Saint Vincent and the Grenadines

Terms of Reference

for the

Urban Revitalization Study and Master Plan for Kingstown

Ministry of Urban Development, Energy, Seaports, Grenadines Affairs and Local Government
Saint Vincent and the Grenadines

October, 2024

Table of Contents

TERMS OF REFERENCE

1 INTRODUCTION

Kingstown, located on the south coast, is both the commercial and administrative capital of Saint Vincent and the Grenadines (SVG). French settlers founded the city shortly after 1722. It has a population of approximately 20,000 persons. Consistent with the most island capital cities in the Organization of Eastern Caribbean States (OECS), Kingstown's economic and urban development was predominantly driven by the commercial activity generated by its port activities. This trend has continued throughout its history, including more recently, with a cruise ship berth added in 1999 and an ongoing USD 247 million Port Modernisation Project.
In parallel to this development project to modernize Kingstown's main port, the Government is working towards the re-development of Arnos Vale, at the site of the now decommissioned E.T Joshua Airport as a "modern city".

Considering the lack of master planning or significant infrastructure upgrades and no climate resilience plans, it is imperative that the capital city of Kingstown undergoes an integral urban revitalization process.

These Terms of Reference aim to conduct a comprehensive urban revitalization study for Kingstown (Appendix A) to provide a corresponding master plan. This Plan shall encompass planned investments, ecological considerations, and mitigation considerations for current and future risks of natural hazards, e.g. extreme rainfall, floods, landslides, hurricanes, and storm surges, earthquakes and the projected effects of climate change.

2 BACKGROUND

2.1 Saint Vincent and the Grenadines

Saint Vincent and the Grenadines is an archipelago state in the Eastern Caribbean comprising 32 islands, with Saint Vincent being the main island where Kingstown is situated in the south. The total population of SVG is 109,557 (2015 census) of which about 10,000 persons live in the Grenadines. In 1979, Independence from Britain was achieved. SVG is an active member of the Organisation of Eastern Caribbean States (OECS)[1] as well as CARICOM[2].

Tourism is the main pillar of economic growth for SVG and the OECS region, which already has a comparative advantage in the international industry given its location, climate and history. The

[1]The OECS is a ten-member grouping comprising the full Member States of Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, St Kitts and Nevis, Saint Lucia and St Vincent and the Grenadines, with the British Virgin Islands, Anguilla and Martinique as associate members of the OECS. The OECS was created in 1981, as an inter-governmental organisation dedicated to economic harmonisation and integration, protection of human and legal rights, and the encouragement of good governance between countries and dependencies in the Lesser Antilles in the Eastern Caribbean. It also performs the role of spreading responsibility and liability in the event of natural disaster, such as a hurricane. They share a common currency the EC Dollar. (EC$2.7 = USD$1)

[2] The Caribbean Community (CARICOM) is an organisation of fifteen Caribbean nations and dependencies whose main objective is to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

Grenadine islands currently play host to a plethora of royalty and world celebrities, while the mainland boasts of a wide variety of ecotourism activities (e.g. active volcano, which erupted in April 2021, several waterfalls and nature trails, petroglyphs, flower gardens etc.). Tourism in SVG, accounts for 50 percent of export earnings and 19 percent of total employment. Nearly 75 percent of tourism employment is typically unskilled or semiskilled labour and is highly inclusive of women and youth.

In light of the importance of the tourism sector along with broader developmental considerations in mind, during the period 2005 to 2017, the government of SVG embarked on the largest ever-infrastructural project in its history, the construction of the Argyle International Airport (AIA). This was achieved at a cost of approximately EC$700 million, with the specific intention of providing a catalyst for economic growth and opportunity. The terminal building is located approximately 17km by road from central Kingstown. With the opening of the airport (February 14th, 2017), the government was expecting to attract local and foreign investors reliant upon international flight connections, especially in the tourism and real estate sector, but also in sensitive agricultural products and their derivatives. The **Urban Regeneration Study and Master Plan Designs for Kingstown** will further contribute to the facilitation of the AIA investment through synergies derived from proper master planning further improving the tourist experience and tourism product.

Coupled with the impetus expected from the AIA, Kingstown will be affected by the direct impact of the Kingstown Port Modernization Project and the development of a modern city at the ET Joshua airport site that has now become vacant for development.

While the current phase of the Kingstown Port Modernization Project comprises of the construction of a new container port, the port development program also calls for the future construction of an intraregional cargo facility and an inter-island ferry terminal facility on the north side of the Kingstown Bay (Appendix B). The current estimated cost is USD$ 247 million with projected completion of the container port in the first half of 2025.

With the expected boost in activities resulting on the operationalisation of the primary cargo port, issues relating to traffic routing, on street parking and traffic congestion within Kingstown will need to be addressed.

Street Vending and vendor relocation is also a challenge within Kingstown. While the Kingstown Board recently relocated vendors into markets, this aspect of the development still requires a long-term solution, likely with a view to integrating vendors in a sustainable way, within the Kingstown

The development of the modern city at Arnos Vale on the now decommissioned E.T Joshua Airport site is currently in the design procurement phase, with the intention to proceed to concept, preliminary and final designs by 2025. The 133-acre development of this city has commenced with the design of a 130-bed acute referral hospital. Provision in the city layout will be made to connect the modern city with Kingstown via a tunnel under Cane Garden. Prefeasibility studies was completed, but this tunnel is considered a long-term project.

Additionally, SVG's geographical location influences the level of Kingstown's exposure to meteorological, geophysical and climate change hazards and their potential impacts to its physical, economic and social stability. Volcanic eruptions have affected the country in 1789, 1812, 1902,

1971, 1979 and 2021. Recorded Tsunami events are rare (1842 and 1867), but real, especially in light of the proximity of "Kick 'em Jenny" (active submerged volcano) south of the Grenadines. SVG is located in the Atlantic hurricane belt and has suffered periodic damage from past events e.g. from Hurricane Allen (1980), Hurricane Lenny (1999), Hurricane Tomas (2010) and Hurricane Beryl (2024). There have been several major near misses, such as hurricane Ivan in 2004 (category 4) and hurricane Maria in 2017 (category 5). Storm surge heights was estimated at 2.8m high. Several storm events have also affected Saint Vincent, most notably the events of December 24, 2013 when 278mm of rain fell over a three-hour period and the November 2016 floods. These recent hurricanes and floods have individually caused loss and damage amounting to between 5 and 15 percent of GDP. More than 15 percent of accumulated debt since 2010 is directly attributable to post-storm reconstruction, as well as attempts to "future-proof" the country and people through forward looking adaptation and resilience-building efforts.[3] Therefore, climate change adaptation is considered a key component of this consultancy.

2.2 Kingstown

According to the 2012 census, there are 12,712 inhabitants in Kingstown as defined by its administrative boundary. However, the KUR study will focus on a smaller area comprising the central business district and immediate environs. The administrative boundary (green) and the KUR area (red) are shown in Appendix A.

The capital city of Kingstown is located at the mouth of a river plain, and is bordered by two rivers, North River and South River. The original topography is defined by a short flat coastal zone varying between 170m and 300m along the sea front, behind which the mountain slopes commence. In 1991, approximately 80m of land was reclaimed along 80% of the bay front. Unfortunately, this land expansion cut off most of the city from direct access to the sea, as "development" comprised of primarily institutional and government buildings, with limited sea side landscaping, or vehicular and pedestrian access.

Flooding in Kingstown resulting from overflows from both North and South River occurs frequently with Rose Place and parts of Bay Street and Back Street experience flooding due to a combination of inadequate river cross sections, low bridge freeboards and increased surface runoff from upstream developments

The central Kingstown layout is currently constructed along a rectangular grid street system, which has three main streets - Bay Street, Middle Street and Back Street - for easy reference, all parallel to the coastline and intersected by cross streets to form rectangular city blocks. There is a fourth road situated on the bay front for a short section of the reclaimed land. Access to and from Kingstown is via the Windward Highway and the Nelson Mandela Highway (this section of road is currently inaccessible due to the ongoing port construction). – indicate Appendix X: Map

Middle street is a narrow street approximately 20 feet wide and 4000 feet long. The southern leg of Middle Street, has a continuous cobble stone finish with a covered drain in the centre and is used primarily (but not exclusively) for pedestrian traffic (900 feet). The northern leg has an asphalt-wearing course, which is dominated by vehicular use. The continuity of Middle Street is

[3] 2018 SVG Budget Address

interrupted by the Kingstown Vegetable Market building, which is the largest building in the city. The Market was opened to the public in 2000 and consists of four levels.

The building architecture is a mix of historic and modern styles. The city has acquired the moniker "City of Arches", because of the predominance of covered sidewalks with building overhangs supported on the roadside boundary by arched structures. This feature forms arcades crowded with vendors. There are significant religious structures currently used as tourist sites, such as the Catholic, Anglican and Methodist churches.

According to data provided by the Physical Planning Unit, in September 2011, Kingstown had 98 derelict buildings. Two derelict government buildings were demolished in 2016 creating a large vacant lot of approximately 0.5 acres along Back Street. It currently serves as a parking lot. The residential suburbs in the surrounding hills are comprised of one to two story reinforced concrete buildings on private lots with insignificant informal settlement. Where there is such settlement (for e.g. Pauls Lot and Long Wall), the structures are a mix of materials viz blocks, concrete and wood and are generally "permanent" in nature.

Vending was widespread and "uncontrolled" throughout Kingstown. This micro entrepreneurial activity covered a wide range of commerce and was visible under the arcades, outside the market building, Middle Street, Bay Street, Heritage Square, around the bus terminus and in a designated area (poorly constructed and in a dilapidated condition) known as Little Tokyo. Generally, there is no uniformity in goods presentation in the city, with a plethora of booth shapes (wood frames), tents, vans, car trunks, trailers and trays. In 2022, the Government through the project called Kingstown Clean-Up renovated three buildings in Kingstown for the relocation of vendors. Approximately 250 vendors were then relocated to either of the three buildings. Additionally, plans are on the way for the development of Little Tokyo into a modern Bus Terminus.

While there may be a dearth of public green space within Kingstown, The Botanic Gardens on the outskirts of central Kingstown provides a welcome public space. Created in 1765, it occupies 20 acres and is in fact the oldest Gardens in the western hemisphere. It is famous for being the destination of Captain Bligh's second visit to the Caribbean in 1798 (his first ended in the infamous mutiny on the Bounty) when he introduced breadfruit to the island. Other Green spaces of note are the Richmond Hill Playing field, which services several schools bordering the ground, Victoria Park (former national stadium) a large vacant lot belonging to the Anglican Church amounting to about 3.2 acres and the grassed area at the Kingstown Cruise Terminal. Part of the parking lot of the Anglican Church is currently used as an occasional car park for big activities at Victoria Park and part as an informal football ground for the city youth.

At the institutional level, the central government through the Ministry of Urban Development and Local Government currently manages governance of central Kingstown. The governing body itself is referred to as the "Kingstown Board" and manages the Central Market, a public car park, collects property taxes, vendor stall rents, cleans the streets and carries out minor sidewalk repairs.

A World Bank sponsored report, *Improving Urban Resilience of Coastal Cities in the Caribbean Through Resilient Infrastructure and Urban Planning (February 2022),* considered Kingstown in

its scope and provided recommendations regarding the improvement of its infrastructure, which will need to be considered under this TOR.

A World Bank and the GoSVG led technical workshop on *Resilient Urban Development for Arnos Vale and Kingstown* (March 2019) with broad stakeholder participation, raised several issues that was considered central to the *renewal* efforts for the city. A summary report of technical recommendations and event proceedings will be provided to the selected consultant. The main recommendations from the workshop are referenced below.

2.2.1 Central Market

The building needed to be renovated and/or repurposed to maximise its commercial footprint. The building should be structurally analysed to ascertain how street continuity could be re-established and how increased visibility to the internal floor space could be provided without affecting the structural safety of the building. A new / additional location for the market should also be investigated and a more traditional open design proposed. Additionally, repurposing of the existing market should be done.

2.2.2 Connection to the sea

Due to building development along the shorefront edge on reclaimed land, Kingstown had lost its connection to the sea and port city character. Since tourism is its main economic engine, its capital city must show that relationship. This connection should be re-established through urban waterfront designs, implementation of a boardwalk and expansion of the cruise port dock and berth on significant areas of government owned waterfront property.

2.2.3 Ridge to Reef

Given the close inter-connections between land, water and coastal systems, the integration of freshwater water management should be considered to help foster effective cross-sectoral coordination.

2.2.4 Middle Street

Incentivizing commercial uses along Middle Street could provide a unique opportunity for the city through the development of an attractive street bazaar/pedestrianization for locals and tourists.

Bus Terminus
Adequate Bus Terminus for both the Leeward and Windward routes need to be re-established. It is paramount to consider how the traffic and pedestrian flows at the current locations will be affected by the new port development in order to provide specific measures that can reduce potential negative impacts on mobility within the city. Under the rehabilitation of the Little Tokyo project, this project will seek to rehabilitate the space for the Leeward and Windward Buses and creation of a revitalize area for locals and tourists alike.

2.2.5 Public space and Nature-based Design

Several issues have resulted in the sediment built up resulting in the flow being obstructed. Additionally, the lack of green space for public relaxation is noticeable and a deterrent to pedestrian activity in the city. Tree planting, embankment enhancement for e.g. boardwalk along both North and South Rivers, development of empty lots or redevelopment of government owned property in town and on the Bayfront should all be considered.

2.2.6 Traffic congestion and Parking

Traffic congestion and parking are issues all contribute to low productivity and reduced economic activity, which has a negative impact on the city's competitiveness. A transportation policy including a revised governance structure should be developed and submitted within six (6) months of the consultancy.

2.2.7 Functional relation between Kingstown and the Modern City at Arnos Vale

While there were competing ideas concerning the developmental direction of the proposed Modern City at Arnos Vale, there are no arguments supporting the need to change Kingstown's current role as the institutional, administrative and commercial centre of Saint Vincent. Keeping its current uses, the city could be enhanced through proper urban planning and infrastructure upgrading. Without a definitive developmental direction for the Modern City at Arnos Vale, it is too early to establish, beyond speculative predictions, the effect the two urban centres would have on each other.

2.2.8 Depopulation of urban centre – heading can be changed to Physical/Environment aspect

- Depopulation of urban centre

Kingstown has suffered from a depopulation of residential areas, especially in the urban centre. Commercial uses and offices now occupy most buildings. During the night, the central business district is essentially uninhabited, because of the low population density. Actions should be undertaken to promote generate mixed land uses, including the attraction of appropriate housing projects in the city centre to densify the area to help create more nocturnal economic activity.

In addition, the inclusion of urban heritage within the city will help to deal with the negative impacts of the built environment. Improving culturally the image of Heritage square and "China Town" as an artistic and cultural hub will help to attract urban cultural tourists through the creation of urban heritage sites in the city area.

Repurposing of land at the current site of Port Operations

The current phase of the Kingstown Port Modernization Project comprises of the construction of a new container port. The port development program also calls for the future construction of an intraregional cargo facility and an inter-island ferry terminal facility on the north side of the Kingstown Bay. The new cargo port is expected to be completed by mid – 2025. Once the new

cargo port becomes operationalize the lands of current location of the port at Upper Bay Street will be available for redevelopment.

It is expected that in the future, all operations of the port (including cargo, cruise and inter-island ferry operations) will be transferred to the new port.

3 GOALS and OBJECTIVES

The goal is the formulation of a Master Plan and Urban Design with a multidisciplinary approach to provide integral and context-based solutions for Kingstown's urban challenges while improving the socio-economic activity of the city.

The Government of Saint Vincent and the Grenadines (GoSVG) is expected to achieve this goal through the accomplishment of the following objectives:

(i) The development in a collaborative and inclusive manner with all stakeholders, of a vision that will help guide the decision-making process
(ii) Generating an urban project that improves the quality of life of its residents and attracts private investment to the city centre to increase employment generation
(iii) Based on this vision, the development of an exemplary world class SIDS urban revitalization and resilience master plan for the city
(iv) Develop a toolkit for guide and evaluate development in Kingstown

4 DURATION

The duration of the consultancy is expected to take approximately **sixty-six (66) weeks**, including client review periods.

5 GENERAL REQUIREMENTS

This Consultancy will provide the Ministry of Urban Development, Energy, Seaports, Grenadines Affairs and Local Government with a master plan and associated consultancy services for Kingstown and will be contractually responsible for the Consultant's assignment.

It is understood that the Consultant will provide all the technical and support staff to administer and manage all the field and office work that are necessary to produce the deliverables.

The Consultant will liaise with the Ministry's Project Officer/s in order to ensure that communities are consulted, informed and forewarned of planned site activities in a timely manner.

6 SCOPE OF SERVICES

The scope of services shall include, but not be limited to, the following main activities:

General Services

The services shall be carried out in accordance with generally accepted standards of professional practice, following recognized engineering, architectural, master planning and urban planning, for Pre-Contract Services. The consultant's scope of work will cover all activities necessary to accomplish the stated objectives of these services while adhering to the aforementioned principles and practices, whether or not a specific activity is cited in these TOR.

The services will include carrying out both desktop and field investigations, preparation of detailed master planning and design works and a preliminary engineer's estimate for the works.

Finally, open and accessible data and analysis is a core component of this project. Therefore, all data collected and created by the consultants' activities must be preserved, consolidated and transferred to the Government of Saint Vincent and the Grenadines (MUD) upon project completion, in a well-known or standard electronic format. This format for the geospatial data is outlined in Appendix E.

Specific Services

The consultant is expected to carry out the following specific services in order to achieve the project objectives. The consultant is expected to supplement these services, where in his own judgement it is necessary, in order to achieve the project goal and objectives.

6.1 Task 1: Inception Report

Following contract commencement, the consultant will produce an Inception Report in accordance with the content of Appendix C

6.2 Task 2: Visioning

The Firm shall conduct public outreach meetings to obtain from stakeholders their visions, aspirations, objectives, strategies, issues and concerns regarding the development of Kingstown. The consultant will employ in the conduct of these meetings, established methodologies and techniques to extract and record this information from participants.

Stakeholder participation is expected to come from neighbouring communities, government ministries, NGO's, the business community, academia and the general public. As such, no less than six meetings are anticipated at times and place(s) to be determined in conjunction with the client.

Following these meetings, the Firm will develop some advance vision scenarios (tested and consolidated using SWOT and Multi Criteria Analysis), around which the urban design will revolve. The Firm will make recommendations to the client, who will review and advise accordingly.

6.3 Task 3: Data Collection and Analysis

The consultant shall collect all available data required for the master planning design process that will be provided by the relevant government ministries and departments. The data collection activity shall include both desktop and field investigations. The information will be compiled in a report containing the specific information outlined in sections 6.3.2 to 6.3.7 below.

6.3.1 Data collection from local and regional institutions

Data collection from local and regional institutions will include the following entities:

Local:
Ministry of Transport, Works, Lands and Physical Planning – MOTW
National Emergency Management Organization – NEMO
Ministry of Finance, Economic Planning and Information Technology
Ministry of National Mobilization, Social Development, Family, Gender Affairs, Youth, Housing and Informal Human Settlement
Invest SVG
Saint Vincent and the Grenadines Chamber of Commerce
National Properties Limited
Statistics Department
Ministry of Tourism
Tourism Authority
Saint Vincent and the Grenadines National Trust

Regional:
University of the West Indies (Seismic Research Centre of Tsunami, Earthquake and Volcanic Risk), St Augustine, Trinidad
OECS Secretariat, Saint Lucia
Eastern Caribbean Central Bank
Caribbean Development Bank

Government financial, economic, population and other developmental data can also be obtained from the official government website at www.gov.vc.

The selected Firm is expected to identify on its own accord and through its own efforts, additional information, as well as design information, from other sources for analysis.

6.3.1.1 Available Reports to Inform the Firm's Activities

The client has the following reports available specific to the activities at hand to inform the Firm's activities:

(i) Proceedings of Resilient Urban Development Technical Workshop for Arnos Vale and Kingstown (Saint Vincent, March 20-21, 2019)
(ii) Proceedings, Enhancing Resilient Urban Development in the Eastern Caribbean Understanding Risk Caribbean (Barbados, May 27-31, 2019)
(iii) Port Modernisation Project – Final Design Report

(iv) Sub regional Action Plan for the Implementation of the New Urban Agenda in the Caribbean - Prioritizing sub-regional challenges and opportunities (2016-2036) – UN-Habitat.
(v) Improving Urban Resilience of Coastal Cities in the Caribbean Through Resilient Infrastructure and Urban Planning (ARCADIS February 2022)
(vi) National Economic and Social Development Plan: 2013 - 2025

6.3.2 Preliminary Investigations

The consulting firm shall conduct such surveys as are necessary to produce a master plan. This will include, but not be limited to the following activities:

(i) Discussions with Physical Planning Department
(ii) Identification of trees and green spaces for preservation
(iii) Inventory of vendors (general location, number, type of goods, size of display etc)
(iv) Inventory of available vehicle parking spaces
(v) Structural and spatial assessment of existing market building-
(vi) Spatial and operational assessment of Leeward and Windward bus terminus
(vii) Mapping of vehicular and pedestrian access and circulation routes
(viii) Identification of formal and informal waste collection points and routes
(ix) Review of mapped utility infrastructure
(x) Preliminary investigation of vacancy rate in Kingstown.

6.3.3 Traffic Impact Assessment

The Consultant shall undertake a Traffic Impact Assessment (TIA) that includes, at a minimum, the following tasks. The final scope of the TIA to be confirmed with appropriate authorities within the GOSVG:

- Review any relevant existing road and transport studies for Kingstown
- Perform a traffic survey at the main key locations around Kingstown to supplement existing studies. The surveys should be 24-hour automated counts over a month, during the school term and cruise ship season
- Surveys of origin-destination of the population
    - This study will serve to understand the mobility obstacles and the main paths that the population using the area makes. Where they live, where they work, where they look for different services
- Quantify the bus inventory and passengers at both the Windward and Leeward bus terminus and such other informal bus terminus locations around town (e.g. Beachmont and Stony Ground, Hospital Corner/Victoria Park, Silky Bus Stop) that are necessary for the design of new terminus facilities
- Prepare a ten-year growth forecast for vehicles in SVG based on annual vehicle registration statistics and from such other data as may be required for this type of analysis.

6.3.4 A comprehensive Hazard Analysis

i) Review existing hydrologic and hydraulic reports for North and South Rivers. Update these reports to consider 50- and 100-year Return Periods and the resulting flood plain maps, to ensure that the proposed infrastructure is appropriately designed.

ii) Review existing storm surge, tsunami and seal level rise events on Kingstown, in order to assess potential impacts on Kingstown and any proposed designs
iii) In consultation with the Central Water and Sewerage Authority (CWSA) a review of the existing and any future sewage collection and disposal system.
iv) Conduct a fire analysis of the buildings in Kingstown and make recommendations to mitigate this risk
v) Review earthquake preparedness – to determine if buildings can withstand an earthquake above a certain magnitude and make recommendations to improve in this area
vi) Engage stakeholders (including VINLEC, Electrical Inspectorate, NEMO, Fire Department and Physical Planning) to review the potential hazards
vii) The hazard analysis should also include ridge to reef principles.
(v) Conduct an assessment of storm water infrastructure and make recommendations towards its improvement
(vi) Conduct a climate risk vulnerability assessment

6.3.5 Housing Demand Analysis

The goals of this activity are to determine how the houses can be built, where can the houses be built, what type of houses can be built. Zoning areas and public private partnerships (PPP) can also be considered. The model of PPP to use is similar to what is currently done for hotels.

6.3.6 Preliminary Environmental and Social Impact Assessment (Scoping Report)

The Consultant or Firm shall carry out an Environmental and Social Impact Assessment (ESIA) of the proposed Master Plan on the project area and environs. The assessment shall be carried out to World Bank standards currently employed in Saint Vincent under the Regional Disaster Vulnerability Reduction Project (RDVRP). The Environmental Management Framework (EMF) utilised for these projects can be found at:

http://www.gov.vc/images/pdf_documents/environmental_management_framework_march_2016.pdf

While there are no land development projects under the RDVRP, the wide range of infrastructure works represented in the EMF and screening procedures etc., provide the necessary guidelines under which this sub task falls.

At this stage, the activity is a scoping exercise. However, broad and generic issues can be addressed to "red flag" any early concerns that need to be tackled. Typical issues to be addressed are listed below:

- Identification of threats to any significant cultural, tourist, historical or archaeological areas of importance
- Impacts on natural habitat and biological resources
- Consistency with National Development policies, laws and regulations
- Potential positive and negative impact on the social fabric of the affected communities, considering inter-alia urban and demographic growth trends
- Potential private land acquisition impacts
- Vulnerability to wind borne pollutants, including noise and odours from surrounding areas
- Impacts of the urban project on existing settlements (formal or informal) in the area

The Consultant shall indicate for those "red flag" or critical issues present, recommended mitigation measures and commence consideration of inclusion into the preliminary designs.

The consultant will be required to work closely with the social safeguard specialist attached to this project to ensure smooth communications with the various government entities associated with this aspect of the project.

The consultant shall provide at this stage a social engagement plan outlining SMART objectives about the various proposed stakeholder interactions. The strategies will incorporate and be subject to the Client's approval.

6.3.7 Generation of georeferenced cartographic information

Development of spatial data and land-use information (Appendix E), including but not limited to:

(i) Updated satellite photo of Kingstown with a definition of 50 cm/pixel
(ii) Digital Elevation Model – DEM of Kingstown
(iii) Road Ranking Map
(iv) Updated Current Land Use Map
(v) Forest cover map

6.4 Task 4: Strategic Framework Development Guidelines

Based on the activities under Tasks 2 and 3, the Firm will formulate specific strategic guidelines to help steer the master planning and urban design process. These will address the requirement for public policy, regulatory moulding and the imposition of other physical, social, financial and aesthetic conditions. In this regard, the consultant will develop a technical document containing:

(i) Analysis of the *Physical Planning and Development Board Guidelines* for subdivisions, identifying any gaps regarding the current development and proposing the required instruments to bridge such gaps, based on international best practice for urban revitalization, considering local, cultural, socio-economic and environmental conditions
(ii) Definition of an urban and architectural model with cultural relevance according to the context of Kingstown
(iii) The identification of key economic drivers for the city and the development strategy
(iv) The basic guidelines for land categorization and land use
(v) The identification and analysis of the public policy, legal and financial mechanisms, tools and resources required on the client side to execute the proposed revitalization master plan
(vi) The identification of the communication and community participation mechanisms to achieve the social appropriation of the proposal.
(vii) Preliminary identification of emblematic sites that will function as main urban centers in the final intervention

(viii) Proposed common urban standards per inhabitant for general physical interventions, which determine minimum public spaces, green areas, parking, public facilities, and other urban amenities

The Strategic Framework Development Guidelines will form a separate report. The Firm shall be responsible to make a presentation of this report to the Client.

6.5 Task 5: Preliminary Master Plan and Urban Design

Based on the outputs from Tasks 2 and 3 an agreed vision and theme from Task 4, the Firm, upon written confirmation from the client, shall proceed to develop a generalised preliminary master plan and urban design layout.

The design will be prefaced with a document containing the philosophical approach along with a policy document outlining the design standards in this regard.

The visual presentation of the designs will have a level of detail that will include, but not be limited to, the following infrastructure design elements:

(i) Tropical urban design principles. In this regard the design will include infrastructure climate performance considerations, with detailed analysis of the proposed measures to manage the effects of temperature, humidity, wind direction and ventilation, shade and urban greenery for the proposed physical interventions
(ii) The creation of public green spaces
(iii) The development of boardwalks alongside North and South Rivers and the Bay front
(iv) The redevelopment of the Kingstown Market to attract greater usage among vendors and / or repurposing of building for use by other commercial, arts or entertainment activities
(v) The development of a new market to accommodate those vendors not able to fit within the existing Kingstown market (location and concept designs)
(vi) The generation of a new public space that articulates the city with the cruise port
(vii) The redevelopment of the old wharf facility and container / cargo laydown area between the administrative building and the cruise ship jetty
(viii) Concept designs for vending booths and bus shelters
(ix) Intermodal mobility, Transport network and circulation pattern (bay front and riverside boardwalks, vehicle, pedestrian, bicycle, cable cars, etc)
(x) Storm water drainage improvement
(xi) Suggested development of commercial, hotel, industrial and residential zones, mixed zones, along with associated lot sizes and building volumes
(xii) Concept marina works if any
(xiii) Concept building designs for development / redevelopment of public space
(xiv) Design catalogue on common urban furniture for the entire urban project area (benches, lampposts, dumps, etc)

The consultant shall provide several full-size drawings (36" x 24") in each of the proposed physical interventions outlined in sections (ii) to (xiv) above. The consultant is also expected to make four

(4) formal presentations in total, of the preliminary master plan and urban designs to the client technical team and various sectors of the public to be determined. The presentation shall be in PowerPoint format or equivalent. The client will be responsible for the organisation and advertising of the presentations.

6.6 Task 6: Financial Analysis

For the revitalization proposal associated with the physical interventions presented in Task 5 above, the consultant shall conduct a financial analysis with the following focus areas:

(i) Development costs
(ii) Available and potential financial resources
(iii) Financial modelling
(iv) Proposed financing mechanisms and instruments
(v) Financial viability analysis

6.6.1 Development Costs

The consultant will develop cost estimates for the proposed infrastructure considering various horizontal (infrastructure) and vertical development (build-out) scenarios.

In terms of the infrastructure costs, the consultant is expected to provide at a minimum, the following on-site general infrastructure cost details, with special consideration of the materials and technologies to be used for climate change adaptation and resilience:

(i) Flood protection
(ii) Storm water drainage
(iii) Roads
(iv) Public spaces and parks
(v) Water supply
(vi) Sewage and solid waste collection, treatment and disposal
(vii) Electrical supply
(viii) Telecommunications
(ix) Sea defense
(x) Landscaping and urban greenery
(xi) Any proposed public facilities
(xii) Housing relocation
(xiii) Any other relevant areas inadvertently omitted above
(xiv) Available and potential financial resources

The consultant will develop revenue and cost recovery forecasts (with associated assumptions), for the preliminary design option. In this regard the revenue forecasting will consider:

(i) Sales and/or tax revenue from the build-out of condominiums / hotel / commercial / industrial space.
(ii) Public private partnerships (this includes but is not limited to potential government concessions)
(iii) Rental / lease / sale of existing government buildings
(iv) Land swaps and land readjustment operations
(v) Such other revenue streams that the consultant considers relevant

6.6.2 Financial Modelling

The cost and revenue forecasts developed in 6.6.1 and 6.6.2 above, must be analysed with a financial model(s) for the preliminary design option. This financial model will be used to consider best case and break-even scenarios for the build-out phases.

The model will be created with Microsoft Excel. The model(s) will inherently be a flexible tool and at a minimum:

(i) Contain, concise notes to describe variables,
(ii) Provide for inputs and results
(iii) Reflect various project life periods
(iv) Provide for revenues and costs in annual increments
(v) Allow for changes in model input data eg phasing of project elements / assumptions in project development / revenues and costs, with immediate results eg
    a. Revenues and costs (per square foot or other appropriate metric)
    b. Adding, amending or deleting costs for infrastructure and build-out elements
    c. Project financing costs
    d. Cap rate
(vi) Reflect standard financial indicators such as payback period, IRR, NPV, CBR etc.
(vii) Provide a meaningful integration of local, regional and SIDS development statistics, with financial projections
(viii) Provide for the incorporation of estimates of resultant project land and building values following build-out
(ix) Be able to calculate break even scenarios and perform sensitivity analysis

6.6.3 Project Financing mechanisms and instruments

Project Financing shall consider both (a) Traditional and Non-Traditional financing sources and (b) a funding strategy for both the horizontal and vertical development costs of the site, as follows:

6.6.3.1 <u>Traditional and Non-Traditional Financing Sources</u>

The consultant shall consider, but not be limited to, the project financing sources in the table below:

TRADITIONAL	**LAND VALUE CAPTURE INSTRUMENTS**	
GOVERNMENT RESOURCES	**TRADITIONAL**	**NON TRADITIONAL**
Capital Reserves	Property Tax	Tax Increment Financing
Grants	Betterment Levy	Air Development Rights
Tax Abatements	Capital Gains	Public Private Partnerships (PPP)

International Bi Lateral Arrangements (in consultation with the government)	Leverage Government Owned Real Estate	Special Assessment Districts

6.6.3.2 Funding Strategy

The consultant shall also consider but not be limited to the following strategies:

(i) The government funds the infrastructure, with buildings funded (a) primarily by the private sector (PPP) and (b) catalytic build-out funded by government.

(ii) The government regulates the development only (infrastructure and build-out), with the private sector funding, essential / targeted infrastructure and agreed upon selected build- out, with concessionary arrangements, all constructed in accordance with the master plan guidelines and regulations

The consultant shall provide all the assumptions used in the scenarios above. They shall also provide for the scenarios above, a risk matrix for market risk, financial risk, developmental risks and possible external influences, with suggested mitigation measures.

6.6.4 Financial Viability Assessment Report

Using the financial model, the consultant shall conduct such a variety of analysis as is necessary to justify the master plan / urban design option. The report shall provide at a minimum

(i) Executive Summary
(ii) Clear and concise list of assumptions and supporting reasoning
(iii) Explanation of the various analysis conducted
(iv) Risk Matrix
(v) Recommendation of the preferred option
(vi) A development strategy for the recommended proposal
(vii) A project financing plan for the proposal
(viii) Suggested financing modalities for the project
(ix) A soft copy of the Excel model for client use

6.7 Task 7: Final Master Plan and Urban Designs

Based on the clients' written instructions and comments arising out of Tasks 5 and 6, the Firm shall proceed to make such adjustments as necessary to the final preliminary design (Task 5) to produce the final master plan design.

6.8 Task 8: Final Environmental and Social Impact Assessment (ESIA)

Based on the Initial scoping report in section 6.2.5 above and the preliminary urban design footprint, the consultant shall finalise the Environmental and Social Impact Assessment (ESIA) Report with an ESMP.

Applying qualitative and quantitative techniques, the consultant will identify and prioritize any potential negative physical impacts caused by the project during implementation and operation and the estimated costs of recommended mitigation measures both during implementation and in the long term.

The social management plan should analyse any potential negative social risks and impacts arising out of, but not limited to land acquisition / resettlement, anticipated demographic and land use changes in the surrounding areas and recommended mitigation measures. These measures should reflect the principles and guidelines laid out in the National Economic and Social Development Plan: 2013 – 2025. The Firm should liaise closely with the Social Safeguards contact in the assessment of social risks and impacts and in the recommendation of mitigation measures.

7 INPUTS

7.1 The Client

The client will provide the following:

(i) All plans, pictures, reports, topographical surveys, etc. of the proposed works that might be necessary, applicable and already in the client's possession for the execution of the work required under these TOR. The Client will not be responsible for data collection of any type, nor is the client responsible for the provision of any reports other than those listed in section 6.2.1.1
(ii) Access to the project sites
(iii) Liaison with other Ministries, Departments, and Authorities, etc. in order to introduce the Consultant. The Consultant however shall be fully responsible for collecting data, information etc. from these agencies and the organization of further meetings.
(iv) The Client may assign staff to the Firm to receive training and gain hands-on experience in the various aspects of the work.
(v) Assistance in obtaining visas, work permits, driving licences, car registration, etc. and any other formalities found necessary for the Consultant's personnel entering or leaving SVG for the purpose of carrying out the services.
(vi) Use of its laboratory facilities and staff for the performing of tests both in the laboratory and in the field to the extent that they are capable of or have the necessary equipment to undertake such tests. These tests are very limited and consist of density testing, sieve analysis and DCP tests.
(vii) The client will provide the consultant with local office space (20ft x 20ft)

7.2 The Firm

The Firm will provide the following to the Client:

(i) All services required to undertake the various activities outlined in Sections 5 and 6 of the TOR;
(ii) Provision of human resources, technical expertise, and necessary equipment and software required to carry out the assignment;
(iii) List of requisite data or additional information to the client input above;

8 DELIVERABLES

The Consultants shall submit six (6) hard copies and six (6) flash drives for EACH of the following deliverables to the Client's satisfaction. The drawings shall be on 36" x 24" paper in AutoCad format (version to be agreed upon) with written reports in Microsoft Word and Excel:

a) Inception Report (Task 1)
Within two (2) weeks of commencing the works, the Firm is required to submit an Inception Report. A typical sample template is attached in Appendix C.

The Client will forward comments on the report to the Firm within four (4) weeks of receipt.

The Firm will incorporate the comments from the Client and submit a final Inception Report.

b) Visioning Report (Task 2)
Within four (4) months after acceptance of the Inception Report, the Firm is required to submit the Visioning Report.

The Client will forward comments on the report to the Firm within two (2) weeks of receipt.

c) Data Collection and Analysis Report (Task 3)
The Firm shall provide this report within six months of the acceptance of the Inception Report.

The Client should forward comments on the report to the Firm within four (4) weeks of receipt.

d) Strategic Framework Development Guidelines Report (Task 4)
Within four (4) months after acceptance of the Inception Report, the Firm is required to submit a Strategic Framework Development Guidelines report. The Client will forward comments on the report to the Firm within two (2) weeks of receipt.

The firm shall be required to make a power point presentation of this report to the Client.

e) **Preliminary Master Plan and Urban Design (Task 5)**

Within four (4) months after acceptance of the Visioning Report, the Firm is required to submit a master plan along with full build-out concepts. The Firm will present their findings to stakeholders at three separate events during a one-week period, in PowerPoint format.

The client should forward comments within two (2) months.

f) Financial Analysis (Task 6)

The Firm is required to submit the Financial Report along with the Preliminary Design Report.

g) Draft Final Master Plan and Urban Designs and ESIA Reports (Tasks 7 and 8)

The Firm shall have eight (8) weeks following the acceptance of the Preliminary Master Plan to produce the Final Design Completion Report (Appendix D) containing the Master Plan final proposal, including development guidelines, revised financial report, if necessary, final ESIA report etc.
The client will have eight (8) weeks to review the final report.

h) Submission of Final Master Plan

Report Submission format: Six (6) hard copies and six (6) flash drives of all reports and final drawings are to be submitted to the Client. Drawings are to be submitted on 36" x 24" paper and in AutoCAD format (version to be determined)

Comments on the Reports should be anticipated within the timeframe indicated. The Consultant will adjust the ongoing work according to the comments received and will revise the reports within ___ weeks of receipt and in accordance with the comments received.

9 CONSULTANT FIRM MINIMUM REQUIREMENTS

9.1 General experience:

The consulting firms eligible for these works will have a minimum of twenty-five (25) years' experience in master planning and urban design.

9.2 Specific experience:

The consulting firm will have creditable experience in developing climate adapted urban designs and/or projects for tropical located small towns and/or cities during the last eight (8) years.

9.3 Work team requirements

WORK TEAM REQUIREMENTS		
Position	**Qualifications**	**Experience**
Team Leader / Project Director (Urban Planner)	MSc degree in Urban Planning or Urban Development.	Consultant or lead management position in development of projects related to urban developments or redevelopments. General experience not less than 20 years. Specific experience in towns with populations less than 50,000 and SIDS.
Financial Risk and Investment analyst	BSc in Financial Management or Chartered Accountant	Specific experience in developing various financial solutions for urban infrastructure and real estate projects including PPP solutions. General experience not less than 15 years
Urban Economist	BSc in Economics	Specific experience in developing urban economic analysis, economic modelling, demographic analysis and strategic planning. General experience not less than 15 years
Urban Designer	MSc in Urban Design or Urban Architecture	Specific experience in the design and creation of city features including public space, waterfront development, street landscapes and river embankment development. General experience not less than 20 years.
EIA Specialist	BSc. In Natural Sciences or related field	Specific experience in conducting environmental impact analysis with focus on urban developments or redevelopment. General experience not less than 15 years.
SIA Specialist	BSc in Social Studies or related field	Specific experience in conducting social impact analysis with focus on urban development or redevelopment. General experience not less than 15 years.

Infrastructure Design Expert	M.Sc in Civil Engineering	Specific experience in the design of roads, storm water drainage, water and utility distribution systems, for urban developments or redevelopment. General experience not less than 15 years
Structural Engineer	MSc in Structural Engineering	Specific experience in the design of multi-story buildings. General experience in structural engineering of 15 years
Coastal Engineer	BSc in Coastal Engineering or Civil Engineering	Specific experience in the design of coastal defenses. General experience not less than 15 years
Legal Advisor	LLB in Law	Specific experience in urban legislation and regulations. General experience not less than 10 years
Quantity Surveyor	BSc in Quantity Surveying or Civil Engineering or Construction Cost Estimation	Specific experience in cost estimation of large infrastructure projects and CESSM documentation. General experience not less than 15 years
Geographic Information System Specialist	BSc in GIS technology, geomatics or environmental science	Experience in producing publication-quality maps, data, and analyses reaching many disciplines. Experience in spatial database management and remote sensing.

10. COMMENTS BY THE CONSULTANTS

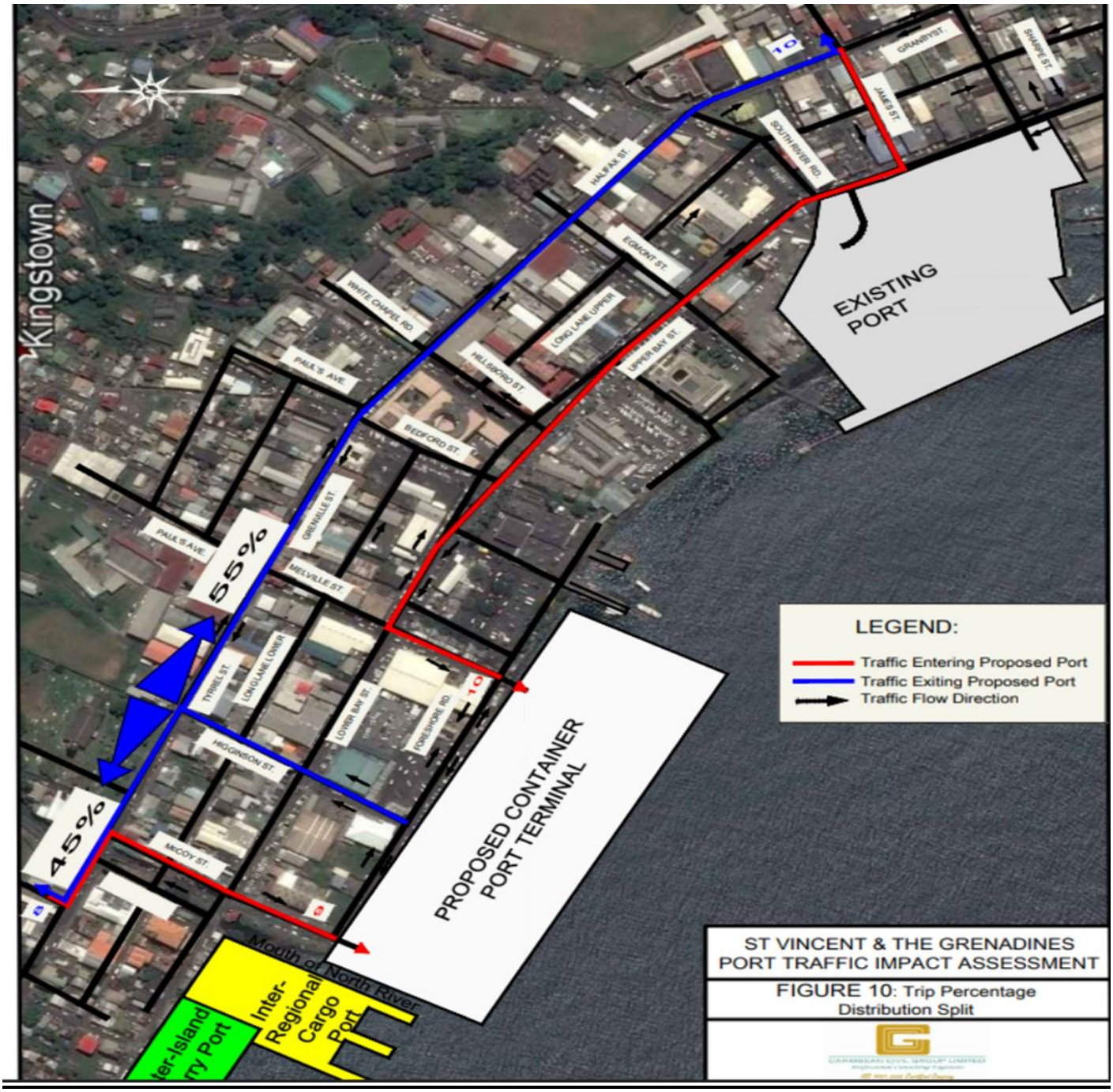
10.1 The Consultants are requested to make comments on, and suggestions for, improvements to these Terms of Reference. The financial implications, if any, of these recommendations should be indicated separately in the Financial Proposal.

APPENDIX A

Combined Boundaries (Census in green and project scope in red)

APPENDIX B

Port Modernization Project



APPENDIX C

Inception Report Template

The consultant is free to format the Inception Report to his normal presentation, but the report shall contain the following minimum content:

- ExecutiveSummary
- Introduction
- Contract signing and project commencement
- Project Organisation / Internal Lines of communication
- Team mobilization and project activities to date
- Background and description of various project elements
- Understanding of Project objectives resulting from initial stakeholder engagements.
- Comments on ToR in light of initial stakeholder engagements
- Project manpower, methodology and scheduling if different from proposal
- Data collection
- Data gaps
- Assumptions, Risks and Mitigation Strategy resulting from data gaps
- Design criteria and codes
- Public communications plan
- Proposed outlines for interim and final reports
- Appendices e.g. Meeting details, Organisation Chart, ToR, photographs, etc.

APPENDIX D

Final Completion Report Template

The consultant is free to format the Final Completion Report to his normal presentation, but the report shall contain the following minimum content:

- Title Page
- Table of Contents
- Acknowledgements
- Executive Summary
- Background
- Goals and Objectives
- Methodology (including codes and standards used)
- Implementation
- Outputs and Results (including final designs)
- Outcomes
- Conclusions
- Recommendations
- Lessons learned
- References
- Appendices (ESIA, Financial Report, Strategic Framework Development Guidelines, Implementation Budget for the Master Plan, Master Plan Implementation Phasing Schedule, etc.)

APPENDIX E

Terms of Geo-Spatial Data Delivery and Sharing

Freely accessible data and analysis is a core component of this project. Therefore, all geospatial data collected and created by project activities must be preserved, consolidated and transferred to the Government of Saint Vincent and the Grenadines upon project completion, in a well-known or standard electronic format. Specifically, the following terms apply:

Licensing: All data procured and developed for this project is done on behalf of the Government of Saint Vincent and the Grenadines and therefore all licensing agreements must be made similarly. In keeping with the governments commitment to open data, it is recommended that this license be under Creative Commons CC-BY-SA where possible and appropriate. See: http://creativecommons.org/licenses/by-sa/2.0/ for more detail.

Vector data: Geospatial vector data must be converted into a standard OGC format or well-known format. This list includes, but is not limited to, shape file format. Additional formats may be delivered with prior approval. All files must include projection parameters. Vector data must adhere to topological standards.

Raster data: Geospatial raster data must be converted into a standard OGC or well-known format. This list includes, but is not limited to, GeoTiff format. Additional formats may be delivered with prior approval. All files must include projection parameters.

Tabular data: Tabular data must be converted into a readily accessible or well-known format. This list includes, but is not limited to, CSV, tab delimited text file, or spreadsheet. Additional formats may be delivered with approval.

Media/method of transfer: All data sets must be transferred in an electronic format including but not limited to external removable storage devices, as agreed by the Government of St. Vincent and the Grenadines.

Metadata: Detailed documentation needs to be provided for each data set. This metadata must include description, source, and contact, spatial and attribute keywords, date, accuracy, restrictions. A description of attributes should to be provided for vector and tabular data sets. Spatial data must include details of projection. The metadata standard to be used in this consultancy will be discussed with the involved ministries and the responsible for the National Spatial Data Infrastructure. The information must be standardized by the National Geographical Information System and must also confirm with to the National Spatial Data Infrastructure.

Derived data: All derived data generated for this project belongs to the Government of Saint Vincent and the Grenadines and must be transferred under these terms.

Periodic updates: Ongoing updates of this data made by the selected must be provided as they are created.

Disposal of data: The selected firm is free to maintain copies of data collected and developed

through this project, without conflicting the terms of any license agreements. Ownership remains with, and must be stated as, the Government of Saint Vincent and the Grenadines.

CARTOGRAPHIC STANDARDS

British West Indies (BWI) Grid parameters

Grid	British West Indies
Projection	Transverse Mercator
Spheroid	Clarke 1880
Datum	St. Vincent
Unit of measurement	Metre
Meridian of Origin	62^{o} West of Greenwich
Latitude of origin	Equator (0^{o})
Scale factor at origin	0.9995
False Coordinates of Origin	400000 Easting
	Nil Northing

Universal Transverse Mercator Zone 20

Grid	UTM Zone 20
Projection	Transverse Mercator
Spheroid	WGS 1984
Datum	WGS 1984
Unit of measurement	Metre
Meridian of Origin	63^{o} West of Greenwich
Latitude of origin	Equator (0^{o})
Scale factor at origin	0.9996
False Coordinates of Origin	500000 Easting
	Nil Northing