

MINIMUM PRIVATE CONTRACTOR

Submission Requirements

INTRODUCTION

The intent of this document is to provide private contractors with a guide as to what is expected as the minimum submission requirements for the installation of electrical infrastructure. It is very important that the instructions given and the requirements stated are followed and met in your submission. These guidelines have been developed to aid the efficient processing of your request, failure to do so will result in your submission being delayed at best and possibly rejected. The corporation expects that the contractor will share with the developer all information submitted to the corporation and all responses received. Should you have any questions or require any clarification with respect to these guidelines these should be addressed to the Manager Distribution Planning.

Submission Format

An initial design submission must be made in hard copy for review and comment. Once adjustments have been made, three copies of final design documents can be submitted. An additional copy can be provided if the contractor wishes to retain a stamped "approved in principle copy" for their records. As part of these submissions the written technical report must be submitted on 8.5" x 14" paper and physically attached in a suitable folder. Diagrams should be submitted on the following sizes of paper, 8.5"x14", 11"x17", 22"x34". All final design drawings and report documents must be submitted in digital format on CD in accordance with other requirements given below.

On completion of the installation, the contractor is required to provide a complete set of as built drawings (hard copy and electronic) for the installation. Even if the installation has passed site inspection it will not be energized until these drawings are provided. Should there be any errors found in the submitted drawings (even after the installation has been energized) the contractor will be required to submit the corrected drawings. Should the contractor fail to submit as-built drawings future design submissions will **not** be accepted and the effected developer advised that the contractor has outstanding submissions for BEC. Additionally, the contractor risks having their infrastructure installation approval rating suspended until the required information is provided.

Site Location Plan

As part of the design drawings, a scale site location plan must be produced that relates the project site to, at a minimum, the two nearest major roads.

Subdivision Approval in Principle

A copy of the Approval in Principle document from the Ministry of Works Subdivision Section **MUST** be included.

Approval to Use Private Contractor A signed copy of the BEC approval to use a private contractor letter issued to the developer **MUST** be included. If it is intended to use any sub-contractors in the execution of the work the potential sub-contractors should be identified in the report along with the scope of the work they will be responsible. Additionally, a signed copy of the agreement with the sub-contractor and primary contractor must be included with the submission.. This is to insure BEC is aware of who is authorized to be onsite during the execution of the project. It should be noted that all personnel on the project site should have some form of company identification.

Developer Contractor Contractual Agreement

A copy of the agreement between the developer and contractor **MUST** be included. This is required so that the corporation can be aware of the scope of the work the contractor is expected to do and point out any gaps or shortfalls in this scope.

Scope of Work Description

This should be a comprehensive written description of the work that the contractor has been contracted by

the developer to carry out.

Technical Report

This should contain the technical description of the project. This must include but is not limited to:- A description of the sequence in which work will be performed. It must indicate points in this sequence where BEC inspections will be requested.

Load Calculations

At a minimum, calculations for total connected project KVA, total diversified project load, transformer load schedule, service cable voltage drop at designed load level. In each case the items for which the calculations are being given must be clearly identified on the design drawings.

Material & Quantity Listing

This listing should indicate the item description, quantities and unit cost of those elements to be used on the project. These amounts must be consistent with the design. (All information provided will be kept confidential).

In the event the developer plans to take advantage of the preferential duty rate on items that are to become part of the corporation's infrastructure. A written request must be submitted IN ADVANCE (preferably with the design submission) of the items arriving in The Bahamas. This request MUST include dated copies of the order invoices which detail the items and their quantities. This request should only be for major components of the electrical installation that are exclusively used for electrical utility infrastructure. Items such as rope, glue cement, wood, etc **should not be included** as approval for them will not be given. It must be noted that only items and quantities deemed necessary for the infrastructure installation in the development will be approved. Request for the preferred duty rate submitted after the items have arrived or without the indicated supporting documents **will be rejected**.

Primary Material Specification Documentation

Specifications for proposed major items should be provided. These items include but are not limited to transformers, cables, streetlights, joints, elbows, poles, cutouts, arrestors, insulators. Should there be a desire to introduce any material that is not standard use on BEC's system should be accompanied with a specific request to use said item along with specifications on the item prior to the items being acquired. BEC reserves the right to reject the use of any such item without explanation.

Total Cost Information

In this section, the contractor MUST indicate the cost quoted to the developer, this cost must be consistent and reasonable for the work to be done. BEC reserves the right to base fees upon its (BEC's) estimation of the cost to do the work, if the contractor's costs do not seem reasonable. The contractor should advise the developer of this condition.

Electrical Design Plan

This must be a scale (preferably geo referenced) geographic representation of the installation. It must show the HV & LV infrastructure proposed for the project. It must be drawn (within reason) to reflect the physical installation to be carried out on the site. It must show all major electrical components, including but not limited to, poles, conductors, cables, transformers, earths, cutouts, isolators, switchgear, proposed normally open points, lighting arrestors. Each point location on the drawing should be given a unique number (it is not required to be posted on site however). The contractor is also required to advise the developer that the placement of the infrastructure is integral to the installation and cannot be relocated. The developer should also be advised that this must be passed onto the property purchasers.

Ducting Route Plan

A separate duct route plan drawing must be included in the submission. This should include plans for the HV and LV duct work.

Lighting Design Plan

A separate street lighting design plan drawing must be included in the submission.

In the case of gated developments and/or those designed to use non standard lighting elements, provision must be shown for the metering of the lighting. A statement must also be included in the contractors report and on the street lighting drawings that the developer is aware that the operation and maintenance of this lighting will remain their responsibility.

Design Schematic

An electrical schematic of the design must be provided. It should show all the key electrical elements, including but not limited to, fuses, proposed normally open points, switchgear, and transformers

Plinth Design Blueprints

Prints of all plinths, pull boxes, substation buildings, duct arrangements, key trench cross sections, etc, must be provided as part of the submission package and also be included in electronic format on the final design CD.

Deviations

The contractor must request in writing any deviations for the initial “approved in principle” design submission. This written request must be accompanied with suitable technical drawings and calculations (where necessary). Failure to do this will most likely result in the installation failing initial inspection until a deviation request is submitted and approved of the installation is brought in line with the initial approved design.

Please note these requirements are subject to revisions and additions. Additionally, it must be noted that the contractor is required to comply with any additional request made of them by BEC. BEC will not be held responsible for any additional costs associated with meeting these requirements.

As such it is recommended that contractors separate the process into design and construction components. This would allow the contractor to contract for the two components independently. Also this would make it possible for the contractor to get the design approved in principle prior to committing to an installation contract.

Burlington Strachan
Manager Distribution Planning