

# Detailed Designs and Construction Supervision for the Sustainable Visitor Trails and Mountain Huts for Kazbegi, Pshav-Khevsureti, and Tusheti Protected Areas

### INTRODUCTION AND BACKGROUND INFORMATION

The Municipal Development Fund of Georgia (hereinafter MDF or the Client) is a legal entity of public law whose purpose is to mobilize financial resources from donors including international and Georgian financial institutions, to make them available for investments in local infrastructure and services, while simultaneously helping local self-government in strengthening their institutional and financial capacity.

MDF implements various projects including the Third Regional Development Project (RDP3) financed by the World Bank Group and the Government of Georgia (GoG). The Project aims to promote tourism development in Mtskheta-Mtianeti and Samtskhe-Javakheti Regions, including the arrangement of tourist infrastructure at the cultural heritage monuments' adjacent areas.

The consultancy Service aims to develop Sustainable Visitor Trails and Mountain Huts for Kazbegi, Pshav-Khevsureti, and Tusheti Protected Area, eventually supporting the tourism-based economy.

The Municipal Development Fund is seeking a qualified consultancy firm to provide a combination of technical assistance, design and construction supervision services under the scope of this consultancy.

### Overall scope and objectives of this consultancy service

#### Description of the study area

1. Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas are located at the Greater Caucasus Mountains in Eastern Georgia, are geographically interlinked and form the significant sub-network of the mountain protected areas in Georgia. (Map of the study corridor is provided in Annex 1).
2. Kazbegi National Park (legally designated in 2007) is close to one of the most vibrant tourism destinations of Georgia. With approximately 250,000 visitors per year, the town of Stepantsminda has developed as a tourism hub during the last 5-7 years. One of the Visitor Centers is located in the centre of Stepantsminda, where the accommodation facilities are concentrated and most tourist activities start. The other one is located in Omalo, Tusheti. The new visitor centre is also under construction in Shatili, Khevsureti. In the past, Kazbegi National Park was covering several fragmented forest patches and is now undergoing a transformation towards a more consolidated Protected Area (with a proposed area of 70,553 ha). The Natural Monuments (designated in 2012-2013) are part of Kazbegi protected areas mainly preserving specific Geological formations: Truso Travertines, Jvari Overpass Travertines, Keterisi Mineral Vacluse, Abano Mineral Lake, and Sakhirani Cliff, three of which are located in the Truso Gorge (Upper Tergi River).
3. Pshav-Khevsureti Protected Areas consist of Pshav-Khevsureti National Park, Asa Managed Reserve, and Roshka Nature Monument. Pshav-Khevsureti National Park is one of the youngest National Parks in Georgia, designated in 2014. The Pshav-Khevsureti Protected Areas are located between the Tusheti National Park and the Kazbegi National Park and are traversed by the Great Caucasus Trail (Tusheti-Shatili-Kazbegi). The main Visitor Center is planned to be located in Shatili, an ancient fortified village, located close to the border with Russia (Chechnya). The area is marked by wild mountain ranges with forested gorges in the lower parts and steep grass slopes in the higher parts. The Pshav-Khevsureti Protected Areas have several

micro-destinations: the areas around the Visitor Centers in Shatili and Barisakho as well as Ukana Pshavi, Roshka/Chaukhi and the new destination of Arkhoti/Asa Valley.

4. Tusheti Protected Areas include Tusheti Strict Nature Reserve, Tusheti National Park, and Tusheti Protected Landscape which have been legally designated in 2003. Tusheti Protected Areas are one of the largest in Georgia and Europe and due to the exceptional combination of natural and cultural assets of global importance they entered into the tentative list of World Heritage sites.

5. The cross hiking, traverse climbing and trekking in Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas attracts pioneer adventurers, however, it lacks visitor services, which must be developed in terms of safety and nature-based tourism needs.

6. Substantial development of connectivity and sustainably managed public use of protected areas sub-system, along the Greater Caucasus Mountains of Eastern Georgia, are needed. Along with the design of traversing and sustainable visitor trail system and lodging facilities, such as campsites and mountain huts of various categories and encouragement of private-public partnership at the protected areas to ensure their sustainable functionality in general and visitor/tourism services upscaling in particular.

#### Summary of services

7. The objective of this assignment is to assist the Agency for Protected Areas (APA) of Georgia to develop existing sustainable hiking trail system and lodging facilities (campsites and variety of huts) to connect Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas along the Greater Caucasus Mountains.

8. The objective of this TOR is to obtain design and supervision services as follows:

a) Monitor, Assess and Design Service:

i. To monitor, assess and design the main trail. (*from village Juta to Abudelaury Lakes; from Abudelaury Lakes to village Tsinkhadu; from village Tsinkhadu to Tanie Lake; from Tanie Lake to village Giorgitsmida through Isardghele Pass; from Giorgitsmida to Khidotani Mountain Range through villages Shatili and Mutso; from Khidotani Mountain Range to Campside Kvakhidi through Atsunta Pass; from Kvakhidi Campside to villages Girevi and Omalo through village Dartlo; from village Juta to Asa Gorge through Arkhotistavi Pass; from Asa Gorge to Tanie Lake through Tanie Gorge – total length 166 km.*) Improve existing trail conditions to become safe, functional for traversing and sustainable for visitors. When designing the trail, important landmarks and locations should be given proper consideration. (See the attached map for the reference Annex 1.)

ii. Design of lodging facilities along the main trail, such as mountain huts and campsites and of various categories with attention to resilience and eco-sustainability. This would include, without being limited to, considerations for sustainable visitors use facilities at the protected areas, mountain huts of various categories, camping and resting areas, orientation and interpretation signage, etc. Define the "theme" that shall reflect a homogeneous cluster of huts (e.g. contemporary architectural solutions, vernacular/traditional alpine architecture, etc.);

iii. To monitor and assess the condition of the network of mountain-hiking and horse-riding trails (*from Asa Gorge to Datvisjvari Pass through the Kalotana Gorge; from Datvisjvari Pass to village Kistani; from Datvisjvari Pass to Khidotani Mountain Range through the Chanchakhi valley; from village Mutso to village Jvariboseli through Andaki valley; from Datvisjvari Pass to village Jvariboseli through Mount Patara Borbalo; from Datvisjvari Pass to village Shuapkho through Matura Gorge*), which links protected areas of Kazbegi, Pshav-Khevsureti and Tusheti, located along the mountains of Big Caucasus, through the network of hiking and horse-riding trails. Improve existing trail conditions to become safe, functional for traversing and sustainable for visitors. To design the new trails in order to integrate into the existing trail systems. (See the attached map for the reference Annex 1.)

- iv. Create a management plan for the trails and the huts;
  - v. Develop a preliminary design with preliminary cost estimates for the investment projects selected for RDP3 financing;
  - vi. Develop detailed designs for the selected projects and support the Client in the preparation of tender-ready bidding documents for approved investment projects;
  - vii. Develop risk assessment and emergency plan for the huts;
- b) Provide supervision services for contracted civil works and related environmental and social supervision of selected investments that are strategic in nature;
  - c) During both stages of the assignment, the Consultant shall comply with the law of Georgia on the System of Protected Areas and align with the protected areas categories (IUCN Categories I, II, III, V) and their overall management objectives (limitations of IUCN Categories which apply to the project areas must be strictly considered, regarding touristic development or any kind of infrastructural intervention). The latter point would aim to promote conservation, sustainable public use and private-public partnerships for the management of the Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas as a multifunctional spatial network where the functions of nature conservation, cultural heritage preservation, and nature/culture-based tourism and recreational destination enhancement will be intertwined.
9. The implementation of the overall investment program, inclusive of both phases, is 24 months, followed by 12 months' defect liability period.

#### SCOPE OF ASSIGNMENT, TIMEFRAME AND DELIVERABLES, TEAM PROFILE

10. The scope of the assignment covers Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas, Study Corridor with a length of approximately 350 kilometres (Map provided in Annex 1. Length of the Study Corridor is not the same as the length of planned Trails and final designs will be developed only for the selected sections of the study corridor). The estimated volume of works covers the development of Sustainable Visitor Trails and Mountain Huts Development and Connecting of Kazbegi, Pshav-Khevsureti, and Tusheti. The estimated volume of works for Sustainable Visitor Trails and Mountain Huts Development and Connecting of Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas is estimated at USD 2,500,000.00 (VAT included). This estimated budget is a tentative financial envelope for the construction phase and does not relate to the inception and design services. The financial envelope may be increased or decreased after defining and accepting the preliminary design packages and cost estimates (Part B) by the Client.

Under this assignment the consultant is expected to provide:

Part A – Inception and evaluation

Part B - Design Services

Part C – Supervision Services

11. The Consultant will carry out the following main activities for Inception and evaluation (Part A):

Task 1. Carry out a rapid desk-review, including stocktaking and preparation of a work-plan and preparing the inception report;

Task 2. To Monitor and assess Main existing trail and seven hut sites;

12. The Consultant will carry out the following main activities for Design Services (Part B):

Task 1: Preliminary Concept Design, Guidelines and preliminary Estimates for the Main existing trail and seven huts;

Task 2: Main trail (166 km) and seven huts detailed designs

Task 3: Monitoring and Assessment mountain-hiking and horse-riding network of trails (184 km)

13. The Consultant will carry out the following main activities for supervision services (Part C):

Activity 1: Inception Stage

Activity 2: Construction Stage

Activity 3: Defects Liability Period

14. During all the stages of the assignment, the Consultant shall comply with the law of Georgia on the System of Protected Areas and align with the protected areas categories (IUCN Categories I, II, III, V) and their overall management objectives (limitations of IUCN Categories which apply to the project areas must be strictly considered, regarding touristic development or any kind of infrastructural intervention). The latter point would aim to promote conservation, sustainable public use and private-public partnerships for the management of the Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas as a multifunctional spatial network where the functions of nature conservation, cultural heritage preservation, and nature/culture-based tourism and recreational destination enhancement will be intertwined.

15. The activities for design services are expected to be performed through the following tasks:

#### Part A: Inception and evaluation

**Task 1: Carry out a rapid desk-review, including stocktaking and preparation of a work-plan and preparing the inception report**

16. The inception stage is expected to cover (without being limited to):

- a) Synthesize information related to the applicable international (binding) obligation (conventions, multilateral bilateral treaties, etc.) of Georgia, relevant national legal and regulatory provisions and best practices relevant to the territory of Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas;
- b) Review overall consultancy objectives, strategies and methodologies; consult the list of documents identified by the Client (through different sources), including management plans, studies from other donors, annual operational plans and strategic documents relevant to Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas, natural and cultural resources database, key environmental, social and economic studies, cartography, related plans/projects, applicable technical literature, and "project ideas" available; and highlight their guiding relevance to this assignment;
- c) Collect any background studies, survey, and maps that are required for the design consultancy and plan for obtaining that information;
- d) Outline a work plan defining project subtasks under the tasks, a methodology which is based on protected areas effective management experience, sustainable infrastructure design (e.g. high-mountain hiking trails, mountain huts, etc.), timeline, dedicated resources; with human resources for international and local must be specified separately, and including planned field visits;

- e) Propose a methodology for the prioritization and categorization of sub-projects undertaking into consideration the RDP III objectives and limitations, as well as the standards of equitable Protected Areas development, sustainable visitor services and effective operation in general;
  - f) Identify a list of key rights-holders (such as Agency of Protected Areas, Municipalities of Kazbegi, Dusheti, and Akhmeta, etc.) and relevant stakeholders (to be established in agreement with the Client), and outline an engagement strategy (including communication and information dissemination) during the various tasks;
  - g) Any revisions to technical components and scope of works in the ToR.
17. Deliverable: Inception Report detailing the items provided in the list above, with a particular focus on the Work Plan and engagement strategy for stakeholders. The Inception Report should provide clear information on the Work Plan, parallel tasks and allocation of personnel/resources between the two parts of this assignment (Design and Supervision).

## Task 2: To Monitor and assess Main existing trail and seven hut sites;

18. The consultant must monitor and assess a sustainable visitor main trail and seven hut sites (*from village Juta to Abudelaury Lakes; from Abudelaury Lakes to village Tsinkhadu; from village Tsinkhadu to Tanie Lake; from Tanie Lake to village Giorgitsmida through Isardghele Pass; from Giorgitsmida to Khidotani Mountain Range through villages Shatili and Mutso; from Khidotani Mountain Range to Campside Kvakhidi through Atsunta Pass; from Kvakhidi Campside to villages Girevi and Omalo through village Dartlo; from village Juta to Asa Gorge through Arkhotistavi Pass; from Asa Gorge to Tanie Lake through Tanie Gorge – total length 166 km.*) (See the attached map for the reference Annex 1.) The general idea for sustainable visitor trails and mountain huts across Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas shall take into account trends and opportunities to ensure effective development and management of the protected areas and to enhance their role as a tourism destination. This positioning would significantly contribute to economic growth and better standards of living of the local communities of Mtskheta-Mtianeti.
19. The consultant must evaluate trail condition, basis of the existing structures and routes, and develop a new resilient, eco-sustainable, safe, functional and well-connected system, camping grounds, mountain huts/lodges. Possibly, the Consultant shall propose solutions that allow the use of this trail and huts during all seasons and is required to mark on the map dedicated locations for winter Activities (such as snowshoeing, ski-touring and etc.). The consultant must research hut sites and should designate the exact locations of the huts that will make sustainable architecture (e.g. near the water sources, best orientation, modern-style constructions, vernacular architecture, etc.) and provide a management plan for an entire system, which takes into consideration the economic sustainability.
20. The activities conducted by the Consultant to Formulate a development Design Concept for the Sustainable Visitor Trails and Mountain Huts Development at Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas are expected to cover but without being limited to are:
- Through a series of discussions with the MDF, Agency of Protected Areas and other key stakeholders such as the Ministry of Regional Development and Infrastructure, Ministry of Environment Protection and Agriculture, the World Bank, the beneficiary municipalities, etc., formulate and propose a Development Concept for the project and propose at least two schematic (ranked) alternatives for Concept for the Sustainable Visitor Trail and Mountain Huts Development. Each alternative should be accompanied by a short brief, together with an overall summary note proposed for selection on technical ground, for discussion and a preliminary agreement with key stakeholders, beneficiary municipalities, and technical and economic local agencies and other relevant stakeholders identified by the Client. The Development Design Concept should discuss all the relevant environmental, social, cultural, political, administrative, managerial, financial, physical dimensions and give solutions/responses to all the problems and issues identified thanks to the background analysis.

Moreover, they should identify the environmental, physical, historical, cultural and socio-economic factors that can contribute to branding the cross-traverse connection of the mountainous protected areas for the domestic and international tourism markets. The consultant should emphasize the use of off-grip technology, innovation, smart design for huts, attractiveness, etc. based on the international trends in the sector.

- The Consultant must familiarize existing and/or be elaborated spatial plans and development regulation plans for settlements around the project area. This includes Akhmeta's spatial plan and its vision on trails in this legal document. The consultant should also coordinate with the firm that will develop Kazbegi spatial plan, in order to match visions on trails and huts systems. Additionally, if in the design process any other spatial or development regulation plan will be developed in the project area, the consultant must obtain the information and integrate/coordinate this data in the design process.
- There shall be regular interactive discussions and reporting (at least once every 2 weeks) between the Consultant team and the Client to exchange concepts and ideas in order to make sure that the proposed design concepts are in line with the PDO and developed in compliance with the guidelines and the regulations operating by law in the project area. The draft design concepts shall be evaluated by a technical committee from MDF to carry out at the Stakeholders' Consultation Workshop. The clearance from the World Bank must be attained. The MDF is responsible for obtaining this clearance.
- Validate Design Concepts for the project area at the 'Stakeholders' Consultation Workshop to be organized in coordination with MDF, with the participation of representatives of the concerned local and central authorities, as well as of the local civic, social and business organizations (including mountain guides from GMGA, IFMGA, GMF, etc., adventure travel operators, guides from eco-tourism association, adventure companies, national park rangers, local guides/porters, etc. to share practical experience and international practices in operation and ownership). The Workshop could use a SWOT analysis approach to assess possible alternatives and project briefs for the entire area.
- Safety and Security Assessment must reveal areas of major risks of mud-flows, landslide, rock falling, and avalanche danger and shall be given priority to avoid placing infrastructure in high risk zones.
- Finalize Design Concept for the project area on the basis of the documentation prepared for the Design Concept, and considering the inputs by MDF, the WB, and the stakeholders' workshop. The Consultant will produce a final version of the Design Concepts in the form of a written report and define:
- Development Design Idea for the entire project area (environmental, social, cultural, civic and economic dimensions) and how this contributes to meeting the needs and to facilitate the activities of the resident population and the visitors (national and international tourists).
- Role of the protected areas categories (According to the Law of Georgia on the System of Protected Areas and IUCN Categories) and their zones within the overall development Design idea and the measures (e.g., regulations, public initiatives, incentives) and actions (e.g., development investments, events) that can facilitate the achievement of their envisaged role. Moreover, the role of the protected areas categories and their zones will be formulated based on their constitutive elements such as the visitor facilities and services (visitor shelters, campsites, picnic sites, trails, orientation, and interpretation signage, rest areas, information kiosks) and activities (recreational, cultural, commercial, etc.). These elements should be described considering (i) their detailed nature and scope; (ii) their relation to one another and (iii) their ranking in terms of relative importance.

- The presentation of the spatial organization of the physical and functional relations at the cross-traverse trail system through the various protected areas categories and their zones, as well as the constitutive elements, including identification of priority investment projects candidate for RDP III financing, should comprise maps at 1:50 000, 1:25 000; 1: 10,000, 1: 2,000 and 1:500 scale for projects of high relevance.
- It will also document the visioning process, consultations and rationale for selection (vis-a-vis other options that were considered, but not selected).

Deliverables: i) Photos of the hut locations ii) hut locations topographic maps (Hydro resource to be considered when determining hut location) iii) Security Assessment Report (Avalanche, landslide, mud-flows, rock falling) iv) environmental impact assessment report (EIA) v) Main Trail Evaluation Report, Define Works (Road Cutting, Steps Arrangement, Bridges, Vegetation Cleaning, etc.) vi) The complexity status of the trails should be determined in accordance with the technical regulations and the appropriate information board should be placed on the track (annex 4) vii) The track should be defined by GPS coordinates viii) The route should be determined by the coordinates where the information boards and poles will be located in accordance with the regulations ix) Planned works (bridge arrangement, road cutting, steps) should be marked on the route and identified by coordinates x) Photo and video material of the works xi) maps scale 1:50 000; 1:25 000

### Stakeholders' Consultation Workshop

21. Validate the design Concept through a Stakeholders' Consultation Workshop to be organized in coordination with MDF, with the participation of representatives of the concerned local authorities, as well as local civic, social and business organizations, professional association of mountain guides, tour operators. The Workshop could use a SWOT analysis approach to assess possible alternatives and project briefs for the entire area. An example of the organization, objectives, and agenda of the Consultation Workshop can be found in annex 2.
22. The draft design concept document must be cleared with the World Bank team before it is presented at the Consultative Workshop. MDF will serve as a liaison between the Consultant and the Bank. All correspondence should be channeled through MDF. After obtaining the Bank clearance, the Consultant may proceed with the Consultative Workshop.
23. Finalize the Concept for the project area, building on the documentation prepared for the Development Design idea for the selection of the concept, considering the inputs by the MDF, the WB and from the stakeholders' workshop. The Consultant will produce a final version of the concept for the project area in the form of a written report and define:
  1. The role of each protected area category and their zones of the project area within the overall vision and the measures (e.g., regulations, public initiatives, incentives) and actions (e.g., development investments, events) that can facilitate the achievement of their envisaged role. Moreover, the role of each category and their zones will be formulated based on their constitutive elements such as visitor spaces (trails, lodging facilities, etc.), services (rest areas, tourist information kiosks) and activities (recreational, cultural, commercial, etc.).
  2. Description of elements concerning: (i) their detailed nature and scope; (ii) their mutual relations; and (iii) their ranking in terms of relative importance.
  3. The presentation of the spatial organization of the physical and functional relations among the various protected areas categories and zones as well as the constitutive elements of each zone, including identification of priority investment projects candidate for RDP III financing, should comprise maps at 1: 10,000, 1: 2,000 and 1:500 scale for unique projects of high relevance.
24. It will also document the visioning process, consultations and rationale for selection (vis a vis other options that were considered, but not selected).

The Consultant will carry out the following main activities for Design Services (Part B):

## Task 1: Preliminary Design, Guidelines and preliminary Estimates for selected Investment;

25. Based on the agreed-upon list of investment projects selected for preliminary concept design by the Client, the Consultant shall develop preliminary designs for selected individual investment projects. The intention for the preliminary design is, in part, to assist the Client in assessing the alternatives/options their feasibility and to make the final selection of the projects for Detailed Design. This shall include, but not be limited to:

- a) Preliminary architectural design alternatives/options for specific investment projects selected, such as visitor lodging facilities, trail network, etc. (e.g. Sketches and conceptual drawings, 3D Visualization);
- b) Develop the concept of the Main Trail network and huts along with it in Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas. To evaluate the results of the monitoring, photo and video materials of the current condition with GPS coordinates should be provided. i) This work is carried out to determine the location of erosive sites, the locations to be cleared of vegetation and shrubs, and to determine the process of their recovery works. ii) The sections obtained as a result of treating the areas should be marked on the map indicating the content of the work to be done (e. g. trail cutting, clearing trails of bushes or vegetation, arrangement steps, bridges, rails, protective ropes, etc.). iii) The consultant will provide information on those sections of hiking trails, routes where horse-riding is possible. This opportunity will contribute to the economic development of the local community. iv) Prepare Individual and grouped topographic map files of the trails and hut sites v) A geologist should visualize the soil at the site of the footbridge in order to determine in advance what type of bridge construction must be taken into consideration when designing. Accordingly, the submitted design documentation must include complete design drawings, renderings, cuts, the expertise inference of the geology and a list of materials.
- c) Layout and relevant sections/elevations at the appropriate drawing scale (e. g. 1:500 – 1:200) showing the spatial and functional characteristics of the intervention and its integration in the natural context. The drawings should be presented in the proper scale (e.g. for accurate details should be from 1:1- till 1:25, for infrastructure and buildings should be at 1:100, etc.) to assure the readability and technical accuracy;
- d) Approximate cost estimations for each of the selected project including costs of operation and maintenance needs;
- e) Environmental screening report if the investments are subject to screening according to the Environmental Impact Code of Georgia (2017) or a scoping report if the investments are subject to EIA according to Environmental Impact Code of Georgia. If the proposed investment project is subject to EIA, the scoping report will be prepared by the Consultant with the prior written consent of the Client.

26. The consultant must develop design alternatives for different size huts; small - with carrying capacity of 8-10 people, medium - with carrying capacity of 12-15 people and large - with carrying capacity for 15-20 people. All huts should include outside and inside dining space, kitchen, outside bathroom (2 for up to 4 people), storage space, connection with the source of water (or a tank), sewage treatment, waste containers (considering possible ways and instruments how the collected waste will be transported to the landfill or a collection point at a designated location) and etc. The consultant is also required to design safe horse stalls and shelters next to the huts. As the location of these huts most probably will be proposed away from the settlements, modern design solutions in line with alpine architecture should be encouraged. Huts and roof structures must be capable of withstanding a load of snow in the winter. Good insulation is very important. When determining the final locations of the huts, the consultant shall consider water sources that can be



connected to the water containers/tanks. Distance, altitude and seasonal availability shall be considered for water purposes and water solutions shall be in the design proposal. Technological innovations in sustainable design, alternative energy, energy efficiency, heating, water use and wastewater treatment, waste utilization, etc. should be considered.;

27. The Consultant is expected to package the investment proposals up to the ceiling of available investment funds for the cross-traverse trail system and mountain huts at Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas, develop the investment plan reflecting priority intervention areas;

28. The Consultant shall package the selected investment projects, based on sustainability, location, size, type and similarities of works, accessibility investment costs, amount of selected investments projects (works). The Consultant and the Client will agree, depending on the type and amount of the works, on how many works packages contracts are needed to assure procurement efficiency, and approve their implementation plan.

29. There shall be regular discussions and reporting between the Consultant team and the Client to review and meet the required standards for the Preliminary concept designs and estimated costs for each investment project. All submitted investment project briefs, also the packaging and implementation plan of projects will be evaluated and approved by the Client and acceptable to the World Bank, for the projects to carry out at Task 3 of Part B and be implemented under RDP III-MDF.

Deliverables: The Consultant will deliver a result of the above Task, the following:

i. Each selected project dossier shall include: preliminary project designs (alternatives), technical report, preliminary cost estimates (for all alternatives) including operation and maintenance costs related to the selected investment and procurement activities funded by the RDP III-MDF; ii The implementation plan, in the form of a written report, including the implementation schedule of works packages and rationale used to package the selected investment projects into the approved amount/number of work packages. The consultant is required to regularly provide work in progress documents upon MDF requests.

## Task 2: Main trail (166 km) and seven huts detailed designs

30. Based on the agreed-upon list of the Preliminary Design for the Selected projects selected in Task 1 of Part B by the Client, the Consultant shall develop, but not limited to:

31. Surveys and Review of Preliminary Designs: to determine detailed project scope and delineate specific project boundaries. This may include activities such as but not limited to (i) reviewing the design and drawings from the Preliminary Project Ideas and make the necessary modifications/comments to these drawings if necessary; (ii) conducting field surveys, including topographic and architectural surveys of the concerned areas and buildings, measured drawings of buildings/facades identified for detailed designs, if needed; (iii) data collection, detailed investigations/evaluations and analysis for detailed design; Borehole investigations for soil required for foundation designs.

32. In any case, the Consultant should consider the review of existing projects identified on the previous tasks and selected to be included in the final list of investment projects, reflect necessary modifications and specifications necessary to fulfil the required design standards as per designing manuals and according to RDP III-MDF objectives.

33. Detailed Design: This includes all works required with the aim of producing a complete set of bidding documents. This include, but are not limited to: (i) prepare detailed designs (architectural, structural, lighting, landscaping, drainage, etc.) with emphasis on resilience and eco-sustainability and technical specifications including all necessary data collection, surveys, and analysis to cover all aspects of the detailed design; (ii) technical reports; (iii) bills of quantities – BoQs (priced and unpriced), (iv) work schedule and bidding documents preparation. The detail design drawings will be prepared on the basis of approval of preliminary designs.

34. The consultant must focus attention to construction methodology in the detailed design task. Designers should have specific experiences on the construction of mountain huts and shelters in the high alpine zone (where no villages are around, and no road connectivity is available) and experience in operating in context with limited or no access by roads, creating specific challenges in the design and costing. The Consultant should prepare a construction methodology proposing, for example, alternative ways to supply material - e.g. horses, quads, etc. and timeline. Any temporary construction access road must be avoided in the sensitive natural landscape and all has to be done in accordance with regulations for nature protection.

#### Environmental and Social Impact Assessment, Environmental and Social Management Plans

35. In case the proposed investment project is subject to EIA in accordance with Georgian legislation and World Bank safeguards policy: This includes all works required with the aim of producing a completed set of environmental documentation required for obtaining of Environmental Decision by the State authority. Environmental Impact Assessment will be conducted by the Consultant with the prior written consent of the Client in case if an EIA is required for individual investment according to the Environmental Impact Assessment Code of Georgia or/and World Bank safeguards policy. The Consultant shall prepare a Scoping Report, EIA report and a full package to submit to the Ministry of Environment and Agriculture of Georgia, according to the Environmental Assessment Code of Georgia to gain Environmental Decision.

36. In case the State Authorities or/and WB finds a defect in submitted EIA, Scoping Report or other documentation as required, the Consultant shall immediately remedy the defects and submit the revised documents to MDF.

37. Specific Approvals: The Consultant shall prepare necessary documents and detailed drawings for approval by the Agency of Protected Areas, local authorities and any other parties required in the process. The required approvals shall be identified in the work plan and executed by the Consultant.

38. Environmental requirements in case if the proposed investment project is not subject to EIA

In case if the proposed project is not subject to EIA and issuance of Environmental Decision by the State authority, the Consultant shall submit the following information:

- Topographic, geological and hydrogeological information (description of relief, geology, and soil, based on archive data and as a result of the visual survey; information regarding existence or probability of hazardous geological processes, the necessity for conducting of explosive works; depth of location of groundwater, etc.);
- Vicinity to the river or other surface waters (lakes, channels, etc.);
- Potential sites and landfills for disposing of excess material (mud, soil, rocks) and construction waste, a brief description (including cadastral information) and maps of suggested sites;
- Location and distance to the nearest licensed quarry for mining of the natural construction material;
- Review all existing underground and surface communications within the project corridor;
- Land ownership and land utilization issues: a) Cadastral data on the project implementation site (due to high altitudes, limited access to technology and low culture of registering land, most of the land ownership is unofficial. Therefore, direct communication with local communities may play a key role to get the most accurate information and avoid conflicts with the locals at the implementation phase. b) Formally attested information whether the project impacts on privately owned, or leased land plots or not (temporal disturbance; loss of the part of the land plot or whole land plot by the owner; loss of the property is on the land plot; loss of income, etc.);
- Brief social-economic information on the surrounding area;
- Description of vegetation, fauna and flora species in the project area. Identification existence of Red Listed species based botanical and zoological surveys. In the case of trees/bushes cutting will be required, the name of tree species (Georgian and Scientific) and quantity should be specified and all required documentation for obtaining a permit for trees cutting shall be provided;

Based on the submitted information and with the Consultant's assistance, the Client will prepare site-specific safeguard instruments, such as Environmental and Social Review (ESR) or a self-standing Environmental and Social Management Plan (ESMP), disclose them through MDF's web page and hold public consultations. The Consultant may be asked to incorporate public feedback into the design documents as necessary.

All earthworks must be designed with care not to trigger natural processes like erosion, landslides, etc. The design must provide engineering solutions to avoid risks of hazards due to human activity through construction works.

ESRs and ESMPs will be part of tender documents for the provision of works and their implementation is mandatory for construction contractors. The Consultant will be responsible for monitoring compliance of contractors' performance with the site-specific ESRs/ESMPs.

The consultant is required to regularly provide work in progress documents upon MDF requests.

Documents must be officially delivered in two submissions. After the First submission, MDF will officially provide remarks and comments, which must be corrected before the Final submission. A full list of documents must be delivered on both submissions.

### Resettlement Requirements

39. In the process of design, the Consultant shall ensure that the impacts on private properties were minimized or/and avoided maximally. In the case of the impacts on the private properties are inevitable, the contractor company shall reveal potential project affected properties at the initial stage and inform the Client (MDF).

The Consultant is responsible for carrying out the following activities:

40. Carry out detailed measuring works within the affected corridor: identifying project-affected land plots; verifying the status of land parcels (registered in Public Registry; unregistered legalizable; unregistered non-legalizable; state-owned and other), checking/verifying land status and request land status recognition document as with representatives of local government as well as a National Agency of Public Registry to recognize the exact size of the land plot, preparing measurement cadastral drawings and dividing drawings in case of partial acquisition of the land, conducting the first stage registration of impacted land parcels and dividing (and register) them according to the original ROW. Already divided and properly registered land parcels shall be provided to the MDF stage by stage. Additionally, provide to MDF cadastral drawings for State land registration.

### PREPARATION OF BIDDING DOCUMENTS

41. The bidding documents shall be finalized based on the Client 's comments on the detail designs, by incorporating all the comments, revisions, and packaging strategies. The Consultant shall advise on suitable packaging for all identified contracts. Bidding documents and drawings shall be prepared in a way that is sufficient to invite bids.

42. Packaging and Contract Documentation (for bidding): The Consultant is expected to provide support to the Client in (i) contract packaging and management based implementation plan; (ii) preparation of bidding and contract documents (in accordance with the current version of the World Bank's Standard Bidding Documents for the Procurement of Works, and including abbreviated specifications of the work to be performed, forms, invitations to pre-qualify and draft advertisements); and (iii) assist the Client in bidding and contractor selection process and bidding evaluation.

43. The bidding documents will be made with reference to the tender drawings and shall contain, among other things, the following sections: Instruction to bidders, Standard forms (contract), Condition of contract,

form of bid and qualification information, Bidding data and Contract Data, Technical Specifications, Bills of Quantities, Drawings, Standard Forms (Bid), and ESRs/ESMPs.

44. There might be approximately 3 packages of works which include all prioritized investments. The exact amount of work packages will be agreed between the Consultant and the Client, depending on the type and amount of the works, and in order to ensure procurement efficiency.

Deliverables: The Consultant will deliver the work packages based on the scheduled implementation plan approved by the Client, and each will include for each investment project: (i) a detailed design dossier; drawings plans/sections/elevations/3D views/details/specifications/BoQs developed an accurate survey and presented using the best design standards and practices, and (ii) bidding documents ready for the bidding process financed by the RDP III and in coordination with the Client.<sup>12</sup>

### Task 3: Monitoring and Assessment mountain-hiking and horse-riding network of trails (184 km)

45. The Consultant will assess the following trail network that links Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas. Please see the list of the routes and the map with an attached trail network. (Annexe 1)

46. Evaluating and monitoring mountain-hiking and horse-riding network of trails should be carried out on the network of the trails of the protected areas located along the Big Caucasus mountains of East Georgia, which is necessary for the integration, conservation and public utilization of the local communities. As a result of the assessment, the identification of the secure and functional network of the trails will be carried. On these treks, mountain huts and camping sites are due to be arranged. The evaluation procedures of the trails should be carried out according to the criteria of Georgian Government's #475 resolution on "Technical regulation \_ planning and marking of hiking trails" and the requirements of the presented Technical Assignment. (Annexe 3)

47. The consultant will assess the actual condition of the trails that connect Kazbegi, Pshav-Khevsureti and Tusheti national parks in order to identify the physical condition of the trails and issue recommendations concerning various works to be conducted on different sections of the trails. For example, clearing trails of vegetation, arranging stairs, installing security cables, rehabilitating hiking bridges and so on.

48. The goal of Hiking Trail Condition Assessment is to identify the specific routes that are most susceptible to erosion, hiking bridges, mountain shelters, toilets, household waste management, and utilization problems.

49. Hiking trails are to be evaluated in accordance with the requirements of the Technical Regulation - Government Decree N475 on Planning and Marking of Hiking Trails as well as according to the criteria of the presented Technical Assignment. (Annexe 2)

50. It is necessary to determine which hiking routes can be integrated with the horse-riding routes according to the difficulty of the trails;

51. A detailed description of the lanes for each stage (in both directions) and information on the distance, time, tourist spots etc.;

52. Identifying sites and areas on the trail (tourist spots, cultural and natural sites, lakes, waterfalls, catering and overnight camps, campsites, car parks, drinking water stations, mobile coverage zones, etc.), obtaining GPS coordinates and detailed, Individual description;

53. Obtaining a full GPS track of the trails, which will highlight the sites and areas on the trail (tourist attractions, cultural and nature sites, lakes, waterfalls, canyons, catering and overnighting facilities, camping sites, herdsman sites/stalls, drinking water points, etc.) and precise points of the placement of the necessary infrastructure (markers, poles, Caverns, information boards, etc.) for marking the trails.

54. Photo and video footage of the trails (general) and the sites on them, grouped according to each trail, sites and their sequence on the trails. Photo and video materials of specific locations where signposts, information boards or any other infrastructure are supposed to be placed, should be provided as well. Photo and video materials are supposed to clearly show the location of the infrastructure, its surroundings, and the direction of the trail (e.g. from which direction the trail is coming and in which direction the trail continues);

55. Additional compulsory specifications: i) The monitoring of the current condition of the trail networks in Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas are supposed to be carried out along with the evaluation procedure. To evaluate the results of the monitoring, photo and video materials of the current condition with GPS coordinates should be provided. This work is carried out to determine the location of erosive sites, the locations to be cleared of vegetation and shrubs, and to determine the process of their recovery works. ii) The sections obtained as a result of treating the areas should be marked on the map indicating the content of the work to be done (e. g. trail cutting, clearing trails of bushes or vegetation, arrangement steps, bridges, rails, protective ropes, etc.). iii) The consultant will provide information on those sections of hiking trails, routes where horse-riding is possible. This opportunity will contribute to the economic development of the local community.

56. Preparatory trail maps should illustrate the following details: i) General Geographical Basis; ii) Shaded terrain model (only in locations where needed); iii) Hydrographic network (rivers, lakes, reservoirs, etc.); iv) Road network (all types of roads that meet in this area); v) Land cover (outlines of forests, shrubs, gardens, vineyards and settlements); vi). Mountain peaks and altitudes; vii) Height profile (hypsometric map); viii) Architectural monuments (churches, monasteries, castles, historic towers, etc.); ix) Archaeological sites; x) Recreational, entertainment and leisure facilities (museums, galleries, theatres, movie theatres, concert halls, etc.); xi) Service facilities (hotels, catering, healthcare, banks, retail facilities, etc.); xii) State-owned facilities (police, city hall, etc.); xiii) Tourism Information Centers; xiv) Cableway.

57. Further details on maps: i) Maps are supposed to be prepared in Georgian and English languages; ii) The map scale should be agreed with the Client depending on the size and volume of the trails; iii) The maps should be submitted in the following electronic formats: working PDF format together with the corresponding Map Shapefiles; iv) In electronic map files, objects of one type marked on the map should be grouped in such a way that they can be easily switched on or off at the same time; v) The map should have a legend, scale and grid system; Geographical coordinates of the objects to be mapped, names and other additional information.

58. Photo and video materials are supposed to comply with the following requirements: photo and video materials should illustrate both the trail in general and its condition - views, nature, condition of the roads as well as objects on the trail (tourist attractions, cultural and natural sites, lakes, waterfalls, food and nightlife, camping sites, drinking water droplets, etc.);

Deliverables: i) geological and hydrogeological information ii) architectural project iii) renders, visual views and photomontage iv) Structural Project v) BoQ v) A work method statement

#### OTHER RESPONSIBILITIES

59. The Consultant shall conscientiously fulfil, to the highest professional standards, the role that they have been assigned to play. It will be the Consultant's responsibility to ensure that all intended outputs are delivered in the most efficient and effective manner ensuring value for money at all times. The Consultant will ensure that all outputs are delivered on time, within budget and to the highest standards.

60. The Consultant shall develop the project's detailed designs dossier based on the national and international design guidelines (e.g. design guidelines for roads, buildings, etc.), in order to achieve the highest sustainable design standards.

61. The Consultant shall perform all engineering, architectural works; quantity surveying, environmental, cultural, social, economic analysis and related works described so far in the TOR, to support the achievement of the defined project objectives and deliverables, and taking into account. The Consultant shall review all available documentation on the project and shall be solely responsible for the analysis and interpretation of all the received data.

62. The Consultant shall assist the bid evaluation committee in evaluating technical aspects of the offers and prepare a report for further consideration by the Client.

63. The Consultant shall clearly define the project boundaries and areas of interventions for each selected investment project that will be under the scope of the detailed design process. The engineering and architecture design shall consider road safety, accessibility standards (e.g. for disabled people, etc.), describe fixtures, lighting design, greenery, etc.

64. The engineering and architecture design shall take into account the need for “smart” and effective (technical and esthetic) solutions and use of construction materials that can be implemented, operated and maintained. The final choice for proposed construction/rehabilitation shall be based on technical and financial analyses of alternative designs, and on the opinions of the district engineer, and in consultation with the Client.

65. Consultants are encouraged, where appropriate, to support the wider economic development of the country by using locally available materials and human resources.

66. Consultants are encouraged, where appropriate, to support and introduce solutions that drive the development of smart infrastructure.

#### IMPLEMENTATION TIMEFRAME AND DELIVERABLES

67. The Consultant will carry out its Part A, Part B and part of this assignment in 6 months.

68. The following list of key deliverables and milestones serves as a guide for the Consultant. The Consultant Team is expected to propose a Work Plan outlining project sub-tasks (e.g. additional internal review/consultation sessions) and refine the timeline to meet the objectives of the assignment effectively, for Client’s agreement:

No.	Deliverables / Services	Format	Duration of Task	Payment Schedule
Part A Inception and evaluation				
Task 1: Stocktaking and Inception				
1.1	Inception Report, Work Plan and Engagement strategy for stakeholders.	<ul style="list-style-type: none"> <li>2 printed reports in A4 size.</li> <li>An electronic copy of reports.</li> </ul>	Within 2 weeks of award of the contract, including a review with the Client and relevant stakeholders and incorporation of comments into a final version.  (Followed by 1 week period for MDF to provide comments and remarks).	
Task 1 ( <i>the payment will be made upon submission and acceptance of Task 1 (Part A) deliverables</i> )				10%
Task 2: To Monitor and assess Main existing trail and seven hut sites (Report)				

2.1	<p><i>Development concept and detailed design scheme.</i></p> <p>Based on SWOT analysis, develop a mobility assessment and propose a Mobility Plan</p>	<ul style="list-style-type: none"> <li>● 2 printed reports in A4 and/or A3 size, plans in A1, A0, etc.</li> <li>● An electronic copy of all reports/docs, plans and related CAD, Excel, Word, PDF, etc. files.</li> <li>● Feasibility and preliminary management strategy.</li> <li>● The initial report on safeguards screening</li> <li>● Initial Report on the impact on the environment, cultural heritage sites, etc. relevant to the project area.</li> </ul>	<p>3 weeks after receiving comments on Part A Task 1 from the Client.</p> <p><i>* The Consultant should conduct at least 1 consultation processes with the Client.</i></p> <p><i>* This stage will include a final presentation review with the Client and relevant stakeholders_ Report of Validation.</i></p> <p><i>* The Consultant will incorporate comments into a final version and have the endorsement of the Client to proceed to Task 1 of Part A.</i></p> <p>(Followed by 1 week period for MDF to provide comments and remarks).</p>	
Task 2 (the payment will be made upon submission and acceptance of Task 2 (Part A) deliverables)				20%
Part B Design Services				
Task 1: Preliminary Concept Design				
1.1	<p>Preliminary Concept Design, Guidelines and preliminary Estimates for the Main existing trail and seven huts.</p> <p><i>This should be carried out based on updated documentation and accurate drawings and surveys with preliminary estimated costs.</i></p> <p>Screening and Scoping Reports (if necessary)</p>	<ul style="list-style-type: none"> <li>● 2 printed reports in A4 and/or A3 size, plans in A1, A0, etc.</li> <li>● An electronic copy of all reports/docs, plans and related CAD, Excel, Word, PDF, etc. files.</li> <li>● A PowerPoint presentation.</li> <li>● Cost-benefit analysis.</li> </ul>	<p>6 weeks after receiving comments on Task 2 of Part A from the Client.</p> <p><i>The Consultant should conduct at least 1 consultation processes with the Client, which will be reflected in the written Reports of Consultation/ Comments.</i></p> <p><i>* This stage will include a final presentation review with the</i></p>	

	<p>Preliminary designs for selected investment projects.</p> <p><i>Report on Validation</i></p>		<p><i>Client and relevant stakeholders Report of Validation.</i></p> <p><i>* The Consultant will have the endorsement of the Client to proceed to Task 2 of Part B.</i></p> <p>(Followed by 2-week period for MDF to provide comments and remarks).</p> <p>If based on screening report Environmental Conclusion will be issued on the conclusion of EIA, scoping report of a selected investment project shall be submitted to MDF within 10 days after issuing of conclusion by the Ministry Environment Protection and Agriculture</p>	
<p><i>Task 1 of Part B (the payment will be made upon submission and acceptance of Task 1 (Part B) deliverables)</i></p>				20 %
<p>Task 2: Main trail (166 km) and seven huts detailed designs</p>				
2.1	<p><i>Detailed designs with technical specifications and reports, BoQs, the work schedule for selected investment projects.</i></p> <p><i>Draft EIA Reports (if necessary)</i></p>	<ul style="list-style-type: none"> <li>• 3 printed copies for each project, in A4 and/or A3 size, plans in A1, A0, etc.</li> <li>• An electronic copy of all reports, plans and related CAD, Excel, Word, PDF, etc. files.</li> <li>• The package of documents and related documents will be submitted as per bid requirements and in line with World Bank Guidelines.</li> </ul>	<p>The detailed design stage will commence after receiving comments and approving the final deliverables of Task 1 of Part B.</p> <p>The detailed design of the overall approved list of selected investment projects will be delivered into the approved amount of work packages by the Client in 8 weeks together with EIA reports (if necessary).</p> <p>The detailed design stage will be conducted by the Consultant based on the implementation plan approved by the Client.</p> <p><i>*The Consultant should conduct at least 4 consultation processes, or more if required by the Client,</i></p>	



			<i>depending on the number of packages of works.</i>	
Task 2 of Part B ( <i>the payment will be made upon submission and acceptance of Task 2 (Part B) deliverables</i> )				40%
2.2	<i>Documents for Building permits</i>			
	<i>The Consultant will assist the process and prepare all the necessary documents as requested by the law to obtain the building permits.</i>			
2.3	Bidding Documents			
	<i>Prepare the bidding documents dossier.</i>			
Documentation of the coordination process under this Consultancy:				
	<i>Each communication process held between the Client and the Consultant while developing this consultancy should be recorded in:</i>  <i>Consultation/Comments Report.</i>  <i>Report on Validation</i>	<ul style="list-style-type: none"> <li>● 2 Printed copies for each consultation report.</li> <li>● 2 Printed copies of Validation Reports.</li> <li>● An electronic copy of the reports (Word, PDF, etc.)</li> <li>● Georgian/English language.</li> </ul>	<i>*Reports shall be delivered upon the final deliverables of each Task.</i>	
* The deliverables of report/documents etc. should be copies in Georgian and copies in English languages for packages and specific task.				
Task 3: Monitoring and Assessment Report mountain-hiking and horse-riding network of trails (184 km)				
3.1	Evaluating and monitoring mountain-hiking and horse-riding network of trails should be carried out on the network of the trails of the protected areas located along the Big Caucasus mountains of East Georgia, which is necessary for the integration, conservation and public utilization of	<ul style="list-style-type: none"> <li>● 2 Printed copies for each consultation report.</li> <li>● 2 Printed copies of Validation Reports.</li> <li>● An electronic copy of the reports (Word, PDF, etc.)</li> <li>● Georgian/English language.</li> </ul>	5 weeks after receiving comments on Part B Task 2 from the Client.  <i>* The Consultant should conduct at least 1 consultation processes with the Client.</i>  <i>* This stage will include a final presentation review with the</i>	

	<p>the local communities. As a result of the assessment, the identification of the secure and functional network of the trails will be carried.</p>		<p>Client and relevant stakeholders_ <i>Report of Validation.</i></p> <p><i>* The Consultant will incorporate comments into a final version and have the endorsement of the Client to proceed to Task 3 of Part B.</i></p> <p>(Followed by 1 week period for MDF to provide comments and remarks).</p>	
<p>* The deliverables of report/documents etc. should be copies in Georgian and copies in English languages for packages and specific task.</p>				
<p><i>Task 3 of Part B (the payment will be made upon submission and acceptance of Task 3 (Part B) deliverables)</i></p>				<p>10%</p>

69. There shall be regular interactive discussions and reporting between the Consultant team and the Client to exchange concepts and ideas in order to make sure the proposed investment projects are feasible and practical. All submitted investment project briefs will be evaluated by a technical committee, partly composed of the key technical staff of MDF. It is also necessary to obtain clearance by the World Bank.

70..The Consultant will submit all reports and deliverables requested under this assignment to MDF for review and approval. MDF will be responsible for sharing the documentation with the World Bank, and with the Local Authorities, and any other interested central and local government authority as deemed necessary.

Part C (supervision stage) shall commence or become effective upon successful completion of the detailed design of the 1st package of works in Parts A, B (design stage) and when the contract for civil works has been awarded. Duration of the services/contract under supervision stage will be closely dependent on the time allowed for completion of the works contracts as may be brought out by the Part B. Authorial supervision required during the construction will be merged with the construction supervision by the consultants.

#### TEAM PROFILE AND KEY PERSONNEL

71. A multi-disciplinary team of key staff will be required for the execution of the project. The Consultant Team should be led for the full term of the project by a Principal Architect/Protected Areas Facility Planner as the Team Leader with the experience in the execution of similar projects in and specific background in Architecture, Protected Areas Facility Planning & Project Management. A local Architect preferably with experience in Protected Areas Facilities Planning and with the knowledge of the local language should be mobilized fully for the duration of the consultancy to serve as local liaison. The Team Leader and Deputy Team Leader should make required field visits to the project areas each as part of the development of design services, which will be reflected in the work plan and be subject of the evaluation process. The presence of the key staff (international or local) is considered obligatory as part of the deliverable in the stakeholder workshop.

72. The following list of qualifications (in RECOMMENDED QUALIFICATIONS section) serves as a guide and Consultant Team may with justification propose additional staff. Among the requested qualifications, team members must be experienced in mountain tourism, guiding, operations, hut and shelter construction, avalanche and disaster risk management, etc. The Consultant Team shall also propose the time allocation for

each of the staff dedicated to their respective tasks and the breakdown of the time that those works will be performed on location or remotely.

*Team composition:*

73. In order to provide for the top-level performance for the assigned task, the consultant shall mobilize the qualified staff (key personnel as well as the support staff). All the specialists shall be well-recognized professionals in their respective fields with at least 5-year experience in a similar work environment.

74. The consultant for the Part A: Inception and Concept and Part B Design Services should mobilize the following personnel:

N	Personnel	Number	Month	Input, person/month
	Key Experts			
1	Team Leader/ Architect/	1	6	6
2	Deputy Team Leader/ structural engineer/	1	6	6
3	Sustainable engineer	1	4	4
4	Biodiversity/Protected Areas/ Environmental Specialist	1	4	4
5	Civil engineer	1	3	3
6	Tourism Expert	1	3	3
7	Trail Engineer	1	3	3
	Non-Key Experts			
1	Park Facilities/Assets Management, Visitor Services Specialist	1	3	3
2	Architect/Landscape Architect	1	4	4
3	Hydro Technical Engineer	1	3	3
4	Engineer Surveyor	1	1	1
5	Gis Specialist	1	2	2
5	Water Supply/Sanitary Engineer	1	2	2
6	Mechanical/Electrical Engineer	1	3	3
7	Cost Estimator	1	2	2
8	Geology	1	4	4
9	Geodesist	1	4	4
10	Trail markers specialist	1	4	4

### Part C: Supervision Services

- Supervision services intend to include:
  - A. Supervision of the contracted civil works from the list of specifically identified investment projects for the Sustainable Visitor Trails and Mountain Huts Development and Connecting of Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas, including monitoring, inspection and reporting supervision activities;
  - B. Environmental and Social Supervision of the contracted civil works.
- More specifically, the Assignment will be carried out through the following specific Tasks and Activities.
  - Activity 1: Inception Stage

- Activity 2: Construction Stage (18 months, seasonal)
  - Activity 3: Defects Liability Period (12 months)
- C. The consultant should ensure strict adherence of the contractor to the requirements of the detailed designs, technical specifications, Environmental Documentation (EMP/ER/EIA) Ensuring Contractors' good command of the requirements laid out in Environmental Documentation, tracking adherence of Contractors' performance and advising Contractor on the corrective actions in case of identified environmental compliance;
- D. The consultant should supervise their implementation in compliance with the Georgian Legislation, World Bank policy, Environmental Management Framework (EMF) of RDP III, in order to ensure that the prescribed environmental and social mitigation measures are applied on time and in a due manner and that no damage is caused to the natural and social environment in the course of works.

*Activity 1: Inception Stage*

1. During the Inception Period, the Consultant shall become familiar with all the aspects of the project, all volumes of the work contract and project's environment, review the present Terms of Reference.
2. The Consultant shall be aware of all the relevant information available for the project and the stakeholders involved in the project. The Consultant shall visit all the relevant institutions in order to ensure that the requirements of all parties to the project are addressed adequately.

*Deliverables:*

3. Inception Report, inclusive of but not limited to Project synopsis (summary); Analysis of the project; Start situation, review of the available documents, project progress with mobilization; Project planning; Coordination with other projects; Project goals and objectives; Project approach; Initial findings and description of any unexpected problems encountered, contractual difficulties faced; Intended results; Updated methodology, work plan, time and manning schedules (based on the Consultants' programs); Quality assurance system by the Consultant; Quantity checking and measurements records; Constraints, risks, assumptions; and Planning for the next reporting period.
4. In the same report, the Consultant shall describe any adjustment or addition the designs may need to improve the quality of works without any increase of cost or any prejudice to the Client with respect to the Contractor.
5. The Consultant shall also include as an annex to the inception report a complete Quality Assurance and Quality Control Manual (QAQC) concerning the supervision activities. The QAQC Manual shall specify the requirements, procedures, and guidelines for all the main activities necessary to run the works smoothly and shall cover at least the following:
  - Practical information and introduction;
  - Project organization charts, for works and supervision contracts, including names of key personnel, the definition of key interactions and information flow. Also, responsibilities and key functions shall be described;
  - Time and cost management procedures;
  - Reporting procedures;
  - Record keeping of correspondence, expenditure, minutes of the meeting, site records, instructions;
  - Issued to works contractors and instructions received from the Client;
  - Design modification and design approval procedures;
  - Document control procedures (including Contractor's insurances, reports, etc.);
  - All standard forms needed during the supervision activities (e.g. site instructions, completion certificates, variation orders, formats of reports, hidden works record sheets, form for field inspections and testing, measurement sheets, interim payment certificates, and related invoices);
  - Review and approval of detailed construction drawings prepared by the Contractor;
  - Selection of borrow pits and quarries;

- Procedure for approval and testing of construction materials, and supplies;
  - Procedures for testing the works by the Contractor;
  - Safety protocols;
  - Procedures of measurement of the works executed;
  - Procedures for Performance Certificate and the Taking-over Certificate;
  - Snag list and Defects Liability inspect
  - on reports; and
  - Draft Final and Final Statement of the Account.
6. The Inception period shall commence immediately upon commencement of the present Service contract, whichever is latest, see section 5.2 "Commencement date & Period of execution". The Consultant shall submit the Inception Report within 4 weeks from the commencement of the Inception period.

*Activity 2: Construction Stage*

7. The Consultant shall administer the contract and supervise the construction works, i.e. carry out the duties of the Supervisor in accordance with the Special and General Conditions for Works Contract of the projects funded under WB.
8. The Consultant will carry out, but not necessarily be limited to, the activities mentioned below:

*Contract administration and management, Site Procedures:*

9. The Consultant's team shall carry out contract administration and management duties throughout the duration of the assignment to secure smooth and timely implementation, proper day-to-day supervision and control of the Project. For this purpose, the Consultant shall establish clear lines of responsibility and procedures for each activity in the construction process.
10. The Consultant shall analyze and monitor contractual programs submitted by the Contractor and give instructions to the Contractor to take appropriate measures to fulfil the tasks. The Consultant shall review the Contractor's programs on a regular basis throughout the project.
11. The Consultant shall ensure that all the required approvals, construction permits, and other applicable and those for the closing of roads are obtained in due course, before the commencement of the works. These include but are not limited to quarry license, gravel license, sand license and approved final waste deposit document released by the respective municipality.
12. The Contractor must not commence any works prior to receiving clearance from MDF on the complete implementation of the Resettlement Action Plan (if applicable), in line with World Bank guidelines.
13. The Consultant shall ensure that the conditions of the contract are strictly adhered to and Contractor and any subcontractor fulfil their contractual obligations.
14. The Consultant shall maintain up-to-date records of all the contractual administration, correspondence, measurements, payments, variations, etc. All instructions to the Contractor shall be clearly documented by the Consultant.
15. The Consultant shall ensure that the Contractors:
- apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;
  - provide and maintain a healthy and safe work environment and safe systems of work;
  - protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;
  - ensures that terms of employment and working conditions of all the workers (including subcontractors) meet the requirements of the International Labor Organization's labor conventions to which Georgia is a signatory;
  - are intolerant of, and enforce disciplinary measures for illegal activities.
  - are intolerant of, and enforce disciplinary measures for gender-based violence, child sacrifice, child defilement, and sexual harassment;

- incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the works;
  - work cooperatively, including with end-users of the works, relevant authorities, contractors and local communities;
  - engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;
  - provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation;
  - Minimize the risk of HIV transmission and to mitigate the effects of HIV/AIDS-associated with the execution of the works.
16. The Consultant shall ensure that all occupational health and safety (OHS) risks during construction and commissioning of the works have been assessed in advance and risk mitigation measures have been established and appropriately cost prior to commencing the respective activities.
  17. The Consultant must make sure that prior to starting of works the Contractor possesses the appropriate protective equipment in accordance with Environmental, Health and Safety Guidelines and that the workers are trained for health and safety at work.
  18. The Consultant's team shall also include a Health and Safety Auditor who shall visit the construction site on a regular (monthly to bi-monthly) basis to conduct safety audits to validate the OHS supervision of the resident engineer and independently confirm compliance with the contractor's OHS plan. Audit reports of the findings will be provided at the end of each visit.
  19. The Consultant shall ensure that the conditions of environmental conclusion (in case if civil works are subject of EIA), as well as requirements of ESRs and ESMPs, are strictly adhered to. For this purpose, the Consultants' team shall include E&S supervision specialist who shall visit the construction site on a regular (at least monthly) basis to conduct E&S monitoring. E&S monitoring reports shall be prepared by filling out monthly field environmental monitoring checklists using the template provided in the Employer's Environmental and Social Management Framework of RDP III and attaching relevant photo documentation. A narrative analytical summary of the environmental and social performance of works contractors should be included in the monthly progress reports provided by the Contractor (checklists to be attached).
  20. The Consultant shall be in continuous contact with the Contractor to identify and resolve any potential problems in an active manner. The Consultant shall hold weekly site meetings and monthly progress meetings with the Contractor and the other stakeholders. All the potential delays and other problems shall be identified and the corresponding actions discussed and agreed in order to assist the Contractor in avoiding or mitigating the overall delay. The Client shall be kept informed of the progress of the works by providing properly prepared reports, briefings and minutes of meetings.
  21. The Consultant shall check and comment on the adequacy and authenticity of all certificates, insurance, securities, indemnities, ownership of the plant, etc. for which the Contractor is liable under the conditions of the contract. The Consultant shall issue all requisite certificates in compliance with the Conditions of Contract.
  22. The Consultant shall prepare all supervision reports in accordance with the requirements laid down in the present TOR.
  23. The Consultant shall assist the Client in administrative duties, including financial planning and preparation of cash flow forecasts for all contracts on a monthly basis.
  24. The Consultant shall advise the Client on any appropriate measures that may be taken to avoid and rectify any deficiencies and improve the cost-effectiveness of the project. The Consultant shall also consider possible cost savings to the Client.
  25. The MDF's safeguard specialists will provide independent oversight and inputs to the Consultant with regard to all aspects of environmental and social compliance, for the Consultant to have addressed on

the project through their role as the Engineer. The MDF will undertake at least monthly inspections of the construction sites, accompanied by the Consultant's safeguard specialist and the Resident Engineer.

#### *Design Review and approval*

26. The Consultant shall review and approve the Contractor's working drawings and possible modifications to the detailed design. In case of any design modification, he should inform the Client and liaise with the designer.

#### *Site supervision*

27. The Consultant shall carry out day-to-day supervision of construction works in accordance with the Works Contracts, Site Procedures Manual and Supervisor's Quality Assurance Manual.
28. The main objective of the supervision is to facilitate achievement of the highest possible standard of construction works within the contract time. In addition to good quality workmanship, the Consultant shall also consider possible cost savings to the Client. The Consultant shall advise the Client on any appropriate measures that may be taken to avoid and rectify any deficiencies and improve the cost-effectiveness of the project.
29. The Consultant shall ensure that the quality of materials and the end product is in line with the related works contract technical specifications standard and quality. All testing shall be carried out in accordance with the works technical specifications specified procedures and at the specified intervals.
30. The Consultant may propose amendments to the design and specifications for the Client's approval if such alterations are sought to benefit the quality and economy of the Project and are in line with provisions of works contract conditions.
31. The Consultant shall order the Contractor to substitute and make good any part of the works if levels, dimensions, materials or workmanship do not conform to the requirements and specifications or are otherwise insufficient.
32. The Consultant shall monitor the correct implementation of the Environmental and Social Management Plans for each site and monitor environmental parameters (air, water, and soil quality) as required in the environmental monitoring plan.
33. The Consultant shall conduct regular site inspections to check the quality of workmanship and materials in accordance with the Contract and good engineering practice, as well as the Contractor implementation of the environmental and social mitigation measures as prescribed in the site-specific ESRs/ESMPs.

#### *Measurements and Payments:*

34. The consultant shall verify and keep accurate technical records of permanent works executed by the Contractor. The works shall be measured on-site by the Consultant supervisor in the presence of the contractor.
35. The Consultant shall ensure that the Contractor's payment applications for work executed are an accurate, fair and reasonable representation of the value of the work. The Consultant shall prepare subsequent certificates and present these to the Client for approval and further processing. The Consultant shall ensure that the Client is continuously informed of all matters relating to payments, cash flow or any other impacts on budgetary provisions.
36. The Consultant shall consider the time required for all requisite endorsements and/or approvals by authorities before the actual payment of the Contractor's invoices can be made. To avoid any delays in payments the Consultant shall ensure the high quality of all the payment documents.
37. The Consultant shall carefully monitor all levels, lines and other parameters affecting the work, in order to ensure that the works fulfil the requirements of the detailed design and of the Client, in a timely manner.
38. Accurate records shall be taken throughout the duration of the contract in order to reach agreement on the Contractor's final account.

39. The Consultant shall monitor the Environmental, Health and Safety guidelines for construction and decommissioning at all times throughout the site including the safety of the public/communities, visitors, consultant's staff, contractor/subcontractors' staff, report to the borrower and take action upon clearance from the borrower.
40. The Consultant shall appraise traffic management proposals in line with the Traffic Management Plan prepared by Contractor and compliance with the requirements of the works contract.

*Other activities*

41. The Consultant shall carry out all other activities needed for the smooth implementation of the Project. These activities include inter alia the following:
  - a. Administration of the contract in accordance with the works contract documents;
  - b. The Consultant shall take note of the requirement to obtain the specific approval of the Client before taking any of the actions as detailed in the Special Conditions of Works Contract;
  - c. The Consultant shall give the order of commencement;
  - d. The Consultant shall organize monthly progress meetings with each contractor, keep records and distribute the minutes of the meetings;
  - e. Checking and confirming that the Contractor mobilizes and supplies to the contract all the materials identified in the contract, to be committed to the project and ensure that all the works performed remain on site until the release has been authorized;
  - f. Approval of Contractor's details of temporary works and operations;
  - g. Approval and surveillance of the traffic management proposals prepared by the Contractor to ensure that the Contractor carries out the work to minimize interference with adjacent traffic by providing necessary lights, guards, fencing and watchmen, etc. and provide access to local buildings and properties at all times;
  - h. Approval and surveillance of environmental measures identified by the Contractor in order to carry out the work in an environmentally safe way. Taking appropriate mitigating action to meet the relevant requirements of the contract and those of the local and state authorities, with the clearance of the borrower safeguards specialists. Follow up and report weekly on the implementation of the ESMP.
  - i. If applicable, provide data to the Client for the determination of the value of any variations to the contract;
  - j. Assist the Client in the processing of Variations, approve the setting-out of the works and give instructions to the Contractor in this regard;
  - k. Review any changes in drawings and/or specifications, which may be necessary or desirable before or during the execution of the construction works, and discuss them with the Client;
  - l. Negotiate and recommend to the Client any Variations initiated by the Contractor or to be initiated by the Client;
  - m. Verify and approve "as-built drawings" and deliver to the Client all reports, records, quality certificates, measurement sheets, etc. prepared or supplied by the Contractor;
  - n. The Consultant shall instruct the Contractor to carry out any on-site tests required under the Works Contracts Technical Specifications, including load tests, as may be considered necessary to confirm the adequacy of the Works. The Consultant shall supervise such tests, record the test measurements and verify the adequacy or otherwise of the results;
  - o. The issue list of defects ("snag list") and other documentation as required before the Certificate of Provisional Acceptance will be issued. The list must include compliance with the ESMP and environmental permit.
  - p. Carry out an inspection upon the completion of works and prepare Provisional Acceptance Certificate, list of defects and other documents as required by the work conditions of the contract;



- q. Organize the Inspection in the presence of a representative from the Contractor, Client, and the Beneficiary and issue the Provisional Acceptance Certificate.
- r. Ensure that the procedures are carried out in line with local regulations and requirements, as appropriate;
- s. Advice on any claims or contractual disputes and problems arising during the works, and prevent claims and delays whenever feasible.

*Deliverables:*

a. *Progress Monthly Reports:* The Monthly Reports should be based on the physical and financial progress, as well as dealing with contractual and technical matters, for each of the Civil Works Contracts included in the reports. They will make use of graphics and include statements covering (but not limited to) the following:

- Physical progress related to program and time;
- Explanations for variances to the above;
- Expenditure related to cash flow forecast and budget;
- Explanations for variances to the above;
- Claims or disputes;
- Human resources, mechanical equipment, and materials;
- Testing and quality control;
- The Project Monitoring Indicators for Project Activities Table issued by the Contracts Manager;
- Local issues;
- Updated maintenance works program;
- A revised Cash Flow forecast and
- Findings of environmental and social monitoring including filled environmental monitoring checklists.

b. *Draft Completion Report:* The report will include, but not be limited to, the following inputs:

- Physical progress related to the original program;
- Explanations for variances to the above;
- Expenditure related to original budgets;
- Explanations for variances to the above;
- Overall review of the project objectives and whether achieved successfully or not.
- Other information to be included in the Completion Report shall be addressed following the review by the MDF and WB.

*Activity 3: Defects Liability Period*

42. During and after the Defects Liability Period the Consultant shall carry out the following duties:

- a. Provide quarterly inspections reports during the 12 months of the Defects Liability Period.
  - The consultant shall supervise, inspect and record completion of any outstanding work and remedy of defects after Provisional Acceptance has been issued.
  - The Consultant shall undertake three intermediate inspections at approximately three-monthly intervals during the Defects Liability Period. In the event that the Client calls the Consultant to the Works to deal with a particular defect at another time, this shall be deemed to be one of the intermediate inspections.
  - In addition to dealing with any particular defect, all intermediate inspections shall cover the entire Works. The Consultant shall:

i) Notify and instruct the Contractor accordingly of all defects found.

ii) Report on the status of the Works and on the operation and maintenance of the Works to date.

- b. Undertake the Final inspection at the end of DLP and issue the Final Acceptance Certificate
  - On the expiry of the Defects Liability Period, the Consultant shall make the final inspection of the Works and issue the Final Acceptance Certificate in accordance with the Works Conditions of Contract.
  - The final inspection shall be carried out in the presence of a representative from the Contractor, Client, and the Beneficiary/ies.

*Deliverables:*

43. Final completion: The Final Report will be based on the Draft Completion Report, but will incorporate any comments/suggestions made by the reviewing parties (MDF and WB).

**IMPLEMENTATION TIMEFRAME AND DELIVERABLES**

44. It is expected that the supervision consulting activities will start as soon as the first package of works contract for the selected list of investment is signed. (Detailed design for this investment is prepared in Part B of the ToR.)
45. It is expected that there might be approximately 3 packages of work contracts, that will be grouped based on the similarities of works for all the selected investments. The Consultant will carry out its overall assignment in *18 months*. Following up defect Liability period for each contract in 12 Months.
46. It is expected that the *selected packages work* contracts will have a different starting date. The Client will give notice to the Consultant of the start date of each work contract for which supervision is required, and the supervisor will mobilize the required staff accordingly. An estimation of the starting date should be calculated upon the availability of the detailed design for the investment prepared in Task 2 of the design services and the procurement time needed for each package. It is expected that all the packages will be implemented within the 18-month time frame. The consultant must consider limitations caused by high precipitation during winter, early spring and late autumn seasons. Actual time for construction works will be seasonal and shorter than 18 months.
47. The Contract to be entered into between the Client and the Consultant shall be "Time Based". The Client shall pay to the Consultant (i) remuneration that shall be determined on the basis of the time actually spent by each Expert in the performance of the Services after the date of commencing of Services or such other date as the Parties shall agree in writing; and (ii) reimbursable expenses that are actually and reasonably incurred by the Consultant in the performance of the Services.

*Deliverables:*

Report	Time due	Number of copies
Inception report	2 weeks after the start of the contract	<i>1 hard copy in English and in Georgian, plus e-copy in each language</i>
Progress Monthly reports	1 week after the last day of each month. For the duration of 24 months.	<i>1 hard copy in English and Georgian and e-copy in each language</i>
Draft Completion report	4 weeks prior to completion of the contract period	<i>E-copy in each language</i>
Final Completion report	2 weeks after completion of the contract period or after comments on the draft completion report are provided by MDF, whichever comes later	<i>2 hard copies in English Georgian plus e-copies in each language</i>

Defect Liability Period	12 months after approval of the Final Completion Report	2 paper copies in English and 2 paper copies in Georgian + electronic copy on CD or DVD, in each language
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#### TEAM PROFILE AND KEY PERSONNEL

48. The Consultant shall provide an experienced construction and Environmental and Social supervision and contract administration team of key staff with proven technical and managerial competence and experience in the supervision of construction works under World Bank Guidelines for Procurement of Goods, Works and Non-Consulting Services, national legislation and internationally recognized contract conditions used by IFI's.
49. The working language of the project is English and Georgian language. The key staff team assigned by the Consultant must possess proficiency in the English language. Day-to-day communication language with the employees of municipalities, water, electrical, telecom, and other utilities and local authorities will be in the Georgian language. An adequate number of Georgian speakers shall be assigned at the field level to ensure smooth communication among all participants, direct and indirect, of the Project.
50. For the supervision assignment, all experts should work in the beneficiary country 100% of the contracted working days unless specifically requested and approved by the Client.

#### Team composition:

The Consultant for Part C: Supervision services should mobilize the following personnel:

N	Personnel	Number	Month	Input, person/month
	<b>Key Experts</b>			
1	Team Leader/ Architect/	1	6	6
2	Deputy Team Leader/ Structural Engineer/	1	6	6
3	Material Engineer	1	3	3
4	Civil Engineer/Quantity Surveyor	1	4	4
5	Environmental, Health/Safety Specialist	1	4	4
	<b>Non-Key Experts</b>			
1	Geotechnical Engineer	1	1	1
2	Engineer Surveyor	1	1	1
3	Water Supply/Sewer Engineer	1	3	3
4	Mechanical/Electrical Engineer	1	3	3
5	Cost Estimator	1	2	2
6	Site Supervision Engineer	1	6	6
7	Structural Engineer	1	2	2
8	Road/Trail Engineer	1	3	3

The selected Consultant is allowed to add additional non-key experts in Technical and Financial proposals for the Part C which they assumed will be required to hand over quality outputs based on the delivery requirements of this ToR.

The consultant must not be confused with the difference in inputs person/month and required time period for supervision, which is 18 months. The consultant must note that due to limitations caused by high

precipitation during winter, early spring and late autumn seasons, the actual time for construction work to take place will be around 6 months. Thus, the inputs are provided only for that timeframe.

**I. RECOMMENDED QUALIFICATIONS:**

Key expert narrative qualification requirements for Part A and B:

No	Position	Qualifications	Experience
1	Team Leader/ Architect/	<p>Minimum Master's degree in architecture, sustainable design and/or relevant technical fields with further advanced training;</p> <p>sustainable and adaptive reuse of cultural heritage buildups, buildings and green spaces and related design and construction codes/regulations/standards</p> <p>In-depth overall knowledge in detailed design</p>	<p>7 (seven) yrs. Postgraduate. Experience in Architecture and &amp; Project Management. Working experience in mountainous areas is mandatory. In-depth overall knowledge in detailed design supervision for large, and medium-sized civil works SPs.</p> <p>He/she should have worked as Architect/Project management in projects relevant to the scope of this consultancy, with a particular focus on protected areas and nature reserve tourist infrastructure development and planning the sustainable design of visitor facilities and cultural heritage preservation;</p>
2	Deputy Team Leader/ Structural Engineer	<p>Minimum Master's degree in engineering /or relevant technical fields with further advanced training;</p>	<p>7 (seven) yrs. postgraduate exp. in similar projects. Working experience in mountainous areas is mandatory.</p> <p>Structural engineers are primarily concerned with designing and constructing buildings and structures that are safe and capable of withstanding the elements to which they will be exposed. Key tasks include:</p> <p>preparing reports/designs and drawings/making calculations about loads and stresses/selecting appropriate construction materials/providing technical advice/obtaining planning and/or building regulations approval/liaising with relevant professional staff such as architects/ monitoring and inspecting work are undertaken by contractors/administering contracts/managing projects</p>
3	Sustainable engineer	<p>Minimum bachelor degree in engineering/ or relevant technical fields with further advanced training;</p>	<p>Sustainable engineering is the process of designing or operating systems such that they use energy and resources sustainably, in other words, at a rate that does not compromise the</p>

			natural environment, or the ability of future generations to meet their own needs.
4	Biodiversity/Protected Areas/ Environmental Specialist (Core team, local)	Minimum Master's degree in Biodiversity/Protected Areas/ Environmental management or relevant postgraduate qualifications in environmental sciences.	<p>He/she must assist, advise and suggest methods and techniques related to the conservation and ecosystems management.</p> <p>Review and approve subcontracting parts of the green facility works;</p> <p>Review the procedures set up by the Consultant in relation to the green facilities works and monitor performance and adherence to approved methodologies for the works.</p> <p>Must have proven experience in biodiversity/ecosystems assessment and landscape studies and in-depth overall experience in the detailed design of large and medium-sized civil works involving the restoration of heritage buildings SPs.</p>
5	Civil Engineer/ Quantity Surveyor	M.Sc. in Civil Engineering.	<p>10 (ten) year postgraduate experience in designing projects in civil engineering, with relevant experience in projects relevant to the scope of this consultancy.</p> <p>He/she should have worked a minimum of 5 (five) years in designing/planning projects related structures/ constructions (roads, trails, etc.) and building construction. Preferably worked in similar projects, in stabilization and intervention in cultural heritage buildups, green spaces, heritage buildings and preparation of rehabilitation plans for similar size and type of historic properties.</p>
6	Tourism Expert	<p>Minimum Master's degree in tourism management, nature/culture/geo sustainable tourism, protected areas visitor services and/or relevant technical fields with further advanced training;</p> <p>Knowledge of international and local best practices in sustainable tourism/park visitor services</p>	<p>5(five) years' experience of implementation of similar size and type SPs, with a particular focus on Protected Areas, Mountain outdoor tourism Visitor Services, Capacity, and Competences Development. Certified in mountain guiding and be a trail planner and/or an operator</p> <p>He/she should have worked a minimum of 5 (five) years in planning projects related to implementing the capacity development program including methods and techniques related to the park's sustainable facilities/assets management, visitor services, tourism-related</p>

		management and competences development and related codes, regulations, and standards. Competence and experience in eco-tourism and green tourism packages, management and marketing of adventure tourism, etc.	green business development in and around protected areas and competences development. Competence in SWOT analysis related to natural touristic sites (meaning identification of strengths, weaknesses, opportunities and threats and how to deal with them), expertise in the creation of touristic packages, as well as in the elaboration of branding and promotion strategies for touristic sites.
7	Trail Engineer	Relevant technical fields with further advanced training;	5 (five) years' experience of implementation of similar type projects, with a particular focus on trails marking and knowledge of technical regulation of the trails.
6	Park Facilities/Assets Management, Visitor Services Specialist	Minimum Master's degree in architecture, sustainable design, and/or relevant technical fields with further advanced training;  facilities/assets management and corresponding software, visitor services capacity and competences development and related design and construction codes/regulations/standards.	5 (five) years' experience of implementation of similar size and type SPs, with a particular focus on protected areas Facilities/Assets Management, Visitor Services, Capacity, and Competences Development;  He/she should have worked a minimum of 5 (five) years in designing/planning projects related to implementing the capacity development program including facilities/assets management software, methods, and techniques related to the park's sustainable facilities/assets management, visitor services capacity and Competences Development. Preferably worked in similar projects, in stabilization and intervention in historic structures and protected areas.

Key expert narrative qualification requirements for Part C:

No	Position	Qualifications	Experience
1	Team Leader/ Architect/	M. Sc. He/she shall have at least a Master (3+2) or equivalent University Degree in Civil Engineering/Architecture.	<i>7 yrs. of experience in design and supervision of projects in similar projects.</i>  He/she should have worked a minimum of 5 (five) years as Architect /Supervisor's representative in service contracts in charge of supervision of works contracts for construction or reconstruction of infrastructure projects related to nature preservation, green spaces,

			<p>mountainous areas and sustainable development.</p> <p>Knowledge of international and local best practices for nature preservation and sustainable and adaptive reuse of landscape, sustainable development of tourism infrastructure for nature reserves, buildings and green spaces and related design and construction codes/regulations/standards;</p> <ul style="list-style-type: none"> <li>•Monitor performance, deadlines, SP progress, and conduct a risk management plan to avoid any unexpected incidents that may have a negative impact on the SP development.</li> <li>•Review the procedures set up by the Consultant</li> </ul>
2	Deputy Team Leader/ Structural engineer /	Minimum Master's degree in structural engineering	<p><i>7 Seven of experience as a Deputy team leader.</i></p> <p>Proved design Management experience of implementation of similar size and type projects in mountainous areas with a particular focus on assembling and modular structures;</p> <p>Knowledge of international and local best practices for Prefabricated structure codes/regulations/standards;</p> <p>In-depth overall knowledge in detailed design supervision for large, and medium-sized civil works.</p> <ul style="list-style-type: none"> <li>•Overall responsibility for implementing the SP and managing a team of designers and construction supervision personnel</li> <li>•Review and certify subcontracting parts of the works;</li> </ul>
4	Material Engineer	He/she shall have at least a Master (3+2) or equivalent University Degree in Civil Engineering.	<p><i>7 (seven) years of material engineer experience in design/supervision/construction</i></p> <p>He/she should have worked minimum 5 (five) years in the position of Material Engineer in service contracts as part of the supervision consultant team, in charge of supervision of works for construction of infrastructure projects (roads, trails, buildings, etc.).</p>
5	Civil Engineer/ Quantity Surveyor		<p><i>8 (eight) years of civil engineer experience in design/supervision/ construction of large infrastructure projects</i></p>

		He/she shall have at least a University Degree in Civil Engineering or equivalent.	- He/she should have worked preferably 5 (five) years in the position of the quantity surveyor in service contracts as part of the supervision consultant team, in charge of supervision of works for construction in Protected Areas and Nature Reserves
6	Environmental, Health/Safety Specialist	University Degree in Environmental Engineering or equivalent.	<i>7 (seven) years in environmental engineering.</i> He/she should have worked preferably 5 (five) years (on environmental management plans and monitoring of such plans) responsible for monitoring the Works Contractors' compliance with the environmental requirements of the EMPs and also monitoring of social requirements.

The Consultant is supposed to have an experience of arranging eco-touristic hiking trails, conducting research, installing informative boards and signs on trails, preparing trail design estimate documentation, the cost of which in total has to exceed GEL 500,000. In addition, for each implemented project the cost should be at least GEL 30,000. Contracts, receipts or other supporting documentation are supposed be submitted as a confirmation for each implemented project.

51. The Consultant will be evaluated and selected on the basis of the composition of the proposed team and the profile, qualifications, and experience of the relevant members. No changes in the composition of the team and the team members will be allowed during the implementation of the assignment unless authorized by the MDF, in consultation with the World Bank.

## II. TIMEFRAME FOR THE ASSIGNMENT

52. The consultant should be a Firm. The selection method to be applied is QCBS (Quality and Cost Based Selection), in accordance with the procedures set out the World Bank's Guidelines Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" (January 2011, revised July 2014).
53. Design Services should be performed within the 6 months period, and the level of inputs required is 57 man/months. The firm will be contracted for the design part under a lump sum contract.
54. Supervision Services should be performed within 18 months period, and the level of inputs required is 44 man/months. The firm will be contracted for the supervision part under a time-based contract.
55. The terms and conditions of payment mirror the implementation schedule of the assignment for the supervision services, and are time basis.

## III. RESPONSIBILITIES OF CONSULTANT

56. The Consultant will be responsible for implementing the entirety of the tasks defined in the scope of the assignment. The Consultant will bear all the costs related to the employment and mobilization of its team of international and local experts, including travel and subsistence costs.
57. No facilities will be provided by MDF. The consultant will be expected to arrange office facilities at the project area and elsewhere.
58. The Consultant will be responsible for the costs of producing, translating, printing and distributing the information material and reports required to carry out its assignment.



59. The consultant will be solely responsible for the timely and qualitative fulfilment of all matters listed above under this assignment. The Consultant shall take out and maintain insurance against the risks and for the coverage including, inter alia, professional liability to cover the risks of design errors and omissions, non-fulfilment of the obligations/services undertaken which include but are not limited to such elements as the quality of service, time of service delivery and work contracted, reporting to the responsible structures.

#### IV. COORDINATION WITH CENTRAL AND LOCAL AUTHORITIES

60. The Consultant will work in strict coordination with MDF (the client) and the Agency of Protected Areas.
61. At central and regional levels, the Consultant will also need to interact with the National Agency of Cultural Heritage Preservation (NACHP) under the Ministry of Education, Science, Culture and Sports, the local municipalities and other stakeholders, if any, pertaining to their areas of interest.
62. The Consultant shall maintain good coordination and interaction with the Client during all parts of the assignment and provide assistance if changes are required for specifications.

#### V. REPORTING

63. Reporting and all the deliverables documents must be submitted to MDF in English and Georgian. The Consultant must possess high-level English and Georgian Language skills to ensure effective communication with the Client and stakeholders.
64. The Consultant should provide translators if required to have good communication with the Client and the Stakeholders during field visits or meetings organized as part of the assignment.
65. All reports and deliverables developed during this assignment will require the World Bank clearance/no objection. MDF will be responsible to make all reports and deliverables available to the World Bank and to manage the Bank's clearance.

#### VI. LIST OF ANNEXES

- Annexe 1: Project Area Boundaries and Intervention Areas
- Annexe 2: Draft Agenda for "Stakeholder's Consultation Workshop"
- Annexe 3: Technical regulations of the trails
- Annexe 4: Document Packages

ANNEXE 1: Project area map and intervention areas



## ANNEXE 2: Draft Agenda for Consulting Workshop

Duration: 1 day

Participants: representatives of relevant national agencies, local government (elected officials, administrators, managers of public agencies), local representatives of central government (managers of public agencies), civil society (citizen groups, cultural associations, NGOs), the business community (representatives of productive, commercial and service activities and their organizations), academia and media.

Venue: possibly a meeting room capable of accommodating from 50 to 60 participants in a public building such as a school or Town Hall.

Objectives:

- Inform the participants and through them, the public in general about the activities carried out in the Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas by Government (central and local) with WB support;
- Share views on Kazbegi, Pshav-Khevsureti and Tusheti Protected Areas context and its development potential and constraints;
- Identify a solution to enhance potential and alleviate constraints;
- Get inputs to improve the design of the overall investment program and the individual investment subprojects;
- Neutralize possible disappointment about the exclusion of category A investments explaining the rationale of the WB intervention and indicating that these investments are best carried out through targeted operations funded by government and/or other donors.

## ANNEXE 4: Document Packages

The documentation package for each design should include at a minimum, but not limited to, the following:

- Explanatory Note (a detailed summary of issue and determination of ways for its solution, justification of selected methodology);
- A topographic survey by applying of UTM - (International) System of Coordinates;
- Photos reflecting the existing situation;
- Situation Plan (Scale: 1: 1000);
- General Layout (Scale 1:200), reflecting project facilities to be rehabilitated on the General Layout;
- Architectural measurement (in case of requirement (Scale: 1:100, 1:50));
- Architectural working drawings: plans, sections, façades, details, joints (Scale: 1:100, 1:50, 1:25), specifications;
- Landscape layout and relevant sections/elevations at appropriate drawing scale (e.g. 1:500 – 1:200) showing the landscape-spatial and functional characteristics of the intervention and its integration in the natural context of the entire settlement. The drawings should be presented in the proper scale (e.g. for accurate details should be from 1:1- till 1:25, for infrastructure and buildings should be at 1:100, etc.) to assure the readability and technical accuracy. The drawings of landscape fittings can suggest standard appropriate “green” and “brown” features available in the market, with suppliers’ designs and details at appropriate scale or replaced by images of fittings available in the market and installed in other similar parks;
- Registers for lining, accomplishment works, specifications for floors, ceilings, and doors/windows;
- Detailed drawings for small architectural shapes (Scale: 1:50, 1:25, 1:20);
- Structural working drawings (Schemes, details, joints, specifications (Scale: 1:100, 1:50, 1:25);
- Engineering part – power network, water disposal, water supply, weak currents (schemes, details, joints, specifications) (in case of requirement);
- Vertical planning design for the site;
- Draft Method Statement to comprise of the list of required machinery, time-schedule for works and tentative Financial Schedule;

- Registers and Cost Estimate for quantities of works to be executed – Resource and Detailed versions;
- Feasibility Study and alternative Cost Estimate;
- Determination of load on the engineering communication network for obtaining technical conditions from relevant institutions, as required;
- Economic analysis (should include capital expenditures required for project implementation as well as average annual operation and maintenance costs. The named data should be provided for each possible alternative solution of project design (based on technical specifics of the project, at least two alternative technological solutions should be presented). The deliverables should also include the methodology of each alternative of cost calculation with respective clarification and reference to the data sources.
- Detailed and general specifications of Bidding Documentation.