

Construction Project Management Handbook

To provide guidelines to PRT Civil Engineers undertaking construction projects in Afghanistan

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TABLE OF CONTENT:

| CHAPTER 0 | INTRODUCTION | 3 |
|------------|------------------------------------|----|
| CHAPTER 1 | BIDDING PROCESS | 4 |
| CHAPTER 2 | CONTRACT FOR WORK | 6 |
| CHAPTER 3 | CONSTRUCTION DESIGN | 7 |
| CHAPTER 4 | NOTICE TO PROCEED | 8 |
| CHAPTER 5 | PROGRESS REPORT | 9 |
| CHAPTER 6 | PROGRESS PHOTOGRAPHS | 10 |
| CHAPTER 7 | SITE VISITS | 11 |
| CHAPTER 8 | REGULAR MEETINGS | 12 |
| CHAPTER 9 | LOCAL GOVERNMENTAL MONITORING TEAM | 13 |
| CHAPTER 10 | PROJECT CLOSEOUT | 14 |



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CHAPTER 0 INTRODUCTION

This document was compiled based on first hand experience with Afghan construction companies and reflects specific conditions in Logar Province, Afghanistan. It briefly introduces the main aspects, issues and difficulties of managing construction projects in Logar. In order to make the handbook comprehensive, generally known facts about construction processes are included. This document is a recommendation only and is not a regulation of any kind. It is written solely in accordance with the experience of the Civil Engineers of the Czech PRT from March 2008 to March 2010.

Specific conditions of work for the Czech PRT are:

- Our commitment to employ local companies and to use local sources of material
- The impossibility of day to day presence at the site
- A fortnightly site visit planning cycle
- The imited time for inspection of site due to security
- A large number of small scale projects (40,000 300 000 USD) managed by one Civil Engineer
- The necessity to obey Act No. 137/2006 Coll. on Public Contracts

Please keep in mind, that Afghan contractors do projects in order to make a profit, so they should be approached during project implementation as any other contractor anywhere in the world.



CHAPTER 1 BIDDING PROCESS

Prepare bidding documents with as much descriptive and precise detail as possible to avoid extra cost during the course of construction.

Bidding Documents should contain:

<u>Instruction to Bidders</u> – This document must describe the whole bidding process and the responsibilities of Bidders, eligibility and qualification of Bidders, documents comprising the bid, language of bid, bid price, currency, format and signing of Bid, deadline and place for submission of bid, bid opening and evaluation, award criteria, right to cancel the bidding process, period of bid validity, etc.

A sample of the "Bid" structure is attached (attachment nr. 1).

<u>General Conditions for Works</u> - should describe all responsibilities, duties and activities of the Bidder during the course of construction which can affect Bid Price. These activities are, for example: the obligations of Contractor in respect to third parties, general obligations including security of site, safety of work, protection etc, site administration, provision of general site facilities, temporary works, services, management of the works, financial matters, quality control, etc.

Technical Specifications – should describe the quality and standards of material used.

<u>Scope of Work</u> - should describe the whole construction time structure, divided into a logical sequences, if necessary. Dimensions, orientation, location of individual buildings and structures, fixing, required methods of installation, and other specific aspects shall be specified. Consider all aspects of the construction project and describe these aspects in the Scope of Work. If you cannot do so, transfer this responsibility to the Bidder and state in the Bid Documentation that the Bidder assumes full monetary responsibility for any and all additional work, materials, or equipment required to complete the project that was not included in the statement of work and contractor's offer.

<u>Drawings, design, sketches, etc.</u> – Sometimes there is no time for detailed plans and drawings. In that case, at least prepare sketches to specify basic volume, spatial zoning, transportation ways, junctions, etc.

The following statement is recommended to be included in scopes of works (as it also gives the responsibility for the design to the bidder): "The Bidder is considered experienced enough to design and build the facility according to relevant regulations and has full monetary responsibility for the design".

<u>Bill of Quantities</u> – Sometimes it is not possible to elaborate an accurate Bill of Quantities. Therefore you must transfer this responsibility to the Bidder by stating that the quantities of work and materials set forth in the Bill of Quantities are estimates only and are not to be considered as limiting nor as extending the amount of work to be done or the material to be supplied by the Contractor. Also the prices and rates



entered by the Contractor in the Bill of Quantities shall be deemed to cover the complete and finished work as required by the Contract Documents, including, *inter alia*, all costs and expenses which may be required in and for the construction and maintenance of the Works, together with all risks, liabilities, contingencies, insurance and obligations imposed or implied by the Contract. Bidder will be responsible for all costs related to site conditions that a reasonable site inspection would have revealed.

It is always better to know a reasonable, estimated contract price before you announce the project. If you have the capacity and detailed documentation, take the time and put together a Bill of Quantities, price each item with unit prices you know from previous projects, and announce it in Instruction to Bidders. Bidder will thereby be made aware of prices you are willing to accept and will not submit a bid with unreasonably high prices. It is one of the few cost management tools you have, so try to use it.

- Prepare all Bid Documentation with as much descriptive detail as you can. If you are not able to
 specify all the items, it is advisable to transfer full monetary responsibility of possible extra costs
 to the Bidder
- If you can calculate precisely estimated project prices, do so in Instruction to Bidders



CHAPTER 2 CONTRACT FOR WORK

For this chapter, Client means the Czech PRT

Send the Contract for Work to the Contractor in advance in .pdf format, so no details can be altered, to allow him to become familiar with it. In case of comments from his side, he should contact the Client by email. It is an error to ask or allow the Contractor to print it out and sign it. Client must always print out all copies to ensure Contractor does not make any changes to it. Client and Contractor must, TOGETHER, read the Contract for work, to make sure Contractor understands Contract for Work prior to asking him to sign.

After the Contract for Work is signed, Client shall introduce Contractor and his project to the Logar Provincial Department of Economy, in Pul-E Alam, which represents the Ministry of Economy at the provincial level, through an approved written form. The Afghan Government will then have complete information about the project and can oversee the contractor's duty to pay taxes. (Remark: By this stage, the government will be aware that the Czech PRT will realize this project, since all projects are discussed and proposed by the relevant ministerial departments, the department of economy, the Head of the Provincial Council. The majority of projects pass through the Provincial Development Committee (PDC) decision. Informing the Department of Economy at this time means that we are announcing the name of the contractor to the government).

Such information should minimize the possibility of negative governmental interventions and possible work suspensions for lack of information during the course of the work. Sometimes the reason for suspension by the government is only to be more involved and to try to have more control of financial matters in the execution of the Contract. The Czech PRT has always sent very clear messages on this subject.

Important to do:

- Introduce to Contractor all of his rights, responsibilities and duties prior to signature of the contract.
- Ensure the Department of Economy knows all of the necessary information about the hired Contractor and the Project prior to the Project Commencement Date.
- Make all involved parties, Contractor, Government, etc., aware of the possibility of project
 cancellation if there is any hint of corruption or bribery, as these practices are not acceptable to
 the Czech PRT.

6



CHAPTER 3 CONSTRUCTION DESIGN

After signing the Contract for Work, the Contractor shall be responsible for the provision of drawings, descriptive schedules, details, or other like documents, any necessary calculations and all other information (all are referred to as drawings, etc., herein). It is strongly recommended that the contractor visit and inspect the site prior to the final version of the drawings and consults it with the final recipient to mitigate any misunderstandings during implementation.

All such drawings, etc., shall be elaborated according to the Scope of Work, Technical Specification and Sketches which form Bid Documentation.

The Contractor shall submit such drawings, etc., for review and comments to the Client at agreed intervals. The Czech PRT recommends 5, 8, 11, and 14 calendar days from the date of signing the Contract for Work.

- Make sure Contractor elaborates construction design according to Bid Documentation.
- Do not wait for deadlines or agreed milestones. Keep calling and asking Contractor if he is working on the construction design. Do not just give the assignment, follow the instructions you gave to the contractor.



CHAPTER 4 NOTICE TO PROCEED

After final approval of drawings, etc., the Client shall instruct Contractor by Notice to Proceed Letter to commence the Works. The Notice to Proceed Letter shall assign the Commencement Date. Issue this letter no later than one week prior to the intended Commencement Date to give Contractor reasonable time to mobilize the workforce and material to the site.

Client shall make sure that Contractor commences work on the Commencement Date.

- Do not issue Notice to Proceed and do not pay the Contractor any installments of the Advance Payment prior to final approval of the construction design.
- Make sure Contractor is aware of the Commencement Date and commences work accordingly. Keep asking him if he is ready to follow your instructions. Just give him a call.



CHAPTER 5 PROGRESS REPORT

The Contractor shall monitor his own performance against the Contract Time Schedule and prepare comprehensive reports for the Client at agreed intervals. It is recommended to ask Contractor to send reports on a weekly basis.

The Progress Report shall include:

- 1. A statement of overall progress compared to that previously reported.
- 2. Actual and potential sources of delay shall be highlighted, together with proposed corrective action and measures to mitigate the impact of delay.
- 3. Records of any incidents that may result in an insurance claim (in regards to Health & Safety requirements), or affect possible tenants
- 4. Current technical queries.
- 5. Contract date for completion and sectional/phased completion dates, together with any extension of time agreed or being claimed, including reasons.
- 6. Any difficulties or delays in the execution of Subcontracts.
- 7. Weather reports for the period since the previous progress report and weather forecasts for the period following.

Important to do:

- Remind Contractor what progress he is supposed to report each week and take immediate actions
 if he does not do so. Mitigate the impact of delays by forcing Contractor to take corrective
 measures if he is beyond the Time Schedule or in your judgement is in danger of falling behind
 the time schedule.
- Stay informed of whether Contractor is ready to start further activities on the Time Schedule. Keep asking him.
- Pay attention to periodic reports and their accuracy and compare them with the Contract Time Schedule and Bill of Quantities. Do not automatically accept anything that the Contractor sends. Take time to go through it
- Give him feedback on each report.

9



CHAPTER 6 PROGRESS PHOTOGRAPHS

The Contractor shall take progress photographs at agreed intervals, as shown in the Scope of Work. All photographs will be sent to the Client either by CD or email. It is recommended to require the Contractor to send photographs on a weekly basis as part of the Progress Report.

The Contractor shall be required to take progress photographs of the structure prior to covering it by another structure. If any structure or work executed is covered up without an inspection, it must, if required by the Client, be uncovered for approval at the Contractor's expense, and this must be included in the Contract.

Content of each photograph shall be agreed with the Client.

Important points:

- Remind Contractor what photographs he is supposed to send each week and take immediate actions if he does not do so.
- Pay attention to Time Schedule and Progress Reports and be aware of what structure is going to be covered by another structure and instruct the Contractor to take photographs prior covering.
- Give him feedback on each report.



CHAPTER 7 SITE VISITS

Carefully consider and plan each site visit. Each mission requires significant assets, both human and technical, as well as risks. Keep this in mind and prepare carefully for each site visit.

Do not inform Contractor about planned site visits. Plan site visits at irregular intervals.

Upon return from a mission, provide written comments to the contractor and request feedback from him.

- Be responsible and prepare adequately for each site visit.
- List all your duties and do not miss any when you are there. It may take two or more weeks before you can come back the next time.
- Report all findings to Contractor by e-mail and observe his corrective actions.



CHAPTER 8 REGULAR MEETINGS

Establishing regular meetings with the Contractor is a must in case he abandons the Work, does not send Reports or otherwise demonstrates a lack of intention to cooperate with the Client or follow the Contract.

(This refers to smaller projects. Larger projects or those with frequent issues generally require setting up regular meetings anyway)

- Always send agenda to Contractor prior a meeting to save time and speed up the process.
- Always summarize what you agreed and send it via email to Contractor
- Follow up on the instructions



CHAPTER 9 LOCAL GOVERNMENTAL MONITORING TEAM

The Monitoring team (MT) is a group of government representatives from various departments, who perform Quality Assessment /Quality Control. Unfortunately, in the case of Logar, some of them do not have technical education or training. This team comes on site and makes log entries into the Construction Site Log Book. It is not standard that MT reports its comments to Czech PRT directly (ALTHOUGH IT SHOULD BE!!). It is important to cooperate with the MT to avoid problems during the handover of project to the local government.

- Inform the MT about the project and its progress
- Encourage MT to visit site and REQUIRE THEM TO give YOU feedback on the quality of work, BASED ON THE CONTRACTED SCOPE OF WORK, etc.
- Try to meet the MT on a regular basis
- When you are on site check and copy all log entries from the MT in Construction Site Log Book
- Make sure the Construction Site Log Book has not be altered, such as pages removed.



CHAPTER 10 PROJECT CLOSEOUT

The Contractor shall inform the Client by written notice that the project is complete and ready for Takeover, not later than 7 days before the Work will, in the Contractor's opinion, be completed. If the Work is divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

Final inspection of the Work, prior to the award of completion, shall always be attended by the Client.

The Contractor shall make good all defects and unfinished work in a period agreed in advance ("Punch List"). Should the Contractor not make good all defects and unfinished work, the Client has to reserve the right to arrange for such remedial work to take place and to offset such costs against monies due to the Contractor.

We strictly discourage paying the Contractor the Final Payment Installment when the Work is not free of all defects and unfinished work and the Work has not passed inspection by you.

We strictly discourage paying the Contractor the Final Payment Installment if the local government has comments on the project quality and refuses to sign the Deed of Donation, unless such comments or refusals are based on facts which contradict the Contract or normally accepted standards of work, whichever is more stringent.

- Inform the government about project closeout and ask them to attend and assist with the final inspection.
- Always attend the final inspection to make sure there are no defects or unfinished work.
- Hire another company if the Contractor does not want to make good all defects and unfinished work. Do not wait. Hire a new company immediately. Do not waste your time in such a case.