS

Incorporate green spaces, planting, drainage swales where possible along roadways, tracks, trails and alleys.

COMPACT SETTLEMENT

10-20 du/acre

MIXED USE

Support mix of uses and more intense use of space along secondary routes

PUBLIC / QUASI PUBLIC

Includes new airport and waste disposal sites

MIXED USE WITH LIGHT INDUSTRIAL

Non-residential uses suitable for flood risk area

FLOOD RISK AREAS

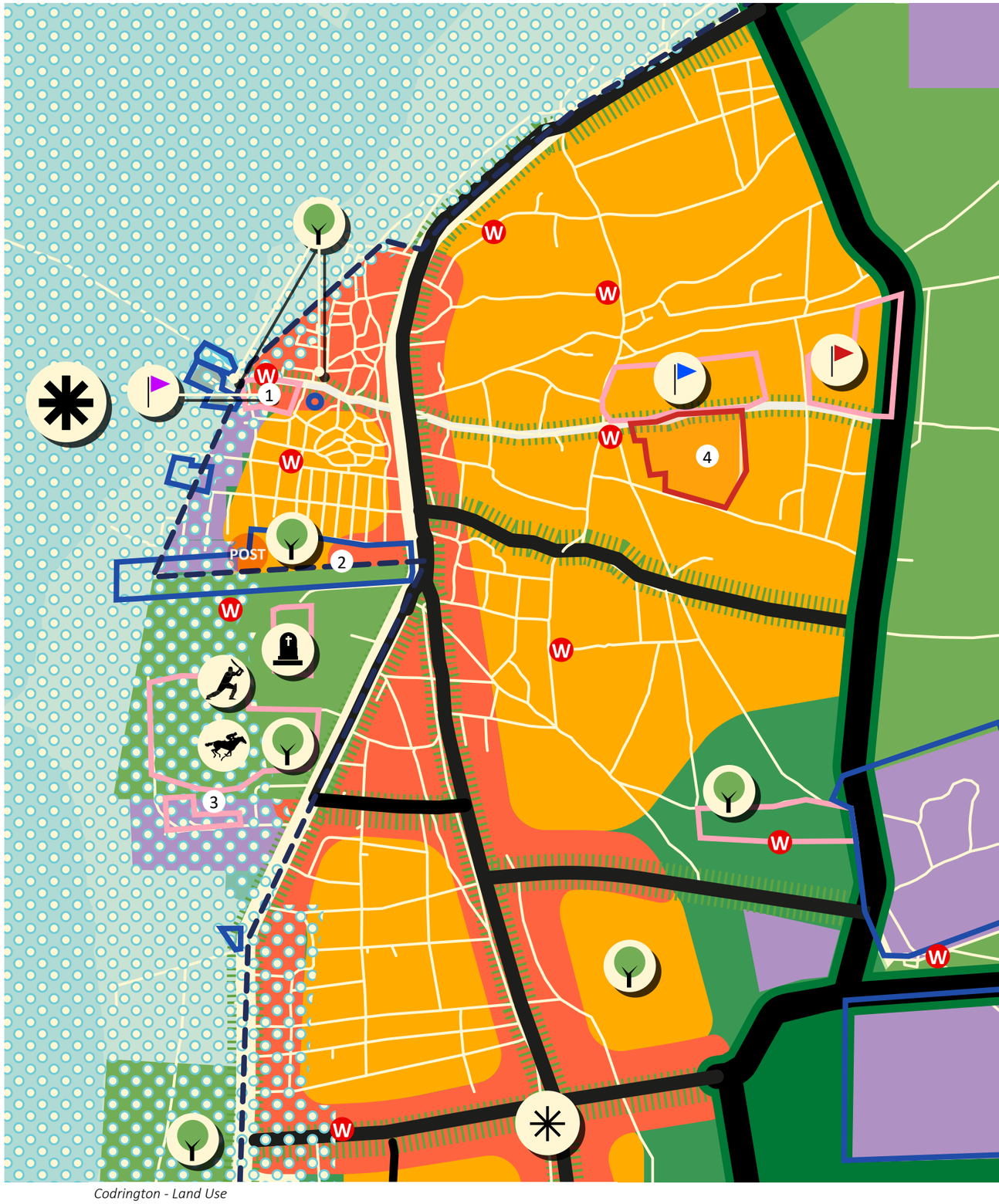
Designate areas at risk to flooding in land use policy and establish regulations for development in these areas.

INFRASTRUCTURE / UTILITY

INSTITUTIONAL

KNOWN DEVELOPMENT AREAS

RAMSAR



Codrington - Land Use

APPEARANCE

Built Form, Character, Heritage, Massing and Height

To celebrate and preserve Barbuda's cultural and architectural heritage.

To incorporate traditional architectural elements and materials into modern designs to maintain a connection to the island's history and culture.

To preserve the Barbudan Residential Vernacular, which is characterized by single-storey concrete dwellings, verandas, raised slabs, hip roofs, specific window and shutter styles, and decorative motifs, it's essential to establish design guidelines that respect and promote this architectural heritage. These guidelines should aim to maintain the cultural identity and resilience of Barbudan architecture while ensuring the safety and longevity of these structures. Here are design guidelines for preserving the Barbudan Residential Vernacular:

Respect the Dominant Style:

- Acknowledge that the modern single-storey concrete dwelling is the dominant Barbudan residential vernacular.
- Encourage the use of locally available materials and technologies in construction.

Prioritize Structural Integrity:

- Emphasize the importance of proper construction techniques, including bracing and reinforcement, to withstand extreme weather events and prevent disrepair.

Verandas:

- Promote the inclusion of verandas in residential designs.
- Encourage both recessed and articulated veranda styles.
- Highlight verandas as spaces for communal gatherings and relaxation.

Raised Slabs & Accentuated Bases:

- Advocate for raised slabs to create sturdy foundations.
- Promote the visual distinction between the base of the wall and the foundation.
- Encourage the use of materials that contrast with the rest of the house for the base.

Hip Roofs:

- Prioritize the use of hip roofs for residential buildings.
- Explain the practical advantages of hip roofs, such as rainwater and debris prevention, ventilation, and wind resistance.
- Allow variations like intersecting hip and hip-and-valley roofs for larger building footprints.
- Use the recommended optimal roof slopes for hurricane resistance (25°-30°) as prescribed in the 'Antigua and Barbuda Building Guidelines.'

Windows & Shutters:

- Maintain the traditional window size of approximately three feet wide by four feet high.
- Encourage the use of single-hung sash windows with mullions and small panes of glass, similar to the historical style.
- Promote the inclusion of painted wooden shutters for privacy, protection, and aesthetics.
- Highlight the importance of operable windows for ventilation and storm protection.

Decorative Motifs & Colour Palettes:

- Encourage the incorporation of decorative motifs in residential architecture.
- Promote the use of decorative blockwork, sprayed concrete patterns, and gradated colors on surfaces.
- Emphasize the cultural significance of decorative motifs in preserving Barbudan identity.
- Establish a colour palette for buildings.

Structural Assessments of Buildings:

- Conduct regular structural assessments of existing buildings to ensure safety and longevity.
- Encourage renovation and preservation of historical structures when feasible.

Local Craftsmanship:

- Support local artisans and builders who can replicate traditional construction techniques and decorative elements.
- Promote the training of new generations in these skills to sustain the Barbudan architectural heritage.

Massing:

- Emphasizes maintaining a harmonious and sustainable height and massing of buildings.
- Establish a general guideline set at two storey max for structures.
- Consider exceptions to allow for additional height will be considered on a case-by-case basis for both public and private developments, ensuring responsible and context-aware construction.
- Focuses on structural resilience to hurricanes and earthquakes, particularly in coastal areas.
- Promote building designs that blend with the island's natural landscape, following land contours and minimizing disruption, especially in ecologically sensitive areas.
- Balance development density to support vibrant communities while preserving open spaces and maintaining a sense of place. Encourages mixed-use developments to reduce transportation needs.

Orientation:

- Where possible encourage the siting of buildings (houses and schools in particular) to take maximum advantage of prevailing breezes.
- Allow for adequate shading of internal spaces, eg. orienting long facades to the north or south which are easier to shade from sun.

Regulatory Framework:

- Establish and enforce building codes and regulations that align with the preservation of Barbudan architectural heritage.
- Encourage developers and builders to adhere to these guidelines through incentives and penalties.
- By implementing these design guidelines, Barbuda can maintain its unique architectural identity while ensuring that its buildings are resilient and safe in the face of extreme weather events and modern construction challenges.

LOT SIZE / DENSITY

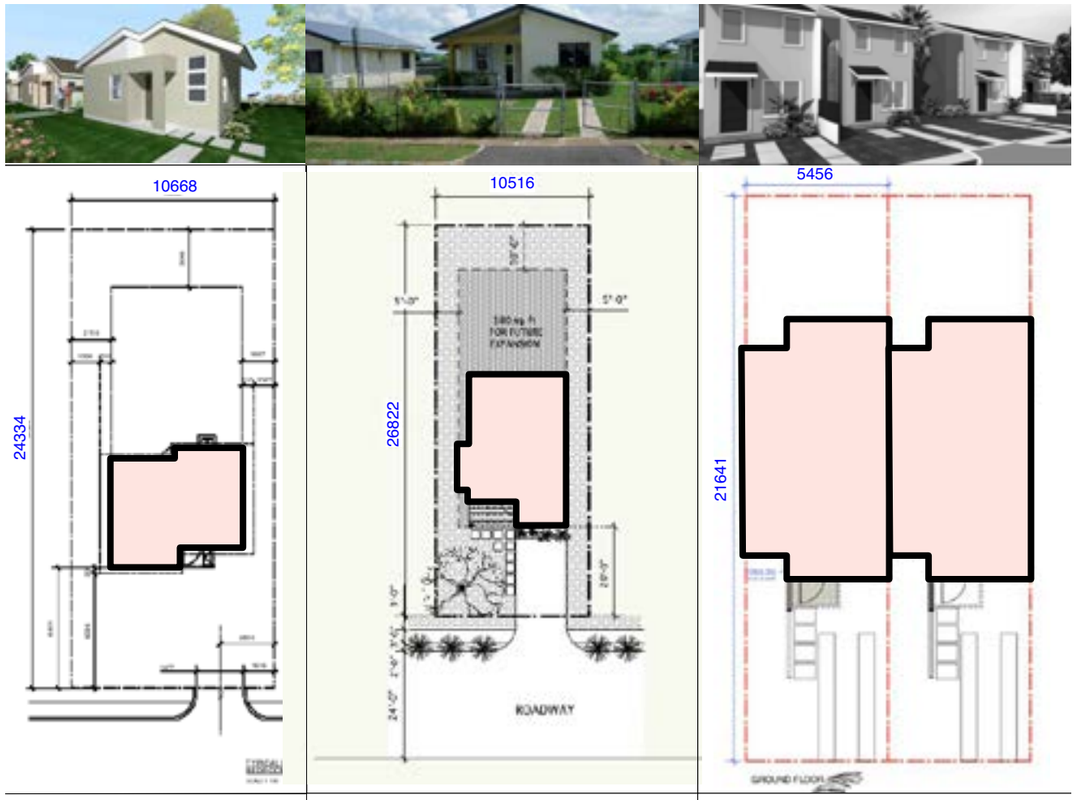
Land use and Designations

COMPACT SETTLEMENT

10-20 homes/acre

Compact development (10-20 homes/ acre) in Barbuda offers numerous benefits. It optimises land use, allowing for more efficient, walkable and sustainable communities.

This approach fosters a sense of community by bringing residents closer together and promoting social interactions. Additionally, compact development reduces the need for extensive infrastructure, cutting costs and environmental impact. It also encourages walking and cycling, contributing to healthier lifestyles and reducing the reliance on automobiles. Overall, compact development in Barbuda not only maximizes land efficiency but also enhances the island's social cohesion, environmental sustainability, and residents' well-being.



STARTER UNIT 35sq.m. with Expansion: 99sq.m. LOT AREA : 0.06 acre	TWO BED. UNIT 60 sq.m. with Expansion: 114 sq.m. LOT AREA : 0.07 acre	TWO BED. TOWNHSE. UNIT : 102 sq.m. LOT AREA : 0.03 acre

ARCHITECTURAL HERITAGE

Restoring damaged historic buildings serves multiple valuable purposes. It preserves cultural heritage, fosters local pride and identity, attracts tourists, and bolsters local economies. Restoration showcases unique craftsmanship and architectural styles, making these structures relevant for contemporary needs and educational purposes.

Understanding the historical significance of these buildings underscores their cultural and economic importance, garnering support from various sources. The Climate Heritage Network, partially funded by UNESCO, provides invaluable guidance and collaboration opportunities in climate and heritage preservation. This network, now including major international heritage agencies like Historic England, Cadw, and Historic Scotland, offers vital resources for preserving cultural heritage in remote communities.

Furthermore, communities with heritage buildings can empower themselves through collaborative initiatives, such as a heritage 'airbnb' concept. Doh Eain's Heritage Homes program is a notable example of this approach, uniting community members to offer unique heritage experiences. Led by Dutch entrepreneur and conservationist Emilie Roell, Doh Eain's impact extends across several countries.

While recognising the cultural and historical value of heritage buildings, it's crucial to explore innovative and sustainable development approaches. Yasmeen Lari's self-build ethos, while not hurricane-resistant like traditional Barbuda architecture, offers intriguing possibilities for the future development of the region.

The Ginnery, constructed around 1906, utilised stones salvaged from the castle in its building materials.

Holy Trinity Church

Wardens House (photo 2021) dates from 1694 and was built as the residence of the island 'Wardens'

REPURPOSED RUINS

Select "hurricane ruins" can be re-purposed as a system of green park systems transecting developed lands and could allow for urban forestry, urban farming, social gathering and commerce.

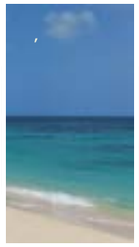
Northwest - DeSuza Street and Well Street

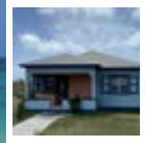
COLOUR PALLET

Establishing a standard paint palette for buildings on the island of Barbuda holds immense value. It enhances visual harmony, preserves cultural identity, and promotes sustainable construction practices. A unified palette contributes to the island's unique charm while fostering a sense of community pride and long-term resilience.

SAND

SEA & SKY





ACCENT

BASE

Bases are typically colours thath are pastles or have white as a base which fare better in intense sunlight. Bright colours used to accent small surfaced like trims, frames, gates, shutters & patterned motifs, especially when shaded.

VEGETATION

ROCK & EARTH

PLANT PALLET

Creating a recommended plant pallet for the island of Barbuda contributes to both its environmental sustainability and the overall well-being of the community.

Establishing a plant palette enables us to select and cultivate plant species that are well-suited to the island's unique climate, soil conditions, and ecosystem. This ensures that the flora not only thrives but also contributes to the preservation of local biodiversity. By planting native or adaptive species, we can reduce the risk of invasive plants and help restore the island's natural balance.

Additionally, a recommended plant palette can have a positive impact on the island's aesthetics and cultural identity. Carefully selected plants can enhance public spaces, beautify neighbourhoods, and celebrate Barbuda's natural heritage. The incorporation of native plants into urban landscaping can also foster a deeper connection between residents and their environment.

Furthermore, from an economic perspective, a well-thought-out plant palette can support local nurseries and create opportunities for horticultural education and entrepreneurship. By promoting sustainable landscaping practices, we can also reduce long-term maintenance costs and water consumption.

Developing a recommended plant palette for Barbuda is not merely a horticultural endeavour; it's a holistic approach to enhance the island's ecological resilience, cultural vibrancy, and economic vitality. It embodies the spirit of sustainable development, where nature and community thrive in harmony.

Appendix B presents a plant palette expertly produced by Kevel Lindsay of Wild Caribbean, Inc., and features in 'Landscaping Plants for Homes, Gardens and Development Projects - Barbuda: Recommendations for Improving Landscapes, Conservation, and Local Ecology' in August 27, 2023.

Sea Grape / Cocoloba uvifera

Seaside Pusley / Portulaca

Cordia Tree / Cordia sebestena

Seaside Mahoe / Thespesia

Seaside Mahoe / Thespesia populnea

Flamboyant Tree / Delonix regia

Tamarind Tree /*Tamarindus Indica*

Neem Tree /*Azadirachta indica*

Hog Plum Tree / *Spondias mombin*

STRATEGIES FOR FUTURE BARBUDA

1
CODRINGTON - A NATURAL 15 MINUTE NEIGHBOURHOOD

Shaping resilient and sustainable community

- Enhancing liveability by shaping effect
- Improving accessibility and connecting Barbuda
- Creating a corridor for activity
- Efficient use of land and resource

2
CODRINGTON CENTRE

The Cultural and Community Centre

- Focusing on from Codrington Lagoon/ Fisheries to Madison Square
- Cultural and community centre
- Foster economic development and livelihood with better support for businesses and improving services at fisheries
- Providing a recognizable Centre for governance for Barbuda
- Creating space for all ages, genders and backgrounds to meet and collaborate

3
RE-IMAGING RIVER ROAD

A corridor connecting communities

- Enhancing liveability by supporting sustainable movement (walking, cycling, micro-mobility)
- Improving accessibility for all and better connecting Barbuda
- Creating a corridor for activity that supports prosperity in the community

4
RIVER DOCK

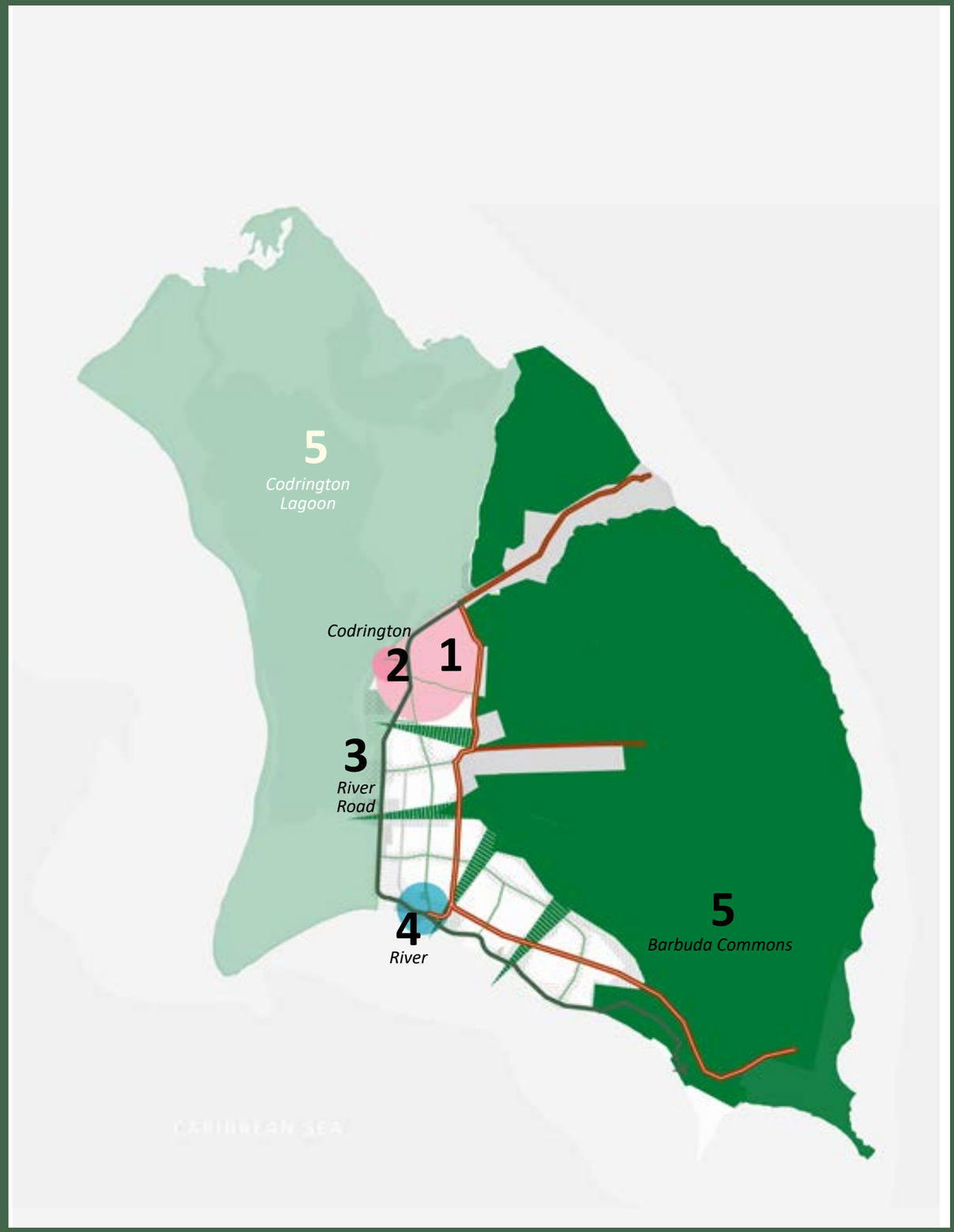
Planning for prosperity

- Foster economic development and livelihood
- Create point for arrival and orientation
- Communicate sense of place
- Managing conflicting uses of fisherfolk, port activity and tourism

5
BARBUDA COMMONS

Protecting Barbuda's natural resource

- Foster economic development and livelihood
- Maintain and enhance ecosystem integrity
- Continue communal ethos on Barbuda with the management of the 'Barbuda Commons'



CODRINGTON: A NATURAL 15 MINUTE NEIGHBOURHOOD

1

Shaping resilient and sustainable community

Codrington's historical essence as a 15-minute neighbourhood.

Older neighbourhoods, with close-knit streets, fostered community bonds and shaped a well connected community. Low car ownership, communal heritage and organic growth all have been integral to its unique character.

Codrington's local shops and services, dispersed throughout the area, also aligns with this model; businesses are often integrated into homes or appear as pop-up stalls during busy times. River Road epitomizes this decentralized approach but will likely face future conflicts due to traffic and infrastructure limitations.

With newer homes located further from the centre and on larger plots, preserving Codrington's natural 15-minute neighbourhood character is vital. Recognising the value created by compact growth is essential. It reduces environmental impact by minimizing vehicle reliance, promotes resilience, and sustains community ties.

Meanwhile, amenities for tourists are intentionally placed away from the community, striking a harmonious balance between residents and visitors. By continuing this structure, Codrington can ensure a sustainable, community-driven future while honouring its heritage and culture.

Guiding Principles for 15-Minute Neighbourhood

EFFICIENT USE OF LAND & COMPACT SETTLEMENT

Create a plan for each 15-minute neighbourhood with the community. Identify the key features that should be included, such as amenities, services, and green spaces.

Promote sustainable development practices and efficient use of land as a part of Barbuda's character. Promote denser, more robust building typologies that also support renewable energy and greater efficiency.

PRIORITIZE BARBUDAN CULTURE, HEALTH AND HAPPINESS

Invest in public art and cultural events to create a sense of place and identity. Bring people together for celebration and community.

Engage the local community in planning and design. Through public meetings, surveys, or focus groups.

Develop a strategy to reduce car dependency and promote walking, cycling, and public transportation. This includes cycle routes, improving pedestrian infrastructure, and creating car-free zones.

Invest in green infrastructure, including planting, rain gardens, and permeable surfaces. This can reduce storm water runoff and dust, and improve air quality.

ENCOURAGE DIVERSITY, DENSITY AND PROXIMITY - SIMILAR TO HISTORIC NEIGHBOURHOODS IN BARBUDA

Support local businesses to thrive as part of a neighbourhood. Support clustering complementary businesses and understand what amenity, such as a generous pavement for outdoor dining or a visable facade, will help businesses thrive.

Foster an inclusive environment and equity for all community members. This can help create a vibrant atmosphere and attract more people to the area.

Create spaces for social interaction and recreational activities, such as micro-parks, DIY playgrounds, areas for natural play, and community gardens.

CODRINGTON: A NATURAL 15 MINUTE NEIGHBOURHOOD

Shaping resilient and sustainable community

ENHANCING LIVABILITY / SHAPING RESILIENCE

PUBLIC OPEN SPACES

Consider for new public park, civic space or playground in area. Open spaces could also incorporate historic feature, such as wells or ruins.

LIVING STREETS

Streets should include landscape spaces for scenic value, human comfort and to facilitate local commerce and social gathering (Caribbean cultural phenomena of socializing and carrying out commerce on roadways).

OUTDOOR RECREATION

The horse race track, cricket pitch, school grounds should be included in the major open space system.

KNOWLEDGE CLUSTER / JOURNEY

Develop east west walking and cycling route connecting schools and education centres. Provide additional planting, increased safety and environmental health.

GREEN INFRASTRUCTURE

Extend green spaces along all roadways, tracks, trails and alleys and provide park spaces that connect to all coastlines

PROMOTING COMPACT EFFICIENT DEVELOPMENT

OPPORTUNITY SITE
HOLY TRINITY SCHOOL

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coastline.

OPPORTUNITY
BBQ AIRSTRIP

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coastline.

OPPORTUNITY SITE
HANNA THOMAS HOSPITAL

Relocate to more resilient location.

LEASEHOLD SITES

Princes Foundation site

OPPORTUNITY
INFILL DEVELOPMENT

Opportunity for intensification

ANIMAL SANCTUARY - GUAVA SITE

Including pasture, shelter - 60' x 20', equipment storage, dry food storage, corral - 60' & 80' Diameter, Clinic / Lab - 60' x 40', Visitor Centre, storage, solar pump house.

FOSTERING ECONOMIC DEVELOPMENT AND ENGAGING LIVELIHOODS

MARKET SPACE

Create a market place for food, crafts and general items on Barbuda / Stalls for local vendors, Food Court (restaurants, cafés, bars, etc.), Restroom facilities.

FISHERIES COMPLEX

Improve fisheries complex (cold storage, water supply, etc.) and review need for fisher-folk near River Port.

WATER SPORTS CENTRE

Water sports administration outlet, Water sports product sales/rentals (diving glasses, goggles, life jackets, sea shoes, snorkelling gear, etc.)

TEACHERS HOSTEL

Provide space to accommodate visiting teachers and educators.

THE RACE TRACK IMPROVEMENT

Including a covered grandstand, event lawn, a cafe, ticket booth, and an announcer's tower. Additionally adding stables, a paddock, and a horse hose down area for the convenience of participants.

DEVELOPING LIVING HERITAGE

HERITAGE CONSERVATION AREA

Focus on maintaining and enhancing historic areas. Define as focal point for Living Heritage in Barbuda

OPPORTUNITY
HISTORIC BUILDINGS

Re-development of the old airport site could include significant open space amenity and should extend to the coastline to encourage public access to the coast

- *Wardens House (Old Government House)*
- *The Ginnery*
- *Holy Trinity Church*
- *Walled Wells*
- *Old Bakery*
- *Small-Scale Houses*

Historical Sites (Data from Watters et al archaeological structures)

RE-PURPOSED RUINS

Select "hurricane ruins" can be re-purposed as a system of green park systems transecting developed lands and could allow for urban forestry, urban farming, social gathering and commerce.

FLOOD RISK

Avoid building residential at ground floor in flood-risk areas; encourage development in safer locations.

THE CODRINGTON CENTRE

2

The Cultural and Community Centre

Codrington has long served as the heart of Barbuda's culture and community; it now has the opportunity to highlight this richness and develop this into a thriving hub of 'Living Heritage'.

This transformation involves a wide range of dynamic components designed to breathe new life into this beloved landmark and cultivate a strong sense of community pride:

- A centre for food encompassing permanent and pop-up restaurants, cafés, bars, and essential facilities.
- A versatile stage for entertainment purposes, including captivating steel band music, cultural dances, dramatic performances, and a venue for various fundraising events.
- A bustling marketplace comprised of vendor stalls, ideally suited for the sale of agricultural produce, with the flexibility to host flea markets, craft expos, souvenir shops, and special fundraising activities.
- A raised boardwalk for small boats, kayaks, and paddle boats.
- Serving as the epiCentre for water sports administration, this facility will also offer product sales and rentals, including diving equipment, life jackets, sea shoes, snorkeling gear, and more.
- An enhanced wharf shelter with an integrated sitting area, strategically positioned as a launch point to key destinations like the Bird Sanctuary, Palm Beach, and North Beach.
- The future redevelopment and integration of adjacent sites, such as the BBQ airstrip and Holy Trinity Primary School, and
- A commitment to restoring historic landmarks like the Warden's House, the Ginnery, and Holy Trinity Church.

In nurturing the Codrington Centre as a beacon of Living Heritage, we aspire to honour Barbuda's rich cultural tapestry while fostering progress and community unity.

Guiding Principles for the Codrington Centre

PROMOTE EFFICIENT AND EFFECTIVE GOVERNANCE GUIDED BY THE ONE PLANET

Create a focal point for Barbudan culture showcasing Barbudan products and enterprise. Provide more support for local businesses to operate. Including fisher-folk and farmers...

Create public space at Madison for community gathering and activities with an annual series of events.

Provide access to essential services such as training, education, and boat-- services.

EMBRACE CULTURE AS THE FOUNDATION FOR A 'LIVING HERITAGE' EXPERIENCE

Preserve the historic features, materials and scale that lend charm and atmosphere to the Codrington.

Consider potential for Government House to become a cultural centre, museum and art space that shares Barbudan culture and heritage

Incorporate distinctive dynamic elements, such as a market space, into the Fisheries for commerce and culture. Explore incorporating a range of dining and cooking experience.

Create designated open spaces that encourage a variety of social interaction for all ages and genders and support a range of community activities.

STRENGTHEN RESILIENCE TO CLIMATE CHANGE AND NATURAL DISASTERS

Design buildings and infrastructure to withstand flooding, high winds, and other extreme weather events.

Improve drainage systems and introduce green infrastructure to reduce flooding risks.

Incorporate renewable energy sources such as solar or wind power. Guidelines as to how this can seamlessly be incorporated into the built environment also.

THE CODRINGTON CENTRE

The Cultural and Community Centre

Sustainable Water

- EDUCATION
- FOOD GROWING
- NEW MARKET SPACE
- IMPROVING RESILIENCE ADDRESSING FLOOD RISK
- GREEN INFRASTRUCTURE

Local & Sustainable Food

- CENTRAL PARK & PLAYGROUND
- COMMUNITY GARDEN
- RE-PURPOSED RUINS

Land Use & Wildlife

- CELEBRATE HISTORIC BUILDINGS
- LIBRARY / MUSEUM
- WALKING MUSEUM
  INFORMATION BOARDS / AUDIO TOUR
- LIVING HERITAGE
- HISTORIC AIR BNB

Culture & Community

- INFORMATION CENTRE
- PRIORITISE NEEDS FOR FISHER-FOLK COMMUNITY - E.G.. COLD STORAGE AND PROCESSING
- CONTINUING EDUCATION TO ENABLE UP-SKILLING

Equity & Local Economy

Health & Happiness

- SOCIAL SPACES FOR ALL AGES
- COMPLETE SPORTS COMPLEX
- GYM AND OTHER AMENITIES
- PROMOTING SUSTAINABLE MOVEMENT
  RIVER ROAD AND KNOWLEDGE ROUTE

Sustainable Transport

- CYCLE PARKING
- BIKE SHOP / REPAIR
- TREE PLANTING
- PLANTING TO REDUCE DUST

Zero Carbon

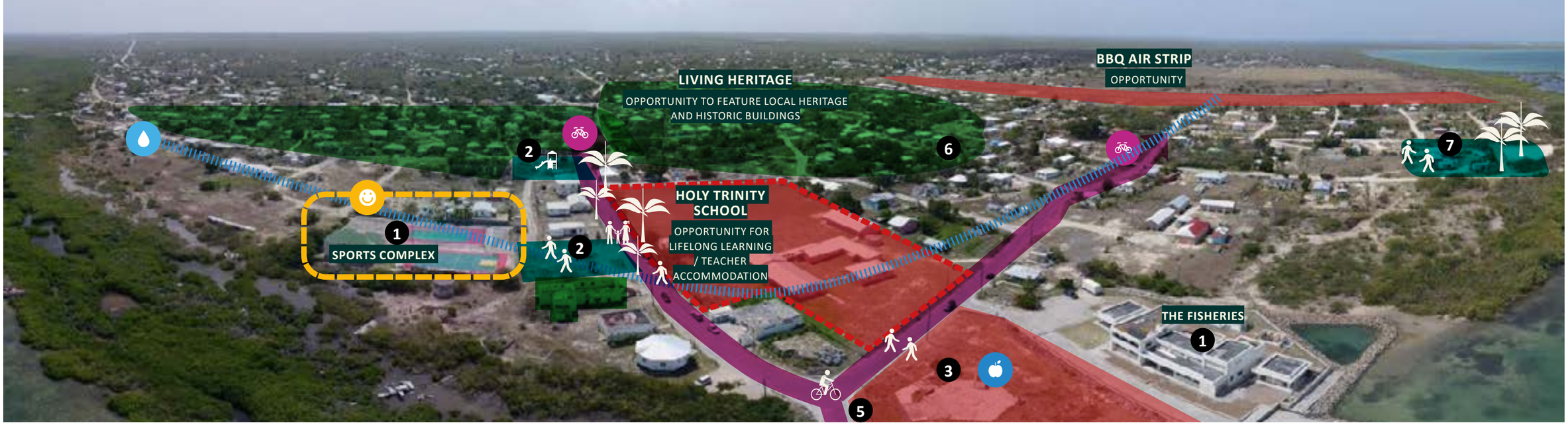
- SOLAR FARM EXPANSION
- MICRO GENERATION

Sustainable Materials

- SWAP SHOP FOR UNWANTED ITEMS
- LIBRARY OF THINGS
- BUILDING CONTROL

Zero Waste

- CENTRAL WASTE SORTING AND RECYCLING
- COMMUNITY COMPOSING



1 IMPROVED FISHERIES AND SPORTS COMPLEX

Improve fisheries complex (cold storage, water supply, etc.) and review need for fisher-folk near River Port.

2 FORMAL PUBLIC PARK

Consider location for new public park, civic space or playground in area. Open spaces could also incorporate historic feature, such as wells or ruins.

3 MARKET SPACE

Create a market place for food, crafts and general items / Stalls for local vendors, Food Court (restaurants, cafés, bars, etc.), Rest room facilities. Vendor stalls for sale of agricultural produce, Optional uses: flee market, craft items, souvenirs, special fund-raising activities etc.

4 BOAT TOUR DEPARTURE POINT

An enhanced wharf shelter with an integrated sitting area, strategically positioned as a launch point to key destinations like the Bird Sanctuary, Palm Beach, and North Beach.

5 WATER SPORTS CENTRE

Water sports administration outlet, Water sports product sales/rentals (diving glasses, goggles, life jackets, sea shoes, snorkelling gear, etc.)

6 RE-PURPOSED RUINS

Select "hurricane ruins" can be re-purposed as a system of green park systems transecting developed lands and could allow for urban forestry, urban farming, social gathering and commerce.

7 COMMUNITY GARDEN

A multifunctional space features a discovery garden, picnic structures, a BBQ area with a capacity of 60, a small playground, a path to water access, a marine garden, educational displays, and an inviting entry pavilion. Offers activities and learning for all ages.

A NEW ISLAND ROAD WITH A REDEFINED RIVER ROAD

3

Connecting Communities

River Road is the spine of Barbuda. It connects the island and accommodates everyday life. With the creation of an new bypass road, River Road has the potential to better connect the communities in Barbuda and promote sustainable movement.

Many islands in the Carribean heavily depend on cars as a primary mode of transportation. Due to the dispersed nature of villages, limited public transportation infrastructure, and the desire for convenience and mobility, many residents and tourists in the Carribean need to rely on expensive and polluting personal vehicles. While some islands have made efforts to improve public transportation and promote sustainable mobility, the car remains a dominant choice for getting around these picturesque but often geographically challenging destinations.

Maintaining roads for vehicles can be considerably expensive, especially in Barbuda. Factors such as harsh weather conditions, wear and tear, and the cost of asphalt contribute to ongoing high maintenance costs. In contrast, supporting sustainable movement options, such as well-developed public transportation, cycling lanes, and pedestrian infrastructure, can be more cost-effective in the long term. Not only do these alternatives reduce road maintenance expenses, but they also promote environmental sustainability, alleviate congestion, and improve the overall quality of life for residents and visitors. Investing in sustainable mobility is an economically prudent and environmentally responsible choice.

Guiding Principles for the Redefined River Road

CONTINUE TRADITIONS ON SUSTAINABLE MOVEMENT IN BARBUDA

Focus on culture: Incorporate public art and design elements that communicate Barbuda's rich culture. Highlight traditions of using horses and donkeys as transport.

Engage the community: Incorporate feedback from local stakeholders and residents to ensure that the design meets the needs of the community..

More intensive uses: Mix of residential, commercial, and public spaces to encourage walking and biking and supporting an active street.

ALLOW FOR A SUSTAINABLE FUTURE PUBLIC TRANSIT, ELECTRIC VEHICLES AND MICRO MOBILITY

Support active transportation: Provide bike lanes and other cycling infrastructure such as bicycle parking, bike-share stations, and servicing locations.

Allow for future public transit / electric micro mobility: Ensure that public transit and micro mobility can be accommodated within design in the future

PROVIDE A SAFE AND COMFORTABLE ROUTES FOR WALKING, CYCLING AND HORSE RIDING

Prioritize pedestrians: Provide sidewalks and other pedestrian amenities such as benches, cross-walks, and public art. Ensure adequate shade and lighting.

Design for safe and comfortable streets: Reduce speed limits to 20 mph or less and use traffic calming measures such as strategic planting and chicanes.

Provide green infrastructure: Plant trees and other vegetation to reduce dust, stormwater runoff and improve air quality. Also explore communal gardens and groves of fruit trees.

A NEW ISLAND ROAD WITH A REDEFINED RIVER ROAD

Connecting communities

A new island road

A New, Resilient Island Road

Strengthening Barbuda's Connectivity

A new, durable road is set to become the main artery on Barbuda, effectively diverting the bulk of traffic away from River Road and villages. This transformation will reposition River Road as a local thoroughfare, emphasising reduced vehicle speeds and prioritising active modes of mobility such as walking and biking.

River Road at Codrington Centre

River Road at Codrington Centre

A Community Corridor

Create a vibrant corridor designed to serve the diverse needs of community from daily events to annual parades. Support a wide range of activities. Promote an active, inclusive atmosphere where residents and visitors alike can come together to celebrate, learn, and connect. Reflect the vitality and diversity of our community.

River Road

River Road

Creating a Tranquil Route Linking Neighbourhoods and Recreation

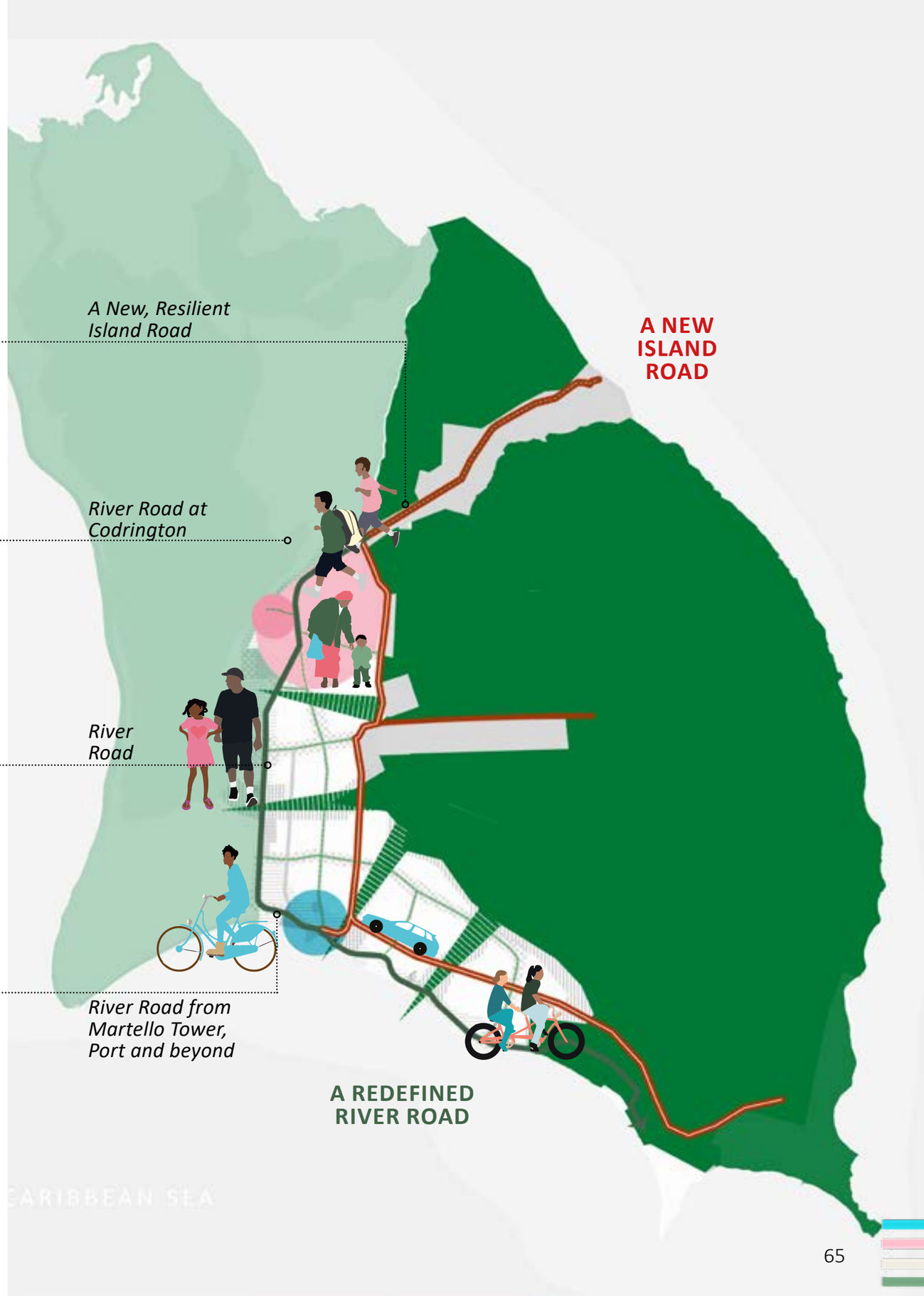
Forging connections between the 15-minute neighbourhoods by establishing a dedicated corridor tailored for walking, cycling, and horse riding. Enhancing safety and security, including the installation of solar lighting. Implement of Sustainable Urban Drainage Systems (SUDs) to mitigate flooding.

River Road from Martello Tower, Port and beyond

River Road from Martello Tower to East

Enhancing Visitor Orientation and Sustainable Travel

Employ clear signage and modern digital navigation tool to simplify exploration for visitors.
Promote safety and sustainable transportation methods through well-planned road layouts, transport hub (electronic micromobility, bike hire, taxi) and strategic design. Preserving Barbuda's unique ecosystem by using native plants and sustainable landscaping practices.



RIVER DOCK

4

Planning for Long Term Prosperity

The transformation of the River Dock area in Barbuda offers an opportunity to establish a thriving secondary Centre. This strategic evolution can be realized by thoughtfully developing the dock vicinity, leveraging its proximity to tourism ventures, and preserving invaluable heritage sites such as the Martello Tower. It is imperative to balance these endeavours with the preservation of essential industrial activities on Barbuda.

By advocating for controlled expansion around the River Dock, forging connections with nearby tourism developments, safeguarding the Martello Tower (River Fort), and accommodating vital industrial functions, we can envision the dock's metamorphosis into a vibrant and multifaceted hub. The potential for this revitalization encompasses a diverse range of elements, including:

- Establishing a transportation hub or station offering car, micromobility, and bicycle rental services.
- Creating space to support small businesses, encompassing restaurants, variety shops, cafés, rental housing, apartments, inns, and more.
- Designating light industrial and commercial lots to accommodate entities like Sandco Ltd., storage facilities, light manufacturing, and other essential activities.
- Supporting resilient design by addressing flood risk and other environmental considerations.
- Integrating the Dulcina Hotel Property.
- Preserving historic treasures like the Martello Tower and Bumpy Well.
- Facilitating residential development in a sustainable and harmonious manner.

This comprehensive vision seeks to revitalize the River Dock area, making it a dynamic and thriving secondary Centre that harmonizes with Codrington's unique character while driving economic growth and preserving the essence of Barbuda's heritage.

Guiding Principles for the Redefined River Road

ESTABLISH AS A GATEWAY AND ORIENTATION POINT FOR ARRIVAL

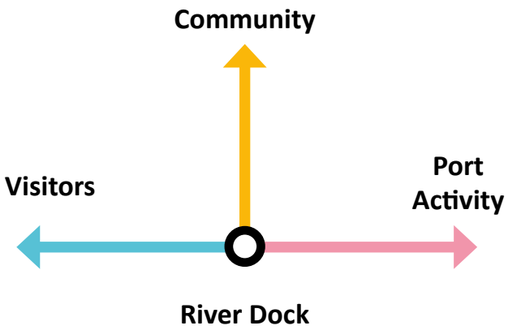
- Create a positive arrival sequence that addresses potential conflict of ferry users and port activity.
- Improve Ferry service to Barbuda will encourage ‘day trips’ from Antigua, while making it easier to access services off island.
- Create a welcoming point of arrival to Barbuda with outdoor seating, landscaping, and shade structures to welcome and orientate visitors.
- Improve availability of taxis, car, micromobility (e-bikes, moped, etc) and cycle hire to help get visitors around the island.

ADDRESS POTENTIAL FUTURE CONFLICTS BETWEEN USES

- Develop a long term strategy for the area
- Respond to overlap between industry, environmental risk, fisher-folk, port activity, heritage, tourism and, potentially in the long term, a new neighbourhood for Barbuda.
- Protect area around the Martello Tower (River Fort) and safeguard views to and from the tower.
- Screen and buffer unsightly light industrial and industrial uses.

NURTURING ECONOMIC GROWTH AND LIVELIHOOD

- Identify land requirements in short, medium and long term.
- Recognize the needs of fisher folk at River Dock - such as the need for enclosures for fishers to land and process catch at Pearl Harbour and River Dock.



RIVER DOCK

Planning for Long Term Prosperity

PLAN FOR PROSPERITY BY NURTURING ECONOMIC GROWTH AND LIVELIHOOD

1

SUPPORTING PROSPERITY FROM PORT

Designating light industrial and commercial sites to accommodate entities like Sandco Ltd., storage facilities, light manufacturing, and other uses allowing Barbuda to add value to products in Barbuda.

FLEXIBILITY TO GROW A NEW LOCAL CENTRE IN THE LONG TERM

Scope for business and residential uses

SUPPORTING MARINE ECONOMY AND FISHER FOLK AT RIVER DOCK

Sufficient ice supply, processing and cold storage

2

PRIMARY ISLAND ROAD

ALTERNATIVE ROUTES FOR PORT TRAFFIC

Promote alternative routes for industrial traffic that minimize their presence near the River Dock, and reduce congestion and emissions in the area.

9

COCONUT GROVE

Create a diverse and productive area for both leisure and agriculture including a coconut palm grove, significant producing trees, and beehives. Site offers tool and vehicle storage, a 400-square-foot office and restroom area, landscape material storage bins, an 80-square-foot chemical storage/pump house and parking.

ESTABLISH AS A GATEWAY AND ORIENTATION POINT FOR ARRIVAL

3

A WELCOMING MIXED USE CENTRE

Creating space to support small businesses, encompassing restaurants, variety shops, cafés, rental housing, apartments, inns, and more.

4

ACCOMMODATING VISITORS

Establish transportation hub offering car, micro-mobility, and bicycle rental services.

PUBLIC OPEN SPACES

Consider for new public park, civic space or playground in area. Open spaces could also incorporate historic feature, such as wells or ruins.

5

PEDESTRIAN / CYCLE ROUTE - RIVER ROAD

Provide an anchor to the River Road recreational route with connection to Port, Martello Tower and the beach. .

ADDRESS POTENTIAL FUTURE CONFLICTS BETWEEN USES

6

MARTELLO TOWER

Develop and enforce regulations that restrict development within a designated buffer zone around the Martello Tower. Seek input and support for the protection and restoration efforts, emphasising its historical importance.

Explore establishing conservation easements to legally safeguard the views surrounding the Martello Tower.

7

BUMPY WELL SITE - PRAIRIE & CORRAL

Create a well-equipped space, featuring a 24' x 40' storage facility and an 80' x 40' shelter for various purposes. Additionally, the site includes main storage, a pump house, and a water tank for essential operations. An inviting entryway and a corral round out the program, providing a practical and functional environment for a variety of activities.

Restrict development around bumpy well - 40m

8

GREEN BUFFER ZONES

Create green buffer zones between the industrial areas and the River Dock. These buffer zones can consist of native vegetation, trees, or wetlands, not only acting as visual screens but also helping mitigate any potential environmental impacts.

ENVIRONMENTAL IMPACT ASSESSMENT

Conduct regular environmental impact assessments of all significant proposals. Ensure any adverse effects on air quality, water quality, or noise pollution are identified and addressed.

FLOOD RISK

Avoid building residential at ground floor in flood-risk areas; encourage development in safer locations.

‘BARBUDA COMMONS’

5

Continuing communal traditions while preserving the essence of Barbuda

Common land designation under Crown land, often known as "common land," is a concept primarily associated with the United Kingdom. Common land refers to areas of land that are owned by the Crown (the government) but are subject to certain rights and privileges granted to the public. These rights are typically related to activities like grazing, gathering firewood, or other forms of common use, and they may have been established for centuries.

Land use within the “Barbuda Commons” should be determined by Barbudans and the communities’ traditions should be maintained. If there is to be tourism entry into the space the activity should be managed by Barbudans. Additional permitted uses outside of the traditional use for camping and hunting will require possible infrastructural improvements. Improvements could include:

- The development of an appropriate Visitors’ Centre.
- Development of trails and trail heads with appropriate signage and information. This aspect can also be managed digitally.
- Built forms should be kept at a minimum to ensure authenticity to the traditional uses of the land and for site preservation.

To ensure the safeguarding of the national resource there will need to be a process to determine the compatibility of adjacent proposed developments to the space to ensure preservation of the “Barbuda Commons”.

Barbudans to decide what level of tourism is permitted in the space as it relates to visitation and carrying capacities. Due to the flat elevations and dense forest cover the visitation by visitors will require local guides to ensure safety. Well managed tourism in the space provides Barbuda with unique and authentic experience to offer the market while providing income to the community and possible resources for site management. Tourism can be imagined as “traditional” visitors, schools, universities, researchers, and specialised nature site visitors.

Guiding Principles for Barbuda Commons

COMMUNITY-LED STEWARDSHIP

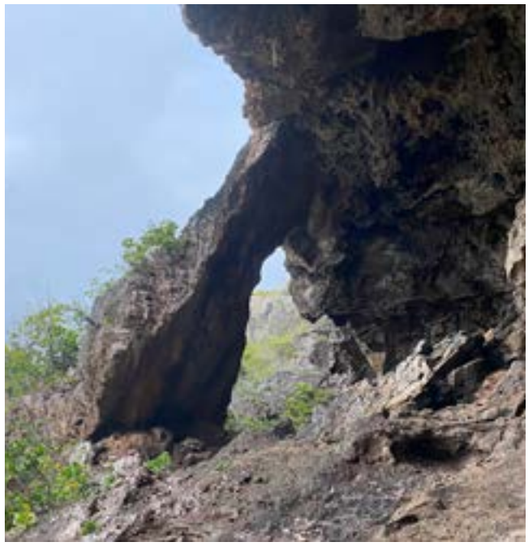
- Decisions regarding land use, tourism activities, and infrastructure should be made collectively by the community to ensure authenticity and cultural continuity.
- Requiring guides for trails, hunting guide, fishing guides required.
- Appointing park rangers to manage and enforce violations.
- Promoting excursions caves, hunting, fishing, farming, Barbuda’s heritage, camping, pre-colonial/ colonial heritage.

ECO-CENTRIC DESIGN - PROTECTING CORE ASSETS FROM ‘RIDGE TO REEF’

- Proritising eco-centric design principles, with minimal built forms to maintain the area's traditional uses and preserve its natural beauty.
- Infrastructure improvements, such as a visitors' Centre, trails, and signage, should blend harmoniously with the landscape and ecosystems.
- Maintaining the tradition of communal management of land from ‘ridge to reef’
- Looking to strengthen protection through policy and active enforcement

SUSTAINABLE TOURISM & CONSERVATION

- Serving as a model for sustainable tourism, focusing on responsible visitor engagement, guided tours, and educational outreach.
- Collaborating with island communities, conservation organisations, and research institutions should be central to its mission, fostering ecological research, conservation, and economic opportunities.
- Utilise One Planet Action Plan to find potential partners to help protect, research, conserve the land, and respect wildlife and nature
- Connecting with universities, research institutions, charities, NGOs
- Establishing carbon offset.



‘BARBUDA COMMONS’

Continuing communal traditions while preserving the essence of Barbuda

The “Barbuda Commons” should be the foundation for a Barbuda national park system. The park system would ensure the conservation of the natural asset for generations of Antiguans and Barbudans. The Barbuda system of National Parks Should be an island wide system of protected areas with a key component being the “Barbuda Commons” conservation area but also to include coastal protection areas, public parks and open spaces, national attractions, and beach and shore access. The Commons would also protect watershed and groundwater sources that are essential for a resilient and sustainable future Barbuda.

SUSTAINABLE TOURISM & CONSERVATION

VIEW POINT / TRAIL HEAD

Well-maintained trails with informative signage to guide visitors through the diverse ecosystems and landscapes of the 'Barbuda Commons.'

1

VISITORS' CENTRE / EDUCATION AND OUTREACH FACILITIES

A welcoming centre providing information, educational resources, and guided tour bookings for visitors interested in exploring the area.

Facilities designed for environmental education and outreach programs, including spaces for schools and local community groups to engage in learning about the environment.

WILDLIFE VIEWING AREAS

Designated spots where visitors can safely observe and appreciate the diverse wildlife that inhabits the 'Barbuda Commons.'

2

ANIMAL SANCTUARY (GUAVA SITE)

Support program to ensure the welfare of animals. This includes a security booth, pastures, a spacious shelter, a service entrance, storage for trailers, trucks, and equipment, dry food storage, guest parking, corrals, a clinic/lab with apartment housing upstairs, a visitor center, multiple storage and shelter spaces, a solar pump house, a water well, and designated dumpster areas for medical and non-medical waste, all integrated into a secure and efficient service yard.

4

RESEARCH STATIONS

Facilities for scientific research and ecological studies, attracting researchers and students interested in studying tropical ecosystems.

MANGROVE ENHANCEMENT

Specific areas dedicated to the restoration and preservation of mangrove ecosystems, crucial for coastal protection and climate change mitigation.

COMMUNITY-LED STEWARDSHIP

6

BUMPY PRAIRIE & CORRAL-EQUSTRIAN HUB & TRAILHEAD

Establish a Trailhead and Equestrian Hub. Mobilize resources, construct corrals and stables, build trail access points, and hire experienced staff to bring this unique outdoor destination to fruition.

TRADITIONAL CAMPSITES

Designated areas where Barbudans and potentially visitors can experience traditional Barbudan camping practices while enjoying the natural surroundings.

7

COMMUNITY-MANAGED TOURISM HUBS

Centres managed by Barbudans for tourism-related activities, ensuring that local communities benefit from tourism income.

PRE POST

CULTURAL HERITAGE SITES

Preservation and celebration Pre and Post-Columbian sites of cultural heritage, especially as traditional Barbudan sites and structures, to connect visitors with the island's history. Consider network of information posts with QR code link to information.

7

SALT PONDS

Implement eco-friendly salt harvesting, preserving the ecosystem. Develop salt-themed tourism with educational tours. Engage the community in producing specialty salts. Promote Barbuda's specialty salts globally, focusing on sustainability.

ECO-CENTRIC DESIGN - PROTECTING CORE ASSETS FROM ‘RIDGE TO REEF’

ECO-TONES / GREEN INFRASTRUCTURE / NATURAL FLOOD MANAGEMENT

Landscaped corridors designed to connect land preserves, fostering ecological connectivity from the ridges to the reef.

Implement nature-based solutions, such as wetland restoration and afforestation, to absorb excess water and reduce the impact of floods. These measures can also enhance ecosystem health and biodiversity.

C

CAVES

Protected caves within the "Barbuda Commons" for exploration, with guided tours available to educate visitors about their cultural and ecological significance.

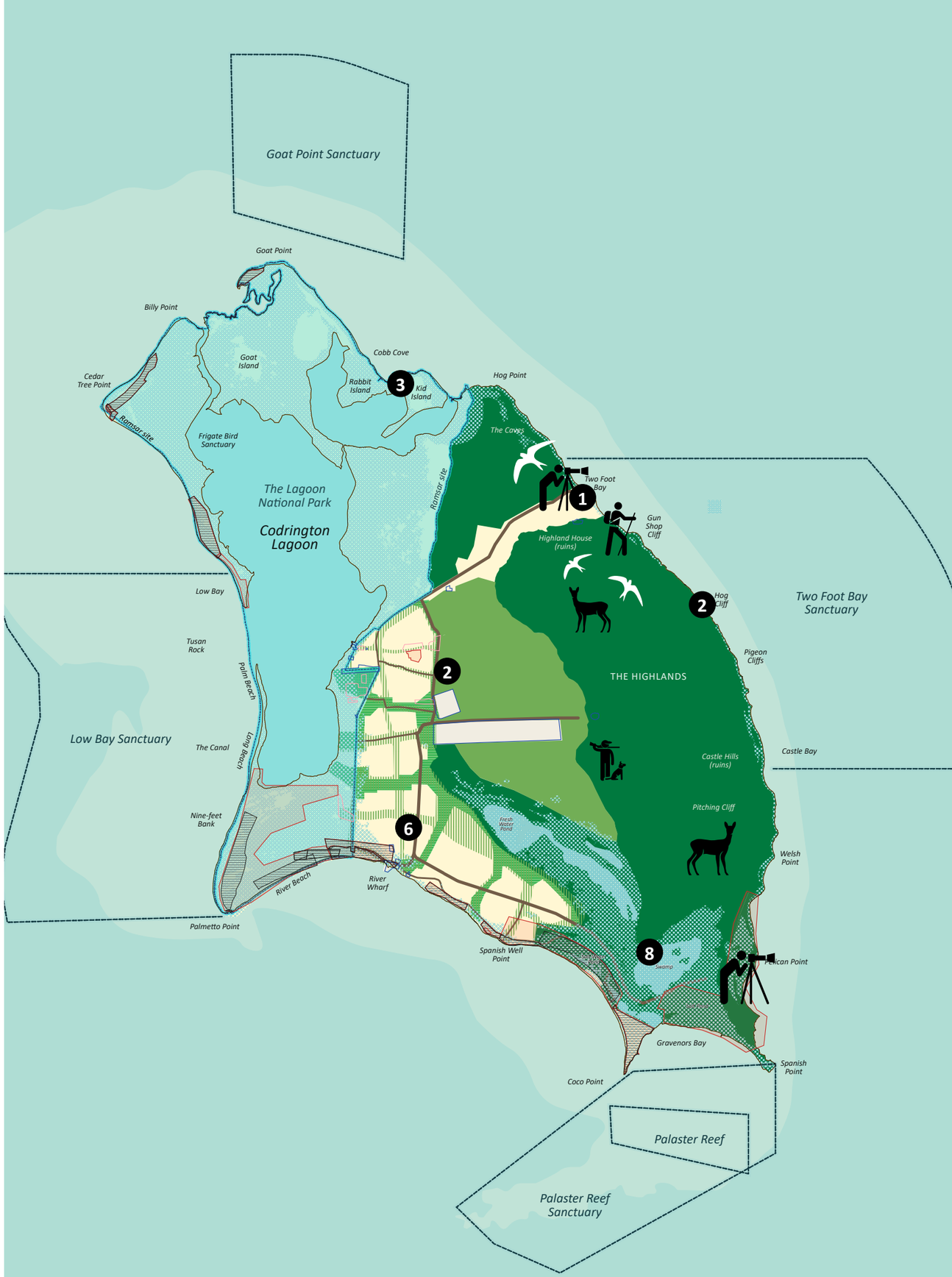
8

DARBY CAVE

Organise guided tours to Darby Cave sink hole during peak visitor season.

HUNTING

Establish a regulated hunting plan in Barbuda, including research, education, licensing, and monitoring. Collaborate with communities, protect habitats, and promote wildlife-based tourism. Regularly review and adapt the plan to ensure sustainable hunting practices and biodiversity preservation.



The Draft Development Plan for Barbuda was developed in consultation with the people of Barbuda, government representatives and other stakeholders. The Plan is based on the information available at the time of preparation and may become outdated. The government should be encouraged to verify and update information as needed. The government retains the final responsibility for decisions based on the plan.

#FutureBarbuda
Draft Development Plan

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Maya Blue Consortium

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#FUTUREBARBUDA

MAYA BLUE