



TERMS OF REFERENCE

FOR THE PREPARATION OF A DETAILED PLAN (DP) AND EXECUTION  
PROJECTS FOR THE REQUALIFICATION OF THE COASTAL ZONE OF  
TARRAFAL DE MONTE TRIGO - SANTO ANTÃO

CABO VERDE



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## 1 FRAMEWORK

### 1.1 Framework/Current situation

The creation of centralities requires organized cities, as planned, safe cities, with a good level of sanitation and with a civic and environmental awareness function. They are vital centers for boosting the local economy, which is why investments in territorial planning, regeneration, rehabilitation and urban and environmental upgrading are reproductive at an economic and social level which, added to the dimensions related to municipal attitudes and citizenship, enhance the quality of the territory.

Cape Verdean legislation, through Legislative Decree No. 1/2006 of February 13, 2006, created the Basic Law on Territorial Planning and Urban Planning (LBOTPU), the first amendment to which was made by Legislative Decree No. 6/2010 of June 21, and the second amendment by Legislative Decree No. 4/2018 of July 6, 2018.° 6/2010 of June 21, and the second amendment by Legislative Decree no. 4/2018 of July 6, 2018, which in Base VII defines the Territorial Management System, in which Territorial Planning and urban planning are based on a territorial management system that takes into account the territory as a whole, keeps its unity, respects territorial diversity and discontinuity, preserves biodiversity and strengthens resilience in case of disaster risks.

The Territorial Management Instruments (IGT), according to Base VIII of the LBOTPU and Article 14 of the National Regulation of Territorial Planning and Urban Planning (RNOTPU) defined in Decree-Law no. 43/2010 of December 10, amended by Decree-Law no. 61/2018 of December 10, are typified according to the different functions they perform:

- Strategics
  - National Territorial Planning Directive (DNOT)
  - Regional Territorial Planning Scheme (EROT))
- Regulatory
  - Special Territorial Planning Plans (PEOT)
- Urban Plans (PU)

The Detailed Plan, as an urban plan, is the territorial management instrument that, in detail, establishes the territorial planning parameters for delimited areas within the municipal territory. This use is outlined in accordance with the provisions of the Municipal Master Plan (PDM), thus defining the contours of the use of space. In addition to outlining the forms of infrastructure occupation, regulations relating to the architecture of buildings and normative demarcations for external and public spaces, the Detailed Plan will also include a comprehensive approach to the development of environmental aspects and the assessment of natural disaster risks. This approach is of particular importance considering that the proposed area has a direct relationship with the coastline. The Detailed Plan therefore not only serves as a guideline for the spatial organization of specific areas in the municipal territory, but also serves as the basis for the detailed design of infrastructure projects, building architecture and outdoor spaces, always aligned with the priorities established in the PDM.

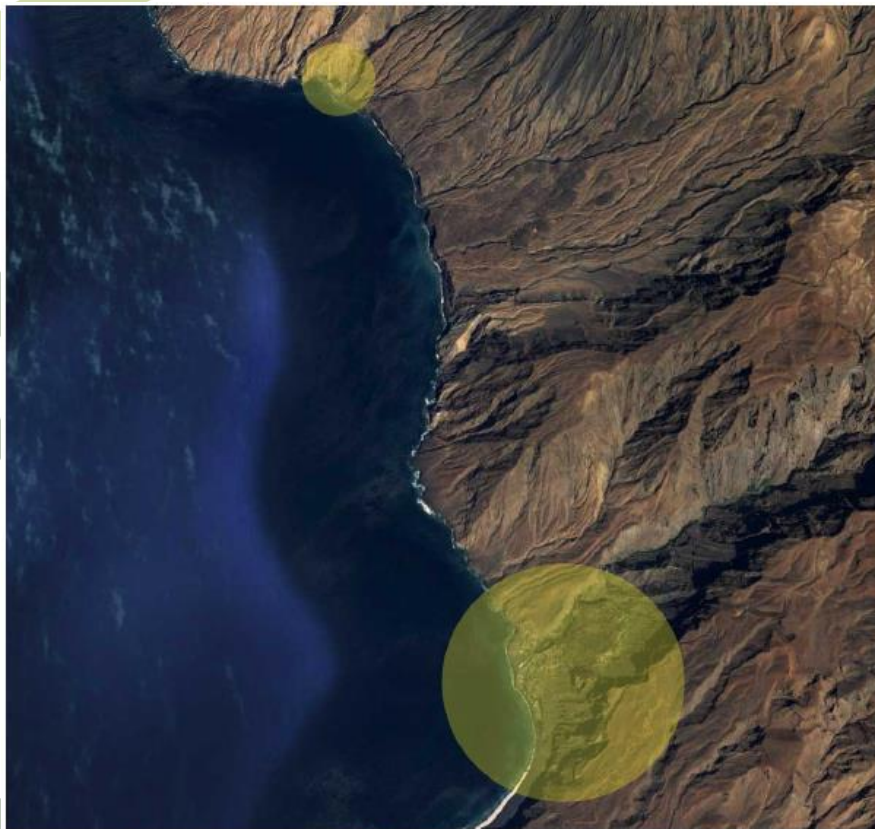
## **2 SCOPE: GENERAL OBJECTIVE, SPECIFIC OBJECTIVES AND EXPECTED RESULTS**

### **2.1 Objectives**

Located in the western and less populated part of Santo Antão, Tarrafal de Monte Trigo is in the municipality of Porto Novo, in a notorious bay for its beauty (the largest black sand beach on the island), as well as its strong potential in fishing and agriculture. Traditionally, it was known for its difficult accessibility, and only recently, in 2020, was the last 15-kilometre stretch of road linking it to the center of Porto Novo completed. The town is exposed to increased flooding in residential areas during the stronger tidal seasons. In order to resolve this vulnerability, the Porto Novo Municipal Council (CMPN), supported by MIOTH, intends to hire an urban planning consultancy and design company to draw up a Detailed Plan (DP), as provided for in the Municipal Master Plan (PDM). The DP is intended to develop and implement the PDM in order to structure land occupation and use, providing a reference framework for the application of urban policies and defining the location of the main infrastructures and public facilities.

The Detailed Plan (DP) will encompass the areas defined in the urban perimeter of the Municipal Master Plan (PDM), as well as the complementary rural land associated with one or more urban perimeters, necessary to enable an integrated planning intervention. In addition, it may extend to other areas of the municipality intended for urban use, such as industrial facilities, logistics parks, tourist developments and their equipment, among others. It is important to note that, in addition to the DP, the consultancy should undertake a sequence of engineering execution projects, where applicable, duly listed, covering: (i) coastal zone protection structures; (ii) fishing infrastructures; (iii) mobility and accessibility.

On the other hand, since Tarrafal de Monte Trigo and Monte Trigo are two Siamese twin communities, united by their orography, socio-economic culture and common historical facts, and considering that the main access to Monte Trigo is via Tarrafal (45 minutes by boat or 4 hours on foot), the consultancy should develop the necessary studies for the implementation of a multi-purpose landing stage (fishing, tourism, cabotage, civil protection, etc.) in Monte Trigo. The consultancy should explore the possibility of a single design for both sites, but adapted to the conditions/characteristics of each site.



Monte Trigo e Tarrafal de Monte Trigo, duas comunidades gémeas

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In addition, the consultancy will be responsible for drawing up the project for the final stretch of road access adjacent to the Praia-Baía de Tarrafal area, thus aligning itself with the guidelines of the competent authorities and the needs of the coastal zone in question.

With the implementation of the DP we will have the planning instruments that govern the spatial organization of a specific part of the municipal territory, integrated into the urban perimeter, which requires an integrated intervention that particularly develops the soil qualification. The DP is the planning instrument that defines in detail the territorial planning parameters of any delimited area of municipal territory, according to the use defined in the PDM.

The work of preparing the technical studies, which are the subject of this TOR, will be financed by the Resilient Tourism and Development of the Blue Economy in Cabo Verde Project (P-176981), which is under the fiduciary responsibility of the Special Projects Management Unit (UGPE).

## **2.2 Expected results**

The expected results from hiring this consultancy can be grouped into two separate subsections for a clearer and more precise understanding:

### **2.2.1 Detailed Plan Results**

The main aim of this project is to draw up the Detailed Plan (DP), an essential instrument for land-use planning in the municipality of Porto Novo. The main objective of the DP is to guide urban transformation, aiming to requalify, improve and integrate various aspects of the city. The main results expected from this plan include:

- To provide technicians and decision-makers in the municipality of Porto Novo with planning and implementation tools that will lead to urban regeneration projects. These projects will contribute positively to the population's quality of life, economic and environmental valorization, and the strengthening of social cohesion.

- Improving the implementation of the instruments defined in Cape Verdean legislation for territorial planning, with a view to more sustainable and integrated development.
- Improved management processes and communication between those involved, including the City Council, residents and investors.
- Development of methodologies and procedures for more sustainable and effective project management.
- Inclusion of the Risks and Disasters approach in the Plan, in accordance with the latest legislative guidelines.
- Contribution to the national dissemination of best project management practices from international partnerships.
- Integration of *stakeholder's* contributions in the process of drafting and validating the DP, ensuring effectively participatory planning.

### 2.2.2 Results of Implementation Projects

In parallel with the Detailed Plan, the consultancy will have to develop a series of detailed engineering execution projects, in accordance with the needs identified. The following list exemplifies the main elements of the execution projects that can be contemplated:

**1. coastal protection structures:** detailed project for the construction of structures to minimize the impacts of coastal erosion and extreme weather events in the towns of Tarrafal de Monte Trigo and Monte Trigo.

**2. Fishing support infrastructures:** Development of infrastructures to promote and support fishing activities in Tarrafal de Monte Trigo and Monte Trigo. The tasks to be carried out by the consultancy should make it possible to build two multi-purpose landings for small craft in the two locations<sup>1</sup>. Therefore, all the studies needed to design the detailed drawings, including technical specifications, bill of quantities and respective

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<sup>1</sup> The consultancy should deliver the execution projects listed in items 12, 13 and 14, which should be thoroughly specified and dimensioned, allowing the consultants to assess the scope and complexity of the work required for detailed engineering, if applicable. This approach ensures a clear understanding of the scale of the projects and enables accurate calculations of costs and resources.



budgets for the two infrastructures should be developed and presented. The consultancy should explore the possibility of drawing up a single design for the two sites, although adjusted to their specific characteristics.

**3. Mobility and Accessibility:** Drawing up solutions to facilitate the mobility of residents and visitors, promoting sustainable means of transportation, proposing solutions for a road link between the existing road and the area where the population is concentrated, totaling approximately 2km in length, adjacent to the Tarrafal Beach-Bay area, as well as the coastline, urban and maritime routes, considering the interconnection between urban areas and maritime resources.

The consultancy should deliver the execution projects listed in items 12, 13 and 14, which should be thoroughly specified and dimensioned, allowing the consultants to assess the scope and complexity of the work required for detailed engineering, if applicable. This approach ensures a clear understanding of the scale of the projects and enables accurate calculations of costs and resources.

### 3 SCOPE OF THE PROJECT

#### 3.1 General considerations

The general objective of the Technical Assistance in question is to hire an urban planning consultancy and design company to draw up the Detailed Plan for Tarrafal de Monte Trigo (PDTMT), as provided for in the Municipal Master Plan (PDM). The aim of this DP is to develop and implement the PDM's guidelines for structuring land occupation and use, providing a reference framework for the application of urban policies and defining the location of the main infrastructures and public facilities for the town of Tarrafal de Monte Trigo, as well as developing a study to define the best location and technical specifications for the project defined in point 11, for the town of Monte Trigo, as shown in fig. 2.

It is intended that the company to be contracted will draw up this urban planning instrument, which will govern the spatial organization of this part of the Porto Novo - Santo Antão municipal territory, imposing an integrated intervention that develops/promotes, in a special way, the qualification of the local soil. Furthermore, the

PDTMT will be the planning instrument that will define in detail the territorial planning parameters, in accordance with the use defined in the PDM.

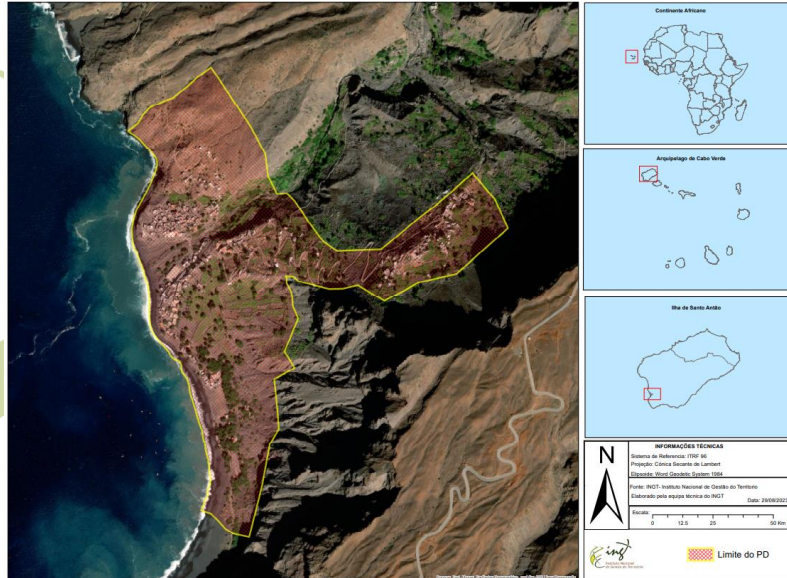


Fig.1 - ig.1 - Extract from the PDM with the boundary of the DP intervention area in Tarrafal do Monte Trigo

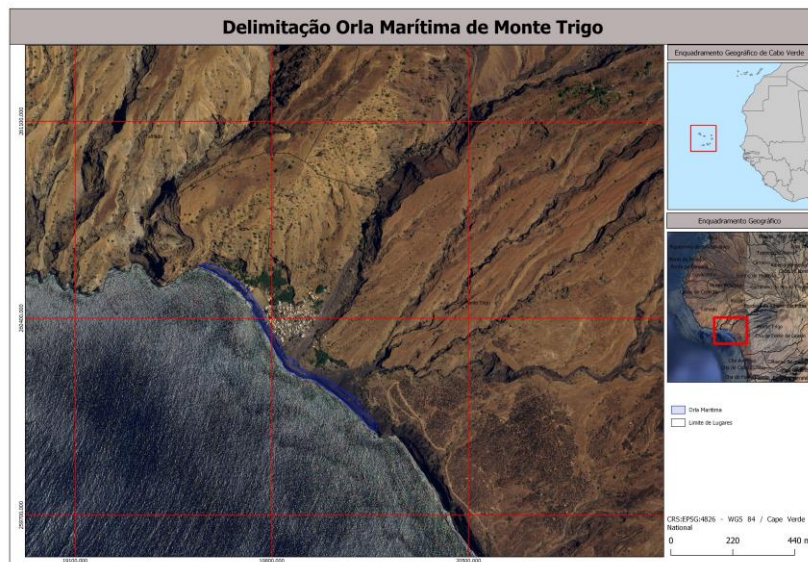


Fig.2 - Fig.2 - Intervention area for the development of the Monte Trigo landing study.

The PDM of Porto Novo Tarrafal de Monte Trigo identifies Tarrafal de Monte trigo as a semi-urban area and classifies it as a residential area where the following uses are permitted:



- a) Dominant use: Housing; and
- b) Compatible: Services/Trade, Social Facilities, Urban Recreation, Small Trade.

2. The construction, reconstruction, extension and replacement of buildings in these agglomerations is subject to the following rules:

- a) Maximum number of floors: 2 (ground floor + 1);
- b) Maximum height of buildings: 7m;
- c) The value of the maximum number of floors and the maximum height of the buildings defined in the previous paragraphs may be altered within the scope of Urban Development Plans and/or Detailed Plans, complying with the formalities imposed by the applicable legislation;
- d) The depth of the gable of new buildings may not be greater than that of pre-existing adjoining buildings and may not jeopardize their good exposure, insolation and ventilation conditions;
- e) There must be at least 1.25 parking spaces for each dwelling;
- f) For every 100 m<sup>2</sup> of gross commercial construction area, services or public facilities, there must be at least 1 parking space; and
- g) In areas where there are no binding urban planning determinations (Allotments, Urban Development Plans and Detailed Plans), the construction, reconstruction, extension and replacement of buildings must be carried out following the alignment of the dominant road in the section of the street in which the building is located, and the City Council may, whenever it deems it necessary, indicate another alignment to be adopted.

In addition:

- h) the construction of a landing stage.





Fig.3 - Extract from the MDP for the area of intervention of the Detailed Plan, and preparation of the specialty projects.

## 4 JOB DESCRIPTION

### 4.1 Description of the work under the detailed plan

This section details the various pieces of documentation that make up the Detailed Plan, in order to provide clarity on the content and scope covered by the project. Each of the four main elements is described more comprehensively below, with a view to full participants' understanding:

#### 4.1.1 Regulations:

The regulations are an essential part of the Detailed Plan, outlining the principles, rules and specific criteria that will guide the development of the intervention area. It includes provisions on building, subdivision of urban property, distribution of functions and urban parameters, such as indices, density of dwellings, number of floors and ceilings. It may

also address indicators relating to colors and materials to be used, as well as conditions for the conversion of areas of illegal genesis.

#### 4.1.2 Graphic pieces:

This section includes a set of cartographic representations that complement and illustrate the guidelines contained in the regulation. The following graphic pieces are included:

1. **Framework plan:** It shows the intervention area in relation to the surrounding urban and environmental context, identifying the main roads, infrastructures, public facilities, urban centers and surrounding areas.
2. **Existing Situation Plan:** At a scale of 1:1000 or 1:500, it represents the vegetation cover, property division, buildings and infrastructures existing in the area.
3. **Conditioning Plan:** it identifies the public utility easements and restrictions that may limit or prevent certain uses.
4. **Legal plan:** it registers, by means of agreed symbols, the indicative and binding measures of the plan, such as the subdivision, the limits of buildable areas, the access system and public spaces.
5. **Plan of natural and climatic risks:** it identifies risk areas, characterizing the types of risks and their conditioning factors.
6. **Synthesis Plan:** Summary of the main solutions adopted in the planning.

#### 4.1.3 Report:

The bidder will submit the following reports in Portuguese, one original and two (2) additional copies on paper and three (3) copies on digital format (CD):

1. **Characterization and diagnosis report** - Initial report of no more than 12 pages, to be submitted one month after the start of the implementation. In the report, the contractor describes, for example, the initial results, the progress made in data collection, the difficulties encountered and/or anticipated, the main environmental and social issues for the plan and presents its work program, as well as the human resources mobilized. In the absence of comments from the contracting authority on the initial report, the contractor will continue his work.

2. **Planning and regulation report** - Draft final report of no more than 15 pages (main text, excluding annexes). This report must be submitted no later than one month before the end of the period during which the tasks were carried out.
3. **Final Planning Report, Final Regulation and Implementation Program** - The final report with the same specifications as the Preliminary final report, including any comments received from the parties on the draft report. The deadline for submitting the final report is 15 days after receiving the comments on the draft final report. The report must contain a sufficiently detailed description of the different options to allow a reasoned decision on their approval. The detailed analyses underlying the recommendations will be presented in the report's annexes

The report substantiates the main solutions adopted in the Detailed Plan and their integration into municipal planning. It includes:

1. **Extract from the PDM** in force in the area, with indicated adaptations or details.
2. **Characterization and diagnosis study**, focusing on biophysical characterization, identification of areas of natural and climatic risks, measures to implement mitigation and adaptation strategies relating to climate change and natural values to be protected.
3. **Development strategy**, addressing the location, distribution and development of economic activities.

#### **4.1.4 Execution Program:**

This document contains indicative provisions on the implementation of the planned municipal interventions and their funding.

#### **4.2 Description of the Works within the Scope of the Execution Projects**

This section details the development phases of the execution projects, ensuring clarity as to the scope, stages and procedures to be followed. Each of the phases is described below:



#### 4.2.1 Base program:

This phase lays the initial foundations of the project, by identifying requirements, objectives and general parameters.

#### 4.2.2 Preliminary study:

At this stage, initial and preliminary solutions are presented for the main aspects of the project. In the specific case of the "Architectural Project for the Rehabilitation of the Tarrafal de Monte Trigo Coastal Zone", this is done at this stage, as a Preliminary Study, and it is part of the bidders' Technical Proposal.

#### 4.2.3 Preliminary project:

The preliminary design develops and details the solutions proposed in the preliminary study, moving forward with more specific elements.

#### 4.2.4 Execution Project:

At this stage, the project is finalized with technical and construction details, ready for physical implementation.

**Each of the phases, for each specialty project, requires the delivery of the specific elements indicated in points 12, 13 and 14 of the ToR.** Review and approval by the Execution Project Management Unit (UGPE) must take place before proceeding to the next phase.

Furthermore, in addition to the technical elements of the project, a Strategic Environmental and Social Assessment (SEA) or Environmental and Social Impact Assessment (ESIA) must be prepared and submitted, in accordance with the World Bank standards and national legislation. Active public participation and participatory strategies are fundamental elements of this process, ensuring inclusion and consideration of environmental and social effects.

## 5 COMPOSITION OF THE TECHNICAL TEAM AND REQUIREMENTS FOR SPECIALISTS

### 5.1 Team

The Detailed Plan (DP) will be drawn up by a consulting company with a minimum of five years' experience, comprising a multidisciplinary technical team. This team must be coordinated by one of its members and must cover at least the following areas of specialization: architecture, urban planning, landscape architecture, civil engineering, environmental engineering, economics, law, territorial planning and urban design. Each specialist must have proven professional experience in their respective fields. The technical team must be recognized for its suitability and professional experience, especially in Municipal Spatial Plans. Experience in coastal regeneration projects, demonstrated by at least two (2) projects, will be considered an added advantage.

### 5.2 Leading Experts

The main specialists are responsible for essential functions within the scope of the contract. Each of them must submit a curriculum vitae and declarations of availability and readiness. The profile required for each principal specialist is detailed below:

#### 5.2.1 Principal Specialist 1: Team Leader - Urban Architect

- Minimum of 10 years' professional experience in similar projects.
- University degree in at least one subject.

### 5.3 Other Specialists, Personnel and Support Services

#### 5.3.1 Specialist 1: Architect

- Minimum of 5 years' professional experience in urban planning and design projects.
- University degree in at least one subject.

### 5.3.2 Specialist 2: Geography and Territorial Planning

- Minimum of 5 years' professional experience in planning, ecological structure, landscape values and urban design projects.
- with knowledge of geographic information systems (GIS) to meet the delivery requirements of the graphic pieces in DWG format and SHP format.
- University degree with at least a BA degree.

### 5.3.3 Specialist 3: Civil Engineer

- Minimum of 10 years' professional experience in urban infrastructure projects, including elaboration and execution of roads infrastructures.
- University degree with at least a BA degree.

### 5.3.4 Specialist 4: Jurist

- Minimum of 5 years' professional experience in building regulations and urban property subdivision.
- University degree at least.

### 5.3.5 Specialist 5: Electrical Engineer

- Minimum of 5 years' professional experience in similar projects, focused on public lighting and urban electrification.
- University degree at least.

### 5.3.6 Specialist 6: Civil Engineer Coastal Works Specialist

- Minimum of 10 years' professional experience in coastal protection projects, including design and execution maritime infrastructures/works.
- University degree at least.

### 5.3.7 Specialist 7: Environmental Engineer

- Minimum of 5 years' professional experience in urban infrastructure projects, Environmental Impact Assessment (EIA) and/or Strategic Environmental Assessment (SEA), with a focus on risks and threats arising from natural phenomena.

- University degree with at least a BA degree.

### 5.3.8 Tourism Advisor

- Specialist with knowledge of tourism to provide concepts on accessibility infrastructure, public and private tourism infrastructure, spatial distribution of activities beneficial to tourism, public spaces, public facilities, housing, among others.
- It is important that all experts are not in conflict of interest with their assignments. Although the exclusivity clause is desirable, we understand that for international companies with consultants active on several projects simultaneously, this may not be feasible. However, it is essential to ensure that these experts have immediate time available for the project.
- The CVs of non-core experts are not required for the proposal, but it is necessary to demonstrate that the company has access to experts with the necessary profiles. The contractor will select and hire other experts as required, following transparent and predefined criteria, including professional qualifications and professional experience.

## 6 MONITORING AND EVALUATION

The progress of the Detailed Plan and the Implementation Projects will be monitored and evaluated at various stages. The evaluation process involves the submission of precautionary measures, preliminary documents, reports, public exhibitions, approvals and coordination meetings. The reports and documents generated throughout the process will be used to monitor the compliance with the objectives, ensuring compliance with the guidelines set out in the ToR.

## 7 PROVISION OF ESSENTIAL DOCUMENTS AND OTHER INFORMATION

For the preparation of the Detailed Plan and Execution Projects, the selected team must have access to relevant documents that guide the planning process. The list of documents to be given to the selected team includes, but is not limited to:



1. Documents from the Municipal Master Plan (PDM) in force in the area of intervention.
2. Technical studies, cartography and information from the Cape Verde Spatial Data Infrastructure (IDECV).
3. Studies carried out to date, such as environmental and risk assessment studies.
4. Other sectoral documents relevant to the development of the Detailed Plan and the Implementation Projects.

The selected team should use these documents as a basis for the project development and to ensure compliance with local regulations and guidelines. Providing accurate and up-to-date information is essential to ensure the quality and effectiveness of the planning and implementation process.

## **8 DEADLINE**

The term of this consultancy is 10 months from the date the contract is signed.

## **9 WORKING LANGUAGE AND PRESENTATION OF DELIVERABLES**

The language of the work with the national technical team must be Portuguese, so the company must have members of the technical team who are fluent in Portuguese and who ensure the bridge with the entity responsible for the technical follow-up of the plan.

Deliverables shall be submitted in Portuguese and English for allowing consultation and dissemination among stakeholders. They can be translated from English if the Vendor finds it more efficient.

## 10 SPECIAL ELEMENTS OF THE COASTAL ZONE PROTECTION PROJECT

### 12.1. BASE PROGRAM

1.1. Specific elements of the core program include an indication of additional field reconnaissance, laboratory testing and modelling studies to be carried out in the following areas:

- 1.1.1. Topography and hydrography.
- 1.1.2. Maritime and fluvial hydraulics, including sea waves, currents and tides.
- 1.1.3. Geology and geotechnics.
- 1.1.4. Sedimentology and sedimentary dynamics.
- 1.1.5. Meteorology and climatology.
- 1.1.6. Economy.
- 1.1.7. Traffic and transport logistics.
- 1.1.8. Urban and landscape integration.
- 1.1.9. Environment

### 12.2. PRELIMINARY STUDY

- 1.2. Defining the location of maritime protection and coastal defense works, as well as defining the type of structures to be used.
- 1.3. Specifications for laboratory tests and modeling.
- 1.4. Specifications for basic data collection, including hydrographic and sediment quality data.
- 1.5. Preparation of the geological and geotechnical study.
- 1.6. Cost estimate for maritime protection and coastal zone defense works.
- 1.7. Comparative assessment of alternative solutions, if any.
- 1.8. Identification of areas subject to overtopping and flooding, with characterization of the volumes of water penetrating and the damage they cause (ideally, an on-site reconnaissance should be carried out by the entity entrusted with responding to the current problem);
- 1.9. Identification of activities and assets affected by overtopping and flooding and their relative importance, i.e. identify the stretches of coastline that require the most urgent protection;



- 1.10. Characterization of the sea conditions and sea levels that are usually associated with situations of damage and obstructions to normal life in the city (wave heights, periods, water levels, etc.);
- 1.11. Characterization of the bathymetry and topography of the coastal zone of the intervention area and characterization of the constitution of the bottom layer in this zone (at the surface and up to a certain depth);
- 1.12. Identification of any constraints on the supply of raw materials for construction, particularly rockfill blocks.

### **12.3. PRELIMINARY PROJECT**

- 1.13. Conclusions of the studies, surveys and tests carried out.
- 1.14. Structural pre-dimensioning and supporting calculations.
- 1.15. Pre-dimensioning of signaling and safety systems.
- 1.16. Drawings, at appropriate scales, defining the location, layout and general arrangement of the works and installations.
- 1.17. Drawings, to an appropriate scale, defining the works to be carried out and the ancillary works and complementary installations.
- 1.18. Proposal for urban integration and landscaping.

### **12.4. EXECUTION PROJECT**

- 1.19. Reports on the studies, surveys and tests carried out.
- 1.20. Structural dimensioning and respective calculations justifying the works to be carried out.
- 1.21. Drawings relating to:
  - 1.21.1. Location of the worksite.
  - 1.21.2. General arrangement.
  - 1.21.3. Implantation, with top hydrographic base, on a scale of not less than 1:2,000.
  - 1.21.4. General, longitudinal and transversal dimensioning containing geological and geotechnical indications, where appropriate, on a scale of not less than 1:200.

- 1.22. Urban integration and landscape study.
- 1.23. Specification of the tests to be carried out during the work.
- 1.24. Plan for quick observation of the work's behavior over time.
  - 1.24.1. Detailed architectural and structural solutions, as well as detailed execution.
  - 1.24.2. Specifications
  - 1.24.3. General site modelling, backfill sections, excavation and backfill plans, excavation;
  - 1.24.4. General implementation of the work, including coordinated planimetric and altimetric implementation;
  - 1.24.5. Paving and finishing plan with construction details;
  - 1.24.6. Construction details for paving and finishes;
  - 1.24.7. Plan of walls and other built structures, reported to the elements of the corresponding specialty;
  - 1.24.8. Drainage plan, referring to the corresponding construction detail or specialty;
  - 1.24.9. Plans of the electricity and communications networks planned along the route;
  - 1.24.10. Plan or diagram showing the security system;
  - 1.24.11. Specifications
  - 1.24.12. Description and justification, including calculations and other supporting documentation;
  - 1.24.13. Measurements and job quantity maps;
  - 1.24.14. Detailed budget;

## **13. SPECIAL ELEMENTS OF THE FISHING INFRASTRUCTURE PROJECT**

### **13.1.BASE PROGRAM**

The aim of the project is to build multi use fishing (landing) and support infrastructures, which will improve safety conditions, development and technical support for fishing activities, product processing and conservation:

- 1.1.Construction of facilities to support the loading and unloading of fish, people and goods (landings) and support areas.
- 1.2. Cleaning/dredging the bottom of the landing basin;
- 1.3.Electrical installations and mechanical means;

### **13.2.PRELIMINARY STUDY**

- 1.1. Proposed location/implantation of facilities to support the loading and unloading of fish, people and goods (multi use landings) and support areas.
- 1.2. Characterization of sea conditions
- 1.3. Characterization of the bathymetry and topography of the coastal zone of the intervention area and characterization of the constitution of the bottoms in this area (at the surface and up to a certain depth);
- 1.4. Geology and geotechnics of the construction site;
- 1.5. Identification of any constraints on the supply of raw construction materials.

### **13.3.PRELIMINARY PROJECT**

- 1.1. Conclusions of the studies, surveys and tests carried out.
- 1.2. Structural pre-dimensioning and supporting calculations.
- 1.3. Pre-dimensioning of signaling and safety systems.
- 1.4. Drawings, at appropriate scales, defining the location, layout and general arrangement of the works and installations.
- 1.5. Drawings, at appropriate scales, defining the works to be carried out and the ancillary works and complementary installations.
- 1.6. Proposal for urban integration and landscaping.

## 13.4.EXECUTION PROJECT

- 1.1. Reports on the studies, surveys and tests carried out.
- 1.2. Structural dimensioning, detailing and respective calculations justifying the works to be carried out and all the specialties (water supply network, wastewater drainage, rainwater drainage, fire, electrical and lighting installations and equipment, mechanical, telecommunications and security systems).
- 1.3. Drawings relating to:
  - i. Location of infrastructure.
  - ii. General arrangement.
  - iii. Implantation, with top hydrographic base, on a scale of not less than 1:2,000.
  - iv. General, longitudinal and transversal dimensioning containing geological and geotechnical indications, where appropriate, on a scale of not less than 1:200.
- 1.4. Urban integration and landscape study.
- 1.5. Specification of the tests to be carried out during the work.
- 1.6. Plan for quick observation of the work's behavior over time.
  - v. Detailed architectural and structural solutions, as well as detailed execution.
  - vi. Contract Specifications
  - vii. General terrain modeling, embankment sections, excavation/dredging and embankment plan, excavation/dredging;
  - viii. General implementation of the work, including coordinated planimetric and altimetric implementation;
  - ix. Paving and finishing plan with construction details;
  - x. Construction details for paving and finishes;
  - xi. Plan of walls and other built structures, reported to the elements of the corresponding specialty;
  - xii. Drainage plan, referring to the corresponding construction detail or specialty;

- xiii. Plans of the electricity and communications networks planned along the route;
- xiv. Plan or diagram showing the security system;
- xv. Contract Specifications
- xvi. Description and justification, including calculations and other supporting documentation;
- xvii. Measurements and job quantity maps;
- xviii. Detailed budget

## **14. MOBILITY AND ACCESSIBILITY :**

### **14.1.PRELIMINARY STUDY**

- 1.1. Schematic definition of the planned route that makes the connection between the existing road and the area where the population is concentrated, totaling approximately 2km, in plan and profile, of the technical and environmental feasibility and its economic and financial conditions, initial investment, operation and maintenance.
- 1.2. Schematic definition of the various elements that make up the proposed route in each of the alternative solutions and for each of its components.
- 1.3. Definition and justification of the reconnaissance program, through geological and geotechnical prospecting and laboratory tests, necessary for the development of the study, including the respective specifications.

### **14.2.PREPROJECT**

A particular element of the preliminary project is the preparation of a general plan, at an appropriate scale, which represents added value in terms of rigor and detail compared to the previous stage, where the following are indicated:

- 1.4. Characteristics of the treatment of homogeneous surfaces and their abutments;

- 1.5. Constructed or plant volumes;
- 1.6. Terrain modeling;
- 1.7. Elevations and sections that describe and justify the solution presented;
- 1.8. Definition of the assumptions for the sizing and schematic layouts of all the infrastructures and structures built, namely:
  - 1.1.1. Roads and parking lots;
  - 1.1.2. Footpaths;
  - 1.1.3. Technical networks, including electricity, water, sewage and communications;
  - 1.1.4. Support walls and other foundations and structures;
  - 1.1.5. Rainwater drainage;
  - 1.1.6. Road safety systems;
  - 1.1.7. Detailed preliminary budget by work groups.

### **14.3.EXECUTION PROJECT**

- 1.9. A general plan for the intervention, summarizing and describing both the programmatic solution and the corresponding construction situation;
- 1.10. Work plan with identification of phases, boundaries and a description that gives a global perception of all the work involved;
- 1.11. Plan of demolitions, removals, relocations and precautionary measures;
- 1.12. General terrain modeling, embankment sections, excavation and embankment plan, excavation;
- 1.13. General implementation of the work, including coordinated planimetric and altimetric implementation;
- 1.14. Paving and finishing plan with construction details;
- 1.15. Construction details for paving and finishes;
- 1.16. Plan of walls and other built structures, reported to the elements of the corresponding specialty;
- 1.17. Drainage plan, referring to the corresponding construction detail or specialty;





- 1.18. Plans of the electricity and communications networks planned along the route;
- 1.19. Plan or diagram showing the security system;
- 1.20. Contract Specifications;
- 1.21. Description and justification, including calculations and other supporting documentation;
- 1.22. Measurements and job quantity maps;
- 1.23. Detailed budget;