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JANU RESORT

Providenciales, Turks & Caicos Islands

Prepared for

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TABLE OF CONTENTS

1. INTRODUCTION AND OVERVIEW 1-1
1.1 Reference Page 1-1
1.2 Non-Technical Summary 1-2
1.3 Description of the Proposed Development and Its Relationship with Other Development in the Area 1-2
1.4 Aims and Objectives of the Assessment 1-3
1.5 Scope of the EIA and Results of the Scoping Exercise 1-4
1.6 Impact Assessment Methods and Analyses 1-4

2. BASELINE STUDIES 2-1
2.1 Historical Overview of the Site and Existing Development 2-1
2.2 Biological Environmental Baseline Assessment 2-2
2.2.1 Baseline Terrestrial Environment 2-3
2.2.2 Baseline Marine Environment 2-25
2.3 Physical Environmental Baseline Assessment 2-27
2.3.1 Topography of the area, overlaid with terraforming plans 2-28
2.3.2 Bathymetry for site shoreline, any other underwater areas conceivably affected by the project, extending at least 100 meters from the coast and within the entire footprint of proposed project 2-32
2.3.3 Geology 2-32
2.3.4 Hydrology and Hydrogeology 2-33
2.3.5 Sediment analyses, including grain size (beach) and testing for contaminants (if any) 2-33
2.3.6 Climate and Meteorology 2-33
2.4 Baseline Aesthetics 2-35
2.5 Baseline Coastal Processes and Dynamics 2-36
2.5.1 Currents and Tides 2-36
2.5.2 Sediment Transport 2-36
2.5.3 Erosion and Accretion 2-37
2.5.4 Coastal Dynamics 2-37
2.6 Water Quality 2-37
2.7 Socio-Economic Baseline 2-38
2.7.1 Demographic 2-38
2.7.2 Employment: labor & skills demand at construction and operation; local and foreign workers needed 2-38
2.7.3 Safety/Security concerns within the community 2-39

2.8 Other Relevant Parameters Identified During the Scoping Exercise by the Consultants 2-40

3. LEGISLATIVE AND REGULATIVE CONTEXT 3-1
3.1 TCI Development Plan/Master Plan 3-1
3.2 TCI National Physical Development Plan 2020 3-1
3.3 Physical Planning Ordinance and Subsidiary Legislation 3-1
3.4 TCI Development Manual 3-1
3.5 TCI Building Code 3-2
3.6 National Parks Ordinance 3-2
3.7 Coast Protection Ordinance and Subsidiary Legislation 3-2
3.8 Mineral (Exploration and Exploitation) Ordinance and Subsidiary Legislations 3-2
3.9 Marine Pollution Ordinance and Subsidiary Legislation 3-2
3.10 Fisheries Protection Ordinance and Subsidiary Legislations 3-3
3.11 Wild Bird Protection Ordinance 3-3
3.12 International Treaties and Conventions 3-3
3.13 Turks and Caicos Islands Vision 2040 3-3

4. PROJECT DESCRIPTION, CONSTRUCTION AND OPERATION 4-1
4.1 Description of the Proposed Project/Components 4-1
4.2 Project Justification – Socio-Economic and Ecological 4-2
4.3 Coastal/beach Development and Management (including beach access along southern boundary of site) 4-2
4.4 Methods and Changes to Topography for Terraforming (construction of lake and islands within) 4-2
4.5 Source and Quality of Fill and other Materials to be used for Terraforming 4-2
4.6 Solid Waste Management During Construction and Operation 4-2
4.7 Surface-run-off Management (storm water runoff and treatment; watershed into and from lake and to sea) 4-2
4.8 Traffic Flow and Safety 4-3
4.9 Water and Electrical Demand and Source (construction and operations) 4-3
4.10 Landscaping: Initial Phase, Operation, and Maintenance 4-4
4.11 Construction Phase Activities 4-4
4.11.1 Construction Methods and Program 4-4
4.11.2 Site Security and Hoarding 4-5
4.11.3 Sources of Fill and Rock 4-5
4.11.4 Storage and Maintenance of Materials and Equipment 4-5
4.11.5 Beach Traffic Impact and Safety 4-7
4.11.6 Temporary Sanitary Facilities 4-8

4.11.7 Access and Staging 4-8
4.11.8 Solid Waste Management 4-8
4.11.9 Liquid Waste Management 4-8
4.11.10 Control Storage of Fuels and other Dangerous Substances 4-8
4.11.11 Emergency Mitigation Plan 4-9
4.12 Socio-Economic Baseline 4-12
4.12.1 Demographic 4-12
4.12.2 Employment 4-12
4.12.3 Safety/Security Concerns within the Community (construction and operation) 4-13
4.12.4 Issues Raised in the Public Consultation (written and verbal/oral concerns) 4-13
4.13 Impact to Terrain 4-13
4.14 Potential Alternatives (Including changes to avoid disturbance of vulnerable specimens of *Consolea* cf. *nashii* on property) 4-13

5. IMPACT ASSESSMENT 5-1
5.1 Impact Identification 5-1
5.2 Description of Impact: 5-1
5.2.1 Potential Impacts to the Biotic Environment 5-1
5.2.2 Potential Impacts to the Coastal and Dune Environments and Processes 5-4
5.2.3 Potential Impact of Added Lighting 5-4
5.2.4 Potential Impact to any Species identified as endemic, near-endemic, rare, threatened, or endangered (by either IUCN or CITES listing 5-4
5.2.5 Potential Impact to Geological Environment 5-4
5.2.6 Potential Impacts to the Aesthetic and other Built Environment 5-5
5.2.7 Water Quality and Noise Pollution (construction and operation) 5-5
5.2.8 Ecosystem and Economic Analyses (may summarize above; valuation is needed) 5-5
5.2.9 Socio-Economic Impact 5-5
5.3 Impact Assessment (including the cumulative impact of all existing and proposed structures in the study area 5-6

6. MITIGATION AND MONITORING 6-1
6.1 Proposed Actions and Schedule to Mitigate Against any Environmental Impact (including proposed monitoring activities) 6-1
6.1.1 Impacts to Terrestrial and Marine Life (displacement) 6-2
6.1.2 Impacts to Water Quality 6-2
6.1.3 Impacts of Noise, Light, and Air Emissions 6-2

6.1.4 Impacts of Incursion of Invasive Species of Flora and Fauna 6-2
6.1.5 Impacts to Resettled Wildlife (e.g. bird nesting causing hazards to property or people) 6-2
6.2 Proposed Actions to Mitigate Against Noise Pollution 6-2
6.3 Storm Surge Analysis and Mitigation Plan for Sea Level Rise 6-3
6.4 Building around, or rescue and removal of rare, threatened, and endangered species of plants where possible 6-3
6.4.1 Plan for avoidance or expert relocation of vulnerable specimens of *Consolea* cf. *nashii* including DECR supervision 6-3
6.5 Landscaping/Replanting Plan Utilizing Native Species (list all landscaping species; identify what will be imported versus sourced from within TCI) 6-4
6.6 Proposed Techniques and Models to Mitigate Against Light Pollution (including impacts to nesting sea turtles and migratory birds) 6-4
6.7 Proposed Climate Change Mitigation 6-4
6.8 Financial Resources for Mitigation 6-5
6.9 Environmental Monitoring and Financial Requirements 6-5
6.10 Public Consultation/Social Listening/Monitoring 6-5
6.11 An Environmental Monitoring and Management Plan (EMP) must be prepared with the following minimum components: 6-5
6.11.1 Summary of the Potential Impacts of the Proposal 6-8
6.11.2 Description of the Recommended Mitigation Measures 6-9
6.11.3 Statement of their Compliance with Relevant Standards 6-9
6.11.4 Allocation of Resources and Responsibilities for Plan Implementation 6-9
6.11.5 Schedule of the Actions to be Taken, Covering all Factors of the EMP 6-9
6.11.6 Programme for Surveillance, Monitoring and Auditing (covering all factors as noted in the EMP) 6-9
6.11.7 Programme for Control of Invasive Species of Flora and Fauna on the Property 6-9
6.11.8 Programme for Protection, Avoidance, or Expert Relocation of Vulnerable Specimens of *Consolea* cf. *nashii* 6-9
6.11.9 Contingency Plan when Impacts are Greater than Expected (covering all factors as noted in the EMP) 6-9

7. RECOMMENDATIONS AND CONCLUSIONS 7-1
7.1 The Environmental Impact Assessment Shall Include: 7-1
7.1.1 A summary of Key Impacts Identified and their Significance 7-1
7.1.2 A statement on the Overall Environmental Acceptability of the Proposed Activity 7-1
7.1.3 A Summary of Key Mitigation and Monitoring Measures 7-1

7.2 Statement of Understanding of Terms of Environment Charter 2001 7-1
7.3 Statement of Understanding of Terms of Climate Change Charter 2022 7-1
7.4 Applicant's Declaration of Intent to guide the development by the recommendations of the EIA consultant, with updated Declaration following response to public or TCIG commentary requesting or requiring alterations to any part of the EIA..... 7-2

8. REFERENCES 8-1

LIST OF APPENDICES

Appendix A: The Terms of Reference (ToR)
Appendix B: Qualifications of the EIA team of experts
Appendix C: Government Permits
Appendix D: Time Series Visualization of Project Site and Shoreline
Appendix E: The Schedules
Appendix F: IUCN Red List TCI Species Highlighted
Appendix G: Terrestrial and Marine Species List and Plants in Plots
Appendix H: Index of CITES Species
Appendix I: Project Drawings
Appendix J: Representative Photos
Appendix K: Water Analysis
Appendix L: Socio-Economic Justification
Appendix M: Heavy Equipment Protocol
Appendix N: Certifications (Applicant and Owner)
Appendix O: Public Meetings (to be added after public consultation)

LIST OF TABLES

Table 4-1. Water and Wastewater Capacity 4-3
Table 4-2. Electrical Demand 4-4
Table 5-1. Direct Impacts to Landside and Marine Communities..... 5-2
Table 6-1. Environmental Management Plan 6-6

LIST OF FIGURES

Figure 1-1. Proposed Location relative to Neighbouring Development 1-3
Figure 2-1. Location Map 2-2
Figure 2-2. Proposed Vegetation Plot Locations 2-5
Figure 2-3. Proposed and Surveyed Vegetation Plot Locations 2-6
Figure 2-4. Simpson's Diversity Index by Quadrat 2-8
Figure 2-5. Distribution of Simpson Diversity Index 2-8
Figure 2-6. Vegetation Coverage by Quadrat 2-9
Figure 2-7. Habitat Map 2-10
Figure 2-8. Yellow-Crown Night Heron Nest 2-14
Figure 2-9. *Consolea Nashii* Locations Map 2-23
Figure 2-10.Topographic Survey with Grading Plan 2-28
Figure 2-11. Colour Coded Topographic Survey of the Project Site 2-30
Figure 2-12. Average Monthly Temperature 2-33
Figure 2-13. Accumulated Monthly Rainfall 2-34
Figure 2-14. Average Wind Direction 2-35
Figure 2-15. Artist Rendering of the Janu Resort 2-36
Figure 2-16. Projected Resort Operations Staffing at Stabilisation (319 roles) 2-39

LIST OF PHOTOS

Photo 2-1. Representative Coastal Coppice Habitat, February 17, 2026 2-11
Photo 2-2. Representative Buttonwood Forest Habitat, February 17, 2026 2-13
Photo 2-3 Representative Dry Broadleaf Evergreen Scrubland Habitat, February 17, 2026 2-15
Photo 2-4 Representative Dry Broadleaf Evergreen Forest Habitat, February 17, 2026 2-17
Photo 2-5. Wetland, February 17, 2026 2-18
Photo 2-6. Salt Pond with Black Mangroves, February 17, 2026 2-19
Photo 2-7. Shoreline Communities 2-20
Photo 2-8. Cleared Road, February 17, 2026 2-21
Photo 2-9. Yellow Crown Night Heron Nest, August 7, 2026 2-24
Photo 2-10. Marine Environment 2-26
Photo 2-11. Over wash Looking Landward 2-31
Photo 2-12. Over wash Looking Seaward 2-31

ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DBES	Dry Broadleaf Evergreen Scrubland
DDME	Department of Disaster Management and Emergencies
DECR	Department of Environment and Coastal Resources
DoP	Department of Planning
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EVA	Extreme Value Analysis
FSPS	Fiscal and Strategic Policy Statement
ft	foot
ft/s	feet per second
gpd	gallon per day
GPS	Global Positioning System
HAZMAT	Hazardous Materials Management
IUCN	International Union for Conservation of Nature
km	kilometer
m	meter
m/s	meters per second
m^2	square meters
mm	millimeter
mph	miles per hour
MSL	mean sea level
MVA	megavolt-ampere
NPSDP	National Physical Sustainable Development Plan
SDGs	Sustainable Development Goals
SDI	Simpson's Diversity Index
SDS	safety data sheets
SLR	sea level rise
sqft	square feet
sqm	square meter
TCI	Turks & Caicos Islands
ToR	Terms of Reference
yd^2	square yards

1. INTRODUCTION AND OVERVIEW

1.1 Reference Page

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Island and General Location

The study area is located in the Northwest Point, along the western coast of Providenciales, Turks & Caicos Islands.

Submittal Version:

Version 1. Submittal to the Department of Planning: October 2026

1.2 Non-Technical Summary

The proposed Janu Resort development is located on approximately 84.75 acres of coastal land at Northwest Point, Providenciales, Turks & Caicos Islands (TCI), north of Malcolm Road. The project comprises a low-density luxury resort consisting of individual guest pavilions and residential villas totalling 179 guest bedrooms, together with supporting infrastructure, recreational amenities, internal roadways, utilities, and landscaped open spaces. Northwest Point is one of the least developed areas of Providenciales and is characterized by extensive natural vegetation and coastal habitats. The nearest existing development is the Amanyara Resort, located south of Malcolm Road, which similarly follows a low-density development approach.

An Environmental Impact Assessment (EIA) was undertaken to evaluate the potential environmental and social effects associated with the proposed development and to provide information to support the planning and regulatory review process. The primary aim of the assessment was to identify existing environmental conditions within and surrounding the project site; evaluate the potential direct, indirect, and cumulative impacts of the proposed development during both construction and operation; and recommend practical measures to avoid, minimize, or mitigate adverse impacts. The assessment also seeks to ensure that the project is planned and implemented in accordance with the environmental policies, legislation, and sustainable development objectives of the Turks and Caicos Islands.

The scope of the EIA included baseline investigations of the site's terrestrial and, where applicable, coastal environments to characterize existing physical, biological, and ecological conditions. The assessment considered vegetation communities, protected and endemic plant species, wildlife habitats, geology, soils, topography, drainage, surface water resources, landscape character, and other environmental features that could potentially be affected by the proposed development. Potential impacts associated with site preparation, construction activities, and long-term resort operations were evaluated, and appropriate mitigation measures and environmental management recommendations were developed to reduce environmental risks.

1.3 Description of the Proposed Development and Its Relationship with Other Development in the Area

The Janu Resort project has been granted Outline Development Permission, dated 12 June 2026 for the development of parcels 60000/235, 825-836 and 874-898. The Planning Application is registered as PR 18942 for the development of approximately 84.75 acres of land along the western shoreline of Providenciales, in the Northwest Point area of the island.

The proposed Janu Resort development is located at Northwest Point, Providenciales, Turks and Caicos Islands, on approximately 84.75 acres of coastal land situated north of Malcolm Road. The project is planned as a low-density luxury resort comprising individual guest pavilions and residential villas, providing a total of 179 guest bedrooms. The development has been designed to integrate with the natural landscape while providing high-end hospitality and residential accommodations.

Northwest Point remains one of the least developed regions of Providenciales, characterized by extensive natural vegetation, coastal limestone habitats, and relatively undisturbed shoreline

environments. Development within the surrounding area is limited, resulting in a landscape that retains much of its natural character and ecological integrity.

The nearest existing development is Amanyara Resort, an exclusive luxury resort located south of Malcolm Road (Figure 1-1). Similar to the proposed development, Amanyara is a low-density, high-end tourism destination that has been designed to complement the surrounding environment through careful site planning and preservation of natural features. Aside from Amanyara, there are few residential or commercial developments in the immediate vicinity, and the area largely comprises undeveloped land.



Figure 1-1. Proposed Location relative to Neighbouring Development

The proposed Janu Resort is consistent with the existing pattern of development within Northwest Point, where tourism developments have historically emphasized low-density layouts and integration with the surrounding natural environment. Given the limited level of existing development in the area, the project is not expected to contribute to significant urbanization but will instead expand the region's luxury tourism offerings while maintaining the character of the surrounding landscape through appropriate environmental management and mitigation measures

1.4 Aims and Objectives of the Assessment

This EIA was created to ensure that the development, operation, and maintenance of the Janu Resort proceeds with adequate controls that protect the long-term health of the environmental resources of the project site and immediate vicinity. Data were collected to provide a reference for comparison with future data collection following the construction of the proposed project, as well as the long-term condition of the adjacent environment. In particular, the assessment is

focused on the upland terrestrial elements of the development that comprises the Janu Resort and facilities. The adjacent waters were assessed qualitatively to address the potential of secondary unexpected impacts

1.5 Scope of the EIA and Results of the Scoping Exercise

This EIA will address all relevant items discussed in the Terms of Reference (ToR) (Appendix A) for the project with specific attention to *Consolea nashii*, a tree-like cactus endemic to the Lucayan Archipelago. This species was found mainly in the coastal coppice habitat, immediately landward of the dune, however a few individuals were found further landward within the dry broadleaf evergreen scrubland (DBES) habitat. Each individual cactus greater than 1.5 meters (m) was mapped to evaluate potential impacts of the project.

1.6 Impact Assessment Methods and Analyses

In-situ assessments and desktop analyses were carried out for both terrestrial and marine habitats within the proposed project's footprint and the nearby nearshore marine environment. These approaches were selected to collect comprehensive, up-to-date data for establishing the baseline conditions that are currently present within the project area. A clear understanding of current conditions enhances confidence in identifying any environmental changes in the future. Furthermore, this provides a more robust foundation for safeguarding the long-term health of environmental resources.

The terrestrial environment within the site of the Janu Resort was assessed both qualitatively and quantitatively. A systematic sampling approach was taken to analyze the abundance and distribution of the area’s terrestrial flora and fauna species. This sampling method allows for the sampling locations to be at fixed intervals throughout the site. To gather representative data over the large sampling area, an interrupted belt transect assessment was completed through the establishment of 14 transects, oriented roughly east to west, parallel to the existing road, extending landward from the dune. Along these transects, 3-m by 3-m plots were established. The preliminary design for this survey was conducted via desktop analysis to appropriately map out the transect and plot locations. These locations were in-situ validated, which resulted in a total of 43 plots that were thoroughly examined and documented. Species of trees, shrubs, ground cover, vines, epiphytes, and fungi were recorded. The plot assessment included all fauna recorded within the plot as well as nearby. Quantitative analyses were conducted to summarize current vegetation biodiversity and abundance. Qualitative assessments were completed to support the findings of the quantitative analyses.

No construction activity is proposed seaward of the dune line and does not propose any changes to the marine environment (i.e., no docks, piers, boat channels, dredging, etc.). The project implements a 100-foot (ft) setback along the sandy beach and a 60-ft setback where rocky shorelines exist. A qualitative assessment was conducted of the marine environment to collect basic baseline conditions of quality of health and species present. No epibenthic plots were established or analyzed.

Additionally, baseline studies were conducted for the physical environment consisting of summaries for the following features: topography, geology, hydrology, visual aesthetics, water

quality, and climate/meteorology. Baseline water quality testing was conducted to document existing water quality conditions prior to project construction.

2. BASELINE STUDIES

2.1 Historical Overview of the Site and Existing Development

The Turks & Caicos Islands (TCI) are a British Overseas Territory located in the tropical Atlantic Ocean southeast of the Bahamas and north of Hispaniola. The archipelago consists of approximately 40 low-lying limestone islands and cays, of which eight are inhabited. The islands are geographically divided into two groups: the Turks Islands to the east and the Caicos Islands to the west, separated by the deep-water Turks Island Passage.

The Caicos Islands, which include Providenciales, North Caicos, Middle Caicos, South Caicos, Parrot Cay, and Pine Cay, are situated on the Caicos Bank, a broad, shallow carbonate platform characterized by extensive seagrass beds, tidal flats, and fringing coral reefs. In contrast, the Turks Islands (Grand Turk and Salt Cay) are located on a separate, smaller bank (the Turks Bank).

Historically, the islands were utilized for salt production beginning in the 17th century, particularly on Grand Turk and Salt Cay. Modern development has shifted toward tourism, with Providenciales emerging as the primary economic and population center due to its infrastructure, international airport, and resort development.

Providenciales is the most developed island within TCI and serves as a hub of tourism and commerce. Development has largely been concentrated along the northern and northeastern coasts, including Grace Bay and Leeward. The proposed development site for Janu Resort lies along the Northwest Point of Providenciales, Turks and Caicos Islands. Amanyara Resort and Spa is located just south of the proposed Janu Resort site. This area is comparatively undeveloped. Additionally, the Janu Resort site is adjacent to the Northwest Point Marine National Park, a designated conservation area established to protect ecologically significant coastal and marine habitats.

The Northwest Point region of Providenciales has historically remained largely undeveloped relative to other areas of the island. While Amanyara represents a high-end, low-density resort development, the surrounding lands have experienced minimal infrastructure expansion, preserving much of the native vegetation and coastal geomorphology (Figure 2-1).

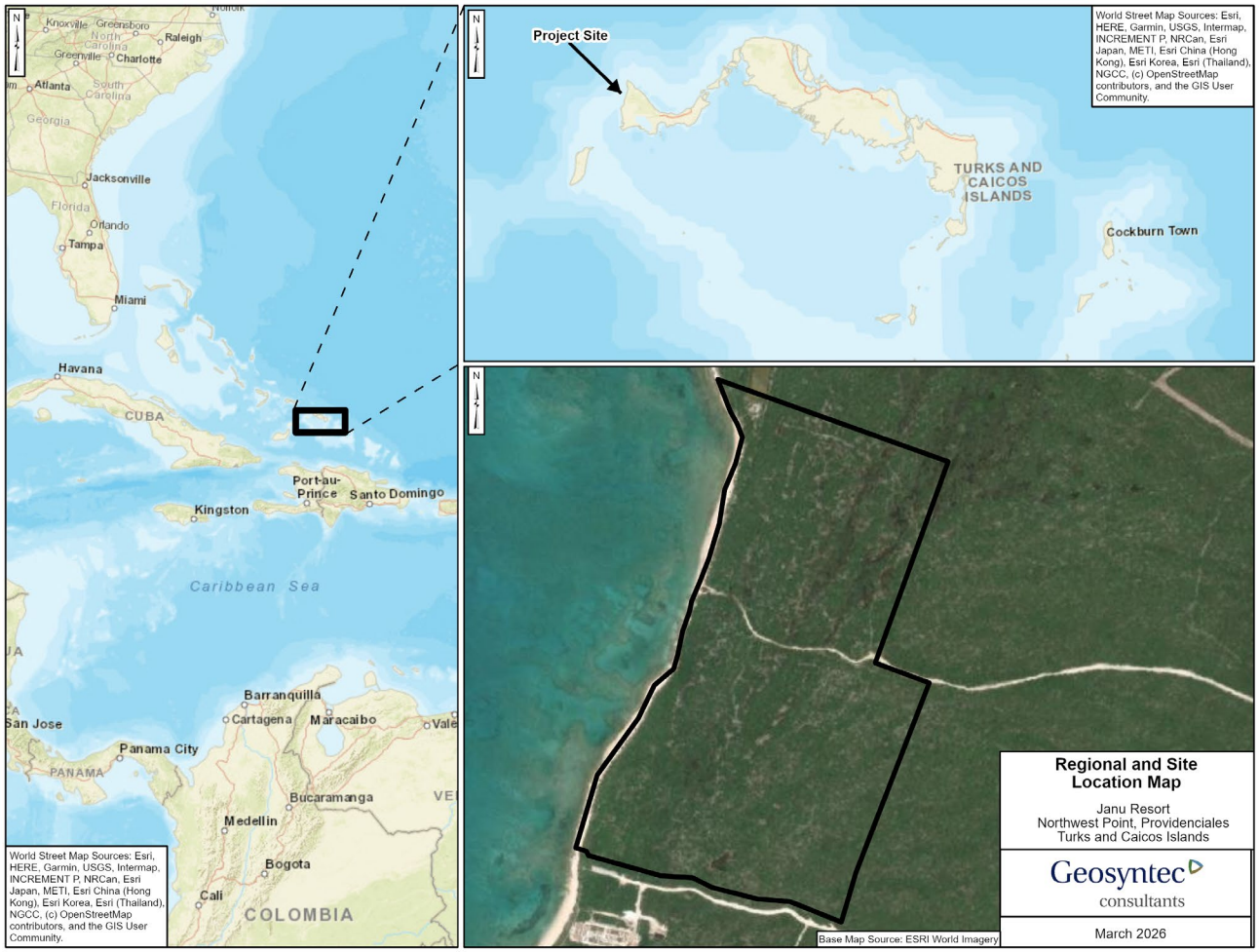


Figure 2-1. Location Map

A look at historical Google Earth imagery for the western shoreline of the proposed site has revealed a stable shoreline largely due to rocky outcroppings along the shoreline and protection from dominant wind and wave action. Time-series images of the shoreline along the project site can be found in Appendix D.

2.2 Biological Environmental Baseline Assessment

Qualitative and quantitative assessments of the terrestrial environment encompassing the area for the proposed project site were undertaken on February 16-24, 2026 and August 3-7, 2026, by Geosyntec Consultants staff with experience with the flora and fauna of the Turks & Caicos Islands. The following assessments were conducted to encompass the baseline environmental study required for this project.

- Quantitative assessment of 43 plots along 14 transects within the total development area. A series of random 3-m by 3-m plots were assessed, documenting all species observed, recording quantity, height, relative health, soil composition, percent cover, fauna observed, and other notable characteristics.

- Qualitative assessment of the site along the transects, between transects, along the dune, and along the roads. A description of the general health of the area and a complete species list of all flora and fauna encountered.
- Qualitative assessment of the marine environment adjacent to the project area. A description of the general health of the environment is provided within the baseline environmental assessment section, and a complete species list of all flora and fauna observed

Literature research was collected to accurately validate and document onsite conditions, including floral/fungal and faunal communities. The literature research involved querying the databases used by the Turks & Caicos Islands Government for information pertinent to the site, including lists of terrestrial and aquatic flora and fauna that are designated as Endangered, Threatened, and/or Endemic. It also included querying protected species lists maintained by international organizations to which Turks & Caicos Islands is a signatory, including the IUCN and CITES.

The primary aim of these assessments is to accurately document floral and fauna communities present on the site and to apply standard scientific principles to assess the qualitative conditions of the property. The results of the field investigation and research will be used to determine the potential environmental impacts of the project. The spatial scope of the assessment area was to include all landside areas and nearshore marine areas of the subject property that could be affected by the proposed project. This scope will help determine the extent of what kind of direct and/or indirect impacts there could be, as well as any short-term or long-term impacts to these environments. Additionally, the full list of terrestrial fauna and flora identified onsite can be found in Appendix G. Whereas the full list of identified marine flora and fauna found onsite can be viewed in Appendix G.

The conditions and species observed within the project area are representative of habitats common throughout the Turks & Caicos Islands. The project is likely to impact the existing general conditions within the project area, however, a landscape plan with extensive native vegetation has been developed. Anthropogenic influence is evident along roads and the shoreline, although habitat functions are still provided in the current conditions.

2.2.1 Baseline Terrestrial Environment

2.2.1.1 Description and quantification of habitats and ecosystems present, including uplands, wetlands, ponds, and vegetative communities.

To analyze the abundance and distribution of the area's terrestrial flora and fauna species, a systematic sampling approach was undertaken. This sampling method allows for the sampling locations to be at fixed intervals throughout the assessment area (Figure 2-2). An interrupted belt transect assessment was completed to gather representative data over the large sampling area. The preliminary design for this survey was conducted via desktop analysis to appropriately map out the transect and plot locations. Fourteen line transects with 2 to 4 plots spaced approximately 50 m apart within the development area were mapped out based on the most recent satellite imagery. Each line transect would alternate with spaced out plots to account for the space in

between. This desktop analysis resulted in a total of 43 plots, and all Global Positioning System (GPS) coordinates were field adjusted during the assessment.

During the day of assessment, the method was to follow the pre-established GPS coordinates to each plot location. However, due to the vegetation density on the sampling site, the exact predetermined locations were not consistently accessible. This led to the establishment of additional plots in the field shown in Figure 2-3. The transects and GPS track lines shown in the figure indicate where the qualitative assessments were made. The track line was recorded using a Garmin GPSMap 79s WW handheld Global Positioning System (GPS) that continuously recorded the field observer's locations while navigating the project site, indicating the area assessed. This method allowed the observers to gather further information to support the quantitative findings along the lines of general ecosystem health and to complete a species list of all flora and fauna of the project site.

The quantitative assessment of the resulting 14 line transects, and 43 plots allowed for parameters to be examined, such as all species observed, recorded species composition within plots, height, relative health, soil composition, fauna observed, and other notable characteristics. Several analyses were conducted using the collected parameters to indicate species diversity, abundance, and vegetation coverage. Species diversity between transects was calculated utilizing the Simpson's Diversity Index (SDI). SDI is a tool used to assess biodiversity within a specific area, focusing on the variety of species present. It considers two key factors: species richness and species evenness. Species richness represents the total number of species in an ecosystem, with a greater number indicating higher richness.

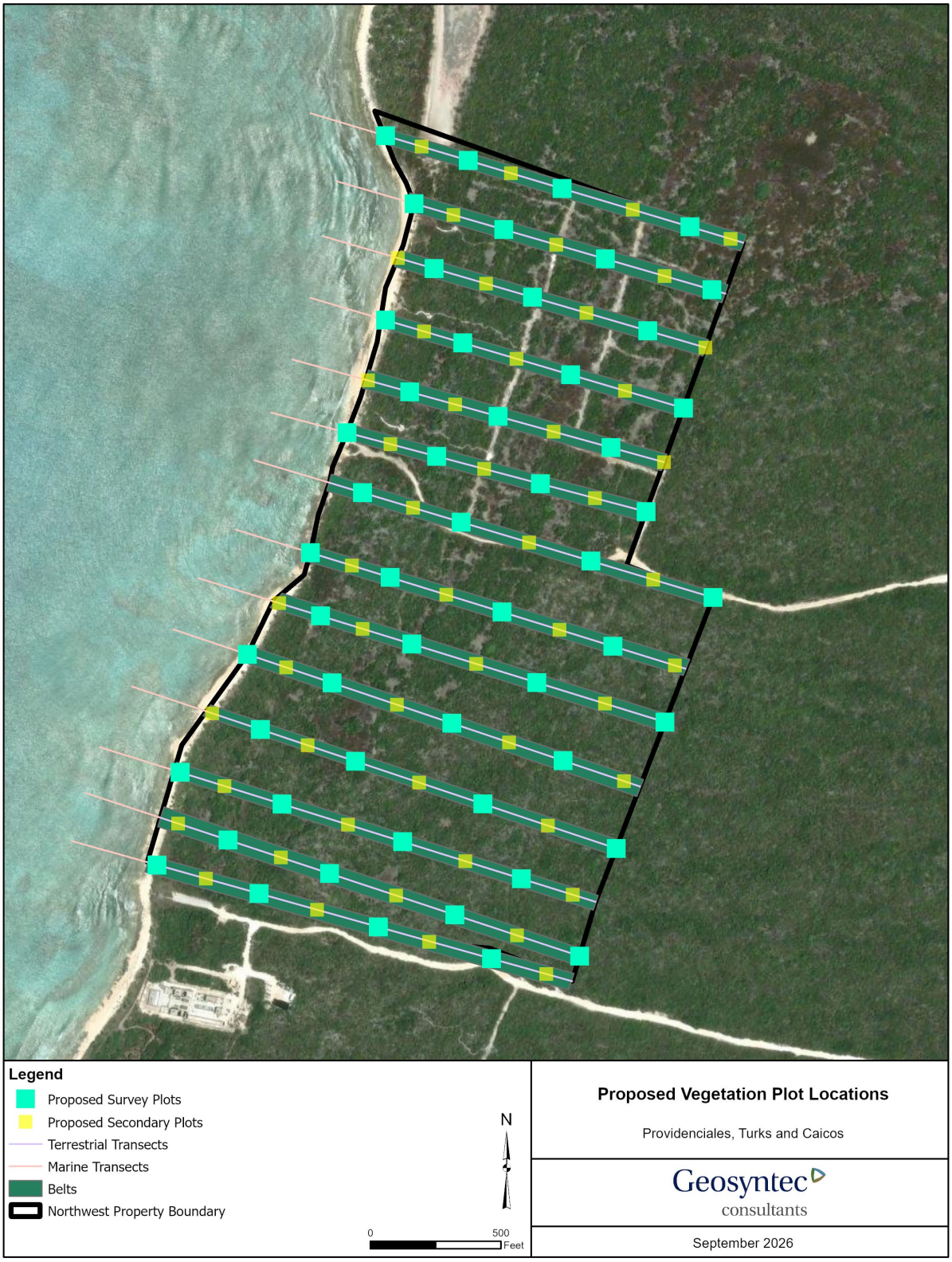


Figure 2-2. Proposed Vegetation Plot Locations

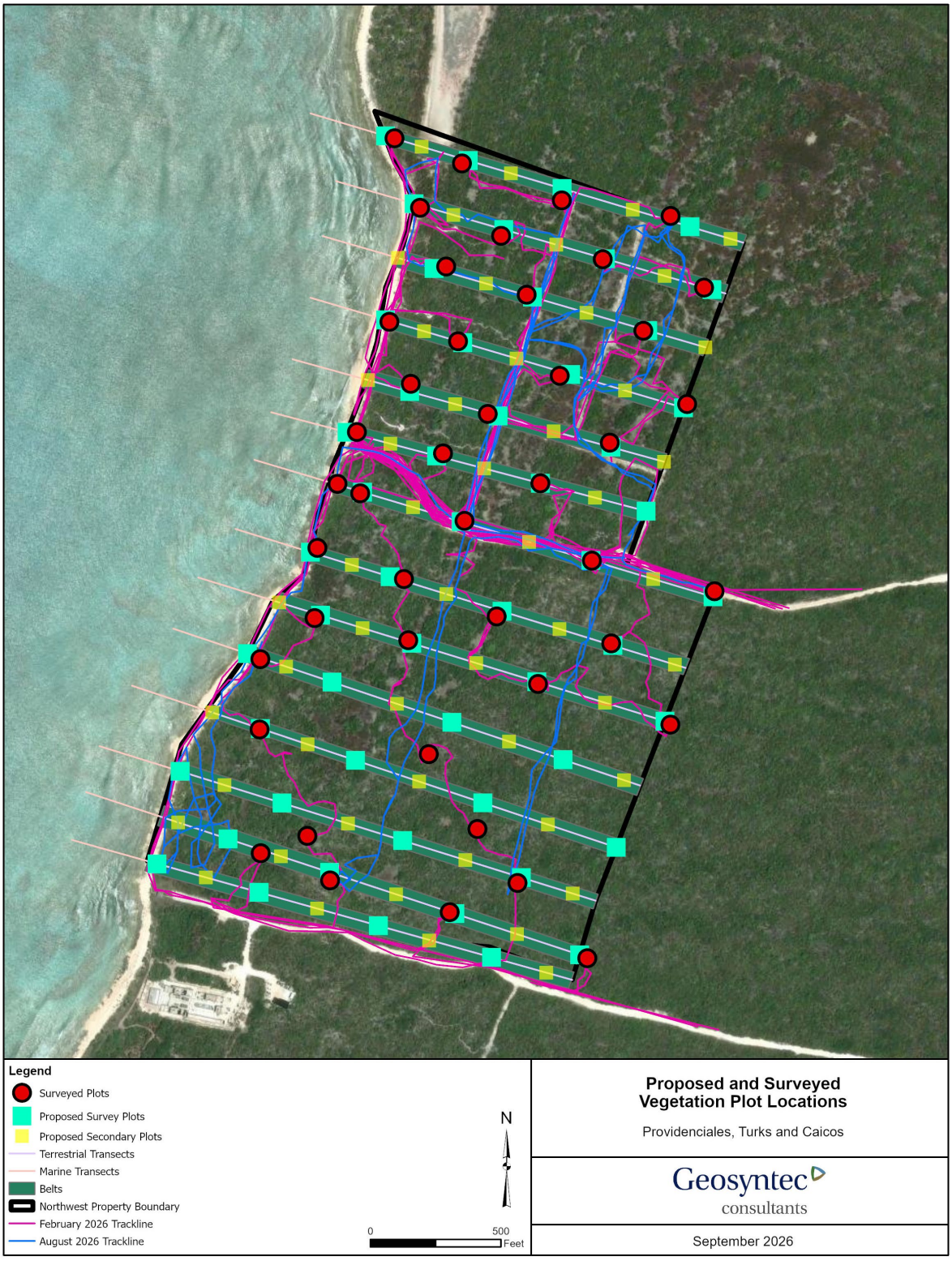


Figure 2-3. Proposed and Surveyed Vegetation Plot Locations

However, richness alone does not account for how evenly individuals are distributed among those species. This is where species evenness comes into play. Species evenness measures the relative abundance of each species in an ecosystem. It highlights the balance within the community, as ecosystems dominated by one or a few species exhibit lower diversity than those with a more equitable distribution of species. To determine an area's diversity, one of the equations associated with the SDI must be used. This equation is defined as:

$$D = 1 - \Sigma \left(\frac{n^2}{N}\right)$$

In the above equation, "*N"* indicates the total number of organisms, *"n"* indicates the population of each species, and *"D"* is the area's diversity index. The resulting values range from 0 to 1, with values closer to 1 corresponding to greater diversity than values closer to 0. Diversity was calculated for all plots and their corresponding transects. These calculations were only feasible for the shrub and tree categories within each assessed plot due to the complexity of evaluating frequency and counts of groundcover and vine categories.

SDI was calculated for each plot and each transect. The results are shown in Figure 2-4 and Figure 2-5. Plot 19 had the lowest biodiversity with an index of 0.07, whereas plot 45 s 19 and 23 had the highest biodiversity with an index of 0.869. The mean SDI for all plots was 0.634, where the majority of plots had a SDI between 0.459 and 0.812, as shown in Figure 2-5. Based on these results, the conclusion can be drawn that since this environment has a mean of 0.634, it is considered to have a slight moderately high degree of biodiversity. This indicates that the vegetation community has a relatively even distribution of species, meaning that a single species does not dominate it but is also not extremely diverse, with many equally abundant species.

The most abundant tree and shrub species observed were seagrape (*Coccoloba uvifera)* and buttonwood (*Conocarpus erectus).*

The plots' percent total cover was also collected to estimate the assessment area's vegetation coverage. Coverage ranged from 35.5 percent to 89.1 percent. The mean for the area was 62.3 percent, indicating that this assessment area has a moderately high degree of percent total vegetation coverage (Figure 2-6).

The qualitative assessment supported the habitat delineation and findings that was observed within the quantitative analysis. The habitats classified onsite can be divided into five categories: Coastal Coppice, Buttonwood Forest, Salt Pond, Wetland, Dry Broadleaf Evergreen Shrubland, Dry Broadleaf Evergreen Forest, and Cleared/Disturbed areas shown in Figure 2-7. The qualitative findings of these habitats are detailed in the following sections.

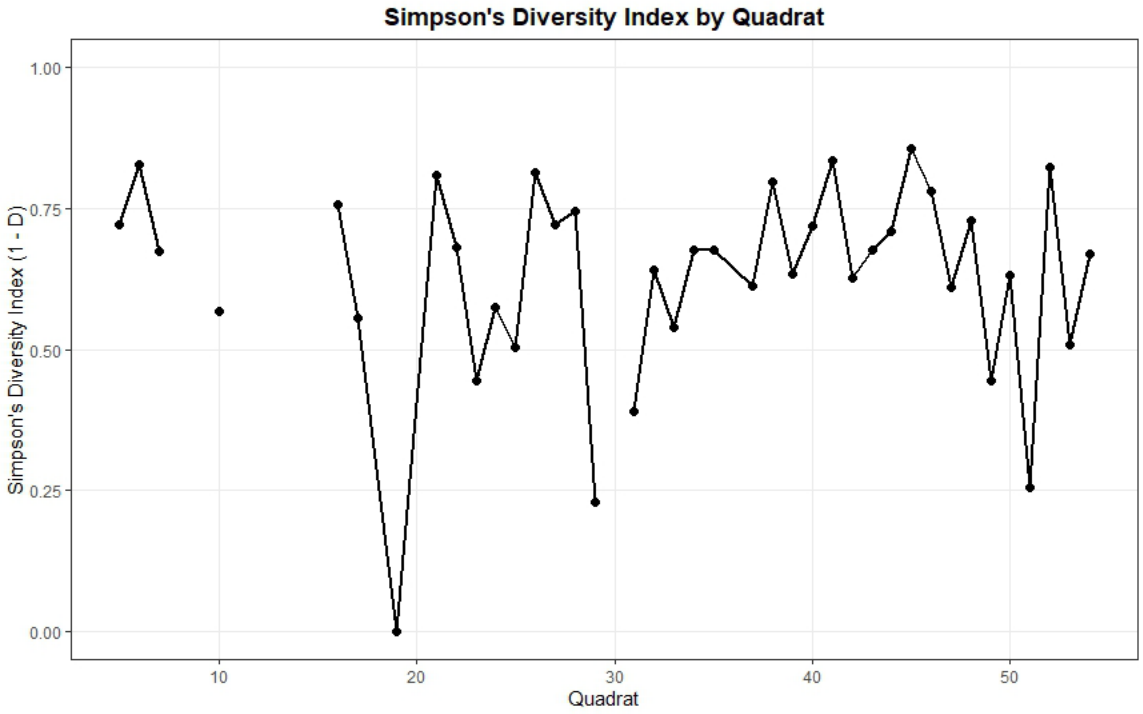


Figure 2-4. Simpson's Diversity Index by Quadrat

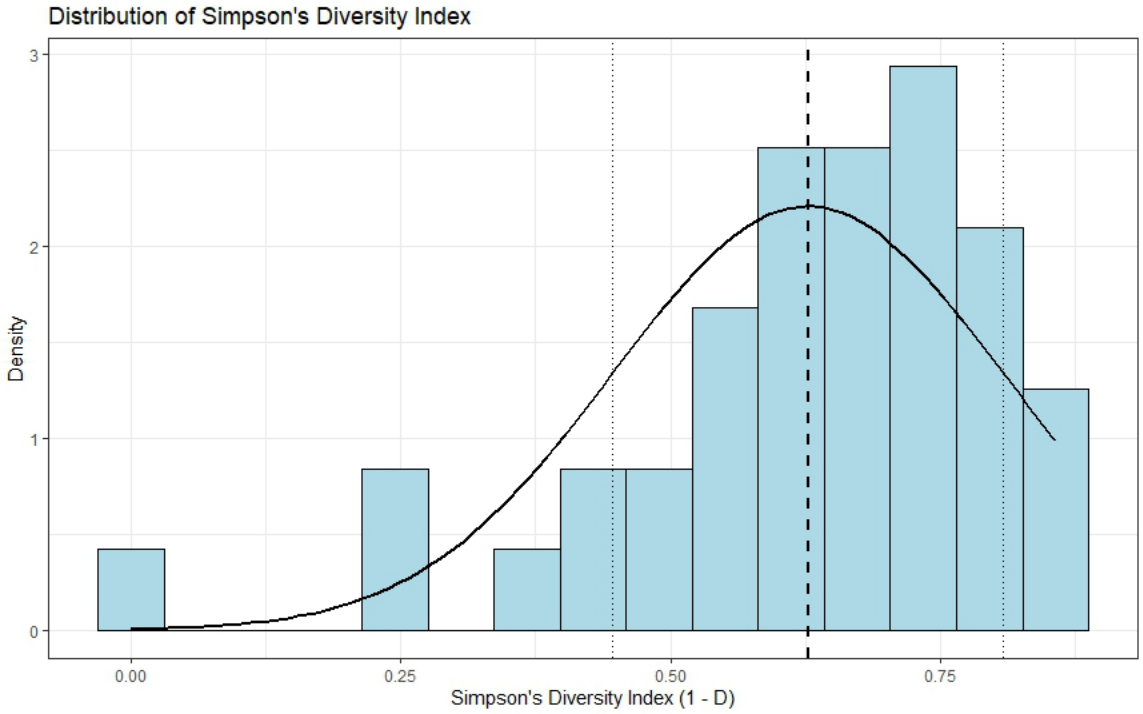


Figure 2-5. Distribution of Simpson Diversity Index

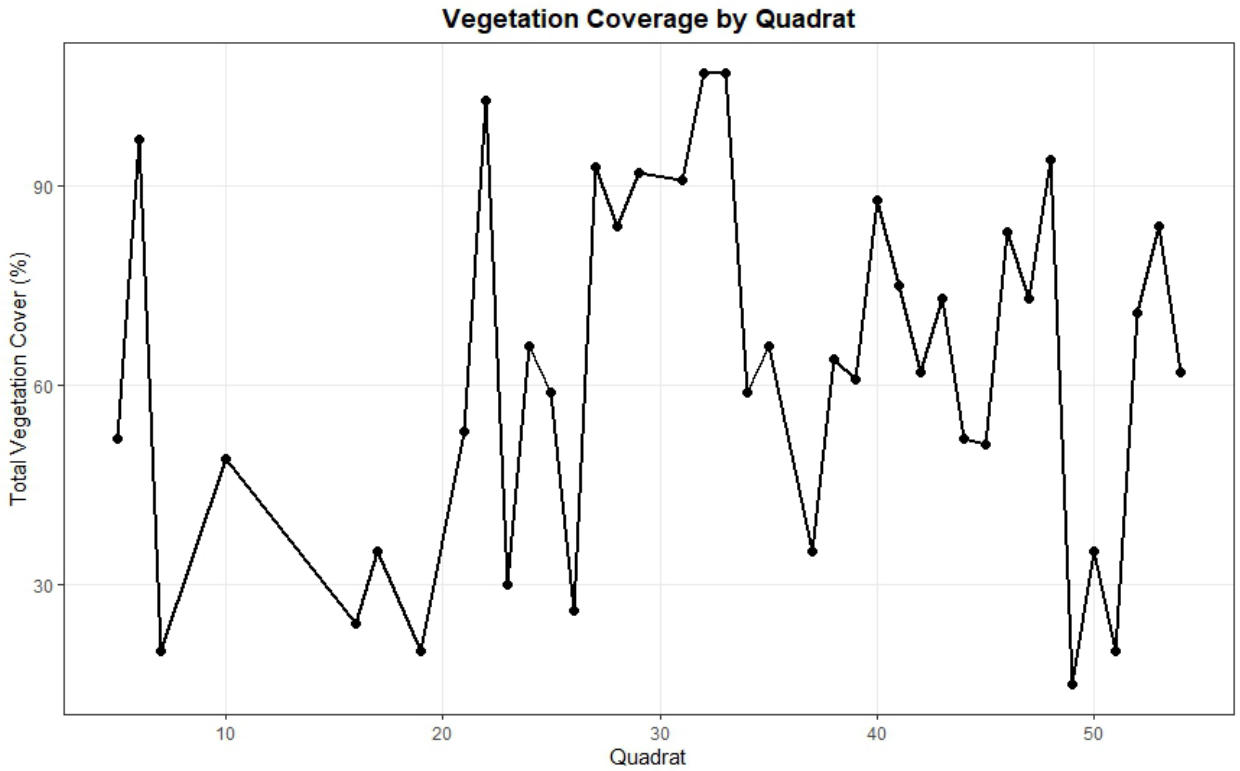


Figure 2-6. Vegetation Coverage by Quadrat

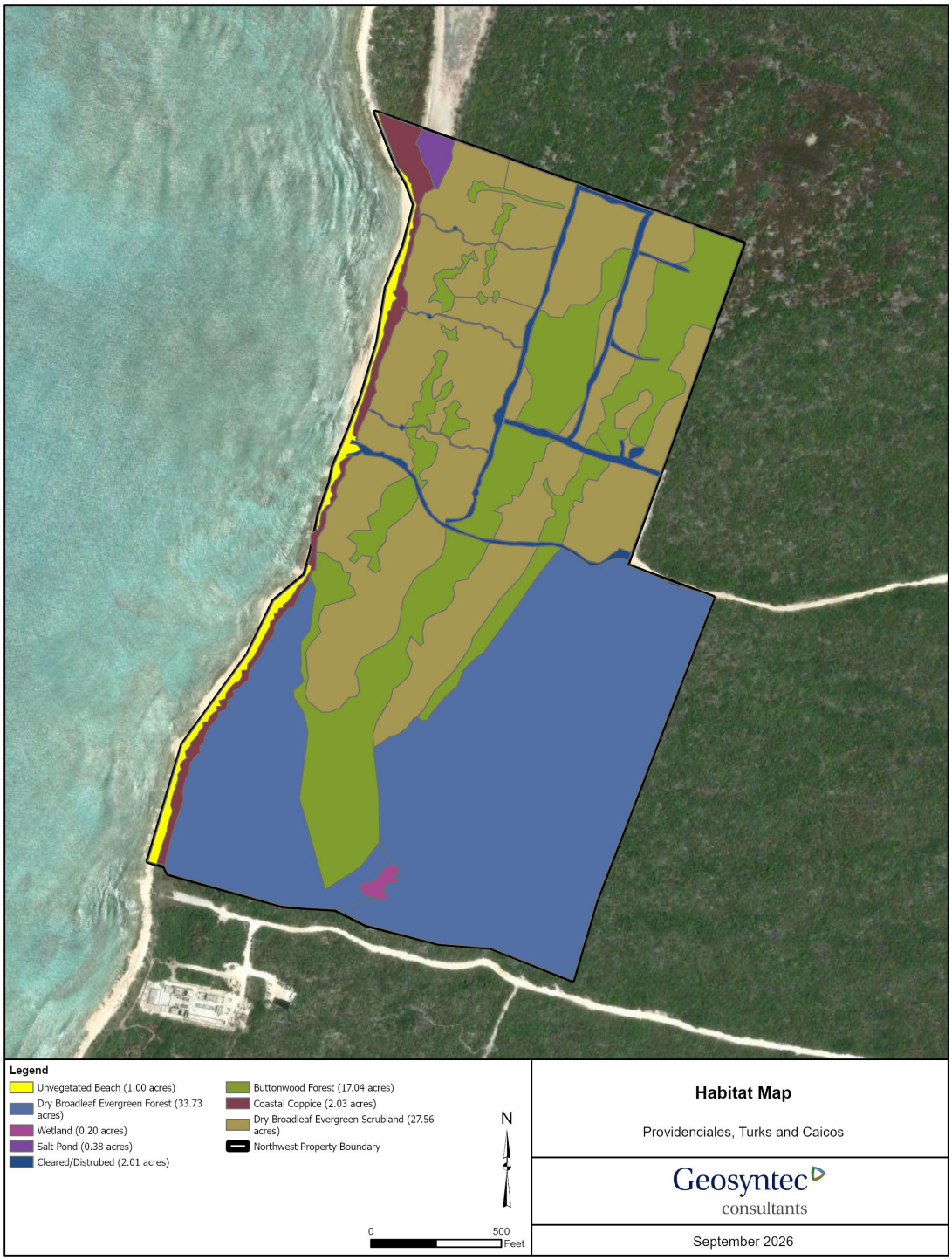


Figure 2-7. Habitat Map

Coastal Coppice

Approximately 2.03 acres, representing 2.4 percent of the assessment area, were classified as Coastal Coppice. This habitat occurred primarily along portions of the site influenced by proximity to the coastline and represents a transitional vegetation community between the immediate shoreline and the more developed inland terrestrial habitats. The Coastal Coppice was characterized by low-growing to moderately dense woody shrubs and small trees adapted to the exposed environmental conditions associated with the coastal setting (Photo 2-1).



Photo 2-1. Representative Coastal Coppice Habitat, February 17, 2026

Vegetation within this habitat consisted primarily of salt- and drought-tolerant coastal species capable of withstanding persistent salt spray, strong winds, high solar exposure, and relatively dry conditions. Common vegetation included sea grape (*Coccoloba uvifera*), sisal (*Agave sisalana*), and bay cedar (*Suriana maritima*), along with other shrubs and low-growing woody species characteristic of coastal environments. Vegetation structure generally consisted of a low to moderately developed canopy and shrub layer, with height and density varying according to proximity to the shoreline and degree of exposure.

Avian activity was documented within and adjacent to the Coastal Coppice during the field assessments. Species observed included brown pelicans (*Pelecanus occidentalis*), yellow-crowned night herons (*Nyctanassa violacea*), laughing gulls (*Leucophaeus atricilla*), Eastern kingbirds (*Tyrannus tyrannus*), and ruddy turnstones (*Arenaria interpres*). Ruddy turnstones were observed foraging along shoreline areas associated with this habitat, while other species were observed flying over, perching within, or otherwise utilizing the coastal habitat. These

observations demonstrate use of the Coastal Coppice and adjacent shoreline by both terrestrial and coastal avian species for movement, resting, perching, and foraging.

Overall, the Coastal Coppice represents a distinct component of the terrestrial habitat mosaic within the assessment area. Although limited in spatial extent compared with the Dry Broadleaf Evergreen Forest and Dry Broadleaf Evergreen Scrubland communities, its position along the coastal margin and the presence of salt-tolerant vegetation provide habitat structure and contribute to ecological connectivity between the shoreline and inland vegetation communities. Documented use by a variety of coastal and terrestrial bird species further demonstrates the ecological function of this habitat within the project site.

Based on the overall condition of the coastal vegetation community, minimal evidence of anthropogenic disturbance, ecological connectivity with the adjacent shoreline and inland vegetation communities, and documented utilization by coastal and terrestrial avian species, the Coastal Coppice was assigned a good ecological rating. Although the habitat remains in a relatively natural and undisturbed condition, vegetation within this community is subject to persistent salt spray, wind exposure, and other natural environmental stressors associated with its proximity to the coastline. These conditions contribute to comparatively lower plant species diversity and reduced vertical structural complexity relative to the more developed inland forest and scrubland communities. Despite its lower biodiversity and structural complexity, the Coastal Coppice remains a naturally occurring and functional coastal community that provides wildlife habitat and contributes to ecological connectivity and overall habitat diversity within the assessment area.

Buttonwood Forest Approximately 17.0 acres, representing 20.3 percent of the assessment area, were classified as Buttonwood Forest (BF). The Buttonwood Forest habitat occurred as scattered and discrete patches throughout the assessment area rather than as a single continuous community. This habitat was characterized primarily by buttonwood (*Conocarpus erectus*), which formed the dominant tree canopy and distinguished the community from the surrounding dry broadleaf forest and scrubland habitats. The distribution and structure of the habitat varied across the site, with buttonwood occurring in localized stands associated with site-specific environmental conditions (Photo 2-2).

Avian activity was documented throughout the Buttonwood Forest habitat during the field assessments. Species observed included blue-gray gnatcatchers (*Polioptila caerulea*), bananaquits (*Coereba flaveola*), northern mockingbirds (*Mimus polyglottos*), Eastern kingbirds (*Tyrannus tyrannus*), and northern waterthrushes (*Parkesia noveboracensis*). These observations indicate that the buttonwood stands provide habitat for both resident and migratory bird species, including opportunities for foraging, shelter, and perching.



Photo 2-2. Representative Buttonwood Forest Habitat, February 17, 2026

Of particular importance, an active, yellow-crowned night heron (*Nyctanassa violacea*) nest containing downy nestlings was documented within the Buttonwood Forest during the second field survey, conducted during the week of August 3–7, 2026. At the time of observation, the nestlings were primarily covered in down and had not yet developed the plumage associated with fledging. Yellow-crowned night herons typically remain in the nest for approximately 30 to 43 days following hatching. Based on the observed developmental stage of the nestlings, nesting activity was therefore expected to continue for several weeks following the August survey. The presence of an active nest confirms that the Buttonwood Forest is utilized not only for foraging, shelter, and movement, but also for nesting and breeding activity.

The active nest and surrounding habitat should be considered during project planning and prior to vegetation clearing or other potentially disruptive construction activities within or adjacent to the affected Buttonwood Forest. Because the timing of fledging and independence can vary, the nesting area should be reassessed by a qualified biologist prior to disturbance to confirm that the nest is no longer active and that dependent young are no longer present within the immediate nesting area (Figure 2-8).

Overall, the Buttonwood Forest represents a distinct terrestrial habitat within the assessment area and provides structural habitat for a variety of avian species. The documented use of this community by resident and migratory birds, together with confirmed nesting activity by yellow-crowned night herons, increases its ecological significance within the project site. Appropriate avoidance, monitoring, and mitigation measures should be incorporated into development planning to minimize potential disturbance to active nesting birds and associated habitat.

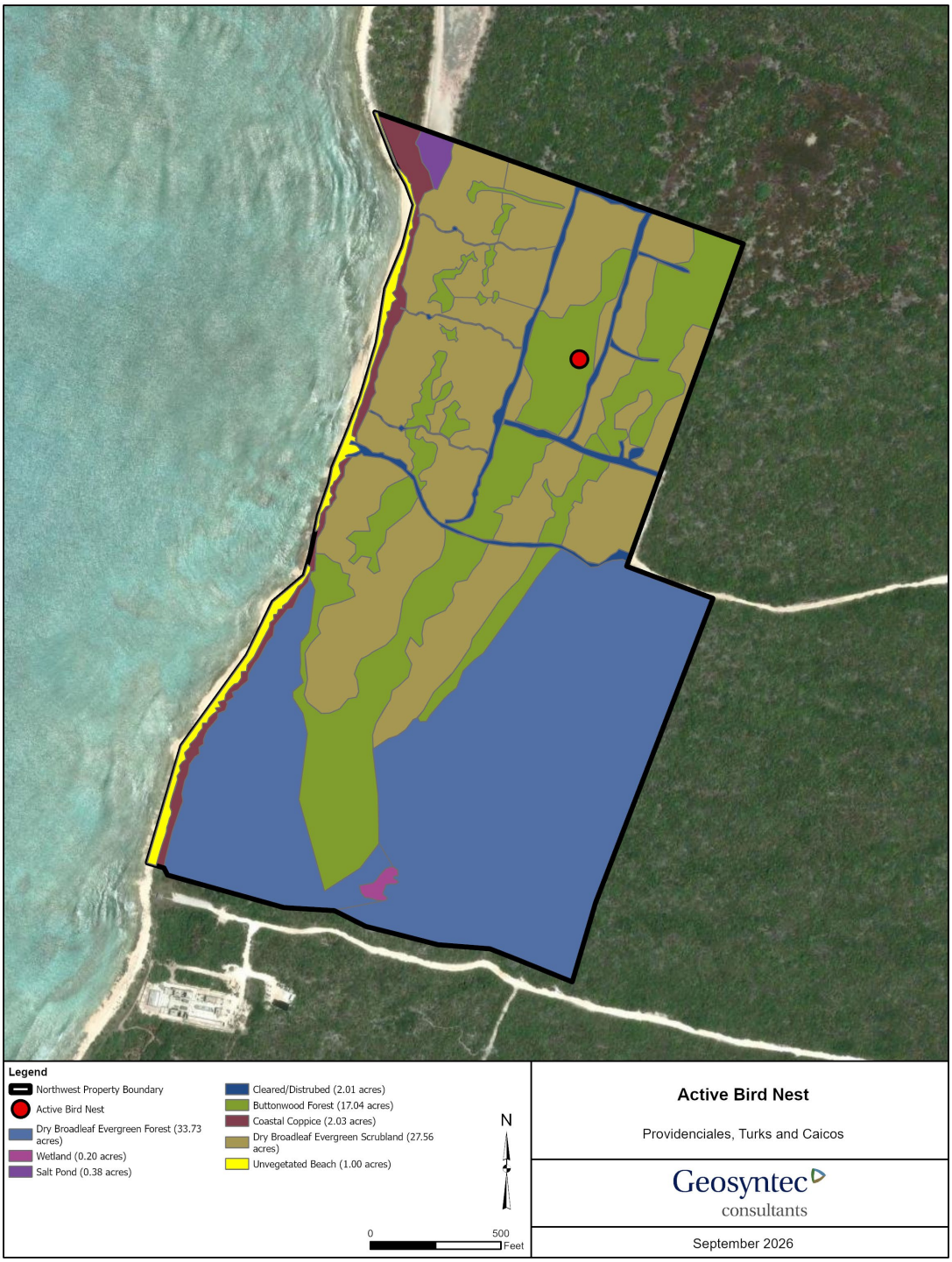


Figure 2-8. Yellow-Crown Night Heron Nest

Based on the predominantly native vegetation community, intact habitat condition, minimal evidence of anthropogenic disturbance, and documented utilization by resident and migratory avian species, the Buttonwood Forest was assigned an excellent ecological rating. The documented presence of an active, yellow-crowned night heron nest further demonstrates the ecological function of this community as nesting and breeding habitat and increases its sensitivity to potential disturbance during the nesting period.

Dry Broadleaf Evergreen Shrubland (DBES)

Approximately 27.56 acres, representing 32.8 percent of the assessment area, were classified as Dry Broadleaf Evergreen Scrubland (DBES). This habitat represents one of the dominant terrestrial vegetation communities within the assessment area and is characterized primarily by low-growing to moderately dense woody vegetation adapted to the dry environmental conditions of Providenciales (Photo 2-3).



Photo 2-3 Representative Dry Broadleaf Evergreen Scrubland Habitat, February 17, 2026

Vegetation within the Dry Broadleaf Evergreen Scrubland was predominantly shrub-height, with relatively few mature trees occurring throughout the community. Compared with the adjacent Dry Broadleaf Evergreen Forest, this habitat exhibited a lower and less-developed canopy, with the majority of vegetation occurring within the shrub and small-tree strata. Common woody vegetation included pigeon plum (*Coccoloba diversifolia*), Inagua silver palm (*Coccothrinax inaguensis*), oysterwood (*Gymnanthes lucida*), and other native shrubs characteristic of dry broadleaf communities. Scattered trees, including poisonwood (*Metopium toxiferum*), joewood (*Jacquinia keyensis*), and other woody species, were present but occurred less frequently than within the forest habitat.

Despite having a less-developed vertical structure than the Dry Broadleaf Evergreen Forest, the scrubland supported a variety of terrestrial fauna. Avian species observed within this habitat included common ground doves (*Columbina passerina*), thick-billed vireos (*Vireo crassirostris*), white-eyed vireos (*Vireo griseus*), Eastern kingbirds (*Tyrannus tyrannus*), northern mockingbirds (*Mimus polyglottos*), yellow-crowned night herons (*Nyctanassa violacea*), blue-gray gnatcatchers (*Polioptila caerulea*), bananaquits (*Coereba flaveola*), and American kestrels (*Falco sparverius*). Vocalizations from several of these species were also heard throughout the habitat, providing additional evidence of avian use of the scrubland vegetation. Birds were observed utilizing the shrub and scattered tree layers for perching, movement, and foraging. No active bird nests were observed during the assessment.

Additional fauna observed within the Dry Broadleaf Evergreen Scrubland were similar to those documented within the Dry Broadleaf Evergreen Forest and included Bahamian brown anoles (*Anolis sagrei ordinatus*), orb-weaver spiders, and Gulf fritillary butterflies (*Agraulis vanillae*). These observations indicate that, despite its lower vegetation stature, the scrubland provides habitat structure and resources utilized by a variety of terrestrial wildlife.

Overall, the Dry Broadleaf Evergreen Scrubland was characterized by relatively continuous vegetative cover and a diverse assemblage of native shrubs, scattered trees, and other terrestrial vegetation. The habitat exhibited limited fragmentation and supported a variety of avian, reptile, arachnid, and insect species documented during the field assessments. Based on the condition and diversity of the native vegetation community, continuity of vegetative cover, minimal evidence of anthropogenic disturbance, and documented utilization by terrestrial wildlife, the Dry Broadleaf Evergreen Scrubland was assigned an excellent ecological rating. Although the community has a lower and less vertically complex vegetation structure than the Dry Broadleaf Evergreen Forest, this structure is characteristic of the natural scrubland community and is not indicative of habitat degradation.

Dry Broadleaf Evergreen Forest

Approximately 33.73 acres, representing 40.2 percent of the assessment area, were classified as Dry Broadleaf Evergreen Forest, making it the largest habitat type identified within the assessment area. This habitat was characterized by relatively well-developed, predominantly evergreen woody vegetation forming a continuous and structurally complex canopy compared with the surrounding scrubland communities. The community was dominated primarily by mature trees and other woody species, including poisonwood (*Metopium toxiferum*), joewood (*Jacquinia keyensis*), mahogany (*Swietenia mahagoni*), yellowwood (*Zanthoxylum flavum*), and other native tree species characteristic of the dry broadleaf forests of Providenciales (Photo 2-4).

A well-developed shrub and understory layer was also present beneath the canopy and included species such as sweet Margaret (*Psidium longipes*), small-leaved blolly (*Guapira discolor*), and white stopper (*Eugenia axillaris*). The combination of a developed tree canopy, woody understory, shrubs, vines, and occasional cacti provided multiple layers of vegetation and greater structural complexity than the adjacent scrubland communities. Species within this habitat are generally adapted to the seasonally dry conditions, high temperatures, and relatively shallow soils characteristic of the terrestrial environment of Providenciales.



Photo 2-4 Representative Dry Broadleaf Evergreen Forest Habitat, February 17, 2026

Avian activity was documented frequently throughout this habitat. Visual observations included bananaquits (*Coereba flaveola*), thick-billed vireos (*Vireo crassirostris*), white-eyed vireos (*Vireo griseus*), blue-gray gnatcatchers (*Polioptila caerulea*), and eastern kingbirds (*Tyrannus tyrannus*). Vocalizations from several of these species were also heard throughout the habitat. Birds were observed utilizing the tree canopy and understory vegetation for perching, movement, and foraging. No active bird nests were observed during the assessment.

Additional fauna observed within the habitat included Bahamian brown anoles (*Anolis sagrei ordinatus*), orb-weaver spiders (family *Araneidae*), and Gulf fritillary butterflies (*Agraulis vanillae*). These species were observed utilizing vegetation and other available habitat features throughout the forest community. The relatively continuous vegetation and presence of multiple structural layers, including the tree canopy, understory, shrubs, and vines, provide a variety of opportunities for wildlife movement, shelter, and foraging within the assessment area.

Based on the relatively high diversity and condition of the native vegetation community, well-developed vertical structure, habitat continuity, minimal evidence of anthropogenic disturbance, and documented utilization by terrestrial wildlife, the Dry Broadleaf Evergreen Forest was assigned an excellent ecological rating. As the largest habitat type identified within the assessment area, this community represents a substantial component of the site's terrestrial habitat and provides relatively continuous and structurally complex habitat for a variety of wildlife species.

Wetland

Approximately 0.20 acres, representing 0.2 percent of the assessment area, were classified as Wetland habitat. This habitat occurs within the low-lying portion of the site where localized topography and drainage conditions allow for the natural periodic accumulation and retention of water which appears to flow from higher elevations to the north and collect in a relatively large low-lying area near Malcolm Road Vegetation within this area is influenced by wetter soil conditions and differs from the surrounding upland plant communities, with species adapted to periodically saturated or inundated conditions, most abundant being *Eleocharis geniculate* (Capitate Spike Rush). Although the Wetland habitat comprises only a small proportion of the overall assessment area, it provides localized habitat diversity and represents a distinct ecological feature within the predominantly upland landscape of the project site (Photo 2-5).

This designation is exclusive of low-lying disturbed areas that also hold standing water after rain events and contain similar vegetation.



Photo 2-5. Wetland, February 17, 2026

Based on its natural and relatively undisturbed condition, distinct vegetation and hydrologic characteristics, and contribution to habitat diversity within the predominantly upland assessment area, the Wetland habitat was assigned an excellent ecological rating. Although limited in size, this habitat represents a distinct natural community and provides ecological functions and environmental conditions not present within the surrounding upland habitats.

Salt Pond

Approximately 0.38 acres, representing 0.5 percent of the assessment area, were classified as Salt Pond habitat. This habitat consists of a low-lying depression that is distinct from the surrounding upland vegetation communities, containing *Avicennia germinans (Black Mangrove),* and characterized by conditions associated with periodic water accumulation. The extent and character of inundation may vary seasonally in response to rainfall, evaporation, and local drainage conditions. Vegetation within and along the margins of the salt pond is generally influenced by elevated salinity and fluctuating hydrologic conditions, resulting in a community distinct from the adjacent upland habitats. Although limited in extent within the assessment area, the salt pond contributes to the overall diversity of habitat types present on the site (Photo 2-6).



Photo 2-6. Salt Pond with Black Mangroves, February 17, 2026

Based on its natural and relatively undisturbed condition, distinct hydrologic characteristics, and contribution to the diversity of habitats present within the assessment area, the Salt Pond was assigned an excellent ecological rating. Although limited in spatial extent within the project site, the Salt Pond represents a distinct natural feature within the project site and contributes to the overall ecological complexity of the assessment area.

Unvegetated Beach/Coastal Rock

Approximately 1 acre, representing 1.2 percent of the assessment area, were classified as Unvegetated Beach/Coastal Rock. The coastal community includes the barren beach and coastal rock, between the dune vegetation line and the waterline. The coastal community does not contain vegetation but does provide habitat to a variety of wildlife including foraging birds along

the wrack line along the sandy shoreline and several species of algae, molluscs and other crustations within tide pools in the coastal rock areas (Photo 2-7).



2-7A – Unvegetated Beach



2-7B – Coastal Rock



2-7C – Beach/Rock Interface



2-7D – Tide Pools in Rock

Photo 2-7. Shoreline Communities

Disturbed/Cleared Lands

Approximately 2.01 acres, representing 2.4 percent of the assessment area, were classified as Disturbed/Cleared Lands. These areas are primarily associated with existing roads and previously cleared corridors within the site. Vegetation within this habitat type is generally sparse or absent as a result of previous land disturbance and continued use. Where vegetation is present along road margins and other disturbed areas, it generally consists of scattered herbaceous vegetation, grasses, and opportunistic or disturbance-tolerant plant species. Compared with the surrounding naturally vegetated habitats, Disturbed/Cleared Lands exhibit reduced vegetation density and structural complexity and have been substantially modified from their natural condition.

Due to previous anthropogenic disturbance associated primarily with existing roads, limited native vegetation cover, and reduced habitat complexity and function compared with the surrounding natural communities, the Disturbed/Cleared Lands were assigned a poor ecological rating.

All areas of cleared, disturbed, or otherwise human-altered lands, were impacted prior to ownership by the applicant, or done so with permission by the TCI Department of Planning (DoP) (Photo 2-8).



Photo 2-8. Cleared Road, February 17, 2026

2.2.1.2 Complete list and description of rare, threatened, and endangered species (as per IUCN Red Data List, CITES, and DECR lists)

The results from the literature search utilized *The Schedules,* a ten-page undated list of flora and fauna that are designated as protected because they are endemic, rare, and endangered (Appendix E). This list was received from the Department of Environment and Coastal Resources (DECR) DECR and was used as the primary reference list for notable flora and fauna that could potentially be present on the site. The list is not specific to the project area, or even Providenciales, but is applicable to all areas in the Turks & Caicos Islands.

A query of the database maintained by the International Union for Conservation of Nature (IUCN) revealed the potential presence of 1,663 terrestrial, freshwater, and marine floral and faunal species that occur in the TCI and designated in descending order of vulnerability, as Critically Endangered, Endangered, Near Threatened, Vulnerable, Least Concern, and Data Deficient. The IUCN database does not allow for filtering by island, so the list (Appendix F) is for all the Turks & Caicos Islands.

Although the IUCN list includes many species that exist in habitats that are not present on the subject property (e.g., mangrove forests, coral reefs, etc.) or within the potential sphere of influence of the proposed project, it does include many species of terrestrial and marine flora and

fauna that have the potential to be affected by the proposed activities. Species that were observed on the subject site and/or within the sphere of influence of the project have been highlighted in Appendix G.

The Turks & Caicos Islands are not registered as a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), but a search of its database of listed species was conducted for this project because the Turks & Caicos Islands are a dependent territory of a signatory party and the DECR has been determined by CITES to be an "authority competent to issue comparable documentation" and "A scientific institution capable of advising that an export is not detrimental to the survival of the species concerned." Similar to the IUCN and DECR's *The Schedules*, the CITES database does not allow for filtering by island, so the list (Appendix H) is for all the Turks & Caicos Islands. It identifies numerous species of flora and fauna that have the potential to be affected by the proposed activities.

2.2.1.3 Complete list of flora (plants) species and any identifiable fungi species present. Plant nomenclature shall be presented either as per Correll's Flora of the Bahama Archipelago 1982 or Plants of the World Online https://powo.science.kew.org/.

A total of 124 flora species, inclusive of fungi, were encountered throughout the entire Janu Resort property. The majority of the flora encountered were native species of the Lucayan Archipelago and Caribbean at large. Some species, such as *Agave sisalana,* were commonly observed on the project site. While not native, they have been established for many years and are not considered invasive.

Appendix G contains the species lists of all flora and fauna encountered on the site, including the "Plants in Plots" table.

2.2.1.4 Georeferenced map of venerable (1.5 meter or taller) specimens of horse-pear cacti Consolea nashii on site, with overlay of any works or development impact.

A special effort was made to map all *Consolea nashii* individuals taller than 1.5 m in height. A total of 42 individual plants were located, largely within the coastal coppice and adjacent seaward edge of the DBEF. A few isolated individuals were located within the inland rocky DBES. Figure 2-9 shows the locations of the mapped individual plants. It should be noted that dense vegetation and limited access through the habitats makes this count an estimate.

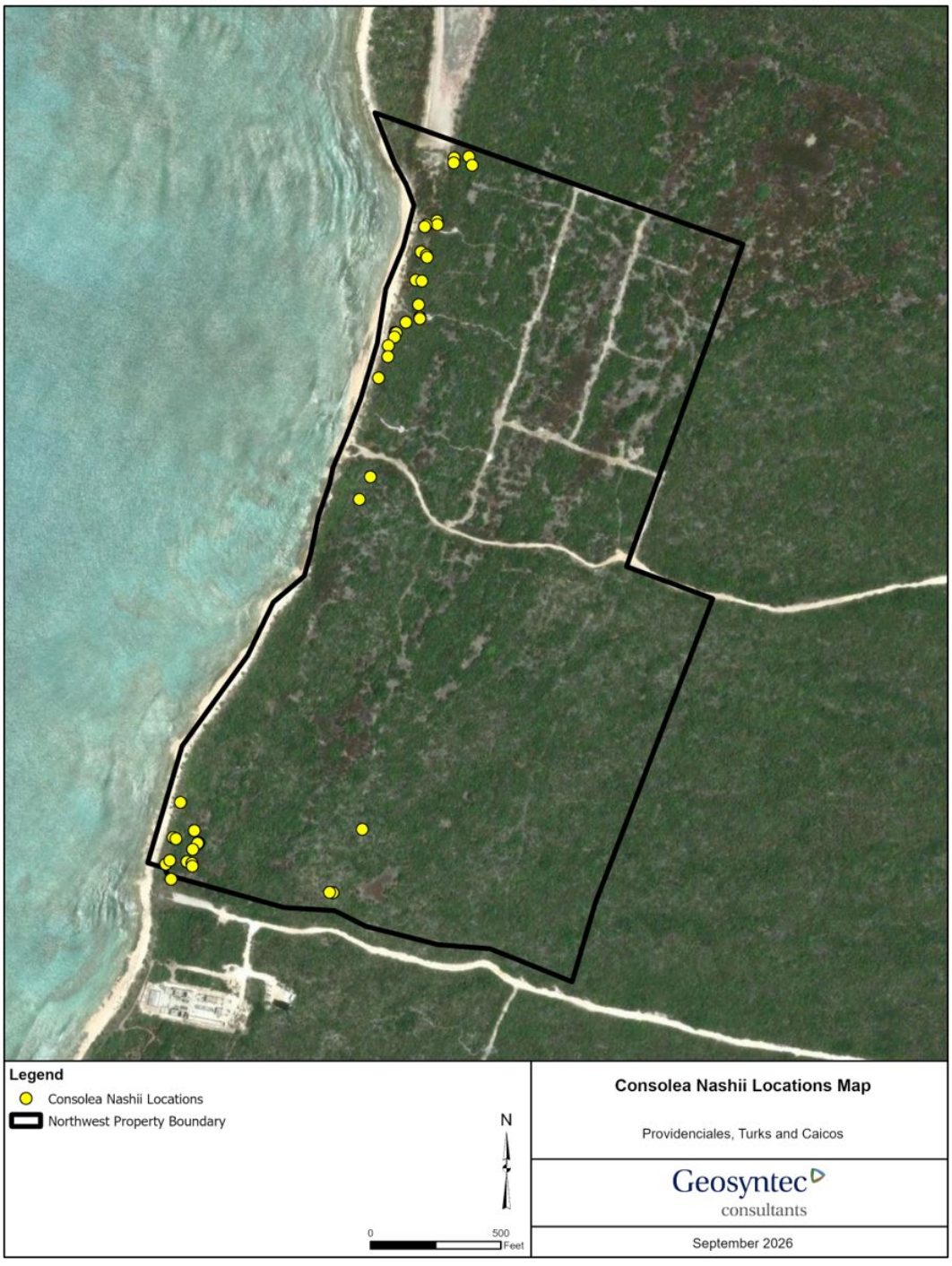


Figure 2-9. *Consolea Nashii* Locations Map

2.2.1.5 Complete list of bird species

Birds were observed during the first trip in February 16–24, 2026, which corresponded with the typical bird migration window for the TCI (October – March).

Additional observations were made in August 3–7, 2026, to encompass seasonal and migratory changes at the proposed project site. During this trip, a yellow crown night heron nest was observed with a young chick.



Photo 2-9. Yellow Crown Night Heron Nest, August 7, 2026

A list of all observed birds is provided in Appendix G.

2.2.1.6 Complete list of all reptile and amphibian species present.

All species lists are provided in Appendix G

2.2.1.7 Complete list of any freshwater fish species present.

No freshwater species of fish were present in the wetland areas within the project site. At the time of baseline investigations, all ponds and wetlands identified through aerial imagery were dry.

2.2.1.8 Complete list of any mammal species present.

All species lists are provided in Appendix G.

2.2.1.9 Representative lists of invertebrates (including terrestrial crustaceans) present.

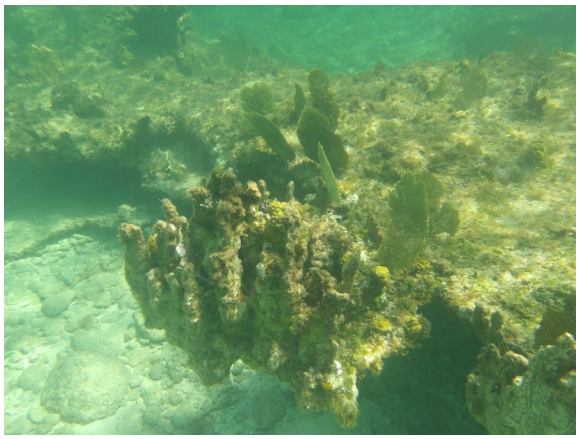
All species lists are provided in Appendix G.

2.2.1.10 In the case of presence of karst habitats, complete lists of cave biota, both terrestrial and aquatic, from qualified researchers

The southeast quadrant of the property is comprised of several rocky ridges where sink holes were encountered, none of which were very deep. No caves were encountered nor any flora or fauna indicative of karst biota.

2.2.2 Baseline Marine Environment

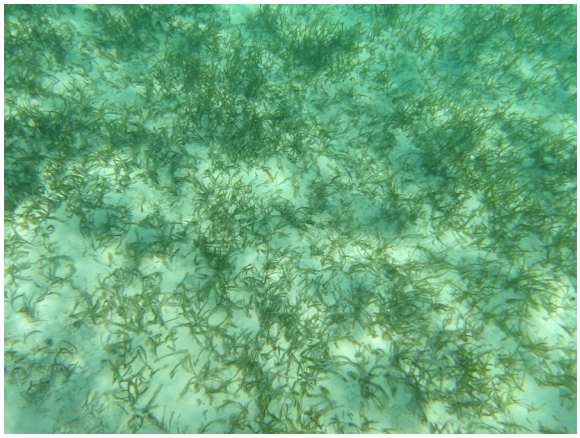
The nearshore environment is predominantly low relief hardbottom dominated by turf algae beginning at the waterline. Beyond the low relief (pavement) hardbottom, the habitat changes. Off the northern end of the property, the nearshore pavement transitions into a moderate relief reef. This transitions southward into low relief hardbottom areas of sand with macro algae. This continues southward into larger areas of sand with seagrass and macro algae. Beyond the nearshore pavement at the south end of the property, the habitat transitions into rubble and low relief hardbottom. The reefs off the north end of the property were observed to have higher diversity of hard and soft corals. The nearshore was observed to have less relief throughout the property to the south, becoming hardbottom pavement and rubble. Isolated areas of higher relief were observed farther offshore as well as areas of sand with seagrass. The nearshore environment was given an excellent rating as there was little evidence of degradation due to human activity (Photo 2-10).



2-10A. Higher Relief Hardbottom



2-10B. Tongue and Groove Hardbottom



2-10C. Seagrass Beds



2-10D. Rubble and Seagrasses

Photo 2-10. Marine Environment

2.2.2.1 Description and quantification of marine habitats and ecosystems present

The marine environment was assessed qualitatively because no elements of the project will present a direct impact on the nearshore resources. No mapping was conducted at this time.

2.2.2.2 Complete list and description of rare, threatened, and endangered species (as per IUCN Red Data List, CITES, and DECR lists)

All species lists are provided in Appendix F.

2.2.2.3 Complete list of all marine flora (plants including seagrass and macroalgae) present

All species lists are provided in Appendix G.

2.2.2.4 Complete list of all coral species present, including soft corals

All species lists are provided in Appendix G.

2.2.2.5 Complete list of all seabird species present

No seabird species were observed. All bird species observed are provided in the species list for terrestrial species in Appendix G.

2.2.2.6 Complete list of all marine reptile species present

No marine reptile species were observed at this site during either time of assessment.

2.2.2.7 Complete list of all fish species present

All species lists are provided in Appendix G.

2.2.2.8 Complete list of all marine mammal species present

All species lists are provided in Appendix G.

2.2.2.9 Representative list of marine invertebrate species (other than corals) present

All species lists are provided in Appendix G.

2.2.2.10 Description of the sargassum situation in the area

Although "seaweed" (actually Sargassum, dead blades of seagrass and other flotsam and/or jetsam) does not accumulate in large quantities along the western beaches, seaweed piling up on beaches in the tropics has been an increasing problem in recent years, particularly when winds and ocean currents deposit these materials on beaches in large quantities. The most affected beaches are predominantly located on the northeastern and eastern facing parts of an island. While this may not be a problem on beaches adjacent to undeveloped tracts (and may actually be beneficial for natural recycling of nutrients and when amphipods, small crabs and other marine organisms provide prey for foraging shorebirds), it can be objectionable when it accumulates in large amounts on beaches that are used by property owners and vacationers.

Beach management techniques to address this problem certainly vary based on the extent of the problem on a day-to-day, week-to-week, and/or seasonal basis. For minimal or relatively light build-ups, taking no action may be appropriate. When build-ups get to be objectionable, addressing them may be as simple as deploying an individual or two with a rake and hauling the material off-site for disposal (or composting). When build-up is heavy, a small army of laborers (rakers, baggers, hole diggers) and equipment (e.g., tractors fitted with rakes) may be necessary to deal with the problem. It is recommended (refer to Section 6) that a beach management plan be developed in advance of unit occupancy, to be prepared for when this problem arises. Owner is aware of increased issues between in February and March and are in the process of developing a plan to address the situation.

2.3 Physical Environmental Baseline Assessment

The topography of Turks & Caicos Islands is very low-lying. Higher terrain for each island is normally near the outside (seaside) of each island. Areas near the Caicos Bank are lower in elevation, with many sections of North Caicos, East Caicos and Middle Caicos being low-lying swamp/marsh areas. The highest points in the country are Blue Mountain on Providenciales and Flamingo Hill on East Caicos, each with a height of approximately 48 m.

The Caicos Islands (Providenciales, North Caicos, West Caicos, Middle Caicos, East Caicos) are located on the Caicos Bank. This area is shallow, with depths between 2 m and 4 m. The Turks Islands are located to the east of the Caicos Islands. The joint state has a deep underwater canyon called the Turks Island Passage [34 kilometers (km) long] between the set of islands.

The overall bathymetry of the area is quite varied. From the land to the reef that surrounds most of the Caicos Islands, the water depths are quite shallow, with an average depth of 2 m. However, just outside of the reef is a steep drop off. Water depths outside of the reef quickly drop to 20 m. The reefs provide good protection for coastal areas and help to provide protection against larger waves and swells. This helps to counteract the overall low topography of the islands.

2.3.1 Topography of the area, overlaid with terraforming plans

The topography of the project site primarily consists of narrow beaches with intermittent rock/iron shore, fronting a dune of varying elevations.

A detailed topographic survey was conducted by Benchmark Surveying, using a drone equipped with LiDAR and camera, covering the entire site. The survey is dated 2023 (Figure 2-10).

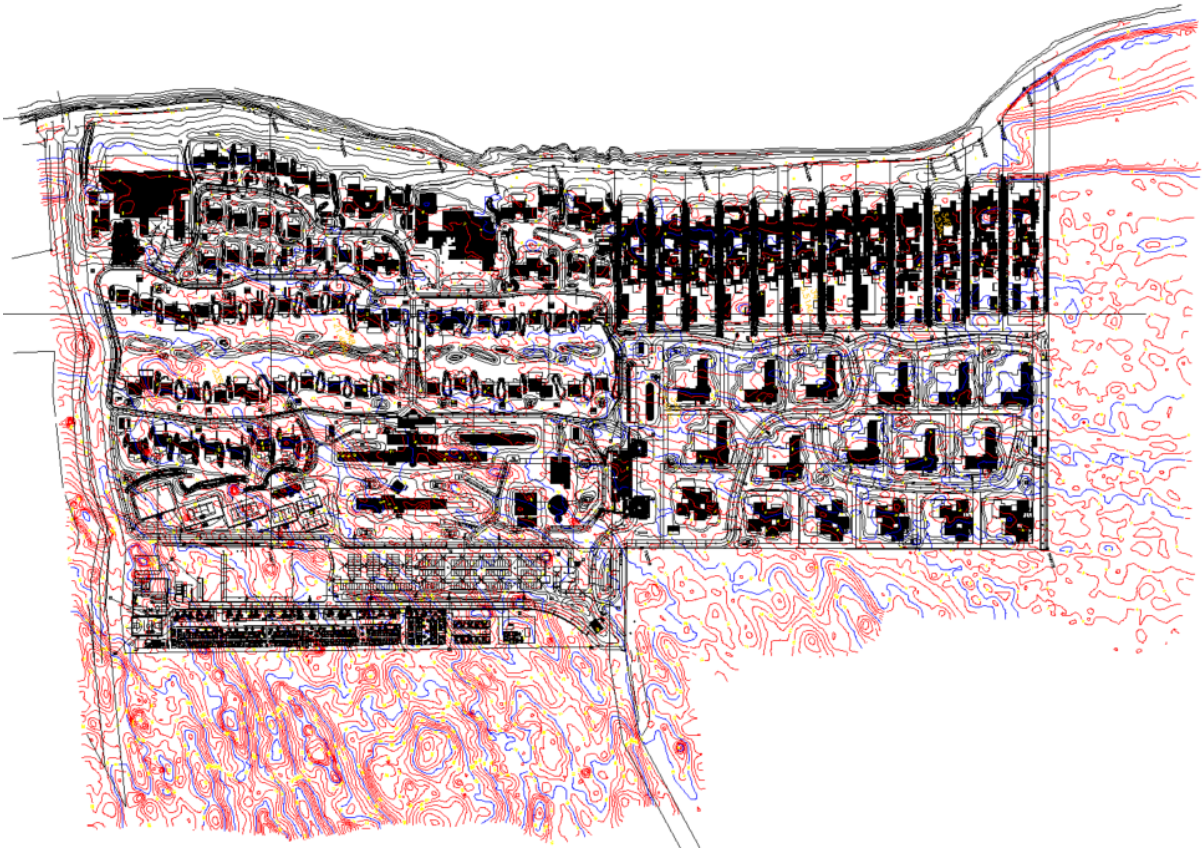
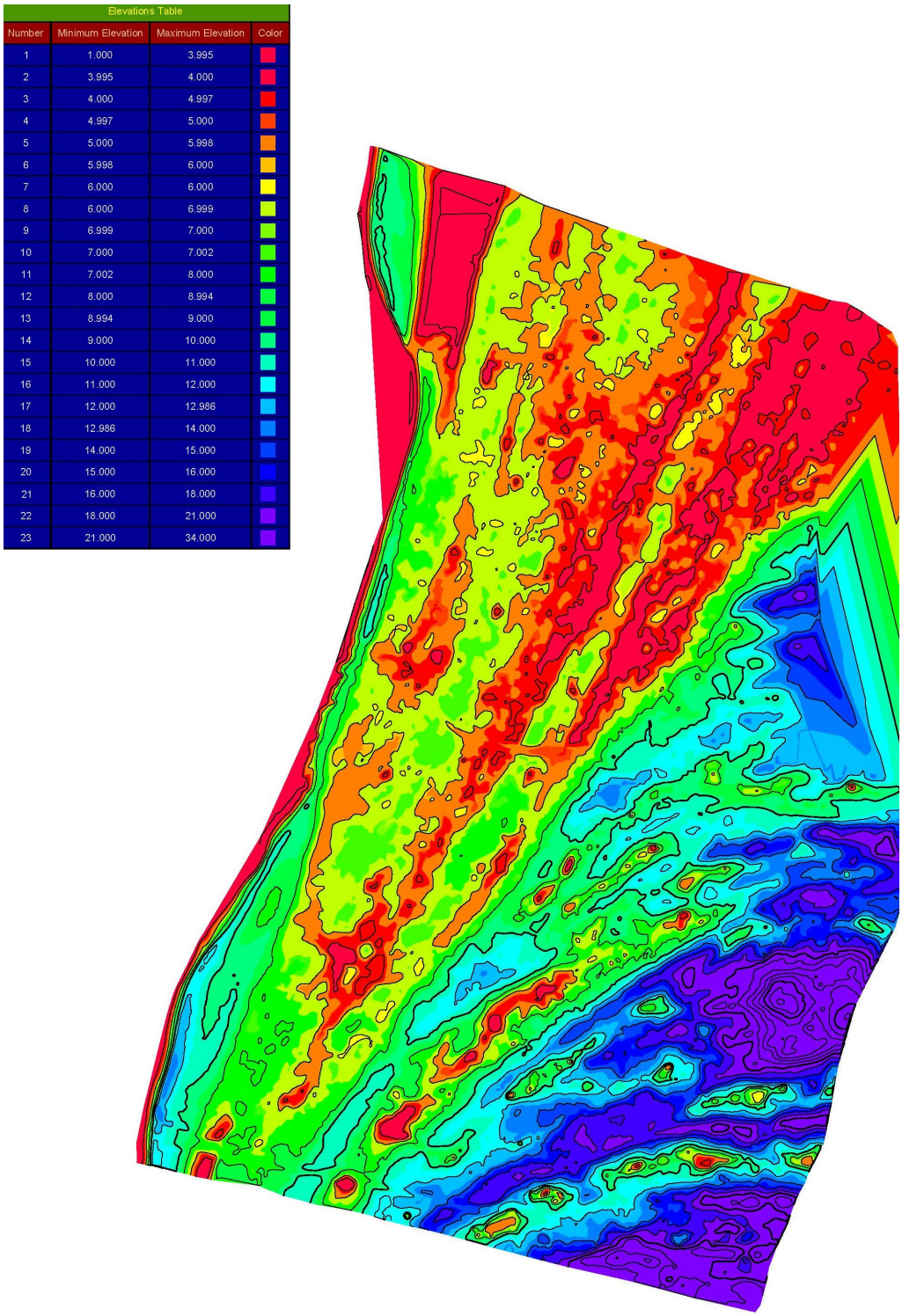


Figure 2-10.Topographic Survey with Grading Plan

The color-coded survey shown in Figure 2-11 allows for the visualization of the site, with lower elevations shown in red and higher elevations shown in blue. Not shown or represented in the figure are the high ridges to the north of the site that guide stormwaters through the site along the lower elevations towards Malcolm Road, which acts as a barrier keeping the stormwater within the property. Project drawings including grading plans and landscaping plans can be found in Appendix I.



Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	1.000	3.995	
2	3.995	4.000	
3	4.000	4.997	
4	4.997	5.000	
5	5.000	5.998	
6	5.998	6.000	
7	6.000	6.000	
8	6.000	6.999	
9	6.999	7.000	
10	7.000	7.002	
11	7.002	8.000	
12	8.000	8.994	
13	8.994	9.000	
14	9.000	10.000	
15	10.000	11.000	
16	11.000	12.000	
17	12.000	12.986	
18	12.986	14.000	
19	14.000	15.000	
20	15.000	16.000	
21	16.000	18.000	
22	18.000	21.000	
23	21.000	34.000	

Figure 2-11. Colour Coded Topographic Survey of the Project Site

There is evidence of erosion from high seas and waves along the property, with evidence of waves overtopping the dune in the lower lying areas. Losses of sand along dunes are evident and likely occurred during the passing of Hurricanes Irma and Maria in 2017 Photos 2-11 and 2-12). Additional representative photos of the entire site are provided in Appendix J.



Photo 2-11. Over wash Looking Landward



Photo 2-12. Over wash Looking Seaward

2.3.2 Bathymetry for site shoreline, any other underwater areas conceivably affected by the project, extending at least 100 meters from the coast and within the entire footprint of proposed project

The project does not contain any elements that can conceivably affect the nearshore environment, through active alteration or through project runoff. No bathymetric surveys were conducted at this time but if the need arises, a survey will be conducted.

2.3.3 Geology

The Turks and Caicos Banks, like the Bahamas, are interpreted to overlie continental crust that was rifted from the North American continental land mass after it separated from northwest Africa during the break up of Pangea in the Triassic (Pindell, 1993). The Triassic sedimentary and volcanic section and earlier continental crust are interpreted to be buried beneath a cover of Jurassic, Cretaceous and Tertiary carbonate sediments.

Remains from the continental drift are buried under hundreds of meters of limestone rock that has been formed by the decomposition of skeletal remains from marine organisms and precipitation of calcium carbonate material. Precipitation is the process in which, under the right conditions, dissolved minerals in the sea water are deposited to form small particles called ooids. Ooids then cement together to form oolite rock, which makes up most of the Turks and Caicos Islands area. Additional rock was formed by the fossilized remains of plankton, algae, coral, shellfish, and the waste pellets of flat fish.

Caves are present on all the islands. These are formed when slightly acidic water dissolves the limestone. The caves on Middle Caicos form the largest cave network in the Bahamian archipelago. These caves are ideal habitats for wildlife and were used by the Lucayans (original inhabitants), for whom they had religious significance. There was a guano industry for a short while, where bat droppings were collected for use in the production of fertilizer.

The porous nature of the limestone means it does not hold water well. As a result, fresh water is difficult to find and occurs where rainwater has accumulated and floats on the denser saltwater table. There are several natural wells on the Turks and Caicos Islands, but locals mainly rely on collecting rainwater and, recently, this has been done through collecting rain runoff from the roofs into large storage tanks.

The material within the project site is dominated by Pleistocene Limestone landward of the highwater mark. Seaward of the vegetation line, the limestone continues into the water, where it becomes covered in unconsolidated Holocene Sands. The limestone formation is characterized by a mature, thin layer of hard brown crust/soil that appears in isolated patches around the site. Well-compacted limestone underlies the soil. Weathered limestone outcroppings are found along the entirety of the site.

The geology of the development site is predominantly composed of Pleistocene Limestone and Holocene Sands. Within the beach project footprint, the limestone outcrops as surface layers of a dark brown hardpacked sediment and weathered beach sands cap rocks.

2.3.4 Hydrology and Hydrogeology

Groundwater is not likely to be present within the project boundaries as a significant resource. An elevated ridge to the north of the property diverts stormwater runoff towards the project site. The runoff seeps into the porous limestone that lies below the surficial layer of sand and soil. However, the filtration of water through these seeps does not provide a significant source of fresh water in any significant quantities for development needs. The seep areas can lead to elevated soil moisture which, in turn, supports a healthy flora environment. The vegetation within the project area does not appear to be sustained by saline groundwater.

2.3.5 Sediment analyses, including grain size (beach) and testing for contaminants (if any)

The project does not include any elements pertaining to beach improvements, excavation, or other activities relating to beach sand. A sample of native beach sand was taken and will be analyzed for grain size and color. These results will be provided to DECR and the Planning Department when the analysis is completed. The need for a test for contaminants from a surface sample of beach sand is not necessary because this portion of Providenciales has very little development and does not experience a lot of heavily human activity.

2.3.6 Climate and Meteorology

Precipitation, temperature, and winds are described in the 2017 EIA report. In summary, the climate of the Turks & Caicos Islands is tropical, with a year-round average temperature of 26.1 degrees Celsius (°C) (79 degrees Fahrenheit (°F) and typically varies between 21.6°C (71°F) and 31.7°C (89°F) (Figure 2-12). This resulted in a heat index ranging between 60 and 90 percent.

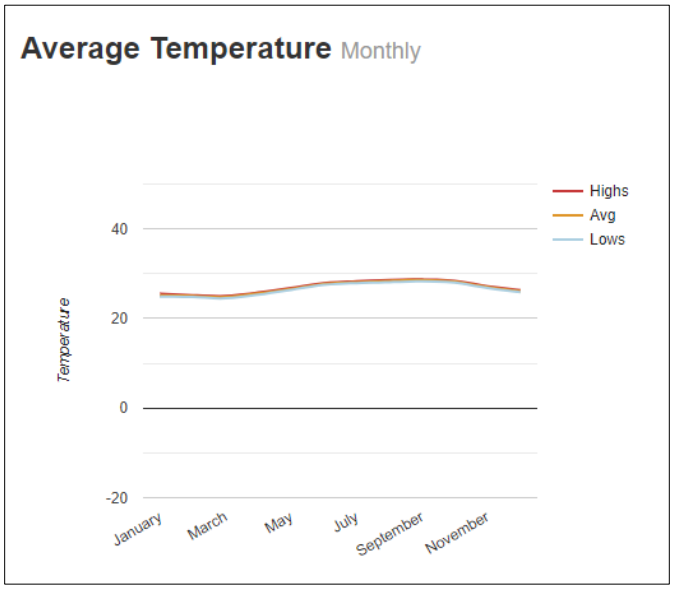


Figure 2-12. Average Monthly Temperature

The wettest months tend to occur in late summer and early autumn, and the driest months occur in the winter, with an average annual precipitation of 762 millimeters (mm) (30 inches) (Figure 2-13).

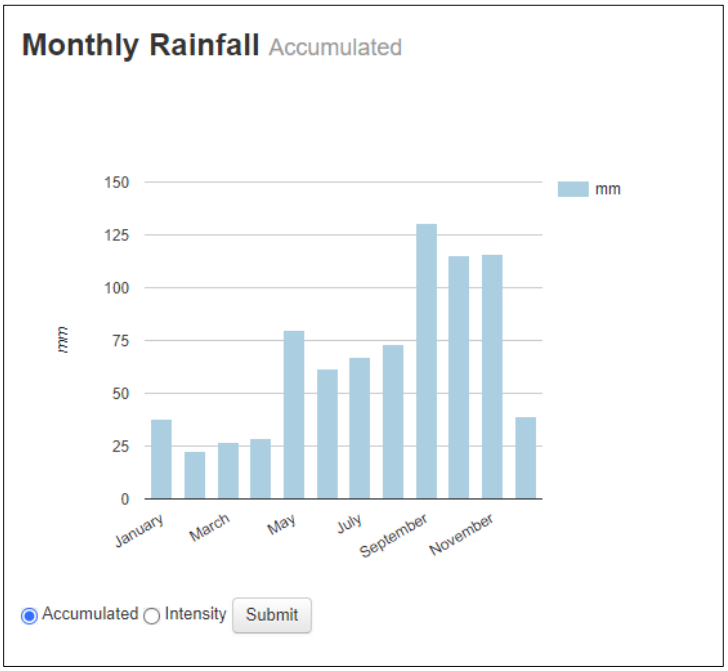
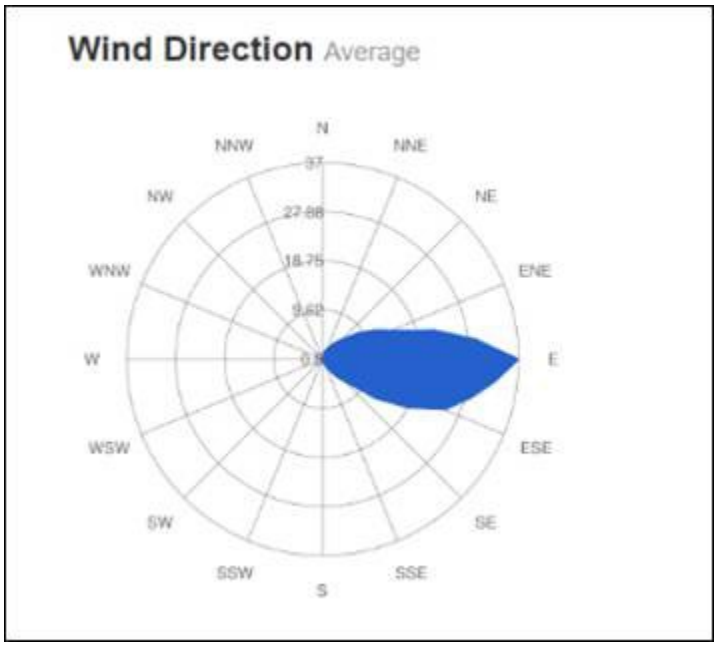


Figure 2-13. Accumulated Monthly Rainfall

Winds are most frequent from the east and have an average speed of 10.7 miles per hour (mph) based on data from between 2011-2016. Hurricanes and tropical storms may occur typically between July and November.

Winds during the typical meteorological year are predominantly from the east to east-southeast but range from northeast to southeast 89 percent of the time. Wind from all other directions can also be observed and is usually the result of frontal or tropical storm systems.



Source for graphs: https://wisuki.com/statistics

Figure 2-14. Average Wind Direction

2.4 Baseline Aesthetics

The aesthetics of the property will experience some changes, but the overall expectation of the project will incorporate a native landscape, including the relocation of many plants that were identified prior to land clearing, harvested and cached in a temporary, onsite nursery. The view of the property from the beach will remain well vegetated due to the adoption of construction setbacks. The illustration of the resort (Figure 2-15) shows the planned aesthetic for the resort.



Figure 2-15. Artist Rendering of the Janu Resort

2.5 Baseline Coastal Processes and Dynamics

The project area is located on the western shoreline of Providenciales, in the Northwest Point area of the Turks and Caicos Islands and is largely unaffected from prevailing wind and sea conditions, which predominately emanate from the east to east-southeast. Wave conditions within the area are generally mild and associated with local wind-generated seas. Given that wave fetch is limited to the south and southwest, the potential for swell conditions is restricted. However, winter storms have been documented to produce large swells along this region of shoreline.

2.5.1 Currents and Tides

The Turks and Caicos Islands have tides that are predominantly semidiurnal with an average range of 0.64 m (2.1 ft) and a spring tidal range of 0.79 m (2.6 ft). The average high tide level is 0.34 m (1.1 ft) [relative to mean sea level (MSL)]. Although wind will play a role, tides produce tidal currents; it estimated they will be on the order of 0.01 to 0.1 foot per second (ft/s) at or near the project site.

2.5.2 Sediment Transport

The amount of sand associated with the beach system is relatively finite, as there is no appreciable sand source coming into the beach system, and the rock headlands at the beach boundaries limit transport of sand out of the system. Sand movement is most notable during episodic (storm) events, which will tend to move sand from the beach into the nearshore as well as move sand down the beach.

2.5.3 Erosion and Accretion

Sand within the beach system periodically migrates both offshore and longshore depending on wave and sea conditions. At times, this will result in a reversal of sand transport to the north, resulting in eroded beach conditions. While this condition will naturally recover, the eroded beach is not conducive to recreational use for a period of time following the storm event. There is also a minor net loss of sand volume within this process that, over a long timeframe, could result in net beach recession and erosion.

Major storms can result in stripping of the beach sand down to base rock and cobble. This has occurred several times along the western shoreline of Providenciales from major storms, severely eroding the dunes. This behaviour is a natural response to storm conditions, and beach recovery occurs typically within weeks of the storm event. The post-storm beach condition, however, is not conducive to recreational use, at least for some period following the storm. There is also a concern regarding a long-term loss of sand due to these storm events (all the sand does not return to the beach following a storm).

2.5.4 Coastal Dynamics

The western shoreline of Providenciales is predominantly comprised of a series of crenulate bays defined by limestone (ironshore) outcrops. Beaches within the area are retained within the embayment features and consist of a thin veneer of sand over base limestone and cobble. The amount of sand associated with the beach system is relatively finite as there is no sand source coming into the beach system, and the rock headlands at the beach boundaries limit transport of sand out of the system.

The western shoreline is fairly typical of crenulate beaches which commonly occur within this region of the Atlantic and Caribbean. The western orientation of the beach limits exposure to prevailing winds and waves ensuring relative stability under typical weather and sea conditions. Sand within the system will migrate both in an onshore-offshore direction as well as up and down the beach based primarily on seasonal variations in weather and sea condition. Transport rates are generally low and the net trend in transport is to the south.

2.6 Water Quality

While no project elements are expected to directly impact the nearshore water quality, a water sample was taken and analyzed to provide a baseline for any unanticipated secondary impacts. The sample of water was taken offshore of the project site, approximately 100 ft from the center of the site. The sample was taken at mid-depth, in approximately -3 ft of water. The sample was taken to Provo Water's labs within an hour of collection for analysis. The samples were analyzed and compared to drinking water standards. All testing results were within compliance with the exception of salinity, sulphates, TDS, and total coliform, which were above drinking water standards but were within expected levels for seawater. The results of the analysis can be found in Appendix K.

2.7 Socio-Economic Baseline

2.7.1 Demographic

The Turks and Caicos Islands Government "Fiscal and Strategic Policy Statement (FSPS)" 2023/24-2026/27, prepared by the Ministry of Finance, Investment and Trade predicted that in 2022 and 2023, the construction industry would maintain its excellent performance. "The actions of enterprises and private persons are expected to drive this sector's growth, which is anticipated to be four percent on average between 2022 and 2025. The Government's new and ongoing capital programmes, which concentrate on infrastructural development, improved physical working conditions, and community-based initiatives, will likely help the construction industry maintain its good performance. Foreign direct investment in tourism-related and other projects and a rise in domestic private-sector investments are also anticipated to boost building activity further."

The Vision 2040, The Framework Document, and Medium-Term Development Strategy establish the targeted outcomes and aligns with the Sustainable Development Goals (SDGs). It indicates that in the medium-term, the Government's key focuses are the following:

1) Human Capital Development,
2) Inflation and Cost of Living Containment,
3) Destination Management Reform.
4) Public Sector Reform,
5) Preservation and Enhancement of National Security,
6) Population & Migration Policy Reform,
7) Primary Sector Development,
8) Housing & Crown Land Management Reform, and
9) Critical Infrastructure (Re)Development.

Turks and Caicos Islands 2026 Tourism Statistics Report also shows that the Turks and Caicos Islands welcomed a total of 1,952,994 Visitor Arrivals for 2025. This is a 28.5 percent increase in arrivals overall when compared to the previous 2023's figures. This trend continues.

2.7.2 Employment: labor & skills demand at construction and operation; local and foreign workers needed

Construction Phase

During the build-out, the project is estimated to engage 250–350 skilled and unskilled workers through contractors and sub-contractors. The project's own schedule of economic opportunities anticipates that, at peak, laborer demand routed through contractors could reach 300–500 roles. Demand spans the full range of construction disciplines and the suppliers and logistics that support them:

- Masonry, carpentry, electrical, plumbing and tiling
- Equipment operation, trucking and civil works
- Roofing and landscaping
- Materials, equipment and provisions supply
- Transport (bus, boat, garbage and haulage) and worker housing

Operational Phase

Upon completion, the resort's detailed staffing plan provides for 319 permanent positions at stabilization, distributed across 11 departments. This refines and modestly exceeds the earlier planning estimate of 250–300 direct operational roles. The breakdown (Figure 2-16) shows a workforce weighted toward guest-facing food-and-beverage, housekeeping, villa and front-of-house roles, with substantial back-of-house teams in maintenance and landscaping.

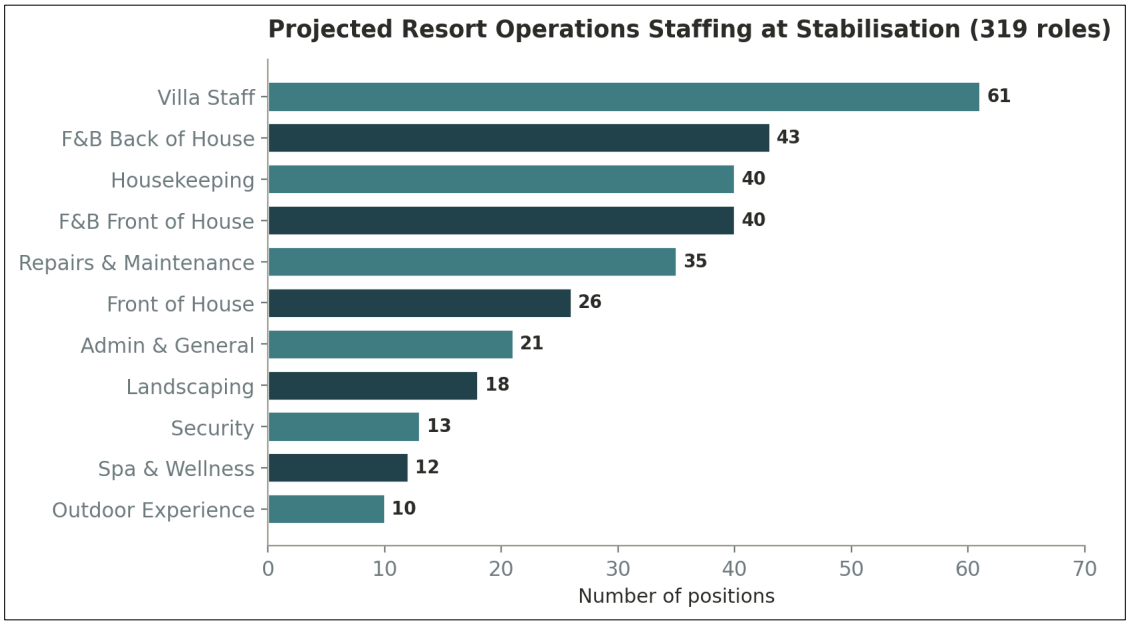


Figure 2-16. Projected Resort Operations Staffing at Stabilisation (319 roles)

Ongoing/Future Employment

During the operational phase and beyond, the property will sustain a continuous program of renovation and improvement works. This is estimated to support an additional 100–200 roles over approximately a decade (to around 2040), maintaining demand for local contractors and trades well after the principal construction phase has ended.

2.7.3 Safety/Security concerns within the community

The applicant will employ a local security team and staff for the construction phase and is working with a security consultant to develop a plan for operational phase of development. Economic impact: short-term and long-term

The largest short-term effect of the construction phase of the project will be the employment of local skilled workers and procuring materials from local suppliers and local services, including:

- Masonry, carpentry, electrical, plumbing and tiling
- Equipment operation, trucking and civil works
- Roofing and landscaping
- Materials, equipment and provisions supply
- Transport (bus, boat, garbage and haulage) and worker housing

A significant long-term feature of this development is the durability of its economic contribution. Many projects deliver a one-time boost, however, a luxury resort with a branded-residence component embeds a long-term economic engine in the local economy.

- Recurring tax base: accommodation and rental taxes grow as the resort matures, and residence resales generate fresh stamp duty over time, sustaining and increasing public revenue beyond the 2035 horizon of this projection.
- Permanent employment: the 319-role operational workforce is sustained for the life of the property, supplemented by 100–200 ongoing improvement-works roles for around a decade after opening.
- Continuous local procurement: recurring operational spending keeps demand flowing to local suppliers and service businesses indefinitely.
- Destination value: the Janu brand anchors Providenciales' northwest coast as a luxury enclave, reinforcing the wider tourism economy and the value of surrounding real estate.
- Stewardship dividend: proximity to the Northwest Point Marine National Park aligns the project's long-term interests with marine education.

Taken together, these features make Janu Resort, Turks and Caicos not merely a construction event but a permanent addition to the productive base to the economy of the Turks & Caicos Islands.

2.8 Other Relevant Parameters Identified During the Scoping Exercise by the Consultants

The ToR comprehensively addresses all concerns and parameters (Appendix A).

3. LEGISLATIVE AND REGULATIVE CONTEXT

3.1 TCI Development Plan/Master Plan

The TCI Constitution (2011) provides for the protection of the environment for the present and for the future generations while promoting justifiable economic and social development.

3.2 TCI National Physical Development Plan 2020

The purpose of the National Physical Sustainable Development Plan (NPSDP) is to strike a balance between environmental sustainability and human development. The environment is the jewel of the Turks and Caicos Islands. This proposed development is consistent with this plan.

3.3 Physical Planning Ordinance and Subsidiary Legislation

All physical development aspects of the proposed project must be in conformance with the most recent version of the Physical Planning Ordinance and Subsidiary Legislation. The ordinance delineates the procedures required for the oversight, review and approval of development by the DoP. The Physical Planning Ordinance was established by the Physical Planning Board, which is empowered to review proposed development and determine if it is consistent with the various requirements of this ordinance.

Section 74 (1) of the Physical Planning Ordinance of the Turks and Caicos Islands (2021) authorizes the Physical Planning Board, while considering an application, to take into account a number of factors to make a proper decision on the application. These factors include, among other factors:

- The impact of the proposed development on the ecology of the island where it is to take place;
- The impact of the proposed development on the natural or built environment and the uses of the adjacent land, and
- The benefits likely to accrue to and the disadvantages that may be imposed on the economic, social and welfare facilities, including prospects of employment and the effect on the infrastructure of the islands as a result of the proposed development.

Section 45 (1)(b) of the Physical Planning Ordinance (2021) gives the Director of Planning the authority to request that a developer (at the expense of the developer) provide an environmental impact or economic feasibility study for developments falling within certain categories where the impact on the environment and/or the economy of the Turks and Caicos Islands may be affected. This is the basis for the requirement for an EIA for this project.

3.4 TCI Development Manual

The Turks and Caicos Development Manual provides the basis for development requirements, including property setbacks and development and construction requirements. All development must be consistent within the setbacks delineated within the Development Manual, specifically with regard to the property boundary and coastal setbacks.

3.5 TCI Building Code

The proposed development includes a variety of physical structures and infrastructure that must be in compliance with the TCI Building Code. For the purpose of this EIA, it is assumed that all development will be in conformance with the TCI Building Code.

3.6 National Parks Ordinance

The National Parks Ordinance (2018) provides for the establishment of National Parks, Nature Reserves, Sanctuaries and Historic Sites and for the imposition of restrictions on development in such areas. It is noted that the proposed development is along the shoreline boundary of the Princess Alexandra National Park. While no activities are proposed seaward of the park boundary (which is delineated by the mean high water shoreline), the project has the potential to impact the park through secondary impacts or activities during the operational phase of the development, however, through proper management of the resort these impacts are expected to be minimal.

3.7 Coast Protection Ordinance and Subsidiary Legislation

The Coastal Protection Ordinance precludes the extraction or mining of any material from the coast without prior governmental authorization. In terms of the ordinance, the term "coast" refers to land bordering the sea bounded by the mean low tide elevation. In addition, this ordinance precludes the discharge of any material within the coastal zone. This ordinance is not relevant to this project. No extraction or mining of material from the coast is proposed.

3.8 Mineral (Exploration and Exploitation) Ordinance and Subsidiary Legislations

Under the Minerals Ordinance, all minerals beneath Turks and Caicos Islands territorial waters and contained within the subsoil are the property of Crown (Part II). Therefore, the exploration for and exploitation of minerals are governed under the Minerals Ordinance, and any such exploration and exploitation of minerals may take place only with the issuance of a license (Section 7) and a grant of development permission from the DoP (Section 5).

All materials should be obtained from a proprietor who is legally licensed under the Minerals Ordinance, and the applicable royalties on said materials shall be paid.

3.9 Marine Pollution Ordinance and Subsidiary Legislation

The Marine Pollution Ordinance governs all vessels and activities within the territorial waters of the Turks and Caicos Islands and the discharge of pollutants therein. It also governs pollutants that may be discharged on land but enter the marine environment (§ 4 and 5). Therefore, the operation of construction equipment for the project is subject to conformity with the ordinance.

Under this ordinance, it is unlawful to discharge oil (§ 9), noxious liquid substances (§ 12), harmful substances as defined by MARPOL (§ 15), garbage (§ 21), and/or hazardous waste (§ 30) into the marine environment.

3.10 Fisheries Protection Ordinance and Subsidiary Legislations

Part III of the Fisheries Protection Ordinance contains provisions for conservation, including restrictions relating to the seabed (Regulation 10), including prohibitions against employing activities or devices that are harmful to marine life, removing, shifting or in any way disturbing coral, seagrass, sand, rock or other substances forming part of the seabed. In principle, this legislation further requires the protection of critical marine habitats associated with fisheries. With regard to this project, direct impacts to the marine environment are not proposed, although secondary impacts, including those associated with behaviour of those using the development, could have bearing under this ordinance.

3.11 Wild Bird Protection Ordinance

Under the Wild Bird Protection Ordinance, it is prohibited to wilfully kill or wound a wild bird. It is also prohibited to remove or destroy a nest or egg. If there are any located within the site, permission from the Governor in writing is required to remove or relocate them [Wild Birds Protection Ordinance (gov.tc)].

Based on site observations, bird use of the property is noted, but there is no project-specific concern relative to this ordinance.

3.12 International Treaties and Conventions

While Turks and Caicos is not formal signatory to either IUCN or CITES, the Turks & Caicos Islands does acknowledge, regulate and protect multiple species that are addressed through these international agreements. There are no coral features adjacent to the beach that will be impacted by construction activities.

3.13 Turks and Caicos Islands Vision 2040

The TCI Vision 2040 is a long-term plan to achieve developed country status. Its goal is to create a diverse economy with a high standard of living, while simultaneously protecting the natural resources. TCI relies heavily on tourism, which requires a healthy management of ecosystems and aquatic resources (Turks and Caicos Islands Vision 2040 Public Document). In principle, this development is consistent with the intent of this plan.

4. PROJECT DESCRIPTION, CONSTRUCTION AND OPERATION

4.1 Description of the Proposed Project/Components

The Janu Resort project has been granted Outline Development Permission, dated 12 June 2026 for the development of parcels 60000/235pt, 825-836 and 874-898. The Planning Application is registered as PR 18942 for the development of approximately 84.75 acres of land along the western shoreline of Providenciales, in the Northwest Point area of the island.

Janu Resort is a luxury beachfront hotel-and-residences development on the northwest coast of Providenciales, being delivered by Northwest TCI Holdings Ltd. under Aman Group's lifestyle brand, Janu. Announced as the brand's first property in the Americas and conceived as a continuation of the celebrated Amanyara story, the project pairs an intimate hotel with a limited collection of fully serviced, Janu-branded beachfront residences on an approximately 84.75-acre site bordering the Northwest Point Marine National Park.

The Hotel development will consist of the following components:

- Fifty-three 1-Bedroom Pavilion with 807square feet (sqft) [75 square meters (sqm)]
- Five 1-Bedroom and Lounge
- Five 2-Bedroom Pavilion with 2,206 sqft (205 sqm)
- Two 3-Bedroom Pavilion with 4,467sqft (415sqm)
- Arrival Lobby and Reception Area, Front Office
- Food & Beverage areas, including a main lodge restaurant / bar/ boutique
- Experience Amenities, including a cinema / pottery, outdoor performance space
- Beach and Pool Clubs, Beach club has 1 pool and two covered water features
- Spa and Wellness amenities
- Sport & Leisure Facilities including a shop, tennis courts and soccer pitch

The Villas development will consist of the following components:

- 29 Branded Villas: these will be sold and be registered in the Janu Resort rental program, controlled by the resort. Breakdown as follows:
- Seventeen 3- or 4-Bedroom Villas with 4,520 sqft (420 sqm)
- Six 4-Bedroom Villas with 5,489 sqft (510 sqm)
- Six 5-Bedroom Villas with 6,458 sqft (600 sqm)

Additional components of the development include front-of-house buildings and other structures having a combined footprint of approximately 67,059 sqft, back-of-house buildings and

structures having a combined footprint of approximately 77,500 sqft, and additional staff areas with a footprint having a combined footprint of 68,802 sqft.

4.2 Project Justification – Socio-Economic and Ecological

The proposed development is consistent with the Land Use Zoning for the location of the property. The proposed development is similar in aesthetics and density to the neighbouring property.

Apart from the creation of jobs during the construction and operation phases of the development, the project delivers a contribution to the Turks & Caicos Islands that is material at national scale, diversified across the project life cycle, and durable well beyond construction. A detailed Socio-Economic Justification Report is included in Appendix L.

4.3 Coastal/beach Development and Management (including beach access along southern boundary of site)

The public beach access at Malcolm Road is accessible to the public. It is understood that all beaches are public spaces and the public will not be discouraged from traversing the beach along the property. The beach will remain open during construction.

4.4 Methods and Changes to Topography for Terraforming (construction of lake and islands within)

The lake feature included in the plans will be excavated using conventional landside techniques. The material from the excavation will be utilized onsite to level the site to achieve desired elevation for construction. Additional material to raise building lots and infrastructure to proposed elevations will likely be necessary and will be obtained through TCI-approved sources.

4.5 Source and Quality of Fill and other Materials to be used for Terraforming

Excavated material from the lake feature will be used within the property boundary to elevate and level lots and infrastructure. No beach or other shoreline treatments are proposed, and no material will be utilized within the nearshore. No beach sand is needed for this project. Imported sand will be used for construction.

4.6 Solid Waste Management During Construction and Operation

All solid waste generated by the construction and the operation of the facility will be handled by sustainable collection and disposal. During construction, contractors will provide enough portable toilets for the number of employees onsite. Trash bins will be placed within the work zones for collecting localized employee and work-related trash. Bins will be collected and properly disposed of on a regular basis.

4.7 Surface-run-off Management (storm water runoff and treatment; watershed into and from lake and to sea)

Storm water will be directed to swales and gullies throughout the site. Affluent stormwater will be collected in deep steel wells. Stormwater from buildings and hard-surfaced areas around the lake feature will drain into the lake.

Silt fences should be utilized around construction areas to keep soil in place and reduce the potential for runoff to enter neighbouring properties and the nearshore environments. There will not be any runoff from the development site onto neighbouring properties.

4.8 Traffic Flow and Safety

The project will have minimal direct impact on existing or future vehicular traffic within or adjacent to the project area. The road to the site is at the terminus of Millennium Highway where traffic is minimal. The greatest concern from increased traffic is the impact on road conditions as the road west of the Malcolm Road and Blue Hills Road intersection is unpaved, and deterioration of the road occurs with the excess traffic and heavier vehicles.

4.9 Water and Electrical Demand and Source (construction and operations)

Water and Wastewater Capacity

The project's water and wastewater loadings have been engineered and are summarised below. The development provides its own reverse osmosis plant, its own wastewater treatment plant and its own water storage, so neither the public water network nor the public sewerage network is called upon to absorb the resort's load.

Table 4-1. Water and Wastewater Capacity

Item	Volume	Basis
Wastewater treatment plant capacity, whole project	110,000 gpd	Recommended design capacity
Resort daily wastewater	78,000 gpd	Operational load
Villa daily wastewater (incl. two-bedroom villas)	32,000 gpd	Operational load
Potable water storage onsite	700,000 gallons	Five days' supply
Initial pool filling: hotel component	1,470,269 gallons	One time, at commissioning
Initial pool filling: villas	892,663 gallons	One time, at commissioning

The 110,000 gallon per day (gpd) treatment capacity is specified above the combined operational load of 110,000 gpd across the resort and villas, and the plant serves the whole project. Water storage of 700,000 gallons represents five days of supply, implying average daily potable demand in the order of 140,000 gallons. Pool filling of 2.36 million gallons in total is a one-time commissioning requirement and is additional to the recurring figures.

Potable water is produced on site by a reverse osmosis plant, and wastewater is treated onsite by the project's own treatment plant. Both are built and funded by the Developer. The development therefore does not draw on public water production nor public sewerage capacity, and imposes no capital or operating cost on either network, a material point in a territory where water production is energy-intensive and capacity is finite.

Electrical Demand

Estimated electrical loadings for the development are summarised in Table 4-2. The values are engineering assumptions prepared in September 2026 and will be refined as detailed design progresses.

Table 4-2. Electrical Demand

Component	Connected Load (VA)	Demand Load (VA)	Diversity Load (VA)
Guest pavilion and villas	7,112,312	5,213,938	2,005,361
Common and commercial buildings	2,451,832	2,098,309	1,249,737
Total	9,564,144	7,312,247	3,255,098

The operative figure for grid planning is the estimated diversity load of approximately 3.26 megavolt-ampere (MVA), which reflects the fact that connected equipment does not run simultaneously at full rating. The total connected load across the site is approximately 9.56 MVA, and estimated demand load is approximately 7.31 MVA.

Pelican Energy, the territory's electricity utility (formerly FortisTCI), has confirmed, following a meeting with the Developer, that its network can accommodate the load required by the Development. The cost of the connection and of any associated network works will be borne by the Developer, not by the utility or the public. Therefore, the development imposes no capital burden on the electricity network while adding a substantial new commercial customer to it.

4.10 Landscaping: Initial Phase, Operation, and Maintenance

The project has a comprehensive landscaping plan in place. Grading for building lots and infrastructure will preserve some existing vegetation throughout the site. No invasive species are included in the landscape plan, and the plan includes a wide variety of native and ornamental species. The use of native and endemic species is encouraged, including the reintroduction of harvested plants back into the landscape. Landscape plans and list of species are included in Appendix I.

4.11 Construction Phase Activities

4.11.1 Construction Methods and Program

The project will proceed in phases with respect to order of construction. The initial phase will consist of infrastructure including roads, utilities, and drainage systems. The next phase will be the hotel and it’s supporting amenities while simultaneously beginning several residential units. The remaining residential units will be constructed as sold.

Construction methods will consist of standard techniques. The foundations of all structures will be constructed of poured concrete slabs, and the walls of the buildings will be constructed of cinderblock filled with concrete. Buildings will be connected by paved paths/roads surrounded by gardens primarily consisting of native vegetation.

4.11.2 Site Security and Hoarding

During construction, the main access to the parcel will be secured by fencing while the dune line will have sufficient signage to keep people out of the construction zone. There will be measures taken to cover the security of the site, materials, and equipment. All landside equipment will be stored within the construction boundary in designated areas of upland construction.

4.11.3 Sources of Fill and Rock

It is not anticipated that the project will require additional rock resources from outside the project footprint. No major coastal works are proposed. Fill material needed for construction of building sites will be procured through TCI government approved sources with appropriate testing submitted for approval if needed.

4.11.4 Storage and Maintenance of Materials and Equipment

The following information is from Appendix M – Heavy Equipment Protocol.

General Requirement – No Maintenance on Unprotected Ground

As a fundamental project requirement:

- Refuelling, lubrication, hydraulic-fluid top-ups, oil changes, coolant servicing and other equipment maintenance shall not be undertaken directly over unprotected soil.
- Appropriate protection and secondary containment shall be installed before commencing such activities.
- Depending upon the activity, this shall include an approved impermeable maintenance surface, portable spill-containment mat, drip tray, absorbent pads or other suitable containment system capable of preventing petroleum products or other fluids from reaching the underlying soil.

Designated Refuelling and Maintenance Areas

Where practicable, routine refuelling and equipment maintenance shall take place within designated areas established by the General Contractor.

Such areas shall:

- Be located on stable and level ground;
- Have an impermeable or suitably protected surface;
- Incorporate appropriate secondary containment;
- Be positioned away from stormwater drainage routes, excavations, wetlands, shoreline areas and other environmentally sensitive locations;
- Be protected from uncontrolled stormwater run-on and runoff;
- Have appropriate fire extinguishers and safety equipment;
- Have clearly identifiable spill-response equipment readily available; and

- Be maintained in a clean and orderly condition.

Routine oil changes, hydraulic servicing, coolant changes and similar maintenance operations should be performed within these designated areas whenever reasonably practicable.

Mobile Refuelling

Where equipment cannot reasonably be relocated to the designated fuelling area, mobile refuelling may be undertaken subject to the following requirements:

- A portable spill-containment mat, drip tray or appropriate absorbent protection shall be positioned beneath the fuelling point before refuelling commences.
- Fuelling hoses, connections and nozzles shall be inspected for leaks or damage.
- Fuel nozzles should incorporate automatic shut-off functionality wherever practicable.
- The operator shall remain in attendance throughout the entire fuelling operation.
- Fuel tanks shall not be overfilled or "topped off."
- Engines shall be switched off during refuelling unless manufacturer requirements specifically dictate otherwise.
- The fuelling vehicle shall carry a complete spill-response kit.
- Any spill or leakage shall be immediately contained and cleaned in accordance with Appendix M, Section 9.

Oil, Lubricant, and Hydraulic Fluid Top-Ups

Oil, coolant, hydraulic fluid and other equipment-fluid top-ups shall be performed using suitable pumps, funnels or dispensing equipment designed to minimize spillage.

A drip tray, spill mat or absorbent pad shall be positioned beneath the fill point and any hose or connection where leakage could reasonably occur.

Containers shall remain properly sealed when not in use.

Empty containers, used filters, oily rags and absorbent materials shall be collected and disposed of through the project's approved waste management system and shall not be left on the construction site.

Equipment Inspections and Leaks

Equipment operators shall undertake a visual inspection of their equipment at the commencement of each working day or shift.

Particular attention shall be given to:

- Hydraulic hoses and connections;
- Fuel tanks and fuel lines;

- Engine and transmission oil;
- Hydraulic cylinders;
- Coolant systems; and
- Evidence of fluid accumulation underneath equipment.

Equipment exhibiting significant or continuous leakage shall be repaired promptly.

Where a leak presents a risk of soil contamination, the equipment shall be removed from service until repaired or relocated to an appropriate maintenance area.

Where immediate relocation is impractical, suitable drip pans, absorbent pads or containment shall be installed beneath the affected equipment until repairs or removal can be undertaken.

Fuel, Oil, and Chemical Storage

Bulk fuel, oil, lubricants and other petroleum products shall be stored within approved areas incorporating appropriate secondary containment.

Storage areas shall:

- Be located away from drainage channels, shoreline areas and environmentally sensitive areas;
- Be protected against accidental vehicle impact;
- Be clearly identified;
- Be kept secure;
- Have suitable spill-response materials immediately available; and
- Be inspected regularly for leakage, deterioration or damage.

Secondary containment shall be appropriately sized for the materials being stored and shall account for potential rainfall accumulation where exposed to weather.

Rainwater accumulated within containment areas shall be inspected before discharge and shall not be released if there is evidence of petroleum contamination (Appendix M Heavy Equipment Protocol).

4.11.5 Beach Traffic Impact and Safety

All development is proposed landward of the primary dune, therefore, impact to beach traffic is not anticipated to be significant during the construction phase of the project. Access to the property from the beach will be prohibited by way of signage where necessary. It is not planned to install a fence through the entire dune to keep pedestrians out because the installation will cause unnecessary damage to an environment where little work is proposed. Existing pathways into the property will be sufficiently blocked, and clear signage will be installed to prevent trespassing.

4.11.6 Temporary Sanitary Facilities

Temporary sanitary facilities will be established onsite. Portable latrines, the number to be determined by contractor, will be provided and maintained by an approved provider on the property for liquid waste disposal. The contractor will be required to maintain acceptable environmental health and safety standards during construction.

4.11.7 Access and Staging

Access to the construction site will be via Millennium Highway. No staging will be outside the premises of the construction site. All workers parking will be within the property boundary and will not affect the traffic flow of Millennium Highway. The construction site is located down a dirt road and is not in close proximity to Millennium Highway and will not cause any obstructions, congestions, visual impacts or nuisances to the existing residents.

4.11.8 Solid Waste Management

All solid waste generated during construction, whether from daily food and beverage consumption by those working at the site or construction waste, will be containerized and disposed of at the public landfill site on a regular basis. Lidded refuse bins will be provided and easily accessible to workers with clear instructions for immediate waste disposal. Inspections will be made at the end of the day by the contractor to ensure that no waste remains behind on the jobsite, including near the shoreline. Solid waste debris is often problematic on construction sites and of particular concern when working close to the marine environment due to the increased incidence of debris either blowing or floating away. Not only is it not aesthetically pleasing washing up on the shore but the waste can injure and kill marine organisms if they ingest it or are inadvertently trapped in it.

There will be a zero tolerance for any waste being disposed of in the terrestrial, marine, or coastal environments.

4.11.9 Liquid Waste Management

The contractor has developed a Heavy Equipment Refuelling, Maintenance & Spill Prevention Protocol, provided in Section 4.11.4. This includes the identification of potentially hazardous liquid waste on the site, means and method of use, storage and disposal. The Project Manager shall conduct regular observations of the project site to ensure compliance with the approved protocol.

4.11.10 Control Storage of Fuels and other Dangerous Substances

Also outlined in Section 4.11.4, hazardous materials will be stored in a secure location using appropriate storage containers. Non-compatible chemicals (i.e., acids and bases) will be segregated to prevent mixing in the event of a spill. Employees are required to read information on labels and safety data sheets (SDS). Storage areas will be kept clean, with access kept clear. Instructions on signs must be obeyed. Appropriate personal protective clothing, if necessary, must be worn.

4.11.11 Emergency Mitigation Plan

Effective planning helps to reduce potential impacts. In the case of the project, the threat of emergencies is small and can be largely avoided with conscientious planning.

This plan outlines strategies to avoid and mitigate spills of hazardous materials on land and in the marine environment. The following are events that can require emergency and mitigation responses.

- Hurricanes and Tropical Storms
- Noxious Liquid Spills
- Public Safety Issues

Successful emergency management may require the participation of key government agencies including:

- The Turks and Caicos Islands Fire Department
- The Department of Disaster Management and Emergencies (DDME)
- The Department of Environmental Health
- The Department of Environment and Coastal Resources (DECR)
- The Turks and Caicos Islands National Healthcare Agency.

Success also depends on financial resources, administration, and trained personnel for implementation. Any emergency and mitigation plan should be seen as a "living" document, in that revision and review should take place, incorporating newly available information, changing circumstances and lessons learned.

Any pollution incident that poses a threat to the natural environment should be reported immediately to DECR, the Department of Environmental Health, DDME, and Maritime Affairs. Spill mitigation materials should be immediately available to the construction crew, including booms and absorbent materials. The silt fences, which should be in place throughout the construction process, will help to avoid and reduce impacts from potential spills. However, the emergency mitigation plan should remain in place in the event that a spill occurs.

The following paragraphs describe the roles and responsibilities that are assigned to the various project principles.

Project management/monitoring team, contract administration and oversight ensure that work is compliant with the mitigation measures outlined in the Environmental Management Plan (EMP). The Project Manager ensures that the necessary equipment, manpower and resources are available to provide an effective and immediate response to an emergency or hazard and to alert relevant authorities immediately. The Project Manager also ensures that construction crews are adequately trained to discharge disaster management responsibilities and/or arrange for additional assistance, if required. All staff members should be informed of emergency procedures, and applicable signage and information should be posted at key locations.

Project Developer – Monitoring operations are to be conducted in accordance with the recommended monitoring and mitigation measures in the EMP to ensure that siltation, spills, and pollution are avoided, reduced, restored, and offset, when required. All solid waste generated will be disposed of on a regular basis, and any solid wastes with the potential to become airborne are not to be permitted near coastal areas. Replacement of hydraulic or machine fluids is to take place at designates sites where the soil is protected. Equipment and machinery shall be serviced, maintained, and washed in designated areas

Hurricane/tropical storm response measures – The following procedures are to be taken in the event of a weather statement regarding hurricanes and tropical storms.

- No construction activities should take place under an active tropical storm/hurricane watch at the time of predicted landfall. All equipment should be secured onsite and all other materials secured within 24 hours of predicted landfall so that they cannot become windborne.
- In the event of a tropical storm/hurricane warning, all construction activities should cease once the warning has been issued. All equipment should be secured onsite if possible, until the storm has passed. Heavy machinery may be needed to be moved to higher ground off site to allow for recovery or clearing that may be needed. Any onsite materials that have the potential to become windborne should be removed to a secure location. No construction activities should take place until the warnings have been lifted.
- TCI Disaster Management Guidelines will be followed.

Spill response measures – The following procedures are to be taken in the event of a spill of hazardous materials:

- Recording of the actions and decisions taken during an accident should be undertaken to ensure lessons are learned. Any improvements shall be enforced in response to improved technologies and capabilities.
- All relevant factors are to be immediately assessed, including the nature, amount, location, wind and current directions and speeds, areas potentially affected, and resources needed and available.
- Priorities are to be established and response initiated, based on most-critical factors first. The employment of chemical dispersants/oil herders is to be used only under the approval of DECR. Response shall include reduction of impacts in sensitive areas, via the removal of pollutant in all affected areas.
- Contaminated materials shall be recovered and disposed of on land at the Providenciales landfill. DECR shall oversee and dictate the clean-up strategy and risk assessment.
- Prevailing weather conditions and hazardous material types will determine the equipment and methods to be used.

- Biological and other environmental values, accessibility and ability to utilize such equipment shall be considerations in selecting the clean-up method.
- Any solid materials, such as tar balls, will be put into plastic bags and disposed of at the Providenciales landfill.
- Response shall also include during- and post-incident biological monitoring to determine the effectiveness of the response.

Reporting Information Requirements for Hazardous Materials Management (HAZMAT) – measures for reporting shall include the following.

- Name of person reporting
- Date and time of incident
- Nature of incident (leak, explosion, spill, fire, etc.)
- Location and source of incident
- Details of injuries and fatalities, causes of injuries, treatments applied
- Identification of material(s) released (if known), manufacturer, label information, characteristics, physical state (e.g., gas, liquid, solid), etc.
- Amount of material released/duration of release
- Affected resources (e.g., air, water, land) and amount of materials released, including a description of direction, height, colour, odour, plumes, vapor, etc., including wind, current speeds and directions
- Local weather conditions
- Response personnel.

Public safety response – In the event of a public safety incident of any magnitude, emergency medical assistance shall be sought immediately. Note, it is preferable to have someone within the construction/management team who is familiar with and can administer first aid. If emergency medical assistance cannot be reached in a timely manner, then affected persons should be transported, if feasible, to Cheshire Hall Medical Centre (the nearest medical facility). In the case of a public safety incident, documentation is critical. The following information should be recorded:

- Time and date of the incident
- Description of the incident/injury
- Name(s) of affected persons
- Actions taken
- Names and contact information of witnesses to the incident

Follow-up with witnesses may be necessary if legal proceedings are initiated.

Water quality management – In addition to previous measures, no washing down of equipment near the water shall take place during construction.

Emergency plan testing and review – This plan will be reviewed and updates as necessary as further information becomes available that may influence plan implementation and emergency operations. If an incident occurs prior to review, the review is to take place immediately following the incident to adjust the plan as needed, incorporating lessons learned.

4.12 Socio-Economic Baseline

See Appendix L.

Dimension	Projected Contribution
Government revenue	Approximately US$100.8 million in cumulative receipts to 2035, of which US$14.1 million (land acquisition stamp duty and land lease) is already committed; building to roughly US$14.8 million per year by 2033–2035.

4.12.1 Demographic

Local business	Recurring demand across construction trades, suppliers, transport, hospitality, professional and financial services that retains spend within the Providenciales economy.

4.12.2 Employment

Construction employment	An estimated 250–350 skilled and unskilled workers engaged through contractors and sub-contractors during the 2026–2030 build-out.
Operational employment	319 permanent resort roles at stabilization across 11 departments, sustained for the life of the property.
Ongoing works	A further 100–200 jobs in renovation and improvement works over the decade following completion.

4.12.3 Safety/Security Concerns within the Community (construction and operation)

Safety and security concerns within the community will be minimal, however, signage will be posted to prevent people from entering the site from the beach and gates will be posted at the property entrance to restrict vehicular traffic to the site.

4.12.4 Issues Raised in the Public Consultation (written and verbal/oral concerns)

Issues raised during public consultation will be addressed and included in an amended or revised EIA and delivered to DECR and the DoP.

4.13 Impact to Terrain

The terrain will be cleared, excavated, and graded using conventional methods (excavators, bulldozers, etc.), utilizing material where possible to level low-lying areas and raise building lots.

Prior to land clearing, where feasible and economically responsible, endemic, threatened, and species of concern, will be identified by a person with knowledge of these species. These plants should be collected and stored until able to be replanted in the landscape plan.

Removed vegetation will be composted or disposed of in the landfill.

All Development Manual and Planning legislation and regulations will be followed.

4.14 Potential Alternatives (Including changes to avoid disturbance of vulnerable specimens of *Consolea* cf. *nashii* on property)

The development will avoid existing *Consolea nashii* to the extent possible. The majority of the individual cacti mapped are within the setback adopted in the construction plans and should be avoided if possible. Landscape staff should encourage the propagation of this species in appropriate areas of the property. Additionally, landscape species within the dunes should prioritize vegetation native to the area to ensure the natural aesthetic is maintained.

5. IMPACT ASSESSMENT

5.1 Impact Identification

For most projects, overlaying the proposed development onto the results of landside and marine investigations reveals the extent to which a project would have direct impacts on landside vegetative communities, intertidal communities, and nearshore sub-tidal marine areas.

5.2 Description of Impact:

5.2.1 Potential Impacts to the Biotic Environment

Potential impacts to the biotic environment, including predicted direct, indirect and secondary impacts to coastal assets.

Based on these assumptions, the extent of the direct impacts of the project on landside communities are shown on Table 5-1.

Descriptions of the results of these direct, indirect and secondary impacts on each community type follow.

Direct, Indirect and Secondary Impacts to the Sand Strand Community

The proposed site plan has been designed to provide a 100-ft setback (in front of sandy shoreline) and 60-ft setback (in front of rock shoreline) from the seaward vegetation line to the most waterward habitable structures. Non-habitable structures such as beach cabanas, and elevated footpaths are proposed within the setback.

Indirect and/or secondary impacts are expected to be minimal in this area. The footprint for planned development within the setback is relatively small, the existing elevations are suitable for development, and the native vegetation will largely remain unaltered.

Table 5-1. Direct Impacts to Landside and Marine Communities

Community Type	Existing Size Acres	Direct Impact Acres	Percent Habitat Impacted	Percent of Combined Impacts	Comments
Dry Broadleaf Evergreen Forest	33.7	27.7	82%	40%	To be replaced with buildings, parking and landscaped areas
Dry Broadleaf Evergreen Shrubland	27.6	23.4	85%	34%	To be replaced with buildings, parking and landscaped areas
Buttonwood Forest	17.0	14.5	85%	21%	To be replaced with buildings, parking and landscaped areas
Coastal Coppice	2.0	1.3	63%	2%	Beach accesses/Lot levelling/Building
Cleared/ Disturbed	2.0	2.0	100%	3%	To be replaced with buildings, parking and landscaped areas
Unvegetated Beach/Coastal Rock	1.0	0.0	0%	0%	No impacts
Pond	0.4	0.0	0%	0%	Possible villa beach access in the future.
Wetland	0.2	0.2	100%	0%	To be replaced with large pond resource

Direct, Indirect and Secondary Impacts to Dry Broadleaf Evergreen Forest

Impacts of 27.7 acres of Dry Broadleaf Evergreen Forest pose the most significant ecological impact of the proposed project. Extrapolation of the results of the vegetation analysis plots suggest that, the applicant must initiate proactive mitigation measures to prevent impacts to orchids, air plants and other vegetation that is designated on the Turks & Caicos Islands Government's list of endemic and/or notable flora and fauna. Observations of fauna in this area, which also included Anolis lizards, butterflies and other insects and migratory and resident birds indicate that there is likely to be a loss of these species during the construction phase from land clearing and noise.

Motile species (e.g., gnat catchers, common ground-doves, humming birds etc.) that inhabit this area will also need to either find other suitable habitat that is unoccupied or persist until after re-vegetation work is completed, at which time foraging and nesting habitat function is re-established.

Indirect and secondary impacts that are likely to result from the loss of this habitat include the reduction (or temporary loss) of habitat for insects and insectivores, including migratory birds that may use existing vegetation for foraging and/or roosting during their annual migrations.

Direct, Indirect and Secondary Impacts to Dry Broadleaf Evergreen Shrubland

Similarly, although to a lesser extent based on the smaller area of impact, the loss of 23.4 acres of Dry Broadleaf Evergreen Shrubland will pose the second-most significant ecological impact of the proposed project. As stated above regarding impacts to the DBEF, extrapolation of the results of the vegetation analysis plots suggest that the applicant must initiate proactive mitigation measures to prevent native orchids, air plants and other vegetation that is designated on the Turks & Caicos Islands Government's list of endemic and/or notable flora and fauna being damaged or destroyed. Observations of fauna in this area, including Anolis lizards, butterflies and other insects indicate that there is likely to be a loss of these species during the construction phase from land clearing and noise.

Motile species (e.g., common ground-doves, mourning doves, woodstar hummingbirds, etc.) will need to either find other suitable habitat that is unoccupied or persist until after re-vegetation work is completed, at which time foraging and nesting habitat function is re-established.

Indirect and secondary impacts that are likely to result from the loss of this habitat includes the reduction (or temporary loss) of habitat for insects and insectivores, including migratory birds that may use existing vegetation for foraging and/or roosting during their annual migrations.

Direct, Indirect and Secondary Impacts to the Buttonwood Forest

Impacts to the 14.5 acres of Buttonwood Forest also pose an ecological impact of the proposed project. While the habitat is patchy and non-contiguous, the low-lying nature and the ability to retain water in shallow ponds, attracts a variety of bird species.

Motile species (e.g., herons, waterthrushes, etc.) will need to either find other suitable habitat that is unoccupied or persist until after re-vegetation work is completed, at which time foraging and nesting habitat function is re-established.

Direct, Indirect and Secondary Impacts to the Wetland

Impacts to the Wetland habitat total 0.02 acres. This habitat consists of freshwater wetland vegetation species. At the time of investigation, the wetland did not contain standing water, however, the soil still held moisture, sustaining the habitat. No fish species were observed, however the impact to this habitat will likely affect foraging of birds.

Motile species (e.g., herons, egrets, etc.) will need to either find other suitable habitat that is unoccupied or persist until after re-vegetation work is completed, at which time foraging and nesting habitat function is re-established.

Direct, Indirect and Secondary Impacts to the Coastal Coppice and Salt Pond

Impacts to the Coastal Coppice habitat total 1.3 acres. The impact to this habitat will be from levelling of building sites and the creation of beach accesses from the ocean front villas, hotel

amenities. Impacts can be reduced by using existing walkways to the beach, avoiding native vegetation, and/or building timber walkways over the vegetation.

Direct, Indirect and Secondary Impacts to the Marine Environment

Because no structures (piers, docks, boat slips, discharge pipes, etc.) are proposed to be constructed waterward of the mean dune line, the project is not expected to have any direct impacts on the marine environment.

Indirect and secondary impacts to the marine environment may occur. These could include potential eutrophication of the nearshore marine ecosystem if nutrients associated with the project find their way into the aquatic environment. Future owners and visitors also have the potential to affect the marine environment through their use of the water. The presence of marine life, including corals, sponges and juvenile reef-fish located in shallow waters in close proximity to the site, is likely to attract snorkelers who wish to see these resources.

Impacts could occur either through direct impact (i.e., blunt force trauma if an inexperienced or non-conscientious snorkeler steps on or kicks corals), or if non-reef-safe sunscreens are used underwater. Although these potential impacts may seem inconsequential based on the low likelihood of damage from a single individual, the cumulative results of potentially hundreds of users visiting the site daily for the foreseeable future increases the likelihood of damage.

5.2.2 Potential Impacts to the Coastal and Dune Environments and Processes

There are no proposed development elements related to the shoreline or proposed changes to the shoreline in the project plans. The dune environment will experience impacts from the creation of beach access points which are discussed in Section 5.2.1 (Coastal Coppice). No impacts to the coastal environment or coastal processes are expected from this development.

5.2.3 Potential Impact of Added Lighting

The impact of lighting on marine life (sea turtles) is expected to be low because there has been little evidence of nesting activities on the beach. However, the adopted construction setbacks and the low profile of the development (mostly single story), would keep light pollution to a minimum on the beach.

5.2.4 Potential Impact to any Species identified as endemic, near-endemic, rare, threatened, or endangered (by either IUCN or CITES listing

All relevant information regarding endemic, near-endemic, rare, threatened, or endangered (by either IUCN or CITES listing) species is supplied in other sections.

5.2.5 Potential Impact to Geological Environment

No caves were observed on the site, however, sink holes were observed in the rocky ridges of DBEF in the southeast quadrant of the property. These karst formations did not reveal any flora or fauna unique to the habitat.

Impacts to within the DBEF, where these sink holes were encountered, will be moderate due to land clearing for infrastructure and building lots. Geologically, no unique karst biota was present and impacts to karst habitat and biota will be minimal.

5.2.6 Potential Impacts to the Aesthetic and other Built Environment

The aesthetic impacts are anticipated to be minimal due to the adoption of sufficient setbacks and the preservation of dune vegetation. The project is designed to be aesthetically pleasing from all vantage points and will conform to established building standards for the area (Amanyara). The artist rendering of the project (Figure 2-15 in Section 2.4) displays the anticipated aesthetic look of the Janu Resort.

5.2.7 Water Quality and Noise Pollution (construction and operation)

The potential for impacts to groundwater and the water quality of the nearshore environment often derive from the following:

- Saltwater encroachment
- Nutrient loading
- Accidental fuel spills

These potential impacts directly relate to construction activities and through the operation phase of the proposed development. Following best management practices can ensure the potential for these risks remains low.

5.2.8 Ecosystem and Economic Analyses (may summarize above; valuation is needed)

These impacts are mutually reinforcing: construction spending seeds local enterprise, operational employment circulates wages through the economy, branded-residence sales and accommodation taxes build a recurring public revenue base, and the brand's presence elevates the destination as a whole. The result is a development whose value to the Turks and Caicos Islands is measured not in a single phase but across a generation.

5.2.9 Socio-Economic Impact

The construction phase of development will use and promote the employment of skilled and unskilled, on-island labourers. This phase is temporary but requires a large workforce of 250-300 engaged through contractors and subcontractors. This positive impact, while temporary, will be significant.

The operational phase will require a permanent workforce of 319 staff members.

5.2.9.1 Public Beach Access

The public beach access to the western coast at Northwest Point is located at the terminus of Malcolm Road. Access to the public beach will remain open throughout the construction phase of the project.

5.2.9.2 Potential Impact to Neighboring Developments, Businesses and Residential Houses; and Marine Activities

The potential impact of noise from construction activities could affect the nearest buildings within the neighbouring development, however, this impact should be temporary and expected to be minimal.

5.2.9.3 Potential Climate Change Impacts

In general, storm surge values are limited for the region and are generally on the order of 1 m or less for typical hurricane conditions. The presence of deep water adjacent to the archipelago and the ability of surge to flow around the islands limit the potential for the creation of extreme storm surges in this area. Tide gauge data collected during the passing of Hurricane Frances (a direct major hurricane impact) on September 1 and 2, 2004, recorded a rise in sea level of only 0.5 m from storm surge. Similar surge magnitudes have been reported in the area for historic storm impacts. Hurricanes Irma (Category 5) and Maria (Category 3) in 2017 had a devastating impact on the Turks and Caicos Islands, largely due to wind and rain.

The project should adopt a finished floor elevation which should be above the anticipated 50-year storm surge level for this area [including sea level rise (SLR)]. This requires proper consideration in the proposed ground level for proposed structures when grading the site for development. Finished floor elevations should be above the anticipated surge (inclusive of SLR) and are the primary mitigative measure proposed to reduce future risk from increased storm surge for this project.

5.3 Impact Assessment (including the cumulative impact of all existing and proposed structures in the study area

Cumulative impacts combine the past, present and future use of the site with regards to the environment, community, and ecosystem. Cumulative impacts can be positive and negative. The effect over time can be long-term and indirect resulting from multiple activities that may be deemed relatively minor but combined with others impacts can be more significant.

Cumulative impacts stemming from this project can include:

- Habitat fragmentation, whose function doesn't fully recover;
- Change to hydrologic function of the site. The establishment of Malcolm Road possibly stopped the flow of stormwater southward through the neighbouring property and led to the retention of water on the proposed site. The wetland habitat within the proposed site does not contain extensive or diverse wetland vegetation and largely is comprised of spike rush grasses surrounded by button wood.
- Ornamental species encroaching on native environments outside of the project boundaries;
- Increased human activity along the shoreline and in the nearshore environment can cause degradation of the foraging habitat for birds, tide pool habitat, nearshore reefs, and seagrass beds.
- Socioeconomically, positive cumulative impacts can be expected. Future forecast predictions are included in the Socioeconomic Justification provided in Appendix M.

6. MITIGATION AND MONITORING

6.1 Proposed Actions and Schedule to Mitigate Against any Environmental Impact (including proposed monitoring activities)

Potential activities that could be considered to minimize and/or offset ecological impacts could include the following.

1. Salvaging and relocating native, endemic, protected/threatened plant species prior to land clearing; temporarily caching these species in a nursery created onsite; relocating cached plants into the landscape plan of the project. The applicant is experienced in this practice and intends to rescue as many as is practicable.
2. The planting plan is designed to increase plant abundance and biodiversity by planting site-appropriate native vegetation and/or integrating other species of native plants that are not presently on the property into the landscape plan for the project. No invasive species or undesirable vegetation is proposed within the landscape planting plan.
3. Ensuring that field monitoring is conducted to avoid impacts to nesting birds during land clearing.
4. Currently no invasive species were found within the project assessment area, however, grading of the site will create an environment for the propagation of opportunistic vegetation to take over.
5. Incorporating environmentally conscious design and management techniques into the project.
6. Developing educational materials notifying future residents of the presence of species of notable plants and that the collection and transport of endemic, endangered and/or threatened species is prohibited;
7. Developing educational materials notifying residents of the delicate nature of the marine environment (seagrasses, corals, macroalgae, and other marine life) in the nearshore; advising that touching, standing on, and harassing these species must be avoided as it will result in damage to these valuable resources; prohibiting the collection any of these species as strictly prohibited.
8. Ensuring coordination with the landscape team to ensure that no ornamental species that are on the list of invasive plants are introduced onto the property.
9. Notifying DECR if nesting marine turtles, nesting birds (e.g., nighthawks on coastal rock, plovers on sandy beaches), or piping plovers are observed within coastal portions of the property and implement appropriate countermeasures to eliminate or minimize adverse impacts on these resources.
10. Continuing to conduct periodic beach clean-ups, as the applicant has for the past 2 years, to remove flotsam, jetsam and/or other solid waste or debris that may accumulate on the shore.

11. Resisting beach management initiatives that would mechanically remove naturally occurring tidal wrack (e.g., seaweed) from the beach, as it harbors prey for foraging shorebirds and is beneficial to the localized ecology, except when situations warrant more aggressive management.

6.1.1 Impacts to Terrestrial and Marine Life (displacement)

With regards to displacement of terrestrial species, the impact will be moderate during the construction phase and through maturity of the landscape plan, however, it is expected to be temporary. During the operational phase, with the addition of more permanent water features (lake), avoidance of native vegetation where land clearing is not necessary, and the relocation of harvested native species into the landscape plan, it is expected that the impact would reverse. As the landscape matures, wildlife is expected to return. There are no anticipated impacts to marine life with regards to displacement because no project activities are proposed within this environment.

6.1.2 Impacts to Water Quality

There are no anticipated impacts to water quality since the proposed design elements do not include any activities along the shoreline, and stormwater runoff will be managed onsite. The utilization of native species reduces the need for chemical fertilizers and pesticides, which can contribute to poor water quality.

6.1.3 Impacts of Noise, Light, and Air Emissions

During construction, the noise levels may increase because of the use of heavy machinery. Work will be conducted during approved hours of operation as allowed by local ordinances and laws.

6.1.4 Impacts of Incursion of Invasive Species of Flora and Fauna

No invasive species are included in the landscape plan. Use of native vegetation is a priority for the Developer. The only cause for the introduction of invasive species will be naturally as evident by the presence of one juvenile *Casuarina equisetifolia*, Australian Pine, observed along the shoreline of the project site.

6.1.5 Impacts to Resettled Wildlife (e.g. bird nesting causing hazards to property or people)

Purposely resettled wildlife is not required for this site as construction activities will occur outside of nesting season, and noise and construction activities will discourage wildlife and cause them to use other nearby habitat during this phase. Extensive nearby habitats are available for wildlife to relocate during construction.

6.2 Proposed Actions to Mitigate Against Noise Pollution

For this project, noise concerns are primarily associated with project construction. During operational phases of the project, the site will consist of high-end hotel/residential use, which is not typically associated with excessive noise.

In terms of construction phases of the project, work will conform to accepted standards for construction within the Turks & Caicos Islands.

All equipment onsite will be in proper working order, including the installation of appropriate mufflers. Noise impacts should be minimal due to a 10-ft vegetated buffer along Malcolm Road, which is required per the Outline Development Permission issued by the Planning Department.

6.3 Storm Surge Analysis and Mitigation Plan for Sea Level Rise

In general, storm surge values are limited for the region and are generally on the order of 1 m or less for typical hurricane conditions. The presence of deep water adjacent to the archipelago and the ability of surge to flow around the islands limit the potential for the creation of extreme storm surges in this area. Tide gauge data collected during the passing of Hurricane Frances (a direct major hurricane impact) on September 1 and 2, 2004, recorded a rise in sea level of only 1.5 ft from storm surge. Similar surge magnitudes have been reported in the area for historic storm impacts. Hurricanes Irma (Category 5) and Maria (Category 3) in 2017 had a devastating impact on the Turks & Caicos Islands largely due to wind and rain.

The project adopts a finished floor elevation which should be above the anticipated 50-year storm surge level for this area (including SLR). This requires an increase in the ground level for proposed structures, which will be attained utilizing the fill provided by the excavation of the canals. Elevation of the finished floor elevation above anticipated surge (inclusive of SLR) is the primary mitigative measure proposed to reduce future risk from increased storm surge for this project.

6.4 Building around, or rescue and removal of rare, threatened, and endangered species of plants where possible

Several endangered, threatened, or special concern species, as listed in the Schedules, were observed within the assessment area, including *Encyclia rufa, Galactia bahamensis, Consolea nashii, Pilosocereus millspaughii,* and *Argythamnia lucayana*. Additionally, other species listed in the Schedules were present onsite. Given the habitat conditions and ecological factors, other endemic, endangered, threatened, or special concern species are likely to be present beyond the surveyed areas.

To the extent feasible and financially reasonable, a qualified person knowledgeable in Turks and Caicos Islands flora should carefully identify and flag all relevant species for relocation. Replanted species will be incorporated into the landscape plan where appropriate. Wherever possible, existing native plant communities will be preserved, in-situ.

6.4.1 Plan for avoidance or expert relocation of vulnerable specimens of *Consolea* cf. *nashii* including DECR supervision

A special effort was made to map all *Consolea nashii* individuals taller than 1.5 m. A total of 42 individual plants were located, largely within the Coastal Coppice and adjacent seaward edge of the DBEF. A few isolated individuals were located within the inland rocky DBES. Figure 2-9 in Section 2.2.1.4 shows the locations of the mapped individual plants.

Avoidance of this species can be achieved through strategic planning regarding beach accesses to avoid their disturbance or removal where possible. Propagation of this species should be encouraged throughout the Coastal Coppice habitat where it is most commonly found.

6.5 Landscaping/Replanting Plan Utilizing Native Species (list all landscaping species; identify what will be imported versus sourced from within TCI)

Landscaping is an essential part of this project. The harvesting of native species before construction begins is recommended. The harvested plants should be kept onsite in a temporary nursery and monitored to ensure survival. The landscape plan should prioritize native vegetation over ornamental, non-native species.

6.6 Proposed Techniques and Models to Mitigate Against Light Pollution (including impacts to nesting sea turtles and migratory birds)

The construction phase of development will have the greatest potential for light pollution. The best way to mitigate light pollution can be achieved by using shields to restrict light from projecting in the direction of the beach and neighbouring properties.

During the operational phase of the project, impacts from light pollution should be minimal to none. Careful planning can reduce the impact of light pollution by positioning lights lower to the ground along beach accesses and ensuring lights cannot be seen from the beach.

6.7 Proposed Climate Change Mitigation

Turks & Caicos Islands is located within the Caribbean along the Lucayan Archipelago. Given its tropical geographic location, it is subject to tropical storms and hurricanes. These weather systems can be particularly devastating since it is low-lying and subject to storm surge/flooding and the accompanying waves. This condition is exacerbated long-term by sea level rise. There is concern that these storm events may become more frequent and more powerful.

Studies have been conducted in the region (for other projects) where an Extreme Value Analysis (EVA) was applied to a range of historical tropical storms and hurricanes within vicinity of the Turks & Caicos Islands. Ultimately, three hurricanes were considered: Irma (2017), Maria (2017), and Ike (2008). Results were run and calibrated to the best ability. Extrapolating these modelled results to a 100-year storm via EVA results in a peak (energy based) wave height of 2.6 m, a peak wave period of 5.0 seconds, a maximum water elevation of +2.3 m (MSL), and a peak current of 1.1 meters per second (m/s) (TCI-ISD-MN-MEMO-001 Hurricane Modelling, Moffat & Nichol, 2023).

In addition to elevated water levels from tropical systems, sea level rise was also considered in the design. Based upon data from the World Bank Climate Group Knowledge Portal, a sea level rise of 0.45 m over a 50-year period is recommended. This value corresponds to the design life of the proposed redevelopment. A sea level rise allowance of 1.00 m was utilized as a basis of design for this project, which correlates to a 100-year design period. Considering this larger sea level rise of +1.00 m, the structures should incorporate a higher design standard, increasing the resiliency of the project design.

Design elements of this project meet standards sufficient to withstand impacts from a major storm event, including considerations for anticipated, long-term sea level rise.

6.8 Financial Resources for Mitigation

As a well-established hospitality leader, Janu Resort and Northwest Holdings TCI have sufficient financial resources to fully implement the recommended mitigative actions. The primary mitigative actions required will be completed in conjunction with construction clearing, which is the relocation of endemic, native, and species of special concern as listed in the Turks & Caicos Islands Schedules.

6.9 Environmental Monitoring and Financial Requirements

This document serves as an environmental baseline for the site. The Owner is responsible for post-construction monitoring to ensure guidelines set forth in the EIA were followed, habitat functionality is restored to the extent possible, any unexpected impacts are identified, and mitigative efforts are assessed for expected impacts.

6.10 Public Consultation/Social Listening/Monitoring

Engagement with the DoP and DECR is ongoing and will continue through ongoing review and engagement regarding this study. Public consultation will occur as required, after DECR and the DoP have provided comment on the study.

6.11 An Environmental Monitoring and Management Plan (EMP) must be prepared with the following minimum components:

Table 6-1 shows the Environmental Management Plan, listing the potential impacts, the overall significance of the potential impacts, proposed mitigative measures, phase in which measures are required, and rating of cost to implement measures (low, medium, high).

Table 6-1. Environmental Management Plan

Resource	Potential Impacts	Overall Significance	Proposed Management	Schedule	Cost
Terrestrial Resources	Adverse Impacts on Populations of Endemic Species & Native Plants of Special Conservation Concern	High	1. Perform thorough inspections for the presence, distribution & abundance of endemic species and Plants of Special Conservation Concern prior to initiating land clearing.	Pre-construction & Construction	Low
			2. To the extent desirable or necessary to maintain biodiversity on the site, relocate transplantable Endemic species and Native Plants of Special Conservation Concern out of areas to be developed and maintain temporarily until they can be replanted into suitable areas onsite following construction.	Pre-construction & Construction	Low
			3. Implement the practice of Avoidance/Leave in Place approach regarding *Consolea nashii* (Tree Cactus) on the site where practicable, especially within the Coastal Coppice where the largest concentration of *C. nashii* are present.	Pre-construction & Construction	Low
			4. Develop educational materials (e.g., signage, printed matter, etc.) about Endemic Species and Native Plants of Special Conservation Concern and make these materials readily available to residents and visitors in hard-copy and/or electronic versions	Post-construction	Low/Moderate
	Clearing of Vegetation	Moderate	1. Minimize clearing of native vegetation to only those areas necessary for grading and construction of proposed facilities.	Construction	Low
			2. Where possible, maintain native landscapes and use native drought-tolerant and salt-tolerant plant materials for landscaping.	Pre-construction	Low
			3. Collect, cache and transplant native species, to the extent practical.	Pre-construction & Construction	Low
	Risk Introducing Non-Native Species, Foreign Diseases and Escape of Pests	Moderate	1. Develop strict residential landscape protocols for homeowners, with list of approved landscape species, to minimize the risk of unintentional introduction of undesirable flora, fauna and pathogens.	Construction	Low
			2. Ensure that construction equipment is clean and pest free before entering and leaving the property.	Construction	Low
			3. Employ Early Detection-Rapid Response protocols to eradicate or control undesirable species.	Construction & Operation	Low

Table 6 1. Environmental Management Plan (cont'd)

Resource	Potential Impacts	Overall Significance	Proposed Management	Schedule	Cost
Terrestrial Resources	Impacts to Wildlife Habitat	Low	1. Landscape setback areas for conservation, as these areas will serve to preserve native plant species and habitats.	Pre-construction & Construction	Low
			2. Wherever possible, maintain native landscapes and use native plant materials for landscaping.	Pre-construction & Construction	Low
			3. Minimize clearing of native vegetation to only those areas necessary for construction of proposed facilities.	Construction	Low
			4. Design and construct beach access pathways to minimize the footprint in environmentally sensitive areas as applicable.	Construction	Low
			5. Implement an environmental monitoring program to include the monitoring functionality of impacted habitat, reintroduced species native TCI flora, and assessment of unanticipated impacts.	Construction & Operation	Low
			6. Adopt covenants and protocols prohibiting the presence of unrestrained domestic pets.	Construction & Operation	Low
			7. Maintain floral and faunal lists and update them as new species are encountered.	Pre-construction, Construction & Operation	Low
			8. Avoid land clearing during the bird nesting season in areas where birds are actively nesting.	Construction	Low
Marine Resources	Prevent Adverse Impacts to Water Quality	High	1. Develop and implement a hurricane preparedness protection plan.	Post-construction & Operation	Moderate
			2. Install and nurture dune plantings to create a vegetated buffer between the construction area and the sea.		
			3. Develop educational materials (e.g., signage, printed matter, etc.) regarding the delicate ecosystems offshore (corals, seagrass, wildlife, etc.) and efforts which can be taken to protect them.		

6.11.1 Summary of the Potential Impacts of the Proposal

The EMP (Table 6-1) provides a general summary of impacts and the mitigative measures to be taken to offset said impacts.

6.11.1.1 Impact on dune areas from construction activities, landscaping (including encroachment by non-native plants), increased foot traffic, equipment storage, and general beach usage.

The dune areas fall within the defined Coastal Coppice habitat. While little construction activity is proposed within this habitat, some landward portions will be affected by the creation of residential lots and beach accesses from residential lots and hotel elements. Several access trails already exist onsite. With strategic planning, additional beach access points could link residential lots to the beach with minimal impact. Landscaping could also impact the dune areas, but proper planning, regulation, and minimization of landscaping within this habitat will reduce impacts.

6.11.1.2 Impact on beach areas and sand from construction activities, landscaping (including encroachment by non-native plants), increased foot traffic, equipment storage, and general beach usage.

The increase of foot traffic is the largest contributor to impacts along the beach and rocky shoreline. Increased beach capacity will have a minimal impact to this habitat, however, it can lead to the cleaning of natural debris on the beach that provides foraging habitat to shorebirds, which is a larger impact. No impacts are anticipated due to construction activities.

6.11.1.3 Impact on groundwater and inshore water from effluent including landscaping irrigation and other wastewater, including consideration of any contaminants including fertilizers, pesticides, detergents, bleach and other chlorine, organic wastes from processed sewerage, and others.

The Coastal Coppice habitat that contains the dune will experience minimal impacts, primarily from the creation of beach access points. Landscaping will be kept to a minimum and incorporate suitable plant species to avoid fertilization and irrigation. Stormwater runoff is directed away from the shoreline towards drains and pond feature. Effluent from landscaping irrigation and stormwater runoff are not anticipated to enter the nearshore water environment.

6.11.1.4 Impacts from invasive species including plants used in landscaping, control of invasive weedy plants in back-of-house areas where landscaping may not be maintained, and also including animals and plant pests that may be introduced to the site with landscaping plants; or invasive animals that associate closely with anthropogenic landscapes including northern curlytail Leiocephallus carinatus, corn snake Pantherophis guttatus, green iguana Iguana iguana, red-headed agama Agama picticauda, marine toad Rhiella marina, Cuban knight anole Anolis equestris, domestic pigeon Columba livia, Mediterranean ring-neck dove Streptopelia capicola, house sparrow Passer domesticus, and other invasive fauna

The site is predominately composed of native floral and faunal species. The clearing of lands for infrastructure and building lots can create an environment for opportunistic species. Control of

invasive species will be monitored as both floral and faunal. Invasives can be brought in accidentally through the import of landscaping plants and material from local providers. Landscapers and staff will monitor for the presence of these species and take actions for their removal if observed.

6.11.1.5 Impacts on seagrass beds and shallow inshore reefs from increased human usage of waterways, including people swimming and using water activity devices, and boat traffic, if applicable

Increased human activity will create an impact to the inshore reefs and seagrass beds through increased snorkelling, swimming, and overall use of the beach and nearshore environment.

6.11.2 Description of the Recommended Mitigation Measures

Mitigative measures to be taken include the creation of educational materials regarding the delicate nature of these environments, discouraging single use plastic where possible, and promoting the use of "reef safe" sunscreen.

6.11.3 Statement of their Compliance with Relevant Standards

Statements of compliance are included in Section 7.2 through Section 7.4.

6.11.4 Allocation of Resources and Responsibilities for Plan Implementation

The Developer takes responsibility for the implementation of the mitigation plan and the expense required for its completion.

6.11.5 Schedule of the Actions to be Taken, Covering all Factors of the EMP

The schedule of actions to be taken and the phase of construction and operation are outlined in Table 6-1, the Environmental Management Plan.

6.11.6 Programme for Surveillance, Monitoring and Auditing (covering all factors as noted in the EMP)

Monitoring of the health of the native species being cached onsite in the temporary nursery, is the first monitoring programme to be conducted. This monitoring will extend to the plants after reintroduction into the landscape plan to ensure their survival in their new location. Landscape staff will monitor native landscape retained and the introduction of new landscape vegetation until maturity to ensure reestablishment of impacted habitat function.

6.11.7 Programme for Control of Invasive Species of Flora and Fauna on the Property

This is covered under Section 6.11.1.4.

6.11.8 Programme for Protection, Avoidance, or Expert Relocation of Vulnerable Specimens of *Consolea* cf. *nashii*

This is covered under Section 6.4.1.

6.11.9 Contingency Plan when Impacts are Greater than Expected (covering all factors as noted in the EMP)

The pre-construction baseline has been established during the EIA study.

During construction, the developer will establish a monitoring event to evaluate the extent to which each habitat has been retained to better assess the anticipated direct impacts. Assessment will also include the extent to which vegetation was harvested and the health of these species cached in the temporary nursery.

After construction, the developer will establish a third monitoring event to assess the habitats, inclusion of new landscape vegetation, the reintroduction of collected species, and the potential for the return of habitat function.

7. RECOMMENDATIONS AND CONCLUSIONS

7.1 The Environmental Impact Assessment Shall Include:

7.1.1 A summary of Key Impacts Identified and their Significance

A summary of potential impacts to terrestrial and marine resources include:

- Adverse impacts on endemic, native, and species of special concern;
- Clearing of vegetation leading to habitat fragmentation;
- Risk from introducing ornamental, non-native species, and escape of pests;
- Impacts to wildlife habitat (nesting, foraging, etc.);
- Secondary impacts to marine habitats due to increased human activity;

7.1.2 A statement on the Overall Environmental Acceptability of the Proposed Activity

The Owner has provided a statement of environmental acceptability included in a letter which addresses acceptances required in Section 7.2 through Section 7.4.

7.1.3 A Summary of Key Mitigation and Monitoring Measures

The following summary list of general activities that will minimize and/or offset ecological impacts could include:

1. Salvaging, caching, and relocating native, endemic, protected/threatened plant species where practicable.
2. Increase plant abundance and biodiversity through a well-developed landscape plan;
3. Avoid impacts to nesting birds;
4. Remove invasive and pest plants and monitor any becoming established;
5. Incorporating environmentally conscious design and management techniques into the project;
6. Developing educational materials addressing critical terrestrial and marine habitats;
7. Monitor for nesting marine turtles, nesting birds, and ensure protection of these species where practicable.
8. Continue to conduct periodic beach clean-ups;

7.2 Statement of Understanding of Terms of Environment Charter 2001

This is provided by the Owner within one letter covering Section 7.2 through Section 7.4 (Appendix N).

7.3 Statement of Understanding of Terms of Climate Change Charter 2022

See Appendix N.

7.4 Applicant's Declaration of Intent to guide the development by the recommendations of the EIA consultant, with updated Declaration following response to public or TCIG commentary requesting or requiring alterations to any part of the EIA

See Appendix N.

8. REFERENCES

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APPENDICES