

7.3.1.1 BASE CONTRACT

Phase 1

- Project Management Services and Supervision of the Consultants responsible for the Final Design of Sections 5, 6 and 7 of the NTH (from Nuevo Eden de San Juan to Concepcion de Oriente): Activities include, but are not limited to: a) Project management process of initiating, planning, executing, monitoring, supervising, controlling, and advising prompt adjustments to the designs implementation plans as a result of a close technical and on the ground follow up, applying best practices in the technical field until final deliveries are accepted accordingly to the related contract(s) and thus closing the implementation; b) reviewing the final deliverables for feasibility study and environmental impact assessment of the project, the ROW and the RAP in order to make any necessary adjustment to proceed with the procurement process for designs not covered in the referred study, if any fatal flaw is detected; and c) supervising and managing the deliverables and providing quality control for design consultancies, project scheduling, and project reporting assistance in the preparation technical specifications of the final design and in the preparation of "Works Requirements" (Bill of Quantities, Technical Specification for Works) for construction of 135 km that will be financed with MCC's funds.

Phase 2

- Project Management Services and Supervision of the Construction Contractor(s) responsible for construction of Sections 2, 3 and 4 of the NTH (from Metapan to Nuevo Eden de San Juan): Activities include, but are not limited to: a) Project management process of initiating, planning, executing, monitoring, supervising, controlling, and advising prompt adjustments to the construction implementation plans as a result of a close technical and on the ground follow up, applying best practices in the technical field until final deliveries are accepted accordingly to the related contract(s), and thus closing the implementation; b) reviewing the final deliverables for final design of 155 km of the NTH (from La Virgen to Nuevo Eden de San Juan), which also includes design of Section 1 (eventough the decision for construction of Section 1 is still pending, and could be possible included in optional Phase 3) in order to make any necessary adjustment to go ahead with the procurement process for construction, if any fatal flaw is detected; and, c) supervising the construction contractor(s), scheduling, managing Requests for Information (RFIs), change order requests, the provision of full or part-time supervision engineers (to be proposed by the Consultant in its Technical Proposal for effective delivery of its services), progress and scheduling, reviewing requests for payment, reviewing as-built drawings, and providing quality assurance for the construction of about 135 km of the NTH (from Metapan to Nuevo Eden de San Juan).

7.3.1.2 OPTIONAL CONTRACT

Phase 3 (Optional)

- Project Management Services and Supervision of the Construction Contractor(s) responsible for construction of Sections 5, 6 and 7 and possible Section 1 of the NTE

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(from Nuevo Eden de San Juan to Concepcion de Oriente); and, if so decided by FOMILENIO, these services will also include Section 1 (from La Virgen to Metapan). Activities include, but are not limited to: a) Project management process of initiating, planning, executing, monitoring, supervising, controlling, and advising prompt adjustments to the construction implementation plans as a result of a close technical and on the ground follow up, applying best practices in the technical field until final deliveries are accepted accordingly to the related contract(s), and thus closing the implementation; and, b) supervising the construction contractor(s), scheduling, managing Requests for Information (RFIs), change order requests, the provision of full or part-time supervision engineers (to be proposed by the Consultant in its Technical Proposal for effective delivery of its services), progress and scheduling, reviewing requests for payment, reviewing as-built drawings, and providing quality assurance for the construction of about 136 km of the NTH: from Nuevo Eden de San Juan to Concepcion de Oriente, and, if so decided by FOMILENIO, also from La Virgen to Metapan (about 19 km).

For the case of the *NCR*, FOMILENIO seeks to hire a consultant firm to provide the services in Phase 1 and a second optional Phase 2:

7.3.2 PACKAGE II: NCR

This PACKAGE for the *NCR* consists of a base contract including Phase 1, and an optional contract including an optional Phase 2, as follows:

7.3.2.1 BASE CONTRACT

Phase 1

Project Management Services and Supervision of the Consultants responsible for the Final Design of 240 km of the Groups 1, 2 and 3 of the *NCR*: Activities include, but are not limited to: a) Project management process of initiating, planning, executing, monitoring, supervising, controlling, and advising prompt adjustments to the designs implementation plans as a result of a close technical and on the ground follow up, applying best practices in the technical field until final deliveries are accepted accordingly to the related contract(s) and thus closing the implementation; b) reviewing the final deliverables for feasibility study and environmental impact assessment of the , ROW and RAP in order to make any necessary adjustment to go ahead with the procurement process for designs not covered in the referred study, if any fatal flaw is detected; and, c) supervising and managing the deliverables and providing quality control for design consultancies, project scheduling, and project reporting, assistance in the preparation of technical specifications of the final design and in the preparation of TOR for construction of 240 km that will be financed with MCC's funds.

7.3.1.2 OPTIONAL CONTRACT

Phase 2 (Optional)

- Project Management Services and Supervision of the Construction Contractor(s) responsible for construction of 240 km of the Groups 1, 2 and 3 of the *NCR*: Activities

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include, but are not limited to: a) Project management process of initiating, planning, executing, monitoring, supervising, controlling, and advising prompt adjustments to the construction implementation plans as a result of a close technical and on the ground follow up, applying best practices in the technical field until final deliveries are accepted accordingly to the related contract(s), and thus closing the implementation; and, b) supervising the construction contractor(s), scheduling, managing Requests for Information (RFIs), change order requests, the provision of full or part-time supervision engineers (to be proposed by the Consultant in its Technical Proposal for effective delivery of its services), progress and scheduling, reviewing requests for payment, reviewing as-built drawings, and providing quality assurance for the construction of 240 km of the NCR.

The optional contracts indicated above (Phase 3 for NTH and Phase 2 for NCR) may be awarded to the CPM depending on the performance in rendering the services for Base Contract (Phases 1 and 2 for NTH and Phase 1 for NCR). FOMILENIO will evaluate the compliance of all contract requirements by the CPM in the services for Base contract and in accordance with this evaluation will determine if the optional contracts will be continued by the CPM.

The lengths and specifications of the roads to be designed and constructed as stated in the above phases are subject to confirmation by the results of the Feasibility Study. In case of the NCR, the lengths and number of road sections to be constructed will be decided based on the results of the feasibility studies, final designs, and the availability of funds.

7.4 Solicitation and Contracts

7.4.1 Solicitation

The solicitation for the CPM is structured in two packages, one for the NTH and one for the NCR. Consultants may submit proposals for any of the following: (i) PACKAGE I; (ii) PACKAGE II; (iii) a single proposal combining PACKAGES I and II. The PACKAGES are described as follows:

PACKAGE I for NTH including:
Base Contract

Phase 1 for NTH: Project Management and Final Design Supervision of Sections 5, 6 and 7. The designs will be contracted by future Request for Proposals.

Phase 2 for NTH: Project Management and Construction Supervision of Sections 2, 3 and 4, based on the designs prepared by CPB.

Optional Contract

Phase 3 (Optional) for NTH: Project Management and Construction Supervision of Sections 5, 6, 7. FOMILENIO reserves the right to also request the Consultant to include Section 1 in this Optional Contract and will negotiate the additional cost based on unit prices proposed by the Consultant in the bid forms.

PACKAGE II for NCR including:
Base Contract

Phase 1 for NCR: Project Management and Final Design Supervision for Groups 1, 2 and 3. The

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designs will be contracted by FOMILENIO in a future Request for Proposals.

Optional Contract

Phase 2 (Optional) for NCR: Project Management and Construction Supervision of Groups 1, 2 and 3.

7.4.2 Type of Contract

The contract(s) for the CPM services shall be structured as Firm-fixed price either for the NTH and the NCR in separate contracts (see RFP sections and draft Contract for details).

The CPM Consultant should note that it shall have no role in the evaluation process of bid proposals from design consultants or construction contractors, or the selection of winning bids thereof. However, the CPM will assist and support the procurement process for construction contractors by certifying the design specifications and drawings developed by the design consultants, and converting them into bidding documents appropriate for use by FOMILENIO's Procurement Agent (PA) for procurement of construction contractors.

This condition shall not limit the right of FOMILENIO to request any technical opinion of the CPM in relation to technical proposals made by the Consultants for final design and construction works contracts. FOMILENIO intends to use the CPM technical expertise on ad hoc, as needed basis, to be determined at the sole discretion of FOMILENIO, for prompt technical review and recommendations to support the technical evaluations during the related design and construction works procurements.

The relation of the CPM with the FOMILENIO's PA and its role in the procurement processes is further explained in Section 8.1.9 Project Procurement Management of these TOR.

7.5 Format of Deliverables

All deliverables to be presented by the CPM according to the details given in next Section 8 of these TOR, shall be submitted in one (1) original and five (5) copies, and two (2) copies in appropriate digital format on CDs or DVDs. The CPM shall use Microsoft Office 2007 or the latest version to elaborate the deliverables and data (Word, Excel, PowerPoint, MS-Project, etc.) and AutoCAD 2007 or latest version for drawings. The CPM shall also submit printable files in PDF format, but these will not be substitutes to the required working files that must be submitted.

8. Description of Services

The CPM is solely responsible for the execution of all duties described herein, direct or implicit, and shall be the only agent authorized by FOMILENIO to provide such products or services. It shall be the sole responsibility of the CPM to bring any conflict between these TOR and any other assigned responsibility to the attention of FOMILENIO's Connectivity Coordinator immediately. Any amendment to these TOR shall, unless otherwise directed in writing or by amendment by FOMILENIO, be governed by the same requirements, standards, schedules, products, services or other criteria set forth herein.

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The descriptions of services in this Section 8 are to be considered as minimum requirements. Technical proposals may include additional services, as the bidder deems necessary or advantageous to FOMILENIO, and the CPM may be asked to perform services that are not explicitly stated, but are understood by widely accepted international best practices for such services as those described.

8.1 Project Management

CPM shall perform effective project management services in order to ensure that the Connectivity Project is completed on time, within budget and at a high level of quality. The services shall be provided to achieve the project goals and objectives as stated in the Compact and in accordance with the outcomes of prior, related activities.

It is expected that the CPM will manage competing project requirements, namely *scope, time, and cost*. Project quality is affected by balancing these three factors, and as such it is expected that the CPM will work to ensure that the Connectivity Project will be considered a high quality project by delivering the roads as required, through works that are within scope, and completed on time and within budget.

Adhering to widely recognized international best practices and standards for project management – the details of which shall be proposed by the bidder in the technical proposal – and acting as the Employer's Representative for managing the Connectivity Project, the services of the CPM provided to FOMILENIO shall include but are not limited to the following:

8.1.1 Project Integration Management

In order to properly integrate all Compact activities, FOMILENIO has prepared an Implementation Plan, already approved by MCC, which will be the basis for the planning activities of the CPM. The preparation of the Implementation Plan also considered conditions in the Compact whose satisfactory completion is required to ensure continued funding from MCC.

8.1.1.a The CPM shall review and continually monitor the development of the Implementation Plan of the Project, particularly as it pertains to the Connectivity Project, and shall recommend to FOMILENIO any adjustment or modification necessary to optimize and successfully complete the project on time, within budget and with the required quality. If FOMILENIO agrees to adjust or modify the Implementation Plan based on the CPM's recommendation; any adjustment of technical specifications, bill of quantities, drawings, budgets or any other technical document resulting from this decision, shall be performed by the CPM as part of its responsibilities.

8.1.1.b To secure the funding for the Connectivity Project, the GoES must comply with conditions set out in the Compact between the GoES and the MCC. The CPM shall assist FOMILENIO and pertinent entities, such as GoES, in attaining compliance with such conditions. The Compact and its supplementary documents and also all MCC guidelines, particularly

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environmental guidelines, procurement guidelines and gender policy, which apply to the implementation of the Program are available at the following websites: www.mec.gov and www.fomilenio.gob.sv.

- 8.1.1.c The CPM shall be responsible for developing a comprehensive project management information system, which shall be adequately introduced and described in the bidder's proposal. The project management information system shall, as a minimum, have the capacity to collect and distribute information necessary for overall monitoring and control of the project from initiation through closing. Based on this information, the CPM shall be able to obtain, on demand, real-time project and component status, forecast the future trends of the Project, evaluate the effect on the achievement of project objectives and propose any necessary measures to guarantee the successful implementation of the project. The CPM shall provide access to this system to FOMILENIO and the UIPC during the period of services and at completion of the services to transfer the software and the rights for operation of this system to FOMILENIO.
- 8.1.1.d The CPM shall coordinate with the PA on all Connectivity Project procurements to ensure proper integration of technical inputs to the Bidding Documents. This may include, and is not limited to, providing reviews of technical aspects of all Bidding Documents, assessing their completeness and revising technical inputs, as necessary.

8.1.2 Project Scope Management

The CPM, through project scope management, shall ensure that all the work required - and only the work required - to complete the Connectivity Project successfully is included in the Contractors' scope of work. The CPM shall consider scope management in both the design phase and the construction phase and shall, as a minimum, perform the following:

- 8.1.2.a The CPM shall develop a scope statement, identifying project constraints and assumptions, and estimating project resource requirements before a project is included in the Procurement Plan of FOMILENIO. A written project scope statement will provide a documented basis for making future project decisions and will ensure a common understanding of project scope among all stakeholders.
- 8.1.2.b The CPM shall continually monitor and assess the progress of activities in the Connectivity Project (in conjunction with other services to be described in these TOR) in order to evaluate the initial scope statement and mitigate negative impacts to overall activity objectives. The CPM shall notify FOMILENIO of impacts as they arise, in real-time, and may be requested to develop and/or implement mitigation strategies.
- 8.1.2.c As actual project costs and progress may affect the entire scope of the Compact, the CPM shall participate in activities, in coordination with FOMILENIO, to assess and determine scope changes that may impact the overall scope of the Connectivity Project.

8.1.3 Project Time Management

The CPM shall effectively manage the scheduling of project activities to mitigate risks, such as higher

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project costs, non-delivery of benefits to the residents of the Northern Zone, and loss of MCC's and GoES funds. To achieve this objective, the CPM shall perform tasks, which include but may not be limited to, the following:

- 8.1.3.a The CPM shall develop a strategy (to be included in the technical proposal) and implement its proposed plan, upon acceptance by FOMILENIO, which, as a minimum, will accurately identify required activities and sub-activities, will demonstrate schedule and resource requirements, and will manage any changes and impacts that may occur.
- 8.1.3.b As mentioned above, FOMILENIO has prepared an Implementation Plan, including a project schedule, which was already approved by MCC as the baseline for the Connectivity Project. Furthermore, the CPM shall develop a more detailed MS-Project implementation plan capturing significant components of each design and construction contract, and provide real-time progress updates and comparison to FOMILENIO's baseline plan, whenever needed by FOMILENIO. The CPM shall review and continually monitor the development of this detailed implementation plan and prepare performance reporting against the schedule baseline as part of its schedule control, in which the CPM shall also propose any proper and timely measures to secure the successful implementation of the Connectivity Project.

8.1.4 Project Cost Management

The CPM shall assist FOMILENIO in managing the Connectivity Project budget. Specific tasks to ensure this objective include, but may not be limited to, the following:

- 8.1.4.a The CPM shall develop and implement a cost management plan to ensure that the Connectivity Project is completed within the project budget. The plan (to be adequately introduced in the technical proposal) shall, as a minimum, determine the types and quantities of resources needed for project activities, assess and apply costs for the resources, allocate costs to project activities over the duration of the project, and manage changes to the project budget.
- 8.1.4.b The Implementation Plan of FOMILENIO has been prepared based on the cost estimation made in 2006 at the pre-feasibility level, for preparation of the proposal to MCC for applying to MCC funds. As result of the Feasibility Study, general updated costs for the Connectivity Project will be determined, establishing the project cost baseline. The CPM shall review the costs and incorporate the costs into the cost management plan accordingly.
- 8.1.4.c CPM shall prepare timely analysis and compare the project's budget to actual costs when new construction contracts are awarded for sections of the NTH or groups of the NCR from the inception of the project to its completion. The CPM shall incorporate and report any variances and change orders, tracking and monitoring all costs associated with the project against the overall project budget allocated in the Compact.
- 8.1.4.d CPM shall provide FOMILENIO with timely and systematic reports of cost status and changes. This activity will gain importance in the implementation of the project when the actual designs are completed and construction cost increases are likely to exceed the total amount allocated in the Compact for the Connectivity Project.

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8.1.5 Project Quality Management

The CPM shall apply quality management to increase the likelihood that the project will accomplish its objectives. Quality management should address the management of the project as well as the quality of the product. Ultimately, the CPM shall incorporate quality management to minimize rework, and in doing so, shall help to control costs, increase productivity, and meet Stakeholder expectations. Quality management shall be performed in conjunction with other services described in these TOR. For Connectivity Project Management services, tasks shall include, but are not limited to, the following:

- 8.1.5.a The CPM shall identify relevant quality standards for project management components, such as project scheduling, Bidding Documents, budget and resource monitoring, risk recognition, supervision reports, among others, and prepare and implement a Quality Management Plan to ensure the quality standards are met for all activities under the CPM's responsibility.
- 8.1.5.b The CPM shall manage quality of the Design and Construction Supervision services (as detailed in these TOR). As part of this task, the CPM shall regularly monitor performance and report to FOMILENIO on compliance with the Quality Management Plan.

8.1.6 Project Human Resources Management

CPM shall manage and balance its resources, particularly its staff, in order to guarantee provision of high quality services and appropriate balance for the work load in any stage of the project. The CPM shall be required to provide, as a minimum, the following:

- 8.1.6.a The CPM shall develop a Staffing and Resource Plan (which is to be adequately introduced in the technical proposal) in order to manage all tasks required to fulfill the objectives of these TOR. The CPM shall accommodate its personnel to the work rate of the design consultants and/or the construction contractors, which at various points may occur simultaneously.
- 8.1.6.b In the case that the design consultants or construction contractors increase the work fronts, the CPM shall provide the staff and equipment resources necessary to fulfill the required supervision services of designs or works. Failure by the CPM to provide supervision of all work will represent non-compliance to these TOR and will be subject to the penalties or sanctions established in Section 10 of these TOR.
- 8.1.6.c In conjunction with its duties as Design and Construction Supervisor, the CPM shall ensure that provisions in the Design Consultants' and Contractors' contracts regarding the qualifications of contractor staff are strictly enforced.

8.1.7 Project Communications Management

Determining and satisfying the information needs of project stakeholders is the essence of

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project communication management. CPM communications should be addressed as a part of the overall project plan, although the level of formality will vary with the diversity of the stakeholders. Critical to effective communication management are performance reporting processes that provide timely information about how project resources are used to achieve project objectives. CPM shall keep close and permanent communication with FOMILENIO, UIPC of MOP, Procurement Agent, and project's stakeholders during the implementation of the project.

Public participation is one of the main principles of MCC projects as established in the Compact, the CPM shall ensure that in all stages of the implementation of the Connectivity Project the design consultants and construction contractors carry out proper public consultation in order to identify critical areas, potential social and environmental impacts and, in a timely manner, propose prevention, mitigation, and/or compensation measures, in order to avoid delays in the implementation of the project.

The EIA final report (as described in Section 4.2 of these TOR) will include an information and communication plan for the construction stage including objectives, strategies, actions and public consultation; CPM shall revise and complement this plan if necessary to achieve the project objectives.

As part of its project communication strategy, the CPM shall propose a web-based information system to share real-time project management data, including (but not limited to) schedule, cost, and scope information, with FOMILENIO, UIPC, and MCC. For this the CPM shall also consider and propose using handheld devices to record field observations and images by construction supervision staff and make it available in real-time on such web-based information system. When proposing such a web-based system, the Consultant shall also include training sessions for FOMILENIO and UIPC staff in using it in its application within the first 30 days of the Contract.

8.1.8 Project Risk Management

The CPM will be expected to assist FOMILENIO in managing risk regarding the Connectivity Project. In doing so, the CPM may be asked to identify, assess and respond to project risks, and, as a minimum, will be expected to perform the following tasks:

- 8.1.8.a The Feasibility Study will include a Risk Management Plan for the Connectivity Project including risk to implementation from the increase in the price of materials and fuel, risk of natural disasters (floods, hurricanes, earthquakes, etc); and also the EIA will include the analysis of environmental and social risks. The CPM shall review and complement this plan, if necessary and if any deficiency is detected, in order to minimize the impact of such identified risk in the achievement of the project objectives.

- 8.1.8.b The CPM shall continually monitor risk and update the Risk Management Plan accordingly, immediately reporting to FOMILENIO as new risks or associated impacts to the Project are identified and developing strategies to manage the impacts, and especially to mitigate negative impacts.

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8.1.9 Project Procurement Management⁶

The procurement processes for the Connectivity Project in particular, and for FOMILENIO's program in general, are the responsibility of the PA (Charles Kendal and Partners). Also, FOMILENIO has its own Procurement Management office which works in coordination with the PA to guarantee that all procurements for services, goods and works are handled and managed in a transparent, competitive and fair way, and in accordance with the timings of the Implementation Plan.

- 8.1.9.a** The CPM shall maintain close communication and coordination with the Procurement Director of FOMILENIO and the PA to monitor the progress of the procurement processes related to the Connectivity Project and to provide any necessary information related to performance of the design consultants and works contractors, since the contract administration is a responsibility of the PA.
- 8.1.9.b** Every six months during the Compact Term, the PA, in coordination with FOMILENIO, prepares a six-month period Procurement Plan to be submitted for the approval of MCC. The CPM shall provide to the PA all information related to procurement processes to be executed for the Connectivity Project for design or construction of any section of the NTH or the NCR.

8.1.10 Environmental and Social Impact Management

As provided in the Deliverables section below, the CPM shall provide the ESID of FOMILENIO with regular reports that update the status of environmental and social impact management activities and verify Project compliance with EMPs, Resettlement Action Plans (RAPs), and other applicable environmental requirements of MCC and the GoES. The proposed frequency, format, and content of these reports shall be described in the methodology of the Technical Proposal and reconfirmed by the selected Contractor in the Inception Report. Each report should at a minimum:

- a) Ensure that all necessary environmental permits have been obtained prior to commencement of Project activities at a given location. These include, but are not limited to, the permits required for work camps, waste disposal sites, borrow pits, and blasting activities.
- b) Ensure that environmental and social responsibilities have been included in the bidding documents, including gender issues.
- c) Ensure that prior to commencing construction works for any given section, that approval of the implementation of the corresponding RAP has been obtained from FOMILENIO and MCC.
- d) Monitor and ensure that the Construction Contractors prepare and submit EMP implementation plans for CPM approval, and—following their approval—that the

⁶ This knowledge area will be closely coordinated with FOMILENIO's PA in order to foster the processes of bidding and contract administration.

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construction contract activities are in strict compliance with EMPs, in accordance with the corresponding EMP implementation plans.

- e) Support or participate in public outreach and consultation programs, as requested by FOMILENIO.
- f) Support or participate in third party environmental audits, as requested by FOMILENIO.
- g) Coordinate with the UIPC specialists and any other consultant hired by FOMILENIO regarding all technical issues associated with ROW acquisition and RAP implementation.

8.1.11 Deliverables

The CPM shall provide as part of its technical proposal a list of deliverables to be submitted as result of the project management activities. These documents shall be prepared in Spanish and submitted first for technical review by UIPC, followed by approval of FOMILENIO. Once FOMILENIO has issued its approval, the CPM shall proceed to prepare an English version of such documents and submit them to FOMILENIO. As a minimum the CPM shall deliver the following documents:

- a) Project Management Plan (within the first 2 months of the services)
- b) Project Management Information System according to section 8.1.1.c of these TOR (within the first 3 months of the services)

8.2 Supervision of Design Consultants

The CPM shall undertake the responsibilities necessary to ensure timely and successful completion of the design of the remaining 135 km of the NTH and the 240 km of the NCR of the Connectivity Project. In this sense, the activities described in this section shall apply for both cases, and shall be considered as indicative only. The Consultants should not be limited by the concise outline of services in this section and may develop their proposal accordingly.

The CPM shall provide technical supervision of the work of the Design Consultants for the remaining roads of the NTH and NCR. This will include review and recommending approval to FOMILENIO of studies, designs, technical specifications, progress and other reports that were submitted. It shall be the responsibility of the CPM to ensure that the design is optimum and cost-effective for obtaining the desired output and successful construction.

It is important to note that the design contracts for the remaining sections of the NTH and the whole NCR will also include the preparation of the Resettlement Action Plans (RAP) and the implementation of such plans for the acquisition of the rights of way (ROW) for the roads. However, these design contracts will not include the construction of new houses for Project Affected Persons (PAP) which will have to be relocated, if necessary. It is expected that the Connectivity Project will include only a limited number of such actual resettlement cases. Therefore, the major focus of the design contracts, and the related design supervision effort by the CPM, shall be placed on the acquisition process for the ROW in coordination with the UIPC and any other consultant hired by FOMILENIO.

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Addendum 2.g

In 8.2 Supervision of Design Consultants (page 86), add the following paragraph at the end:

In case of any contradiction between standards and specifications, the one that provides higher safety and better likelihood for timely completion and suitability for intended use, within cost of the Project shall prevail. Lack of knowledge of laws, standards, rules or regulations of the Republic of El Salvador will not be accepted as cause for failure to apply appropriate standards.

Addendum 2.r

In 8.3 Construction Supervision (page 93), replace the second paragraph by the following:

The CPM *shall* propose a methodology and approach in its Technical Proposal in response to this RFP to show how it would cost effectively utilize its staff in the interim period between Phase-1 and Phase 2 (such as maintaining a reduced presence to effectively perform the required activities during this period). All such costs shall be deemed included in the Financial Proposal offered in response to this RFP.

Addendum 2.s

In 8.3.1 Duties (page 96), replace the number 14) by the following:

- 14) Certify that the monthly certificates for payment from construction contractors accurately reflect the value of the works completed *and recommend to proceed for payment*;

Addendum 2.t

In 8.3.1 Duties (page 97), replace the number 26) by the following:

- 26) Review, approve and monitor the Safety and Occupational Health Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Safety and Occupational Health Plan;

Addendum 2.u

In 8.3.1 Duties (page 97), replace the number 27) by the following:

- 27) Provide photographs of construction documenting *weekly and monthly progress and potential trouble areas according to the formats to be defined previous to the commencement of the construction supervision activities; these photographs should be posted on the web-based project management system*.

Addendum 2.v

In 8.3.1 Duties (page 98), add the following as additional duties at the end:

- 43) *Review and approve the Road Safety Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Road Safety Plan;*
 - 44) *Verify and monitor the environmental auditing processes executed by the Ministry of Environment and Natural Resources (MARN as in Spanish);*
 - 45) *Verify and monitor the process for releasing the Environmental Guarantee of the Project, as well as any guarantee for disposal sites, borrow pits and camp yards, that the Contractor or the MOPTVDU have submitted to MARN in relation with the Project.*
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#6) The Quality Assurance Plan (QAP) of the CPM shall consider as minimum the following content:

1. Introduction (General Approach)
2. Personnel
 - 2.3 Organization
 - 2.4 Tasks and responsibilities
3. Construction Control
 - 3.5 Schedule Control and tracking
 - 3.6 Physical Control
 - 3.7 Financial Control
 - 3.7.1 Monthly Statements for Payments
 - 3.7.2 Liquidation
 - 3.8 Control of design changes during construction
4. Quality Assurance of Materials and Construction Processes.
 - 4.1 Establishment of Acceptance Criteria
 - 4.2 Work inspections
 - 4.3 Technical documentation (standards, specifications, others)
 - 4.4 Laboratory Equipment
 - 4.5 Verification of tests performed by the Contractor
 - 4.6 Verification tests performed by the CPM
 - 4.7 Statistical control
5. Interrelation between Contractors and Employer
 - 5.1 Information Flow
 - 5.2 Correspondence and communication control
 - 5.3 Meetings
 - 5.4 Technical and financial reports

At commencement of the each one of the construction contracts, the QAP (presented as part of the proposal) shall be complemented and made compatible with the scope of works of the corresponding construction contract and submitted for approval to FOMILENIO.

Addendum 2.w: Table 7 – Status of Main Activities of NTH and NCR in the Terms of Reference (page 71) replaced by the following Table:

Table 7 – Status of Main Activities of NTH and NCR

Major activities	NTH-155km Sections 1, 2, 3, 4	NTH-135 km Sections 5, 6, 7	NCR-240 km Groups 1, 2 and 3
1. Feasibility Studies	In progress	In progress	In progress

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2.Final Design	Engineering	In progress	Future tender by FOMILENIO	Future tender by FOMILENIO
3. Design supervision		<i>In progress</i>	Pending (by CPM)	Pending (by CPM)
4. Environmental Impact Assessment		In progress	In progress	In progress
5. Right of Way and Resettlement		Future tender by FOMILENIO	Future tender by FOMILENIO	Future tender by FOMILENIO
6. supervision	Construction	Pending (by CPM)	Pending (by CPM)	Pending (by CPM)
7. contractors	Construction	Future tender by FOMILENIO	Future tender by FOMILENIO	Future tender by FOMILENIO

"In Progress" means that the consulting services are under way by CPB.

"Pending" means that those activities are to be performed by the CPM to be contracted.

"Future tender by FOMILENIO" means that the activity corresponds to works and consulting services to be tendered by FOMILEN through the Procurement Agent.

Addendum 2.x: The FORM FIN-2 (B) (page 52) were it is indicated that the Estimated Man-Month Requir (EMMR) for 3 Senior Field Resident Engineer previously stated 24 months *is changed to 24 months for each one, a total of 72 EMMR*. Consequently the FORM FIN-2 (B) is being replaced by the Form presented below:

FORM FIN-2 (B)

Personnel	ESTIMATED MAN-	FULLY L	PROPOSED PRICE
a) Key personnel			
Project Manager	24		

10 These are estimated man-months strictly for evaluation purposes, not to be changed by the Consultants.
Consultants should fill the FLMR for each position.

[Signature]

[Signature]

Project Road Specialist	Coordinator, Construction	24		
Management Information Systems Specialist		12		
Senior Field Resident Engineer for road construction Total man- months for three engineer		72		
Geotechnical and Materials Engineer		6		
Bridge and Structural Engineer		4		
Pavement Engineer		6		
Drainage Design Engineer		2		
Lead Environmental and Social Specialist – RAP		4		
b) Other non-key personnel technical support staff		36		
c) Other non-key administrative support staff		36		
Total (C)				

9/29/99

✓ *Alvarez*

CLARIFICATION 1

gray

Bernie

REQUEST FOR PROPOSALS
QCBS 2008-008
Consulting Firm
for

"Project Management, Supervision of Design and Construction Supervision for the Connectivity Project including; (i) The Northern Transnational Highway; and/or (ii) The Network of Connecting Roads"

ACLARACIONES No 1

Las aclaraciones presentadas a continuación corresponden a las preguntas levantadas por los asistentes a la Conferencia Pre-Propuesta del 14 de mayo de 2008 a las 9:00 AM celebrada en FOMILENIO. Este documento se presenta en español en razón de que la Conferencia fue conducida en ese idioma, así como que las propuestas deberán ser suministradas también en español.

Aclaración 1

P/ ¿Qué diferencia existe entre los cuadros de las páginas 31 a 33 y los cuadros de las páginas 52 a 54 del RFP?

R/ Los cuadros de las páginas 31 a 33 son a título de ejemplo solamente. Los cuadros de las páginas 52 a 54 son los que deberán ser utilizados en la preparación de las propuestas. Los "Estimated man-month required" son estimados y estrictamente para efectos de evaluación, y no deberán ser cambiados por los Consultores (es decir esa columna se mantiene con las cifras indicadas). Los Consultores deberán llenar la columna correspondiente a "Fully Loaded Monthly Rate (FLMR)". Ver notas al pie de página de cada cuadro. Los meses-hombre a utilizar finalmente se determinarán durante la negociación del contrato con la firma mejor evaluada, cuando se tendrían definidos con mayor precisión el requerimiento de meses-hombre del personal. Los nuevos montos serán determinados aplicando el FLMR.

Aclaración 2

P/ ¿En qué consiste la legalidad de los documentos a ser presentados?

R/ Para la presentación de las propuestas, negociaciones y firma del contrato, la firma consultora deberá emitir un poder que deberá ser presentado con la propuesta apostillado o haber seguido el trámite de auténtica de firmas para que sea válido en El Salvador. El resto de los documentos legales deberán ser presentados certificados por notario del país de la firma consultora que presenta la propuesta.

Aclaración 3

P/ ¿La propuesta deberá ser presentada por la casa matriz o por la sucursal?

R/ La firma consultora deberá decidir, en caso de tener sucursal en El Salvador, cuál de ellas va a presentar la propuesta, es decir si es la casa matriz o la sucursal en El Salvador. La documentación, incluyendo la experiencia de la firma, será de aquella que presenta la oferta, o sea de la casa matriz o de la sucursal. La sucursal podrá representar a la casa matriz presentando la información de aquella, con la documentación legal que lo autorice.

Aclaración 4

(Soyca)

P/ ¿La información solicitada en el numeral 3.4 del Data Sheet (página 22) se limita a la escritura de constitución y poder de representante o se solicitará además la presentación de documentos adicionales?

R/ A discreción de FOMILENIO se podrá solicitar información adicional, entre ellas los estados financieros de la firma consultora mejor evaluada antes de la negociación del contrato (Sección 2 – Instrucciones a los Consultores - numeral 5.8)

Aclaración 5

P/ ¿Los Consultores pagarán solamente el IVA?

R/ En el numeral 3.8 del Data Sheet se aclaran todos los aspectos relacionados con el pago de impuestos y sus Excepciones, así como los Mecanismos para su aplicación.

Aclaración 6

P/ ¿Existe conflicto de interés para la contratación del CPM y el RAP a una misma firma consultora?

R/ Sí, existe conflicto de interés. Para mayor clarificación referirse a la Sección 2 – Instrucciones a los Consultores – numeral 1.6 1 ii). Una misma firma no puede ser partícipe de la ejecución de una actividad (en este caso el RAP) y a la vez ser ella misma la que se supervisa. Este conflicto de interés se limita al PAQUETE I (NTH) y no así al PAQUETE II (NCR).

Aclaración 7

P/ ¿Cómo quedan los pagos mensuales en caso de retrasos no imputable a la firma consultora?

R/ Los pagos se mantienen dentro del esquema previsto en el documento RFP (Sección 10 de los TOR). Se ampliará el último párrafo de dicha Sección 10 (página 103) mediante un Adendum, en el sentido que: "en caso de ampliación de plazo por retrasos imputables al contratista, éste será el responsable del pago. Si el retraso es imputable a la firma consultora, ésta deberá absorber los costos. Si el retraso es de fuerza mayor o caso fortuito, será pagado por FOMILENIO"

Aclaración 8

P/ ;Habrá traducción al castellano del documento RFP?

R/ No habrá una versión en castellano.

Aclaración 9

P/ ¿Cómo va a ser evaluado (puntaje) el Project Manager en cuanto al requerimiento que dice que es preferible que posea un certificado de "Professional Project Management" frente al de la experiencia, y si el primero es más importante que el segundo, es decir si es más importante el certificado que la experiencia?

R/ En el Data Sheet (página 29) se establece el puntaje máximo que será aplicado al Project Manager y los Sub-criterios a aplicar durante la evaluación, los que se dividen en: (i) general qualifications; (ii) adequacy for the assignment; (iii) experience in the region and language. Durante la evaluación, los aspectos relacionados con la calificación del profesional, tales como el certificado que se mencionó en la pregunta serán considerados y ponderados en el Sub-criterio “General Qualifications”, y el aspecto relacionado con la experiencia será tenido en cuenta en el Sub-criterio “Adequacy for the Assignment”.

Ambos elementos serán tenidos en cuenta y evaluados separadamente en cada uno de los Sub-criterios. Este concepto aplica no sólo para el Project Manager sino también cuando se evalúe el resto del personal-clave.

Aclaración 10

P/ ¿Está contemplado otorgar una extensión de plazo para la presentación de las propuestas?

R/ No está previsto otorgar una prorroga al plazo indicado en el RFP, que es hasta el 6 de junio de 2008 a las 3:00 p.m.

Aclaración 11

P/ ¿La totalidad de la propuesta es a precio fijo o sólo aplica a la Fase 1?

R/ La totalidad de la propuesta es a precio fijo (Fixed Price). La Fase 1 se encuentra dentro de la modalidad de Lump-Sum. Para las Fases 2, 2 opcional y 3 opcional los precios fijos serán determinados utilizando los formatos de las páginas 52 a 54, de acuerdo a lo indicado en la Aclaración 1.

Aclaración 12

P/ ¿El personal no-clave será evaluado, requiriéndose la presentación de CVs?

R/ Dentro del personal asignado solamente el "personal clave" será evaluado por lo que para éste se solicita la presentación de los CVs según el Formato TECH-6. En cuanto al personal no-clave se requerirá la presentación en la propuesta de los CVs según el formato TECH-6A que es similar al TECH-6 al cual se le eliminó la frase final que se refiere al compromiso de disponibilidad (En Addendum se presentará el formato indicado TECH-6A). El personal no-clave no será evaluado. FOMILENIO se reserva el derecho de requerir durante las negociaciones del contrato, la sustitución de Personal No-Clave que a su criterio no sea satisfactorio, a partir de la documentación presentada.

Aclaración 13

P/ ¿Cuántos son los contratos que se van a supervisar?

R/ Las licitaciones para construcción de obras y las de consultoría para diseños, darán lugar a la posibilidad de tener varios contratos para cada uno de los Tramos (NTH) o para los Grupos (NCR). Está previsto realizar las siguientes licitaciones:

Para la NTH:

- Diseño Final: Licitación para Tramos 5, 6 y 7 con opciones de presentar propuestas para cada tramo, tramos 5+6, ó tramos 5+6+7
- Construcción: Licitación para Tramo 2 (sólo este tramo)
 - Licitación para Tramos 3 y 4 (con opción de presentar propuestas para el tramo 3, tramo 4 o tramos 3+4)
 - Licitación para Tramos 5, 6 y 7 y Tramo 1 opcional

Para la NCR:

- Diseño Final: Grupos 1, 2 y 3
- Construcción: Grupos 1, 2 y 3

Esta situación, es decir el número de contratos que se otorgarán para los cuales la firma consultora deberá ejercer la supervisión del proyecto variará según las adjudicaciones que se produzcan, pudiendo

Tecnic

20/05/08

existir una gama variada de posibilidades.

Aclaración 14

P/ ¿En cuanto al calendario, se tiene una idea más precisa del traslape que pudiera existir entre las Fases 1 y 2?

R/ En la página 66 se dan las actividades principales que desarrolla CPB indicándose las fechas establecidas para las entregas de los Informes Finales. En la Table 8 (página 74) se indican los períodos que se tiene previstos para la preparación de los diseños y de construcción de las obras. En cuanto a posibles traslapes entre las Fases, el Consultor debe efectuar ese ejercicio para ver como se van entrelazando las actividades en las distintas Fases.

(Fay)

*P/ Pregunta
R/ Respuesta*

CLARIFICATION 2

say 9

2nd

REQUEST FOR PROPOSALS
QCSB 2008-008
Consulting Firm

"Project Management, Supervision of Design and Construction Supervision for the Connectivity Project, including: (i) The Northern Transnational Highway; and/or
(ii) The Network of Connecting Roads"

ACLARACIONES No 2

Las aclaraciones presentadas a continuación corresponden a las preguntas y consultas presentadas por las firmas consultoras por escrito hasta el 16 de mayo de 2008, de acuerdo a lo establecido en el numeral 2.1 del DATA SHEET (página 22). Este documento se presenta en español en razón de que la Conferencia Pre-Propuesta fué conducida en ese idioma, así como que las propuestas deberán ser suministradas también en español.

Aclaración 1

P/ ¿Es correcto interpretar que las referencias a presentar por la firma consultora tendrán que ser de aquéllos servicios que se hayan terminado con posterioridad a junio de 2003, independientemente de la fecha de comienzo?

R/ Las referencias a presentar deben corresponder a contratos que tengan ejecución o vigencia durante los últimos cinco años, independientemente de su fecha de inicio o terminación.

Aclaración 2

P/ ¿Es correcto interpretar que las referencias siempre deben estar limitadas a cinco, incluso cuando la oferta es de un consorcio?

R/ En el FORM TECH-2 en el primer párrafo (C-Consultant's References) (pagina 39) se requiere que la firma consultora debe proveer por lo menos tres referencias y un máximo de cinco proyectos de alcances y magnitudes similares ejecutados por el consultor durante los últimos cinco años. Cuando se trate de consorcio en la modalidad de Joint Venture cada uno de los miembros del consorcio deberá presentar también dicha información, o sea un mínimo de tres y un máximo de cinco referencias en su respectiva especialidad. Cada firma del consorcio será evaluada separadamente en su área de especialidad, y en conjunto como socio para todo el proyecto.

Aclaración 3

P/ ¿La aplicación de la multa diaria por la falta de presencia del personal acordado se aplica solamente al personal de supervisión de las obras?

R/ En Data Sheet (páginas 34 y 35) cuando se indica en el apartado "Unfulfilment and Penalties", el tercer párrafo de la pagina 35 dice a su comienzo que la pena es para Key Personnel, Non-key Personnel and Technician, no haciendo alusión solamente al personal asignado a supervisión de obras. La multa se aplica tanto a Management, Design Supervisión and Construction Supervision.

Aclaración 4

P/ ¿El monto de las Garantías indicadas en el apartado "Bonos y Garantías" del Data Sheet (página 35) se aplica solamente a la fase de trabajo firme del contrato no cubriendo las fases opcionales?

R/ Las garantías requeridas en la página 35 de Data Sheet se aplican al "Contrato Base" no así a los opcionales. Sólo cuando los opcionales se convierten en órdenes firmes de trabajo el Consultor deberá presentar las garantías señaladas.

Aclaración 5

P/ ¿Los formularios de presentación de la propuesta tendrán que ser la versión traducida al español de los documentos incluidos en el RFP?

R/ Efectivamente, tales formularios serán los traducidos al español de aquéllos incluidos en el RFP.

Aclaración 6

P/ ¿El equipo que será evaluado será exclusivamente el indicado en las páginas 29 y 30 y que el requisito de presentar CVs se limita a esa personas, independientemente que el Consultor incluya en su

equipo otros profesionales según su criterio?

R/ El personal que será evaluado es solamente el Personal Clave que se indica en Addendum 1.a de la ADDENDA No 1 para cada Fase.

Aclaración 7

P/ ¿ De la Tabla 7 de la Sección 5 de los TdR se interpreta que la supervisión de los diseños de los Tramos 1, 2, 3 y 4 está pendiente de realizar y que deberá ser ejecutada por el Consultor?

R/ La supervisión de los diseños de los Tramos 1, 2, 3 y 4 de la Carretera Longitudinal del Norte ya está siendo llevada a cabo por el MOPTVDU (ver Addendum 2.a – Tabla 7), y por lo tanto no es parte de los servicios del CPM.

Aclaración 8

P/ ¿El calendario de los trabajos indicados en el capítulo 7.2 de los TdR (página 74) será el que habrá que respetar para preparar la oferta, y que se tendrá que negociar un precio adicional en el caso en que los plazos en que se basa la oferta no se vayan a cumplir por motivos ajenos al Consultor?

R/ Los plazos indicados en el numeral 7.2 General Timing of Services de la Sección 5 Terms of Reference del RFP son los que servirán de base para la preparación de las propuestas. En el caso que hubieran ajustes a estos plazos, se renegociaría el costo por los servicios de CPM.

Aclaración 9

P/ ¿Cuántos serán los contratos que se suscribirán para realizar todos los trabajos de diseño y de construcción de obras que tendrán que ser supervisados por el Consultor?

R/ Esta pregunta fue respondida en la Aclaración No. 13 de las ACLARACIONES No. 1 distribuida a todos los posibles concursantes en fecha 17 de mayo de 2008.

En ese mismo contexto, se aclara que el CPM deberá supervisar todos los contratos para diseños y construcciones que resulten de las licitaciones que se realicen. Sin embargo, el número final de contratos variará según las adjudicaciones que se produzcan y no puede ser determinado exactamente en este momento. Las licitaciones se realizarían de la siguiente manera:

Para el Paquete I:

Diseño Final: Licitación para Tramos 5, 6 y 7 (con opciones de presentar propuestas para cada tramo, para 2 tramos combinados o para los tres tramos combinados);

Construcción: Licitación para Tramo 2 (sólo este tramo); Licitación para Tramos 3 y 4 (con opción de presentar propuestas para el tramo 3, tramo 4 o tramos 3+4);

Licitación para Tramos 5, 6 y 7 y posible Tramo 1 (con opciones de presentar propuestas para cada tramo, para 2 tramos combinados, para tres tramos combinados o si se incluye el tramo 1, para los cuatro tramos combinados).

Para el Paquete II:

Diseño Final: Grupos 1, 2 y 3 (con opciones de presentar propuestas para cada tramo, para 2 tramos combinados o para los tres tramos combinados);

Construcción: Grupos 1, 2 y 3 (con opciones de presentar propuestas para cada tramo, para 2 tramos combinados o para los tres tramos combinados).

Aclaración 10

Ps/ (i) ¿Los procesos de licitación para contratar los diseños y las obras se iniciarán una vez que el Consultor haya empezado su contrato?; (ii) ¿Tendrá el Consultor alguna obligación de redactar o ajustar los pliegos de esas licitaciones?; (iii) ¿Cuántos procesos de licitación está previsto realizar, clasificados entre licitaciones de diseños y licitaciones de obras?

R/ El único proceso de licitación que según lo programado por FOMILENIO se habrá iniciado cuando comience el contrato de servicios del CPM es el de la licitación de la construcción del Tramo 2 de la CLN. Sin embargo, si cuando se inicien los servicios del CPM todavía se está en el periodo de preparación de ofertas por parte de los posibles contratistas, los comentarios que se puedan hacer sobre

GCM/9

20/06/09

los documentos de licitación por parte del CPM serán considerados por FOMILENIO.

Las responsabilidades del CPM en cuanto a los documentos de licitación están expresadas en el literal b) del numeral 8.2.1 Duties (página 86) con relación la supervisión de diseños y en número 2) del numeral 8.3.1 Duties (página 94) con relación a la supervisión de la construcción.

Aclaración 11

P/ ¿Qué se entiende por “fatal flaw” (falla fatal) ya que esto podría implicar costos adicionales de diseño si éste no es absorbido por el diseñador original, dado que en la Fase 2 del NTH, literal b (página 75) se describe una revisión de diseño?

R/ La explicación dada sobre el término “fatal flaw” es aplicable al proceso de revisión de todos los informes finales del estudio de CPB, es decir, al estudio de factibilidad, la evaluación de impacto ambiental y el diseño final de los primeros 155 km de la CLN. En el caso que durante la revisión el CPM detecte una falla fatal que impida continuar con los siguientes procesos de diseño o construcción, deberá informar a FOMILENIO para que se gestione a través del MOPTVDU la corrección correspondiente con el consultor responsable del estudio o diseño original respectivo. En el caso que FOMILENIO solicite al CPM realizar una modificación a los estudios o diseños realizados en el estudio de CPB por causa de una falla fatal identificada durante la revisión del CPM, esto deberá tratarse como un servicio adicional y negociarse por separado a los alcances de los servicios del CPM establecidos en el RFP.

Aclaración 12

P/ ¿Es correcto interpretar sobre la responsabilidad de los estudios de factibilidad, las evaluaciones ambientales y sociales, y los diseños finales seguirá siendo de las empresas que los han desarrollado?

R/ La responsabilidad de los estudios de factibilidad, la evaluación de impacto ambiental y el diseño final de los primeros 155 km de la CLN es del Asocio Consulta-Parsons, Brinckerhoff encargada del estudio “Mejoramiento de la Red Vial de la Zona Norte de El Salvador”, bajo contrato con FOSEP.

Aclaración 13

P/ De acuerdo a lo indicado en el Capítulo 11 de los TdR (página 103), el Consultor no tendrá que incluir en su oferta la valoración de varios recursos necesarios para su trabajo en las Fases 2 y 3, ya que ello será suministrado por el contratista de las obras. ¿Es que el contratista de las obras asumirá?:

- ¿ la instalación de una oficina completa para el Consultor en la zona de las obras, en San Salvador, o en ambos lugares?
- ¿ el equipamiento total de las oficinas incluyendo mobiliario de todo tipo, equipo de cómputo, y equipo de comunicación?
- ¿ instalación de aire acondicionado en las oficinas y el servicio de electricidad de emergencia?
- ¿ todos los consumos de electricidad, agua, telefonía e Internet?
- ¿ el mantenimiento de las oficinas incluyendo la limpieza, la vigilancia y todas las reparaciones necesarias?
- ¿ todos los consumos de material de oficina, como papelería, consumibles de computación, material auxiliar?
- ¿ la instalación de un laboratorio de control de calidad de materiales para uso exclusivo del Consultor, junto con todo el equipamiento necesario?
- ¿ todos los consumos producidos por ese laboratorio de control de calidad de los materiales?
- ¿ el pago de todo el personal que vaya a estar adscrito al laboratorio de control de calidad?
- ¿ la adquisición o alquiler de todos los vehículos que necesite el Consultor para su trabajo?
- ¿ todos los consumos y mantenimiento de todos los vehículos que suministre al Consultor?
- ¿Todos los seguros de los vehículos que se asignen al Consultor?

Tony

Señor

- ¿Existirá alguna limitación a la obligación del contratista de las obras de suministrar todos los servicios indicados más arriba lo cuál se traduzca en que sea el Consultor quien tenga que complementar esos suministros?

R/ Lo indicado en el segundo párrafo del numeral 11 Provisions by CPM (página 103) se refiere únicamente a las provisiones para las Fases 2 y 3 (opcional) para el Paquete I y Fase 2 (opcional) del Paquete II, es decir las fases de la supervisión de la construcción; en este sentido se aclara que las provisiones que serán hechas a través de los contratos de construcción con los contratistas se refieren únicamente a las oficinas de campo en los sitios de construcción, incluyendo oficina completa, equipo y mobiliario de oficina, equipo de cómputo y de comunicación, aire acondicionado para las oficinas y servicio de electricidad de emergencia, todos los consumos de electricidad, agua, telefonía e internet, mantenimiento, limpieza y vigilancia de las oficinas, vehículos para el personal de campo del CPM, incluyendo adquisición, seguros, operación y mantenimiento de los vehículos, y además el espacio para el laboratorio y su equipamiento para el aseguramiento de la calidad durante la etapa de construcción. No será incluido en las provisiones del contratista el suministro de material de oficina, como papelería, consumibles de computación, material auxiliar.

Los requerimientos para estas provisiones estarán detallados en los documentos de licitación para la construcción, los cuales deberán ser revisados por el CPM como parte de sus actividades, pudiéndose en ese momento hacer los ajustes necesarios.

Aclaración 14

P/ ¿Se iniciaría la consultoría CPM aún en el caso en que CPB no haya entregado por completo sus productos, y cómo se resolvería la situación si por un retraso de CPB se atrasa la consultoría de CPM una vez ésta se encuentre en marcha?

R/ La consultoría del CPM se iniciaría según se ha estimado en el RFP en agosto de 2008, no dependiendo de la entrega completa de los productos del estudio que está realizando CPB, ya que la revisión de los informes del estudio de CPB es sólo una de las tareas del CPM. El MOPTVDU en coordinación con FOMILENIO están dando el seguimiento oportuno al estudio para que los primeros informes que deberán ser revisados como parte de los servicios de las Fases 1 y 2 del Paquete I y de la Fase 1 del Paquete II, sean presentados según las fechas indicadas en el RFP.

Si hubiera desfase en alguna entrega de algún producto de CPB, se notificará al CPM y se harán los ajustes necesarios en las asignaciones del personal del CPM.

Aclaración 15

P/ En la página 74 del RFP en los párrafos segundo y tercero se establece una cantidad de meses que al compararlos con el calendario tentativo del proyecto expuesto en la Tabla 8, difieren las cantidades. Favor aclarar cuál prevalece.

R/ Los períodos indicados en la Tabla 8 de la página 74 son tentativos y muestran en qué forma las actividades de diseño y construcción se traslanan, sin embargo los períodos mostrados en esta tabla se inician a partir de noviembre de 2008, cuando se espera comenzar con la construcción del primer tramo y los diseños restantes del Proyecto. Sin embargo, los servicios del CPM se estima se iniciarán en agosto de 2008, por lo que los plazos indicados en los párrafos primero y segundo del numeral 7.2 General Timing of Services, ya considera este factor. En este sentido, ambos datos deben ser considerados en la preparación de las propuestas.

Aclaración 16

P/ ¿Los costos correspondientes a la administración del Proyecto (que no tendrán un pago específico) tendrán que ser parte de las valoraciones de los trabajos de diseños y de supervisión de las obras?

R/ Los pagos correspondientes a los servicios de administración del proyecto, que no tienen una asignación específica, deberán ser incluidos en las valoraciones de los trabajos de supervisión de diseños y en las de supervisión de obras.

Georgy

Diciembre

Aclaración 17

P/ ¿Cómo se efectuará la evaluación si un proponente ofrece sólo un paquete, y otro sólo la combinación de ambos?

R/ Las posibilidades de presentar propuestas para una determinada firma son: (i) Paquete I; (ii) Paquete II; y/o (iii) Paquetes I+II. Referirse al Addendum 1.b de la ADDENDA No 1. Las evaluaciones técnicas se efectuarán para cada paquete separadamente (Paquete I y Paquete II) según los criterios y sub-criterios establecidos en Data Sheet, numeral 5.3 (páginas 25 a 30), tanto cuando la propuesta es sólo para un Paquete o cuando una firma se presenta para los dos Paquetes. La comparación de ofertas se efectuará de la siguiente manera: a) Entre ofertas individuales por Paquetes; (ii) Combinación de ofertas individuales por Paquetes; (iii) Suma de ofertas individuales por Paquetes comparadas con ofertas combinadas.

Aclaración 18

P/ ¿Se podría considerar una prórroga al plazo de presentación de propuestas?

R/ En Addendum 1.d de la ADDENDA No 1, se prorrogó el plazo de presentación de propuestas hasta el 20 de junio de 2008.

Aclaración 19

P/ ¿Se podría clarificar el total del Personal Clave entre lo indicado en las páginas 29 y 30 y lo indicado en el FORM TECH 5 de la página 42?

R/ En Addendum 1.a de la ADDENDA No 1, se presentan cinco Tablas con el Personal Clave que se requiere para cada Fase.

Aclaración 20

P/ ¿Se podría aclarar las diferencias en el "tiempo de asignación" para el Personal Clave, entre lo indicado en las páginas 32 y 33 y los que aparecen en las páginas 52 a 54?

R/ Esta consulta fue respondida en la Aclaración 1 del documento Aclaraciones No 1.

Aclaración 21

P/ ¿Se podría inferir que se puede proponer los mismos especialistas para ocupar ciertas funciones, reiterando lo que se postula en el Paquete 1 y en el Paquete 2, siempre y cuando se plantea en una "propuesta global", respetando la razonabilidad en el cumplimiento del cronograma?

R/ Si bien es cierto que en la lista de personal profesional aparecen en varios casos las mismas especialidades en distintas Fases, las actividades difieren en cuanto lo que es supervisar diseño por un lado y supervisar la construcción por el otro, y para cada fase debe estar asignado el personal mínimo requerido. A continuación se presentan ciertas referencias sobre este asunto, a saber:

- (i) En el primer párrafo del TECH 5 (página 42) se dice: "Consultants are not permitted to propose one individual for more than one position, except for when the services are expected to be executed in phases and the consultant intends to use the same individual on more than one phase on the assignment".
- (ii) En la página 100, numeral 9. CPM Staff, al final del Segundo párrafo se indica: "The proposal shall consider to optimize the staff assignment in order to cover activities which could be done simultaneously in different phases".
- (iii) En Data Sheet páginas 27 y 28, se indica: "In case that the Consultant submits two separate proposals for Package I and Package II, the Consultant shall include in its proposals a detailed section explaining how it will organize its Key Personnel for the different phases including workload and scheduling and additional staffing if needed, in case that, subsequently, the Consultant is considered for award of both Packages". El mismo principio de uso del personal se aplica cuando una firma consultora presenta una propuesta global

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para los Paquetes I y II, debiendo respetarse la razonabilidad en el cumplimiento de los objetivos, metas y cronograma.

Aclaración 22

P/ ¿Para el Personal No-Clave será necesario presentar los respectivos CVs?

R/ Los CVs a ser presentados serán solamente los del Personal Clave. Para el Personal No-Clave no se requiere la presentación de CVs, aunque sí señalar sus funciones y perfiles.

Aclaración 23

P/ ¿En qué medida incidirá en el puntaje de la evaluación del Project Manager el hecho que sea certificado por el PMP?

R/ Esta consulta fue respondida en la Aclaración 9 de las ACLARACIONES No 1.

Aclaración 24

P/ ¿Los 24 meses (estimated man-month required) indicados en FORM FIN-2 (B) en la página 52 para los 3 Senior Field Resident Engineers debe interpretarse como una asignación de 8 meses a cada uno?

R/ No. El plazo estimado es de 24 meses-hombre para cada Senior Field Engineer, es decir un total de 72 meses-hombre. Como para el resto del Personal Clave, los períodos estimados estarán sujetos a revisión y definición durante la negociación del contrato.

Aclaración 25

P/ ¿Para una única propuesta combinada de los Paquetes I y II el número de páginas máximas será de 100 páginas en lugar de 50 páginas como se indica en el FORM TECH-4 (página 41)?

R/ Lo indicado en el TECH-4 se refiere un límite de 50 páginas para cada Paquete. Al ser la presentación global de propuesta para los dos Paquetes, el número máximo de páginas será de 100 páginas (50 para cada Paquete). Páginas adicionales a las 100 mencionadas no serán consideradas en la evaluación.

Aclaración 26

P/ ¿Porqué no se indica en el Personal-Clave en la página 29 el requerimiento de Senior Field Resident Engineer y sí aparece en la página 52 (FORM FIN 2-B)?

R/ En la página 29 se hace referencia al requerimiento de Personal Clave para Supervisión de Diseño, caso en el que no es necesario la asignación de Senior Field Resident Engineer, pero sí en el caso de Supervisión de la Construcción como aparece en la página 52 (FORM FIN 2-B).

Aclaración 27

P/ ¿Cuál es el personal clave a considerar en la preparación de la propuesta?

R/ El personal clave a considerar en la preparación de la propuesta es el que se indica en el Addendum 1.a de la ADDENDA No.1 para cada una de las fases.

Aclaración 28

P/ ¿Cuál es la puntuación máxima asignada a cada Personal Clave?

R/ La puntuación máxima está indicada en los Criterios de Evaluación en las páginas 29 y 30 del RFP.

Aclaración 29

P/ ¿Es que en el caso de la Fase 3 (Supervisión de la Construcción) solo debe incluirse el personal para los Tramos 5, 6 y 7 solamente, o se debe incluir también para el Tramo 1 en caso FOMILENIO decida construirlo?

R/ Deberá incluirse también el personal para la supervisión del Tramo 1. En el caso que finalmente no se incluya el Tramo 1, se harán los ajustes respectivos.

Aclaración 30

P/ ¿Se pueden modificar los formatos FIN- 2 B, C y E para incorporar el desglose de los monthly rate?

R/ No. Los formatos incluyen la columna correspondiente a "Fully Loaded Monthly Rate" (FLMR) que por definición (Ver página 57 – Definitions and Abbreviations) que dice: "Fully Loaded Monthly Rate for personnel all inclusive of all and any direct and indirect costs. En el FORM FIN 3 (page 56) en la nota 4 al pie de la Tabla se indica: ".....Provide fully loaded rates (including overhead)".

Aclaración 31

P/ ¿Los precios establecidos en el Formato "Summary Financial Proposal for PACKAGE II" (página 55) deberán incluir los impuestos producto de los servicios de Consultoría?

R/ En el numeral 3.8 del Data Sheet se aclaran todos los aspectos relacionados con el pago de impuestos y sus excepciones, así como los mecanismos para su aplicación.

Aclaración 32

P/ ¿Es necesario en la presentación de las propuestas incluir una "Garantía de Mantenimiento de Oferta" (página 35)?

R/ No.

Aclaración 33

P/ ¿Es válido presentar como referencias de los trabajos realizados por la firma consultora copia de los contratos y actas de recepciones finales de los proyectos desarrollados (página 36)?

R/ Sí, es válido con la condición que se incluya lo requerido en el literal C. Consultant's Reference (página 39, literales a. y b.).

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Appendix I

FORMA TECH-3 COMENTARIOS Y SUGERENCIAS EN LOS TERMINOS DE REFERENCIA Y EN LA CONTRAPARTE DEL PERSONAL Y FACILIDADES PARA SER PROVEIDAS POR EL FOMILENIO

A – En los Términos de Referencia

Los Términos de Referencia del presente concurso son claros en cuanto a sus contenidos y el Consultor expresa su compromiso de respetarlos en su totalidad.

De todas formas se hacen a continuación algunos comentarios sobre aspectos puntuales que podrían haber sido tratados de una forma algo distinta, y sobre los que se muestra nuestra total disposición a ser discutidos en una eventual negociación con objeto de mejorar la definición de los alcances y las responsabilidades de todas las partes.

Naturaleza y duración de los distintos servicios a suministrar

Está claro que los servicios solicitados en los Términos de Referencia se clasifican en tres grandes categorías:

- Gestión del Programa
- Supervisión de diseños
- Supervisión de obras

Por parte del Consultor se ha tomado nota del plan inicial de implementación elaborado por FOMILENIO, de acuerdo al que se deducen ciertas fechas para la realización de esas actividades y que gráficamente se representan a continuación:--

	2008				2009				2010				2011				2012															
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
Fase 1																																
Gerencia técnica																																
Supervisión diseño Sección 5																																
Supervisión diseño Sección 6																																
Supervisión diseño Sección 7																																
Fase 2																																
Gerencia técnica																																
Supervisión de obras Sección 2																																
Supervisión de obras Sección 3																																
Supervisión de obras Sección 4																																
Fase opcional																																
Gerencia técnica																																
Supervisión de obras Sección 5																																
Supervisión de obras Sección 6																																
Supervisión de obras Sección 7																																
Supervisión de obras Sección 1																																

actividad

Los Términos de Referencia solicitan identificar al personal clave propuesto y clasificarlo según vayan a participar en las fases de supervisión de diseño o en supervisión de obras, dejando fuera de esta clasificación al personal clave que va a desarrollar labores específicas de gerencia del Programa.

Desde nuestro punto de vista hubiera sido mucho más apropiado el haber solicitado la distribución del personal clave entre las tres áreas de actividad, para aproximarse a la naturaleza concreta de las actividades que se van a realizar.

En los Formularios TECH-5 de esta oferta se ha respetado la forma de distribuir al personal clave en las dos áreas de supervisión de diseños, y de supervisión de obras, pero en la parte en la que mostramos el programa de trabajo, hemos preferido cambiar esa agrupación del personal para reflejar su distribución de la forma en que consideramos que se va a ejecutar el Programa.

Esto tiene relevancia en las posiciones del Gerente del Proyecto y del Especialista en Sistemas de Información Gerencial, que serán profesionales clave cuyo desempeño estará orientado a trabajos globales del Programa y su gerencia, y no únicamente a trabajos de supervisión de diseños y de obras.

Delimitación de responsabilidades

A pesar que en los Términos de Referencia y demás documentos del concurso se hace alguna indicación sobre este asunto, deseamos expresar nuestra opinión sobre que la responsabilidad de un diseño debe recaer siempre en la institución o empresa que lo ha elaborado, y que la responsabilidad de la ejecución de la obra debe corresponder a la empresa constructora contratada para tal fin.

Esto será de relevancia en este Programa que va a hacer uso de algunos diseños elaborados por terceros en una fase anterior a esta consultoría.

Aunque los servicios aquí ofrecidos incluyen la revisión de los diseños, es de hacer notar que esa revisión nunca podrá llegar a una verificación del rigor y la calidad de toda la información y datos en los que el diseño se apoya, ya que eso ha debido haber sido el resultado de un trabajo continuado de los responsables de su realización y las entidades que lo han supervisado.

Nuestra interpretación sobre el alcance de la revisión de los diseños que se pongan a disposición del Programa y elaborados con anterioridad, es que se limitará a la comprobación de la integralidad de los documentos y la identificación de aspectos que pueden incidir negativamente en desviaciones de calidad, plazo o costo durante las obras.

Independientemente de lo anterior, el Consultor expresa su total disposición a apoyar la resolución de cualquier vacío detectado en los diseños existentes y a negociar la forma más conveniente de solucionar esas situaciones antes de que puedan repercutir negativamente en las obras.

Una situación algo parecida se puede presentar para el caso de los estudios de factibilidad que también se pondrán a disposición de este contrato de consultoría para ser revisados con anterioridad a la contratación de los diseños de construcción respectivos.

En estos casos, la atención de la revisión habrá que centrarla fundamentalmente en la comprobación de las evaluaciones económicas de las inversiones, ya que en ellas se tienen que analizar componentes con algún grado de subjetividad que podrían ser cuestionados por el ente financiero, MCC.

Por último, con relación a la responsabilidad de la calidad de las obras, el Consultor anima a FOMILENIO a que se aplique el criterio de que sea la empresa constructora la que tenga que asumir esa responsabilidad y que ello se concrete con la presentación de un compromiso de aseguramiento de la calidad que tendrá que

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International standards will be applied for design works, which shall also be considered by the CPM in the design supervision activities. Standards include but are not limited to the following:

- AASHTO
- ACI
- FP
- FHWA
- ASTM
- Asphalt Institute
- Portland Cement Association (PCA)
- Especificaciones para la Construcción de Carreteras y Puentes Regionales, SIECA, March 2001
- Manual Centroamericano para Diseño de Pavimentos, SIECA.
- Manual Centroamericano de Dispositivos Uniformes para el Control de Tránsito, SIECA
- Reglamento para la Seguridad Estructural de las Construcciones de la República de El Salvador.
- Salvadoran roads law (Ley de Carreteras y Caminos Vecinales)

8.2.1 Duties

Duties to be included in this portion of the assignment include but are not limited to:

- a) Review the FS and the EIA (which includes EMPs, RAPs and HIV-AIDS Awareness Plans) Final Reports prepared by CPB as part of the study "*Mejoramiento de la Red Vial de la Zona Norte de El Salvador*", which is the main technical input for further design work. The CPM will perform this review with additional information and clarifications provided by UIPC as available. The CPM shall provide timely advice to FOMILENIO of any required modification or complementary work if any fatal flaw is detected, and after obtaining the corresponding FOMILENIO's authorization, proceed to complement and modify the Final Reports accordingly. The content of these reports is described in Section 4 of these TOR;
- b) Review and recommend any modification to the TOR for the final design works to be used for the tendering of final design services;
- c) Prepare the agenda and presentation for the kickoff (pre-design) meeting of the design projects with the Design Consultants and discuss the agenda with FOMILENIO prior to the meetings. Prepare meeting minutes for this meeting and any project meeting thereafter;
- d) Review and approve of the work programs submitted by the design consultants;
- e) Review and approval of the methodology proposed by the design consultants for the design works;
- f) Monitor and report on the physical and financial progress of the works undertaken by Design Consultants and recommend action(s) to be taken when progress is not in accordance with the approved program;
- g) Ensure that the design works are completed according to the recommendations of the previously developed FS, EIA, the AIA, the general resettlement strategy/RAP, and Archeological Resources Survey and that quality assurance on quality control performed by design consultants has been included; *Scuy G*

- h) Ensure that the Design Consultants perform their services in accordance with the Compact, MCC's regulations, Salvadoran legal framework and any other provisions given in the consulting services contracts;
- i) In the case of deficiency by the Design Consultants, report immediately to UIPC and FOMILENIO and compile or prepare support documents related to such deficiency. Such documentation should include, as a minimum, a description of the current situation and how it constitutes a deficiency in the responsibilities of the Design Consultant, an analysis of potential impacts (including technical, cost, and schedule impacts), and a recommended approach to address the deficiency, when necessary;
- j) Revise and approve all technical matters of the design works, such as topographic surveys, proposed alignment, geometric design, right of way and relocation of utilities, geotechnical investigations, and proposed locations for borrow banks, quarries, disposal areas and camp-yards, pavement design, drainage works, bridges, intersections, earthworks, pedestrian crossings, signage, and any other deliverable from the Design Consultant;
- k) Cooperate with UIPC to ensure that all proposed locations for borrow banks, quarries, disposal areas, camp-yards, and water extraction are communicated to MARN in a timely fashion, in order that site inspections can take place and preliminary environmental approvals can be provided during the design phase.
- l) Ensure that special attention is paid to the border connection/crossing with Honduras in the final design of Section 7 of the NTH, which will additionally require coordination with the government authorities of Honduras. The CPM will be requested to manage such coordination and provide necessary technical support;
- m) Systematically and periodically review the evolution of the cost proposed for construction works, in such a way as to maintain economic feasibility and to allow making real-time decisions related to changes in the level of intervention or category of the roads to optimize the use of financial resources without reducing the quality, useful life and design period;
- n) Ensure that all designs are directly coordinated with and adhere to the World Bank's Operational Policy on Involuntary Resettlement (OP 4.12), MCC Environmental Guidelines and Salvadoran laws. Ensure that final designs include, to the extent feasible, measures to eliminate or reduce the incidence of resettlement, including land acquisition and physical or economic displacement. Also ensure that the design consultants strictly follows the general Resettlement Plan included in the EIA, including any resettlement action plans (RAPs) or land acquisition and compensation programs that must be implemented prior to commencement of construction or rehabilitation activities at a given location. Also, CPM shall secure that implementation of the ROW and RAPs is properly performed by the Design Consultants and avoiding conflicts with the project affected persons.

CPM shall be responsible to manage and supervise the preparation and implementation of the RAPs by the design consultants which is a critical activity for the successful implementation of the Connectivity Project, including but not limited to:

[Handwritten signatures and initials follow, including "Sergio", "Bla", and "JL".]

- Planning, preparation and implementation of the activities of: i) social support; ii) acquisition of right of way; and iii) construction of new houses for resettlement (if necessary) indispensable for the satisfactory physical execution of the RAP, all in accordance with OP 4.12 of the World Bank.
- The number of project affected persons (PAP) under the project alignment will be the result of the final designs and of the preparation of the Resettlement Action Plans, and the CPM shall supervise all activities related to the total number of PAPs.
- Ensure the compliance by the design consultants of the assignment and optimal use of all resources allocated for the project in relation to the RAP's.
- Review, approve and monitor the work plan for RAP's of the design consultants, in case of non compliance with the work plan to propose corrective measures in order to ensure the proper and on-time clearance of the work areas previous to the execution of construction works.
- Establish a flexible working time shift for his staff in order to supervise RAP development to be performed on weekends and non working hours, since many of the land owners work or live outside the project area.
- Ensure that the design consultant provides the social support in two areas: (i) acquisition of right of way or economic compensation; and (ii) resettlement or physical relocation, as applicable.
- Ensure that the design consultants include in the RAP all landowners that are affected by the alignment of the NTH and NCR. This attendance shall cover not only the persons/families living in the properties under the project alignment, but also to those owners/occupants living in other regions of the country.
- Ensure that the design consultants provide necessary field offices to inform and attend the residents of the influence area of the project and owners/occupants of properties under project alignment, in any matter related to processes, inquiries and questions about right of way acquisitions and resettlements. Such filed offices of the design consultants, shall be strategically located in the project area to provide easy access in order to allow the participation of the major number of residents.
- Ensure that the design consultant render his services related to RAP in an equally and fair way to all PAPs, indistinctly of their financial status or if they are owners or occupants of the affected properties.
- Ensure the compliance by the design consultants of all and any of the parts of the process for Acquisition Rights of Way, including but not limited to: (i) identification of owners or occupants; (ii) collection of identification documents and property documents; (iii) topographic survey; (iv) preparation of general and individual right of way drawings; (v) preparation of valuation criteria and parameters; (vi) public consultation; (vii) valuation; (viii) notification; (ix) negotiation and acceptance of valuations; (x) Deed for properties on the name of the State and Government of the Republic of El Salvador; (xi) monitor payment process; (xii) monitor the registration process at the National Center of

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Registers (Centro Nacional de Registros – CNR); and (xiii) monitor the process for clearance of the right of way areas prior to the construction of works.

- Ensure the compliance by the design consultants of the activities related to new houses for resettlements, either individual or group solutions or of any other economic activity, for the PAPs to be relocated in new places (if necessary), including but not limited to: (i) preparation of alternatives and analysis of possible relocation sites; (ii) design of resettlement solutions, individual or group housing or commercial solutions or any other type with the corresponding technical specifications, cost estimation and work plan; (iii) monitor the social support to be provided to the PAPs prior, during and after the resettlement; (iv) monitor the public consultation; and (v) supervision of the construction of any housing or commercial structure resulting necessary for the resettlements.
- o) Ensure that the Design Consultants adequately considered potential impacts to cultural, historical, and archeological resources in the project zones and, as needed, modify road designs to minimize or eliminate impact to these zones;
- p) Ensure that the Design Consultants plan, organize and carry appropriate public consultation of all significant design alternatives with the potentially affected parties; monitor and supervise such public consultation activities and the appropriate consideration of and response to the public input received;
- q) As needed, perform periodic field observations of design firm works including survey work, geotechnical investigation, etc.;
- r) With cooperation of the UIPC, ensure that the Design Consultants prepare the EMP including all measures required to prevent, reduce, control and/or compensate for negative environmental impacts that may occur during the construction and post completion phases of the project, as well as to optimize positive impacts. Additionally, CPM shall secure that the engineering design includes all environmental measures included in the EMP and ensure that the technical specifications for construction bidding documents clearly identify the responsibilities of the Construction Contractor with respect to EMPs, site specific environmental permits and related environmental requirements;
- s) Compile and evaluate information about accident reports as they may occur and report to FOMILENIO;
- t) Prepare and issue instructions to Design Consultants, as necessary for Project Implementation;
- u) Review and comment with recommendation of approval (or rejection) by FOMILENIO of change (variation) orders proposed by Design Consultants;
- v) When appropriate, propose change orders for FOMILENIO's approval, which shall also include the cost and time impact of such proposed changes. CPM shall also be required to submit the various alternatives with cost-benefit analysis and effect on time for the particular design work and for the project as a whole to facilitate decisions by FOMILENIO;
- w) Review and approve of reports submitted by the Design Consultants;

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- x) Provide photographs of field works related to design, and documentation, as appropriate, showing monthly progress of the designs and potential trouble areas;
- y) Review and approve of documents for payments to the Design Consultants, certifying that such documents accurately reflect the value of the services rendered. This shall include invoices and support documents submitted by the Design Consultants as evidence of the executed work, and advice FOMILENIO accordingly;
- z) Analyze and make recommendations regarding claims submitted by the Design Consultants;
 - aa) Attend claims meetings between FOMILENIO and the Design Consultants;
 - bb) Ensure that the designs of the proposed roads are technically sound, cost optimized, and fulfill the minimum requirements of MOPTVDU for each road classification;
 - cc) Assist FOMILENIO to incorporate the results of these studies/designs into the bidding/contract documents for the construction projects;
 - dd) Revise and approve the estimated bill of quantities, technical specifications, proposed construction schedule, cost estimation, drawings, and any other technical inputs to the Bid Documents for procurement packages of road construction;
- ee) Maintain orderly working files and a comprehensive, computerized log for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and monthly progress reports, contract documents including amendments, notices to proceed, change orders and modifications, all in a system which is comparable with software used by FOMILENIO, which will provide deliverable inventory, scheduled dates and actual status. During the course of the work, the CPM shall maintain it in good order and in a reference library format in office space in San Salvador to be used by the FOMILENIO staff. From time to time, FOMILENIO may request the CPM to show documents to interested parties, approved by FOMILENIO. Documents of a sensitive nature should be stored separately in the reference library. Prior to completion of the period of work, the CPM shall pack and deliver to FOMILENIO the entire contents of the Project library in good order and properly indexed and marked. In addition, the CPM shall provide FOMILENIO with all electronic files of any and all project documents stored in a media acceptable to FOMILENIO including a comprehensive, well-organized electronic index of all those documents. The copyright of all Project materials will remain with FOMILENIO;
- ff) Perform all other design supervision and project administration tasks as specified in the contracts between FOMILENIO and the Design Consultants;
- gg) CPM shall promptly recommend to FOMILENIO remedial actions to be taken in the case of implementation delays, cost overruns, poor quality of the deliverables, and other problems, paying special attention to activities that are part of the critical path;

Prepare a Final Report for each one of the Final Designs Sections completed, including recommendation to FOMILENIO for Final Acceptance of all the designs included in the

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contract documents and amendments, with a Quality Certification, stating that all technical, environmental and social requirements have been met.;

- hh) Answer, together with the Design Consultants if necessary, to any comment or questions on the execution of the final designs issued by FOMILENIO;
- ii) As requested by FOMILENIO, support or participate in FOMILENIO's public outreach and consultation program; and
- jj) Perform other related duties as directed by FOMILENIO.

8.2.2 Deliverables

The CPM shall provide as part of its services the following deliverables. These documents shall be prepared in Spanish and submitted first for technical review of UIPC, followed by approval of FOMILENIO. Once FOMILENIO has issued its approval, the CPM shall proceed to prepare an English version of such documents and submit them to FOMILENIO. These documents shall include (but not be limited to):

(i) Inception Report

Within four weeks after the signature of the contract, the CPM shall present to the FOMILENIO the Inception Report with a consolidated work plan outlining critical milestones, methodologies, staffing and a plan to ensure the quality of these services. The roles of the key personnel shall be clarified and the deliverables and their schedule reviewed. Contracting of required work outside of the CPM firm or those subcontractors identified in their proposal shall be minimal and in such cases shall be presented to FOMILENIO for its consideration and approval. At this time, points of contact shall be identified and procedures for communications and exchange of information discussed and decided upon. Coordination of work efforts, definition of FOMILENIO's requirements and establishment of future roles and participation shall also be presented and discussed. The Inception Report will include but not be limited to:

- o Methodology
- o Scope
- o A statement defining the proposed services, including:
 - methods and parameters
 - any changes to the composition of the Consultant's team and specialists needed
 - methods of consultation, through the Connectivity Project Coordinator at FOMILENIO with MOPTVDU, different GoES authorities, local authorities, local population and other concerned parties
 - methods of consultation with the FOMILENIO's Officials, with the Procurement Agent and with the Fiscal Agent
- o Detailed program of work, showing time, duration and personnel as well as the inter-relationship between activities
- o List of applicable environmental laws, regulations, and standards
- o List of required environmental, construction, or other permits
- o List of documents to be kept in document library⁷

⁷ Such list shall be supplied by FOMILENIO.

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- Proposed methodology for tracking compliance with MCC Environmental Guidelines, applicable GoES environmental laws and regulations, and site-specific EMPs and RAPs
 - Proposed schedule
 - Proposed flow of funds
 - Projected staffing
- (ii) Consultant shall provide timely written comments to FOMILENIO on all design submittals received throughout the course of the NTH and NCR final design work within the time specified in the Terms of Reference for those works.⁸ The Consultant is advised that delays in the delivering of its responses and services are unacceptable, and will constitute a basis for withholding payment or reducing the amount of payment due as specified in the payment schedule enclosed in this RFP.

(iii) Monthly Progress Reports

The CPM shall prepare and submit Monthly Progress Reports to FOMILENIO. The Monthly Progress Reports shall address the status of work measured as "percent completion" against the schedule submitted by the CPM and approved by FOMILENIO. The Monthly Progress Reports shall contain an accurate, up to date, account of all work accomplishments, work scheduled and outstanding issues of consultants. The reports shall also include description of problems and proposed solutions, details of any change order, possible delays and effect on the work schedule, time extensions, cost overruns, and any other important technical or administrative aspect that could affect the work progress. These reports shall be submitted to the FOMILENIO no later than the 10th day of the month following the end of the monthly period covered by each report. FOMILENIO will base the payment according to the negotiated payment schedule.

(iv) Special Reports

Other special reports that may be required from time to time as directed by FOMILENIO or UIPC for such issues as significant change requests, prompt remedial actions recommendations, accidents with injuries, and any other important technical or administrative aspect that requires a special attention.

(v) Annual Report

Annual report summarizing all issues related to the works undertaken in the foregoing year.

(vi) Final Report

The Final Report shall include all documents and information collected during the period of services, and also a special section of "lessons learned" on the whole project.

(vii) Communications

All communications concerning the Connectivity Project between the various consultants, contractors, UIPC and other interested or effected parties and the Connectivity Project Manager shall be copied to the FOMILENIO's Connectivity Project Coordinator with a note as to its importance and whether it is for information only or requires action. This applies to all correspondence, technical documents, minutes or any other hard copy or electronic materials. The Consultant shall incorporate such communications in a web-based project information system discussed in Section 8.1.7.

⁸ On average this is generally within 2 to 3 weeks of receipt of the document but will need to be verified against the time periods negotiated in the final contracts.

(vii) Other Regular Reports

As provided in the Deliverables Section, the CPM shall provide the ESID of FOMILENIO with regular reports to update the status of the supervision of the environmental and social (impact where necessary) assessments and that design activities are in compliance with applicable environmental requirements of the Government of El Salvador and MCC guidelines and those defined in the EMPs of the EIAs. The proposed frequency, format, and content of these reports shall be described in the methodology of the Technical Proposal and reconfirmed by the selected Consultant in the Inception Report. Each report should indicate as a minimum:

- Discuss progress made and outcomes of implementing environmental and social mitigation measures contained in the EMPs, RAPs, or other related plans. Particular attention should be given to the information related to Right of Way and Resettlement;
- Summarize the results of any field or laboratory analyses performed to support environmental monitoring requirements (such as water quality sampling, air quality monitoring, and any other test result.);
- Identify any environmental and social issues that could affect Project performance, particularly any unforeseen impacts, and recommended measures for resolving the issue(s);
- Identify any planned or actual modifications to the EMPs, including changes to environmental-related budgets or disbursement schedules; and,
- Outline the primary environmental and social management activities planned for the following reporting period, including proposed measures for resolving key issues.

8.3 Construction Supervision

This Section applies to the construction supervision services indicated in Phase 2 as well as the Optional Phase 3 for the NTH and Optional Phase 2 for the NCR.

The CPM should propose a methodology and approach in its Technical Proposal in response to this RFP to show how it would cost effectively utilize its staff in the interim period between Phase-1 and Phase 2 (such as maintaining a reduced presence to effectively perform the required activities during this period). All such costs shall be deemed included in the Financial Proposal offered in response to this RFP.

The CPM Consultant shall provide complete construction supervision services, according to best international standards of road construction—whether noted below or not—as the supervisory representatives of FOMILENIO. The Consultants should provide a detailed list of their offered services, staffing, location of staff (site office or main office) and duration of staff assignments in the Technical Proposal (Section 3: Methodology and Approach) in response to this RFP.

The CPM shall prepare and manage the Connectivity Project's implementation schedule and shall monitor and report on the physical and financial progress of the works undertaken by Construction Contractors. The CPM shall recommend preventive and corrective actions to be taken in the case of implementation delays, cost overruns, poor quality of the works that does not meet specifications, unmitigated environmental impacts, and other problems. In addition, the CPM shall review and certify the accuracy of invoices submitted by entities providing technical and construction services.

In addition to its continuing service as the Employer's Representative, the CPM shall assume and

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perform all the duties and responsibilities of "the Engineer" as prescribed in the Conditions of Contract for Building and Engineering Works Designed by the Employer, FIDIC 1999, in particular for the construction supervision activities during the construction stage of the Connectivity Project. There will be no other supervisory engineer acting on behalf of FOMILENIO.

8.3.1 Duties

Duties to be included in this portion of the assignment include but are not limited to:

- 1) Review the Final Design reports prepared by CPB as part of the study "Mejoramiento de la Red Vial de la Zona Norte de El Salvador" for the first 155 km of the NTH (from La Virgen to Nuevo Eden de San Juan), which also includes design of Section 1 (eventough the decision for construction of Section 1 is still pending, with the possibility to be included in optional Phase 3), which are the main technical input for the further construction work. The CPM will perform this review with additional information and clarifications provided by UIPC as available CPM shall timely advice to FOMILENIO of any required modification or complementary work if any fatal flaw is detected, and after obtaining the corresponding FOMILENIO's no objection, proceed to complement and modify the final reports accordingly. The content of this report is described in Section 8 of these TOR;
- 2) Review and recommend any modification to the Scope of Work (Technical Specification and/or drawings) on the bidding document for construction works;
- 3) Prepare the agenda and presentation for the kickoff (pre-construction) meeting with the contractors of each different project and discuss the agenda with FOMILENIO prior to the meetings. During this meeting, points of contact shall be identified and procedures for exchange of information and communications are discussed and decided upon. Prepare meeting minutes for this meeting and any project meeting thereafter;
- 4) Review and comment on or approval of the programs of work submitted by construction contractors;
- 5) Review and approve construction plans and methods proposed by construction contractors, for road sections and bridges;
- 6) CPM shall be responsible for managing and supervising the activities of the construction contractors related to ROW and RAPs, including but not limited to the following:
 - Monitor the finalization of pending cases which by any reason were not completed in the design stage. This activity shall apply in the following areas: (i) acquisition of right of way or economic compensation; and (ii) resettlement or physical relocation.
 - Ensure that construction of works by the contractors is executed according to the drawings of right of way acquired by FOMILENIO, avoiding that contractors use land or affect constructions not included in the acquisition.

- Ensure that construction contractors provide an office space for attention of residents of the project area, resolution of claims and social problems resulting from the construction works.
 - Follow-up the process of resettlement on those sections or segment were still exist some problems, and look for an adequate solution, in cooperation with UIPC;
 - In cooperation with UIPC ensure that the ROW of the Section or Sections under consideration for construction is cleared and the land is property of the GOES;
 - Review and assure that social and environmental and social responsibilities are defined in the contractor bidding documents, including gender issues;
 - Ensure that the Contractor has attended any unforeseen social impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays, and inform FOMILENIO immediately;
 - Ensure that the construction contractors execute the access solution to properties as identified in the design stage; and
 - Cooperate with FOMILENIO-UIPC to avoid the illegal occupation (usurpation) of the acquire ROW.
- 7) Monitor and report on the physical and financial progress of the works undertaken by construction contractors and recommending action to be taken when progress is not in accordance with the approved program;
- 8) Ensure that the quality of the construction works are completed according to the design drawings and specifications, and providing quality assurance on quality control tests performed by contractors;
- 9) The CPM shall have its own independent laboratory and equipment and test sites to control construction materials quality , independently of the Contractor's laboratory and equipment; or as an alternative the CPM shall contract these tests to a certified independent laboratory acceptable to FOMILENIO. The CPM shall include a quality assurance (QA) testing plan with a minimal number of respective QA tests per unit road and/or bridge as a percentage of the number of tests in the approved QC plan of the Contractor;
- 10) Monitor and ensure that the Construction Contractors prepare and submit EMP implementation plans for CPM approval. Review the proposed EMP implementation plans with attention to the appropriate sequencing and integration of EMP activities with related construction works. Comment and/or approve the EMP implementation plans.
- 11) Monitor and ensure the implementation of the EMP and the HIV/AIDS Awareness Plan by the Contractor, in accordance with the implementation plan of the EMP, including all environmental measures that apply to borrow pits, dumping areas and camp yards, as well as all public outreach and consultation activities of the Contractor;
- 12) Monitor the processes related to environmental issues carried out by the Contractors with MARN, such as new sites for borrow banks, camp yards and dumping areas, as well as processes with any other institution;

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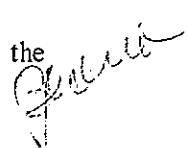
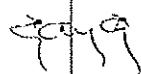
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- 13) Ensure that the Contractor has attended any unforeseen environmental impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays;
- 14) Certify that the monthly certificates for payment from construction contractors accurately reflect the value of the works completed;
- 15) Ensure that the Construction Contractors perform their work in accordance with the Compact, MCC's regulations, Salvadoran legal framework and any other provisions given in the construction contract;
- 16) In case of where the construction contractor does not meet its contractual obligation, the CPM shall report the case immediately to UIPC and FOMILENIO and compile all support documents pertaining to such case;
- 17) Compile and evaluate information for accident reports as they occur and report to both the UIPC and FOMILENIO;
- 18) Prepare and issue site instructions to construction contractors, as necessary for Project implementation;
- 19) To maintain the Record Book (Bitacora) at the work site and use for daily communication with contractors and to maintain registers of main events in a timely manner during the development of the works;
- 20) Provide full time lead construction supervision engineers for each of the construction contracts;
- 21) Review, verify the accuracy, respond, and approve all necessary shop drawings submitted by the construction contractors;
- 22) Review, approve and monitor the Quality Control Plan submitted by the Construction Contractors;
- 23) Review and comment on or recommend approval of construction contractors proposed change (variation) orders to FOMILENIO. Prior to propose to FOMILENIO, CPM shall discuss these matters with UIPC in relation to technical issues;
- 24) Propose change orders for the approval by FOMILENIO; this shall also include the cost and time impact of such proposed changes, if any. CPM shall also be required to submit the various alternatives with cost benefit analysis and effect on time for the particular section on construction and for the project as a whole for facilitating the decision by FOMILENIO. Prior to propose to FOMILENIO, CPM shall discuss these matters with UIPC in relation to technical issues;
- 25) Review and approve reports submitted by construction contractors;

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- 26) Review, approve and monitor the Safety Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Safety Plan;
- 27) Provide photographs of construction documenting monthly progress and potential trouble areas;
- 28) Review and certify monthly payment certificates of construction contractors;
- 29) Analyze and make recommendations regarding claims submitted by construction contractors;
- 30) Attend claims meetings between FOMILENIO and construction contractors;
- 31) Communicate with businesses and communities affected by any of the works undertaken under the Project to keep them aware of the construction process and schedule;
- 32) Review (verify accuracy of) the as-built drawings prepared by construction contractors and compiling complete sets of these drawings for FOMILENIO on a monthly basis;
- 33) Perform pre-final and final inspections of projects sites, as well as prepare, as and if applicable, detailed punch lists and verify that all punch list items are corrected prior to recommendation of FOMILENIO acceptance of the completion of the works and issuance of the Taking Over Certificate;
- 34) Prepare a Final Report for each one of the road projects, including recommendation to FOMILENIO for Final Acceptance of all the works included in the contract documents and amendments, with a quality certification, stating that IRIs or any other evaluation parameters have been accomplished;
- 35) Maintain orderly working files and a comprehensive, computerized log for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and monthly progress reports, contract documents including amendments, notices to proceed, change orders and modifications, all in a system which is comparable with software used by FOMILENIO, which will provide deliverable inventory, scheduled dates and actual status. During the course of the work, the CPM shall maintain it in good order and in a reference library format in office space in San Salvador for use by FOMILENIO staff. From time to time, FOMILENIO may request the CPM to show documents to interested parties, approved by FOMILENIO. Documents of a sensitive nature should be stored separately in the reference library. Prior to completion of the period of work, the CPM shall pack and deliver to FOMILENIO the entire contents of the Project Library in good order and properly indexed and marked. In addition, the CPM shall provide FOMILENIO with all electronic files of any and all project documents stored in a media acceptable to FOMILENIO including a comprehensive, well-organized electronic index of all those documents. The copyright of all Project materials will remain with FOMILENIO;
- 36) Answer, together with the construction contractors if necessary, to any comment on the performance of the works issued by FOMILENIO;
- 37) Perform all other construction supervision and project administration tasks as specified in the contracts between FOMILENIO and construction contractors;



- 38) Support or participate in third party environmental audits, as requested by FOMILENIO;
- 39) Review and verify that delivered materials meet specifications and criteria as described in the Technical Specifications and those that are required to meet the desired performance of the project. The CPM shall perform necessary QA tests, in the field and in a laboratory as required, to ensure compliance of delivered materials to the specified criteria. The CPM shall briefly describe its QA testing plan for expected delivered materials in its technical proposal;
- 40) Conduct weekly meetings with the Contractors to review current work program and daily activities. The CPM is expected to compile and report minutes from the meetings as part of scheduled deliverable reports;
- 41) For every construction project, the CPM will facilitate periodic meetings between FOMILENIO, UIPC and the Contractor project management team to provide high-level status reports and discuss problems, delays, potential change orders, and other pertinent contractual impacts; and
- 42) Perform other duties as directed by the FOMILENIO.

8.3.2 Deliverables

The CPM shall provide as part of its services the following deliverables. These documents shall be prepared in Spanish and submitted for approval of FOMILENIO. If there are significant technical issues in a particular report, the CPM shall submit it first for review by UIPC, followed by approval of FOMILENIO. Otherwise, it shall be submitted directly for FOMILENIO's approval with a copy to UIPC. Once FOMILENIO has issued its approval, the CPM shall proceed to prepare an English version of such documents and submit them to FOMILENIO.

- i. **Inception Report** - Within four weeks after the notification of the award of this contract, the CPM shall present to FOMILENIO in FOMILENIO's offices in San Salvador, a consolidated work plan outlining critical milestones, methodologies, staffing and a plan to ensure the quality of these services. The roles of the key personnel shall be clarified and the deliverables and their schedule reviewed. Contracting of required work outside of the CPM firm or those subcontractors identified in their proposal shall be minimal and any efforts so identified shall be presented to FOMILENIO for their consideration and approval. Coordination of work efforts, definition of needs from FOMILENIO and establishment of future roles and participation shall also be presented and discussed. It is anticipated that some exchange of existing information may occur before this meeting but the majority of information exchange will take place at this time. The Inception Report will include but not be limited to:
 - o Methodology
 - o Scoping
 - o A statement defining the proposed services, including:
 - methods and parameters;
 - any changes to the composition of the Consultant's team and specialists needed;

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- methods of consultation, through the Connectivity Project Coordinator, with MOPTVDU; other GoES authorities, local authorities, local population and other concerned parties;
 - methods of consultation with the FOMILENIO's Procurement Agent and the Fiscal Agent
 - Detailed program of work, showing time, duration and resources as well as the inter-relationship between activities.
 - List of applicable environmental laws, regulations, and standards
 - List of required environmental, construction, or other permits
 - List of documents to be kept in document library⁹
 - Proposed methodology for tracking compliance with MCC Environmental Guidelines, applicable GOES environmental laws and regulations, and site-specific EMPs and RAPs
 - Proposed schedule
 - Proposed flow of funds
 - Projected staffing
- ii. **Monthly Reports:** The CPM shall prepare and submit monthly progress reports to FOMILENIO. The Monthly Progress Reports shall address the status of work measured as "percent completion" against the schedule submitted by the construction contractors and approved by CPM at the onset of work. The detailed schedule shall be in MS-Project 2007, broken down, at a minimum, to a level of Bill of Quantity (BOQ) items, according to the respective contract. In certain cases FOMILENIO may request more specific breakdown of sub-components, as needed. These reports shall be sent to the Connectivity Project Coordinator. The Monthly Progress Reports shall contain an accurate, up to date, account of all work accomplishments, work scheduled and outstanding issues of all contractors. The reports shall also include description of problems and proposed solutions, details of any change order, possible delays and effect on the work schedule, time extensions, cost overruns, etc. These reports shall be submitted to FOMILENIO no later than the 10th day of the month following the end of the monthly period covered by each report. FOMILENIO will base the payment according to the negotiated payment schedule.
- iii. **Special Reports:** Other special reports that may be required from time to time as directed by the FOMILENIO for such issues as significant change requests, prompt remedial actions recommendations, accidents with injuries, etc.
- iv. **Annual Report:** summarizing all issues related to the works undertaken in the foregoing year.
- v. **Environmental compliance reports:** as outlined in above part Environmental and Social Impact Management.
- vi. **Final Report:** The Final Report shall include all documents and information collected during the period of services, and also a special section of "lessons learned" on the whole project.

⁹ Such list shall be supplied by FOMILENIO through its Connectivity Project Coordinator.

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- vii. All communications concerning the Connectivity Project between the various consultants, contractors, UIPC, and other interested or affected parties and the Connectivity Project Manager shall be copied to the FOMILENIO's Connectivity Project Coordinator with a note as to its importance and whether it is for information only or requires action. This applies to all correspondence, RFIs, shop drawing submittals, technical documents, minutes or any other hard copy or electronic materials.

9. CPM Staff

The CPM will be required to have a full range of experienced engineers and specialists, and to make these services available as required during Phase1,Phase2, and optional Phase-3 for the NTH and during Phase 1 and optional Phase 2 of the NCR. The key professional staff shall be highly experienced and must have worked under conditions similar to those in El Salvador.

The CPM must be capable of providing fully competent expertise in the following disciplines on an as needed basis (as proposed in the Technical Proposal). In preparing proposals, firms must provide CVs for positions indicated as **Key Personnel** as indicated in the relevant TECH forms of this RFP and are mandatory positions. These positions are considered as minimum Key Personnel and will be evaluated as part of the proposals for CPM services. In addition, the proposals shall include all necessary personnel to comply with all services required in these TOR including, professional, technical, administrative and supporting staff for each of the phases separately. The proposal shall consider to optimize the staff assignment in order to cover activities which could be done simultaneously in different phases.

Curriculum Vitae shall be submitted in the format given in Section 3-Format TECH 6. The CV must be signed by the individual expert proposed, confirming his availability for the assignment.

All professional staff shall demonstrate by the information submitted to comply with the following requirements:

General Qualification:

- To be a university graduate (B.S.C degree or equivalent). Higher scores will be awarded to Master Degree holders or above, and specific and relevant training.

Adequacy of the Specific Training and Experience for the Assignment:

- To have the following pertinent experience in the field of works proposed: for the Project Manager at least fifteen (15) years and ten (10) years for all other Key Personnel and the Non-Key Personnel..
- From the above general experience, minimum of five (5) years of experience in projects of similar type and size.

Experience in the Region and Language:

- Minimum of three (3) years in the Latin American region or similar environment in other developing countries.
 - All Key and Non- Key Professionals must be fluent in Spanish.
 - The Project Manager and the two Project Coordinators must be also fluent in English.
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FOMILENIO anticipates that the following professionals and skill sets will be required to perform the work, including full- and part-time, as appropriate. However, the Consultant should propose the following and/or additional skill sets as part of their methodology, as per their understanding of the assignment. The lists indicated below corresponds to the minimum professionals required, both for "Key Personnel" as "Non-Key Personnel" for each Phase.

Phase 1 – Project Management Services and Supervision of Design (NTH and/or NCR)

- Project Manager (preferable with a Professional Project Management certificate from the Project Management Institute or equivalent) who will act as a Chief of Party (COP)
- Project Coordinator, Road Specialist for NTH
- Project Coordinator, Road Specialist for NCR
- Bridge (structural) Engineer
- Pavement Engineer
- Quality Management System Expert
- Quality Assurance
- Lead Environmental and Social Specialist - RAP
- Social and Public Participation Expert
- Geotechnical/materials Engineer
- Hydrologic/Hydraulic Engineer
- Drainage Design Engineer
- Cost Estimator
- Construction Engineer
- Contract Specialist
- Surveyor
- Transport Economist

Phase 2 and Phase 3 (Optional) for the NTH and Phase 2 (Optional) for the NCR – Project Management Services and Construction Supervision

- Project Manager (preferable with a Professional Project Management certificate from the Project Management Institute or equivalent) who will act as a Chief of Party (COP)
- Project Coordinator, Road Specialist for NTH
- Project Coordinator, Road Specialist for NCR
- Bridge (Structural) Engineer
- Pavement Engineer
- Senior Resident Engineers (3)
- Quality Management System Expert
- Quality Assurance
- Lead Environmental and Social Specialist - RAP
- Social and Public Participation Expert
- Geotechnical/materials Engineer
- Hydrologic/Hydraulic Engineer
- Drainage Design Engineer
- Cost Estimator
- Construction Engineer
- Contract Specialist

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- Survey Engineer
- Management Information Systems Specialist

10. Form of Payment

As explained in Appendix H of these TOR, all services will be paid based on a *Firm-fixed price*.

For all phases, after the presentation and approval by FOMILENIO of the Inception Report, a payment equivalent to 5% of the cost for the services of this phase will be made to the CPM.

The other 90% of the cost of the services for each phase will be paid by monthly payments, prior approval of the Monthly Report by the FOMILENIO, corresponding to the period subject for payment. The CPM shall include and justify in its proposal the breakdown of the percentage for the monthly payments, accordingly to the level of efforts for the monthly period under consideration. This aspect shall be finalized during contract negotiation.

Final Payment to the CPM will be for an amount equivalent to 5% of the cost of the services for each phase. It will be effective after the approval by FOMILENIO of the Final Report for all services of the CPM and previous presentation of the *Guarantee of Good Supervision*. If after a sixty-day period (60 days), of presentation the Final Report by the CPM, FOMILENIO has not expressed any objection to the report, such Final Report will be considered as approved. (See Data Sheet for information about it).

In any case, prior to receive the final payment, the CPM shall submit to FOMILENIO all documents and information collected during the period of services and provided a sworn declaration that there is no any pending economic claim related to the contract. The documents shall be delivered to FOMILENIO in both hard copies and electronic media acceptable to FOMILENIO and shall include detailed, well organized indexes and tables of contents.

If by requirement of the construction contractors, it is necessary for CPM staff to work overtime, the payments for such overtime will be borne by the construction contractor. The conditions and procedures for this payment will be establish in the bidding documents for the construction contractors.

11. Provisions by CPM

The CPM shall provide all necessary resources for rendering the services required in this TOR, including personnel, equipment, transportation, offices, communications, and any other necessary service, as part of his proposal.

Only for the services to be provided in Phase-2 (for NTH and NCR) and optional Phase-3 (only for NTH), CPM shall consider in its proposal that the office space, office equipment and furniture (including services as telephone, electricity, internet, water, etc), vehicles and laboratory space and equipment (for quality assurance during the construction) will be provided by the construction contractors as part of the construction contracts.

Gary G

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