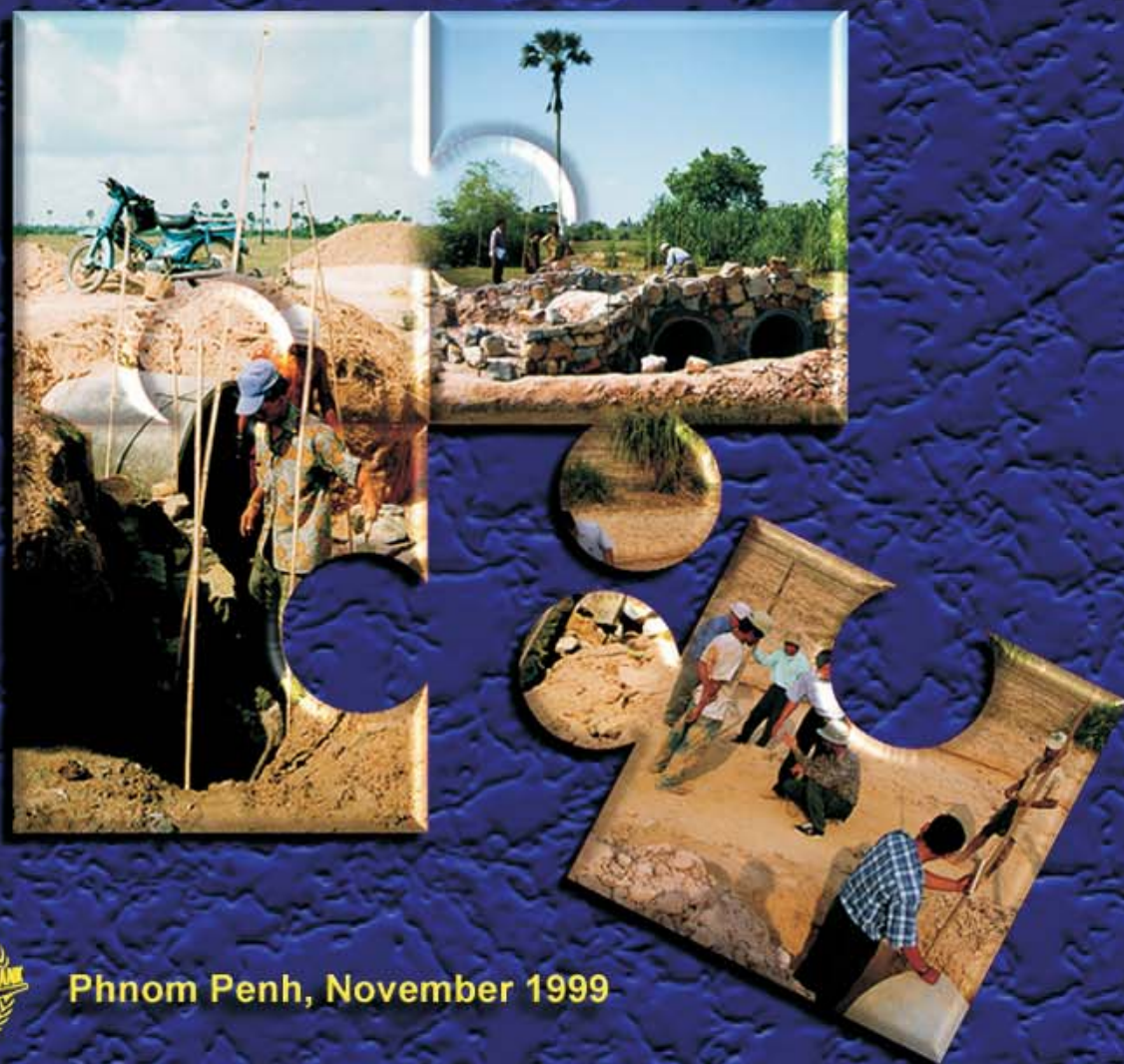


Kingdom of Cambodia Ministry of Rural Development



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Contracts Management Culvert Construction Works

prepared by
Bjørn Johannessen



I.T. Transport Ltd
Consultants in Transport
for Rural Development

Rural Infrastructure Improvement Project
ADB Loan No. 1385 CAM (SF)

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Introduction

The contracts documents and the management procedures described in these guidelines, have been prepared for the purpose of engaging local contractors for the rehabilitation and new construction of concrete culvert drains. They can be applied to new construction or rehabilitation of existing roads as well as to periodic road maintenance works.

This contract management system has been developed for the Rural Infrastructure Improvement Project bearing in mind the specific requirements of this Project and the administrative procedures and regulations under which this Project operate (such as the procurement regulations of MoEF and ADB). Including these concerns, it has still been possible to design a system which follows standard practices and principles for contracting and which thereby allows the system to be applied for works in other similar projects where rural road construction and rehabilitation works are carried out.

The contract documents and procedures are based on existing materials in the country as well as applying guidelines recommended by the Asian Development Bank when using local contractors. Also, due acknowledgement is hereby given to the ILO labour-based road works programme for materials and research which have been incorporated in the RIIP contracts management system.

The general documents follow a standard which is applied to all civil works in the RIIP (i.e. bridges, gravel supply, buildings, wells, irrigation structures, etc.). The technical part of the contract documents have been prepared in such a way that the choice of labour-based appropriate technology is secured as the mode of implementation. As part of this consideration, the technical specifications have been carefully designed to conform with the Technical Manual which was prepared for the Project.

Contracts preparation, supervision and payment procedures are based on a system where authority is decentralised to the provincial level, thus obtaining a more responsive and efficient system, allowing for the Client to perform its duties effectively in terms of supervising works dispersed over a large geographical area.

This manual is divided into three parts. The first section describes the system as a whole and how the individual activities are linked together into a process. The second section describes in detail how each of the contract documents are used, and finally the last section contains samples of all the documents described in earlier sections.

1.1 Contract Documents

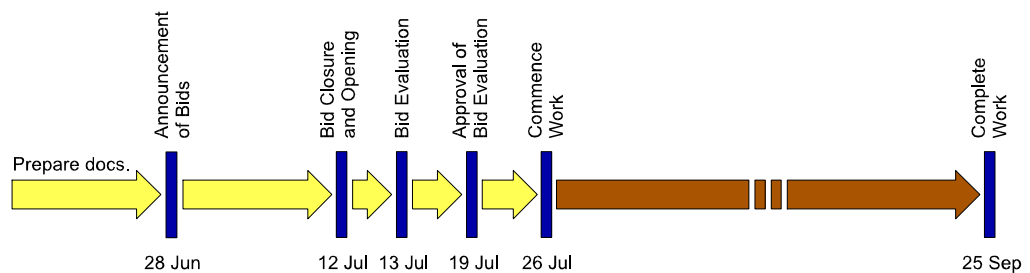
Contract Documents for culvert works comprise of:

- | | |
|-----------------------|---|
| Bidding: | <ul style="list-style-type: none"> ○ Invitation to Bids ○ Work Specifications ○ Technical Drawings ○ Activity Schedule ○ General Conditions of Contract ○ Specific Conditions ○ Appendix to Conditions of Contract - Contract Data ○ Form of Bid ○ Form of Agreement |
| Evaluation: | <ul style="list-style-type: none"> ○ Evaluation of Bids |
| Payment Certificates: | <ul style="list-style-type: none"> ○ Interim Payment Certificate, ○ Certificate of Practical Completion, ○ Final Certificate of Completion |

Section 2 describes the exact use of these documents, how they are prepared, by whom, approval and filing procedures, etc. Samples of all the above mentioned documents are found in Section 3.

As a general rule, bidding documents for specific contracts are prepared by the Assistant Engineers and should be controlled and verified by the Provincial Engineer and the Project Implementation Consultant.

It is important that a time schedule is fixed and agreed with the Provincial Project Manager before commencing on contracts preparation. Important dates include date of announcement, bid closure, commencement and completion of works.



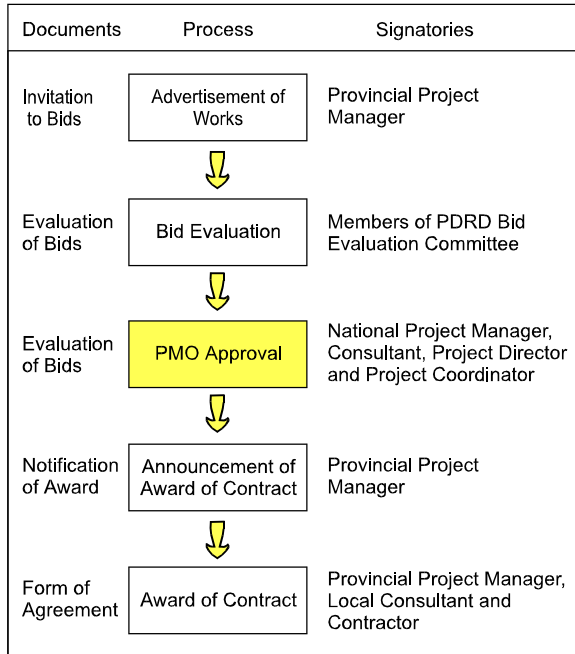
Remember that the above dates need to conform with the overall work programme in the province, and in particular with the other contracted works planned for this specific road project where the culvert works will take place (i.e. earthworks, bridges, laterite supply, etc.). It is the responsibility of the Provincial Engineer to coordinate the various components of the contracts preparation process with the overall physical works programme.

It is preferred that culvert works are completed before embankment works, camber formation and gravelling works commence, thus leaving the entire road line accessible for the ensuing work activities.

1.2 The Bidding Process



Il works contracts follow a set of procedures which clearly defines the role and responsibilities of the Project Implementation Units as well as the Project Management Office.



Contracts for culvert works are prepared by the PIUs, including announcement of bids, bid opening, bid evaluation, award of contract, inspection and supervision of works, certification and payment of works and finally issue of final completion certificates.

The Project Management Office at central headquarters is responsible for the approval of the budget of each of the road projects, approving the Engineer's Estimate and final approval of the findings of the bid evaluation carried out by the PIUs.

The bidding process is regulated by the Project Administration Manual issued by the Ministry of Economy and Finance. Depending on the size of the contracts to be issued, MoEF prescribes different methods for the bidding process:

Domestic Canvassing

For civil works contracts with a total value less than US\$ 50,000:-, the standard procedures for domestic canvassing are applied. This basically implies that a minimum of three quotes are obtained from three separate qualified companies. When culvert works are packaged into separate contracts, the total value of these contracts are in most cases below the maximum amount where domestic canvassing can be applied.

Although it is not required to advertise bids for contracts with a value less than US\$ 50,000:-, it may, at certain intervals during the Project, prove a useful method of attracting more contractors to work with the Project.

Pre-qualification

It is important that the PIU ensures that bids are obtained from firms that are qualified to carry out the works as envisaged in the bidding documents. Ensuring that competitive bids are obtained from qualified bidders is a fundamental measure in attempting to assure that works are carried out in time and to high quality standards once a contract has been awarded.

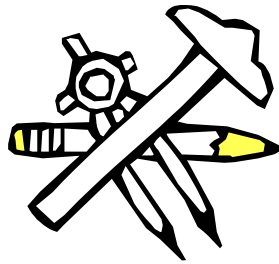
The bidders are therefore required to provide details of the site supervisory staff from site supervisors, technicians to engineers. Furthermore, if this staff chooses to leave the company during the execution of a contract, the contractor shall be obliged to recruit new professionals with similar work experience and training.

Expression of Interest

Therefore, all contractors who wish to work for the RIIP should fill out an Expression of Interest before they participate in their first bidding exercise for a contract funded by the Project. The Expression of Interest is a questionnaire which, when duly filled out by a construction firm, provides information regarding the qualifications, past experience, size and capacity of the contractor.

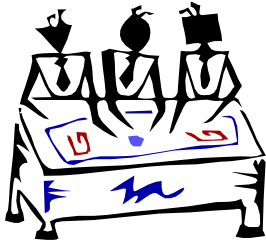
Contractors can obtain this form from the PMO or the PIUs at any time. In order to pre-qualify for any bidding exercise, the contractors need to fill out this form and submit it to the Project at the latest together with their first bid. This information is only requested once, which implies that contractors which have already submitted an Expression of Interest, do not need to submit this form again.

The purpose of the Expression of Interest, is merely to enable the Project to properly assess the capacity and experience of a firm to carry out works contracts. The information submitted by the contractors should be treated as confidential and not passed on to any other private enterprises or individuals.



1.3 Bid Evaluation

Bid evaluation should be carried out immediately after the bid opening. It is important to bear in mind that the bid evaluation is a distinct exercise which is separate from the bid opening exercise. While the bid opening session is open for the public to participate in, and in particular the firms from which bids have been received, the bid evaluation is an internal management meeting in which all discussions are confidential. This implies that only the members of the PIU bid evaluation committee are present during this exercise and their final selection of most successful bidder should not be announced before a final approval of the evaluation has been obtained from the PMO.



Before the bid evaluation committee convenes its meeting, it is important that the Provincial Engineer carries out a series of preparatory activities. The most important duties before conducting the bid evaluation are (i) to prepare the Engineer's Estimate and (ii) to check the bids for any arithmetic errors in the calculation of the total bid values. In addition, there might be a demand for verifying the firms qualifications, whether they have the necessary capacity to carry out the works, their past performance, their staff availability, condition of equipment, etc. This information should be compiled and presented in a summary table to the bid evaluation committee when it convenes, thereby assisting its individual members in making the right assessment of the bidders and finally taking the correct decision in terms of the best bid.

Once the ratings of the bidders have been decided upon, the Bid Evaluation Form is prepared and submitted for final approval by PMO. The form should list the most successful bidder, the second best, the third best, etc. (if any). If for any reason the most successful bidder decides not to carry out the contract, the evaluation committee has already decided that the second best bidder will be awarded the contract.

It is important that only bids which are not rejected are entered into this form. This implies that any bid which is deemed too expensive or not qualified should not be recorded in the bid evaluation form.

Finally, it should be noted that the bid evaluation committee has the authority to reject any bid or all bids. If all bids are rejected, the PIU will need to rebid. In order to obtain more competitive prices during the second bidding round, it is useful to invite more firms to submit bids. Equally, the bid evaluation committee is not obliged to choose the lowest bid. The selection of the most successful bid should be based on several factors, bid price, past performance, staff qualifications, present capacity, etc.

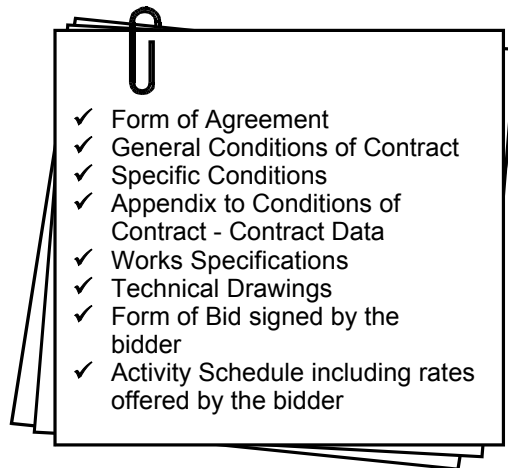
Of particular importance is the contractors current capacity and availability to carry out the works during the period envisaged in the physical work plan. If it is evident that a firm cannot carry out the works between the start and completion dates envisaged in the bidding documents, the bid should be given a lower rating or rejected.

1.4 Award of Contract

After final approval by PMO of the findings of the bid evaluation, the contract is awarded by the PIU to the most successful bidder. The PIU should notify the Contractor immediately after obtaining PMO approval of the evaluation, thereby allowing the Contractor to mobilise as soon as possible.

It is important to note that once the bid evaluation has been approved, the contractor is expected to mobilise immediately upon receiving the notification of award. In other words, the contractor is expected to commence works even before a contract agreement has been signed.

When issuing a contract agreement for culvert works, the following documents should be included:



The contract is prepared by the PIU. It is the responsibility of the Provincial Engineer to prepare the contract based on the above documents issued during the bidding process. When issuing the contract agreement, no changes should be made to the conditions of the contract. Furthermore, the contract should include the Activity Schedule and Form of Bid as submitted by the most successful bidder. Only arithmetic errors should be corrected in these two forms submitted by the bidder.

The contract agreement should be signed by the Provincial Project Manager, an authorised representative of the contractor and the PIC Field Engineer. When the contract has been signed by all parties, a full copy should be sent to the Project Management Office.

The contract agreement serves as supporting evidence for any payments processed under the contract. Therefore, the original copy should be kept in the PIU until the works as prescribed in the contract have been completed, also covering the defects liability period.

1.5 Contract Management

Within two weeks of Notification of Award, the Contractor is obliged to submit a works programme to the PIU covering the entire construction period.

These plans should be updated at least on a monthly basis for each site, thus allowing the PIU to incorporate these plans in the overall progress plans for the province and the road component as a whole.

The PIU will need to carefully coordinate the culvert works contracts with earthworks, delivery of laterite, construction of bridges and other structural works along the road alignment. In this respect, it is important that this planning starts already before the preparation of the individual contracts. The ideal situation would be to issue the culvert and bridge contracts first, thereby ensuring proper access along the entire length of the road when other work activities commence.

Equally, it is important that the division of works between the various contracts are clear. As an example, it must be made clear through the provision of work activities in the Activity Schedule and Bill of Quantities of other contracts, which Contractors have been assigned tasks such as constructing traffic and river diversions, back-filling of culvert pipes, etc.

The PIU should on a weekly basis arrange progress meetings with the contractors where implementation issues are discussed in detail. These meetings can be held at the site or at the PIU office. The PIU is responsible for calling the meetings and the contractors are obliged according to the Special Conditions of Contract to attend these meetings.

Written minutes should be maintained on all decisions made during the progress meetings with the contractors. In addition, all instructions issued to the contractors on site should be made in writing. This is best organised by requesting each contractor to carry a notebook in which all instructions are entered. These instructions should include the quantities agreed on which deviate from the original drawings in the contract, as well as instructions issued relating to improved methods of construction, quality, replacement of staff, changes in work programme, etc. During the next site visit of the Engineer, it is then important that the instructions of the previous site visit are carefully reviewed before new instructions are issued.



When carrying out inspection of culvert work sites, it is important that the Technician on site is properly instructed and authorised to direct and approve works. This way, mistakes and substandard quality works can be arrested and corrected at an early stage before it becomes a major economic burden for the contractor to remedy works that cannot be approved. An important approach to ensure good quality works is to ensure that the contractor uses proper setting out methods for the works - in particular for the stone masonry works.

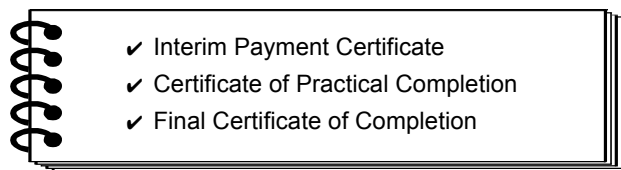
1.6 Payment Certificates

Any payment made to the contractor should be based on completed works which have been measured and approved by the Engineer and deemed compliant to the quality standards established by the project. Under no circumstances shall the contractor be paid for works which have not been completed or have been carried out to sub-standard quality.

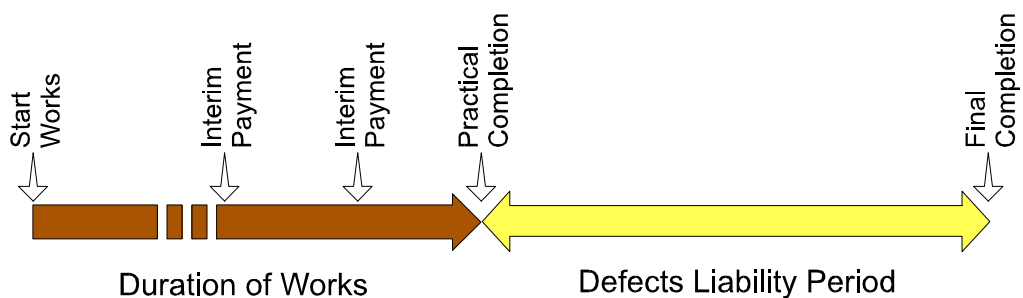
During the course of works implementation, deviations may occur from the Engineer's estimated quantities. *However, the payments should always be based on the actual measured completed quantities - not the amounts as listed in the Activity Schedule.*

Before the contractor carries out any works which deviates from the Activity Schedule and the Technical Drawings, the Contractor needs to obtain written approval for such works from the Engineer. Payment will not be approved for any additional works which have not received prior approval from the Engineer.

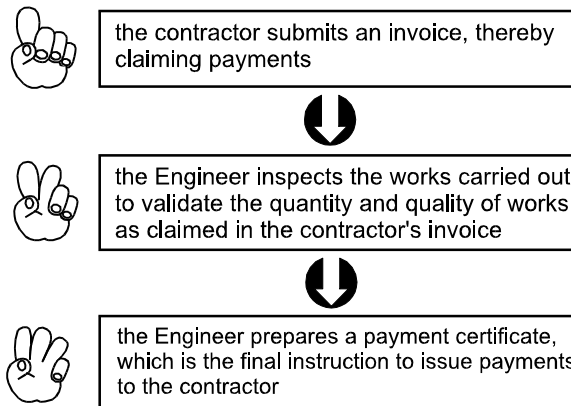
Completed culvert works are approved and recommended for payment by the issue of payment certificates. The following forms attempts to standardise procedures and ensure compliance to the Conditions of Contract as well as prescribed accounting practices:



There are three different types of payment certificates issued during the course of a contract. The Interim Payment Certificate is used for partial payments during the course of works implementation. The number of interim payment certificates to be issued depends on the duration of the contract and the payment schedule as agreed to in the Appendix to Conditions of Contract. When all works have been completed, the final remaining payment will be processed with the Certificate of Practical Completion. This will also be the start of the Defects Liability Period. At the end of the Defects Liability Period and after the contractor has completed any remedial works, the Final Certificate of Completion is issued.



Payment of works completed under a civil works contract is carried out according to the following three basic steps:



When the contractor requests payments for completed works, it is imperative that the Engineer visits the site and measures the works carried out since the previous payment.



Please note that (i) it is the responsibility of the Engineer to ensure that payments are made only for works which have been completed and (ii) that completed works are inspected to verify that the works have been completed to the technical standards and quality prescribed in the contract.

Remember that retention monies are always deducted from the amount due for payment to the contractor according to the amount of works completed since the previous payment. Retention on interim payments should *not* be calculated from the total contract value.



Actual payments to the Contractor should be issued by cheque in favour of the contracting firm or its authorised representative or by direct bank transfer. Under no circumstances should the contractor be paid in cash.

Interim Payment Certificate for Culvert Works

Once works have been measured and found in good order, the total amount for payment is entered into the Interim Payment Certificate. Make sure that the payment conforms to the Payment Schedule specified in the Appendix to Conditions of Contract.

Retention money is deducted from the total amount due in the Interim Payment Certificate. For culvert works, it is recommended that 15 percent retention is applied (Ref. Appendix to Conditions of Contract). This percentage is deducted from the invoiced amount (not the total contract value). By subtracting the deductions from the invoice amount, the final amount due for payment is calculated. This same amount is then used to record the expenditure in the PIU accounts. Please note that at this stage the retention money should not be recorded as an expenditure. It should only be recorded as a liability to the contract.



After the payment certificate has been approved and signed by the Provincial Engineer, the Consultant and the Provincial Project Manager, payments can be processed to the contractor.

Certificate of Practical Completion of Culvert Works

The Certificate of Practical Completion form is used for processing payment for the last remaining works at the end of the contract.



Once the remaining works have been inspected and found in good order, the contractor is eligible for payment of (i) the remaining works and (ii) half of the retention monies. The amount of retention money to be paid out at this stage is half of all retention monies withheld so far, including half of the retention calculated for the final works due under this payment. The remaining half of the retention money should be held back until the end of the defects liability period.

Once again, only the actual payment issued to the contractor should be recorded as an expenditure. Any remaining retention money should only be recorded when it has been paid to the contractor.

The date of issuance of the Practical Completion Certificate is the starting date of the defects liability period and should be the same as when the final works were inspected and approved.

Final Certificate of Completion for Culvert Works

The Final Certificate of Completion is issued after (i) the defects liability period has expired, and (ii) any remedial works have been inspected and found in good order.

Once payment of the remaining retention money has been made, all obligations from both parties to the contract are regarded as fulfilled. This also constitutes the final completion of the contract. Only at this stage should the final retention money be recorded as an expenditure.

1.7 Contract Register

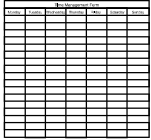
It is important that all contracts awarded are recorded in the Contract Register in the PIU as well as the PMO. Not only is the contract register an important tool for expenditure forecasting - it also provides an excellent overview of all the contractors which in the past have carried out works for the Project, as well as providing a summary of all the construction companies currently engaged by the Project.

The contract register is an important reference source when carrying out a bid evaluation. Through the contract register, it is possible to establish whether a bidder has carried out works previously for the Project.

Also, through the contract register it is possible to quickly establish whether a contractor is currently or in the process of being engaged by the Project for other works. This information may affect the assessment of the contractor's current capacity to take on additional work. If the contractors are already engaged by the Project, they may have already committed their equipment and qualified staff to other on-going works.



All this information has a direct impact on the final selection of the best bid during a bid evaluation. As mentioned earlier, it is important that the evaluation committee selects a bid from a firm which can commence works according to the time schedule specified in the bidding documents, with the required equipment and personnel. Furthermore, if the contract register shows that a firm has worked for the Project before, it is then an important source for obtaining information regarding the firm's past performance.



Instructions to Contract Documents

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Invitation for Bids

- Purpose:** The Invitation for Bids provides the announcement to the public of works intended to be carried out using local contractors, qualified to carry out culvert construction and rehabilitation works.
- Responsibility:** The Assistant Engineer is responsible for preparing the bidding documents including the Invitation for Bids. It should be checked by the Provincial Engineer together with the other bidding documents to ensure that they have each been completed accurately, as well as being consistent with each other.
- Timing:** The Invitation to Bids should be prepared and announced only after all other bid documents have been prepared.
- Procedure:** The Invitation for Bids contains the most basic information relating to works for which the Client wishes to engage a construction firm. Further detailed information is obtained at the addresses mentioned in the announcement and by acquiring the complete set of bidding documents. The following information should be included in the bid announcement:
- Date:** The date of announcement should be at least two weeks before bid closure, thus allowing the bidders sufficient time to inspect the work sites and prepare their bids.
- Province:** Enter the name of the province(s) in which the works sites will be.
- Contract No:** Establish a unique contract number for each contract. This number is used as a reference for all related contract documents, correspondence and accounting activities.
- No:** Insert the exact number of culverts to be constructed/rehabilitated.
- Location:** Enter the exact location of the works.
- Address:** Insert the exact street and postal address, fax and phone number to which requests for further information or bidding documents should be directed.
- Bid Closure:** The bid closure date and time should be at least two weeks after the announcement date.
- Bid Opening:** Bid opening should preferably be scheduled immediately after bid closure. This provides more accountability in the bid submission and closure procedures. If it is not possible to conduct the bid opening at the date for bid closure, it is recommended that the bid closure date is changed to a suitable time when bid opening can also take place.
- Approval:** The Invitation for Bids should be approved and signed by a senior management official (i.e. the Provincial Project Manager), thus sanctioning the start of the contracts announcement and award procedures.
- Filing:** The Invitation for Bids should be posted on notice boards accessible to the general public. When bids are announced in the provinces, a copy should immediately be provided to the Project Management Office. A copy is also filed at the PIU in a designated file for each type of contracts.

Form of Bid

Purpose: The Form of Bid provides the standard letter where the bidder states the total price of his/her bid proposal. Furthermore, it provides a statement from the bidders that they commit them self to the conditions of contract and guarantees the quoted price for a certain period as mentioned in the form. When the bid evaluation has been approved by the project management, the bid form can be used as a binding contract until a contract agreement has been signed by all parties.

Responsibility: The Assistant Engineer is responsible for preparing the bidding documents including the Form of Bid, only leaving the allocated space for the bid price and signature of the bidder open. It should be checked by the Provincial Engineer together with the other bidding documents to ensure that they have each been completed accurately, as well as being consistent with each other.

Timing: Since the Form of Bid forms part of the tender documents and after contract award is construed as part of the agreement, it needs to be properly checked for its accuracy before announcement of bids.

Procedure: The Form of Bid is an essential part of the bidding documents, and should always be provided when inviting for bids. Make sure that the correct version of the Form of Bid is supplied to the bidder, depending on the type of works (culverts, bridge works, road construction, laterite supply, etc.).

The detailed information pertaining to a specific contract which is prepared in advance of announcement of bids are as follows:

Contract Name: Enter a designated name for the culvert contract.

Contract No: Establish a unique contract number for each contract. This number is used as a reference for all related contract documents, correspondence and accounting activities.

To: Insert the address to where the bid should be submitted. Check that this information corresponds to the details given in the Invitation for Bids.

Bid Validity: A reasonable period of bid validity is 60 days. Make sure that the period chosen, is sufficient to cover the time required for bid evaluation and final approval from the PMO - until a notification of award has been issued to the successful bidder.

On submission of their proposals, the Bidder is required to provide the following details to be inserted in the Bid Form:

- ✓ the total quoted price, written in numbers and words under Clause (1),
- ✓ date of submission of Bid,
- ✓ signature of company representative
- ✓ name, address and telephone of bidder.

Filing: All bids received need to be properly filed for later auditing. The Bid Form of the successful bidder forms part of the contract agreement.

Technical Drawings

Technical Drawings for culvert construction works should contain three items:

- (i) standard drawings of the culvert drains,
- (ii) standard drawing of the culvert pipe rings, and
- (iii) a location map.

If any deviations are made from the standard drawings, then additional drawings will be required, preferably before the announcement of bids and latest before the commencement of works. These deviations shall be incorporated in the Activity Schedule.

Major deviations from the standard drawings should have written approval from the Project Management Office prior to Bid Announcement. Minor changes required during works implementation should be reported through the established physical progress reporting system, and reflected in the payment certificates.

In addition to the above documents and the work specifications, the RIIP Technical Manual also forms part of these contract documents and shall be used as a reference when the above mentioned documentation proves insufficient.

In any case, make sure that the Contractor on site, have sufficient copies of the drawings and that they are readily available to the site supervision staff.

Activity Schedule

- Purpose:** The Activity Schedule forms the basis for cost estimating and pricing as well as the breakdown of the major cost items in the culvert contracts. Together with the Form of Bid, the Activity Schedule provides (i) the price offered by the Bidder (ii) the detailed amounts of work expected from the Contractor for which the total price is based upon.
- Responsibility:** The Assistant Engineer is responsible for preparing the Activity Schedule after completing a detailed field survey and preparing the road condition inventory. The form is checked for accuracy by the Provincial Engineer.
- Timing:** The Activity Schedule is prepared for every culvert contract as part of the bidding documents.
- Procedure:** The Activity Schedule is based on the measured quantities from the road condition inventories. The following information should be entered by the Engineer:
At first, basic information relating to Contract Name and Number, Date, Location and Province is entered at the top of the form.
- Item No.:** The Item number refers to the number of culvert drains to be rehabilitated or constructed. Start numbering at the start of the road or at the lowest chainage.
- Chainage:** Enter the Chainage at which each culvert will be located.
- No. of Pipe Rows:** Enter the number of pipe rows prescribed for each culvert drain. This will normally be 1, 2 or 3 rows.
- Culvert Diameter:** Enter the culvert diameter, (i.e. 0.6m, 0.8m or 1.0m).
- Remarks:** Additional information regarding the works can be entered into this column. Here, it is useful to indicate whether the works comprise of rehabilitation of an existing culvert drain or the construction of new drains.
The above information is provided by the Principal as part of the bidding documents. The remaining information is filled in by the Bidder:
- Price:** The price quoted for each of the listed culvert drains forms the basis for the total contract value.
- Total Price:** The Total Price is the sum of the prices quoted for each culvert drain. It is first entered in numbers at the bottom of the table, and then in words immediately under the table.
- Signature:** Finally, make sure that the Activity Schedule is properly signed by the Bidder's authorised representative, including the Bidder's full name and address.
- Filing:** All bids received needs to be properly filed for later auditing. The Activity Schedule also forms part of the contract agreement with the most successful bidder.

Conditions of Contract

General and Specific Conditions of Contract

The General and Specific Conditions of Contract are standard documents which need no changes from one contract to another. They only contain general clauses which relate to all works contracts including culvert works. Any specifics relating to the conditions of contract are referred to and contained in the Appendix to Conditions of Contract - Contract Data. All three documents form part of the bidding documents as well as the final contract agreement.

Appendix to Conditions of Contract - Contract Data

Responsibility: The Assistant Engineer is responsible for preparing the Contract Data. This form is checked for accuracy by the Provincial Engineer and the PIC Field Engineer.

Timing: The Contract Data form is prepared for every contract as part of the bidding documents and is also included in the final contract agreement.

Procedure: Key data relating to the conditions under which a specific contract will be carried out are contained in the Appendix to Conditions of Contract.

At first, basic information relating to Contract Number, Contract Name and Province, is entered at the top of the form.

Name of Contractor: During the preparation of the bidding documents, this line is left open until the final evaluation and selection of the most successful bidder has been carried out.

Commencement Date: This date should indicate when the contractor should be ready to mobilise if awarded the contract. This implies that all the necessary resources in terms of labour, tools and equipment need to be made available from this date.

Completion Date: This is the date when all works are expected to be completed, given the above commencement date. These two dates should correspond to the overall programme of works in the Province.

Site Location: Enter the exact location of the culvert works, i.e. name of villages where works starts and ends. If necessary, also enter the exact chainage for the works.

Retention: Retention is normally fixed as a percentage of the interim payments. An appropriate level for culvert works is 15%.

Currency of Payment: Enter the currency in which payments are made. For this Project, US dollar is the utilised currency.

Defects Liability Period: The defects liability period is basically the guarantee period prescribed from the Contractor. During this period the Contractor will be responsible for repairing any defects which are uncovered and which are caused by sub-standard execution of works. As security, the Principal will with-hold half the retention monies during this period. Three months would normally be a sufficient defects liability period.

- Minimum Amount of Interim Certificate:** To avoid the processing of payment certificates with un-reasonable small amounts, enter a minimum value for interim payments.
- Time for Payment after Issue of Certificate:** This is the maximum processing time for the Principal to process payments for completed works for which the Superintendent have issued a payment certificate.
- Payment Schedule:** The prescribed payment schedule regulates when the Contractor may claim payments for completed works, given that the amount for payment is more than the minimum amount mentioned above. For culvert works, it is recommended that payments are issued only for entire culvert drains which has been fully completed.
- Insurance:** The Contractor is responsible for providing appropriate insurance coverage of its employees and workers. This amount is the maximum amount for which each worker should be covered.
- Filing:** The Appendix to Conditions of Contract - Contract Data forms part of the bidding documents. All bids received needs to be properly filed for later auditing. Also, the Contract Data forms part of the contract agreement with the most successful bidder.

Form of Agreement

- Purpose:** The Form of Agreement provides the standard contract to be used when awarding a contract to the most successful bidder. During the bidding process, a sample of this document is issued as general information to the bidders. Bidders do not need to fill in any information in this Form during bidding. Only once the bid evaluation has been approved by the project management, the Form of Agreement is filled out by the Principal and issued to the Contractor for signature.
- Responsibility:** The Assistant Engineer is responsible for preparing the bidding documents including the Form of Agreement, only leaving the date and name of the Contractor open. It should be checked by the Provincial Engineer together with the other bidding documents to ensure that they have each been completed accurately, as well as being consistent with each other.
- Timing:** Since the Form of Agreement forms part of the bid documents and after contract award is construed as part of the contract, it needs to be carefully checked for its accuracy before announcement of bids.
- Procedure:** The Form of Agreement is an essential part of the bidding documents, and should always be provided when inviting for bids. Make sure that the correct version of the Form of Agreement is supplied to the bidder, depending on the type of works (culverts, bridge works, road construction, laterite supply, etc.).
- The detailed information pertaining to a specific contract which is prepared in advance of announcement of bids are as follows:
- Contract No:** Establish a unique contract number for each contract. This number is used as a reference for all related contract documents, correspondence and accounting activities.
- Contract Name:** Specify a name for the contract.
- Location:** Enter the location of the culvert works, i.e. name of villages from where the road starts and ends, as well as the name of the Province.
- After bid opening and evaluation and final approval from the project management, the following information is entered:
- Date:** Enter the date of contract issue.
- Contractor:** Enter the full company name to which this contract is awarded.
- Approval:** The Form of Agreement shall be signed by an authorised representative of the Contractor and the Provincial Project Manager in witness of the PIC Field Engineer.
- Filing:** The Form of Agreement forms an essential part of the Contract Agreement with the most successful bidder, which needs to be filed for later use as justification for payments of works and finally to be subject to the annual audit.

Evaluation of Bids

- Purpose:** The Evaluation of Bids Form provides a standard presentation of the findings of the Bid Evaluation Committee. Once completed, this form contains the conclusions and decisions of the provincial bid evaluation committee, which is then submitted to the Project Management Office for final approval, before a contract is awarded.
- Responsibility:** The Office Coordinator is responsible for preparing the Evaluation of Bids Form based on the findings of the bid evaluation committee. It should be checked for accuracy by the Provincial Engineer referring to the evaluated bids.
- Timing:** The Bid Evaluation Form should be prepared immediately during bid evaluation and checked and signed by all Committee members at the end of the meeting.
- Procedure:** At first, basic information relating to Contract Number and Province is entered at the top of the form.
- Rating:** This number establishes the selection of the most successful bidder (No.1) and the relative rating provided to bids which were not rejected by the Committee.
- Company Name:** Enter the name of the selected Contractors in the order they were rated by the bid evaluation committee.
- Quotation:** Enter the quoted price of the respective bidders.
- Remarks:** Enter any specific information which is significant to the Contractor and the evaluation of its bid.
- Engineer's Estimate:** For comparison, enter the total value of the engineer's estimate for the contract. This figure should be prepared before bid opening and made available to the participants before the evaluation.
- Selection:** Repeat the full company name for the most successful bidder.
- Location:** Enter the exact location of the culvert works.
- Justification:** Provide the justification of the bid evaluation committee for the above mentioned selection and ranking of bids. If the allocated space in the Form is insufficient, enter additional information on the back of the form.
- Approval:** The Evaluation of Bids Form shall be verified by the PIC Field Engineer and signed by the Provincial Project Manager. It is then submitted for final approval at the Project Management Office where it is approved by the National Project Manager, PIC Teamleader, Project Director and the Project Coordinator.
- Filing:** The Evaluation of Bids Form shall be accompanied by copies of the evaluated bids when it is submitted for final approval. The original bids should be kept at the PIU until the contract has been completed.

Interim Payment Certificate

- Purpose:** The purpose of this form is to certify payments of completed works for which a contractor has invoiced the project. When issuing an Interim Payment Certificate, it is important to refer to the previous payment certificates issued (if any) and the Contracts Register for the specific works contract to avoid any double payments.
- Responsibility:** The Provincial Engineer is responsible for preparing this certificate. It should only be prepared after the works for which the contractor claims have been inspected and found in good order, conforming to prescribed quality, and that the claimed quantities of work have actually been carried out.
- Timing:** Interim Payment Certificates are prepared on the request of the contractor, i.e. upon the receipt of a claim. However, a certificate should only be prepared if it conforms to the agreed payment schedule described in the Appendix to Condition of Contract - Contract Data form.
- Procedure:** A new payment certificate is prepared for each payment according to the agreed schedule.
- Enter basic data relating to the contract, i.e. Road Name, Contract Number, Province, Name and Address of Contractor, and agreed commencement and completion dates. All this information is found in the original contract agreement. Finally, enter the Certificate Number, which should correspond to the number of payments made to the contractor.
- 1) When processing payments for culverts, it is normal procedure to only certify payments for culverts which have been fully completed (ref. Appendix to Conditions of Contract). Each of the fully rehabilitated or constructed culverts are entered into the table, listing Item No., Chainage, No. of Pipe Rows, Culvert Diameter, Remarks and Price according to the Bid Form. The total amount of the completed works is summarised at the bottom of the table. This amount is then transferred to "Total Value of works carried out".
 - 2) The most common deduction is the retention monies. Retention is calculated from the total value of works completed (1).
 - 3) If necessary, any other deductions which have not been entered in the Payment Breakdown, can be placed under Item (3).
 - 4) Amount due for payment is then calculated by subtracting Deductions (2 and 3) from the total value of works completed (1). Amount due is also entered into the form on the following line, written in words.
- Approval:** Before payments are carried out, the certificate needs to be signed by the Provincial Engineer, endorsed by the PIC Field Engineer and approved by the Provincial Project Manager.
- Filing:** The payment certificates are submitted to PMO at the end of the month together with the monthly accounts. A copy is also filed at PIU in a designated file for each contract.

Certificate of Practical Completion

- Purpose:** The purpose of this form is to (i) carry out the payment of the last remaining works when a contractor submits the final invoice, (ii) process payment of half of the retention monies, and (iii) set the starting date for the defects liability period.
- Responsibility:** The Provincial Engineer is responsible for preparing this certificate. It should only be prepared after the works for which the contractor claims have been inspected and found in good order, conforming to prescribed quality, and that the claimed quantities have actually been carried out.
- Timing:** The Certificate of Practical Completion is prepared on the request of the contractor, i.e. upon the receipt of a claim for the last remaining works.
- Procedure:** The Certificate of Practical Completion is prepared only once for any given contract and only when all works have been completed according to the contract.
- Enter basic data relating to the contract, i.e. Road Name, Contract Number, Province, Name and Address of Contractor. All this information is found in the original contract agreement. Finally, enter the Certificate Number, which should correspond to the number of payments made to the contractor.
- 1) Total Contract Value is the total amount of the contract including any amendments.
 - 2) Previous Paid Amounts can be obtained from the previous payment certificates. This amount includes all earlier payments made to the contractor less deductions.
 - 3) Since this is the start of the defects liability period, only half of the retention monies are withheld from this date. In the case of 15 % retention during the construction period, the retention during the defects liability period can then be calculated as 7.5 % of the total contract value, thereby returning half of the retention money to the contractor.
 - 4) If necessary, any other deductions are entered here.
 - 5) Amount Due is the Total Contract Value, less Previous Payments (2), Retention (3) and Other Deductions (4).
 - 6) The remaining retention, to be paid at the end of the defects liability period, is equivalent to Item (3). The duration of the defect liability period is found in the Appendix to Conditions of Contract - Contract Data. The date of the final payment of remaining retention is calculated from the date of the Certificate of Practical Completion plus the defects liability period.
- Approval:** Before payments are carried out, this certificate needs to be signed by the Provincial Engineer, endorsed by the PIC Field Engineer and approved by the Provincial Project Manager.
- Filing:** The Certificate of Practical Completion is submitted to PMO at the end of the month together with the monthly accounts. A copy is also filed at PIU in a designated file for each contract.

Final Certificate of Completion

- Purpose:** The purpose of this form is to (i) confirm the end of the defects liability period and (ii) process payments of the remaining retention monies.
- Responsibility:** The Provincial Engineer is responsible for preparing this certificate. It should only be prepared at the end of the defects liability period after the works has been inspected on site and found in good order and conforming to prescribed quality.
- Timing:** The Final Certificate of Completion is prepared on the date of completion of the defects liability period as indicated in the Certificate of Practical Completion.
- Procedure:** The Final Certificate of Completion is prepared only once for any given contract and only after the defects liability period and final inspection.
- Enter basic data relating to the contract, i.e. Road Name, Contract Number, Province, Name and Address of Contractor. All this information is found in the original contract agreement. Finally, enter the Certificate Number, which should correspond to the number of payments made to the contractor.
- 1) Total Contract Value is the total amount of the contract including any amendments.
 - 2) Amount Due is at this stage half of the original retention monies. In the case of applying 15% retention during the construction period, the retention during the defects liability period can then be calculated as 7.5% of the total contract value, which is the amount due at the end of the retention period. Repeat the same figure, written in words.
- The date of practical completion is the date of issue of the Certificate of Practical Completion. Date of End of Defects Liability Period is calculated from the date of the Certificate of Practical Completion plus the defects liability period as agreed in the Appendix to Conditions of Contract - Contract Data.
- Approval:** Before payments are carried out, this certificate needs to be signed by the Provincial Engineer, endorsed by the PIC Field Engineer and approved by the Provincial Project Manager.
- Filing:** The Final Certificate of Completion is submitted to PMO at the end of the month together with the monthly accounts. A copy is also filed at PIU in the designated file for each contract.

Contract Register

- Purpose:** The Contract Register is intended to assist the Accounting Section and the Project Management to monitor progress of contracts. This form should be used for both civil works contracts as well as supply contracts.
- Responsibility:** The Engineer is responsible for updating the Contracts Register every time a new payment certificate is issued.
- Timing:** One Contract Register form is used for each contract and is updated as the contract progresses every time payments are made.
- Procedure:** For civil works contracts, the Contract Register is based on information obtained from the Interim Payment Certificate(s), the Certificate of Practical Completion and the Final Completion Certificate, depending on the progress of the contract.
- At the top of the form, enter basic information relating to Province, Name and Address of the Contractor/Supplier, Contract Date, Contract Number, Contract Value, Dates of commencement and completion of the contract and General Ledger Account Code. If the contract will be paid through the ADB commitment or direct payment procedure, enter the PCSS number issued by ADB.
- Reference Date:** Enter the date on which the Contract was issued. This date is found in the Contract Agreement.
- Ref. No:** Enter the contract number.
- Category:** Enter the full name of the contract including the name of the location of the work sites or to where the supplies are destined. Also include the budget category code.
- Invoice Amount:** Enter the payment request from the invoice submitted by the contractor. This amount should correspond to the total invoiced amount before any deductions for advances or retention.
- Date:** Enter date of payment (ref. Payment Certificate).
- Amount:** Enter payment less deductions (ref. Payment Certificate).
- Contract Balance:** Contract Balance is calculated by subtracting the payments carried out so far, and any advance payments.
- Advances on Payment:** Enter any advance payments which were carried out at the start of the contract.
- Retention on Payment:** Enter the amount of retention deducted from the payment (ref. Payment Certificate).
- Posted on G/L:** Indicate by Yes or No whether it has been posted in the General Ledger.
- Approval:** This form needs no approval, however, it should be submitted to the Provincial Engineer for comparison with the related payment certificates.
- Filing:** The Contract Register is kept in a designated file. Copies should be submitted to the Project Management Office together with the monthly progress and expenditure reports.



Sample Documents

- 1 Invitation for Bids
- 2 Form of Bid
- 3 Technical Drawings
- 4 Specifications for Culvert Works
- 5 Activity Schedule
- 6 General Conditions of Contract
- 7 Appendix to Conditions of Contract – Contract Data
- 8 Special Conditions of Contract
- 9 Form of Agreement
- 10 Evaluation of Bids
- 11 Interim Payment Certificate for Culvert Works
- 12 Certificate of Practical Completion of Culvert Works
- 13 Final Certificate of Completion for Culvert Works
- 14 Expression of Interest
- 15 Contract Register



INVITATION FOR BIDS FOR CULVERT WORKS

Date: _____

Province: _____

Contract No: _____

Loan No: 1385 - CAM (SF)

The Royal Government of Cambodia has received a loan from the Asian Development Bank (ADB) towards the cost of the Rural Infrastructure Improvement Project, and it is intended that part of the proceeds of this loan will be applied to eligible payments under the contract (s) for supply and installation of culvert drains.

The Ministry of Rural Development ("the Principal") invites sealed bids from prequalified eligible bidders for the construction and completion of _____ (No.) concrete pipe culvert drains in _____ (location).

Bidders may obtain further information from, and inspect and acquire the bidding documents at the office of the Principal, at

Rural Infrastructure Improvement Project
Project Management Office
Ministry of Rural Development
corner of Road #169 and Soviet Boulevard
P.O.Box 136, Phnom Penh
Telephone 023 366 810, Fax 023 428 049

Project Implementation Unit
Provincial Department of Rural
Development
or _____ Province
Telephone: _____

All bids must be delivered to the Project Implementation Unit in _____ Province before _____ hours on _____. Bids will be opened immediately thereafter in the presence of bidders representatives who choose to attend.

Provincial Project Manager
Rural Infrastructure Improvement Project



FORM OF BID

Contract Name: *Culvert Works at*

No:

To: The Provincial Project Manager
Rural Infrastructure Improvement Project
Provincial Department of Rural Development
_____ Province

Gentlemen:

1. Having examined the General and Special Conditions of Contract, Specifications, Drawings, and Activity Schedule for the execution of the above-named Works, we, the undersigned, offer to execute and complete such Works and remedy any defects therein in conformity with the General and Special Conditions of Contract, Specifications, Drawings and Activity Schedule for the sum of

(_____)

or such other sums as may be ascertained in accordance with the said Conditions.

2. We acknowledge that the Contract Data forms part of our bid.
3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonable possible after the receipt of the Principal's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.
4. We agree to abide by this Bid for the period of *60 days* from the date fixed for receiving the same, and it shall remain binding upon us as may be accepted at any time before the expiration of that period.
5. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
6. We understand that you are not bound to accept the lowest or any tender you may receive.

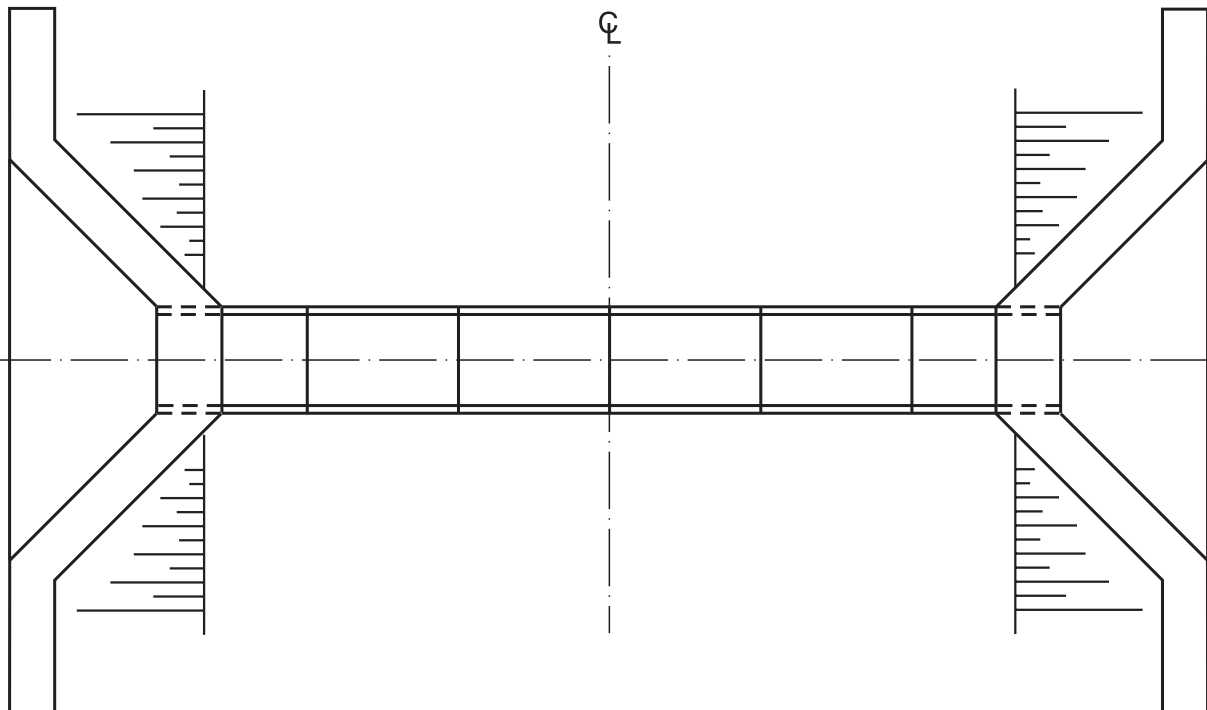
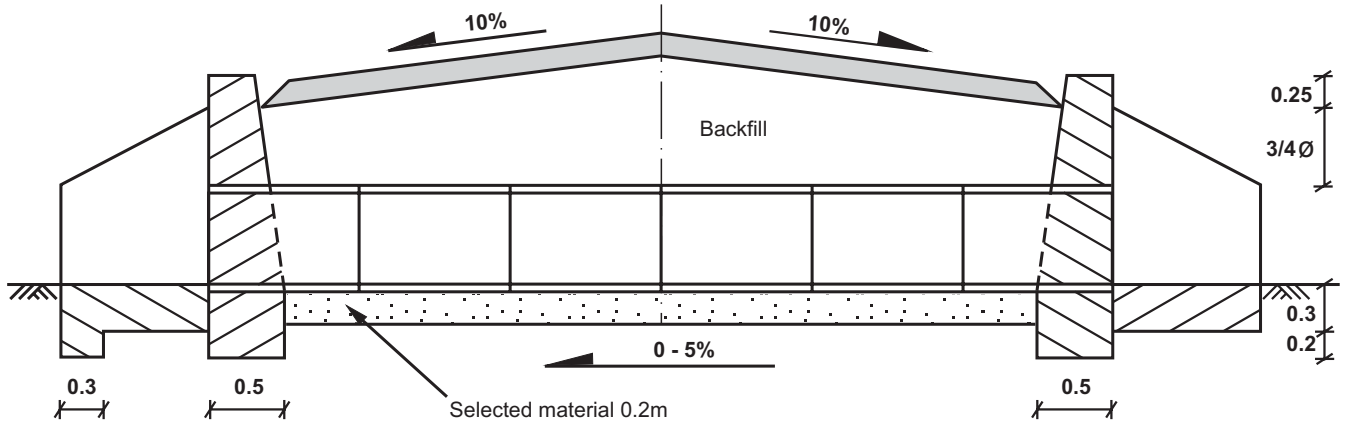
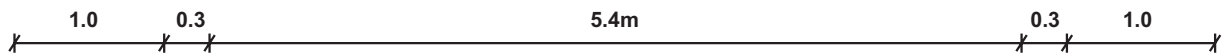
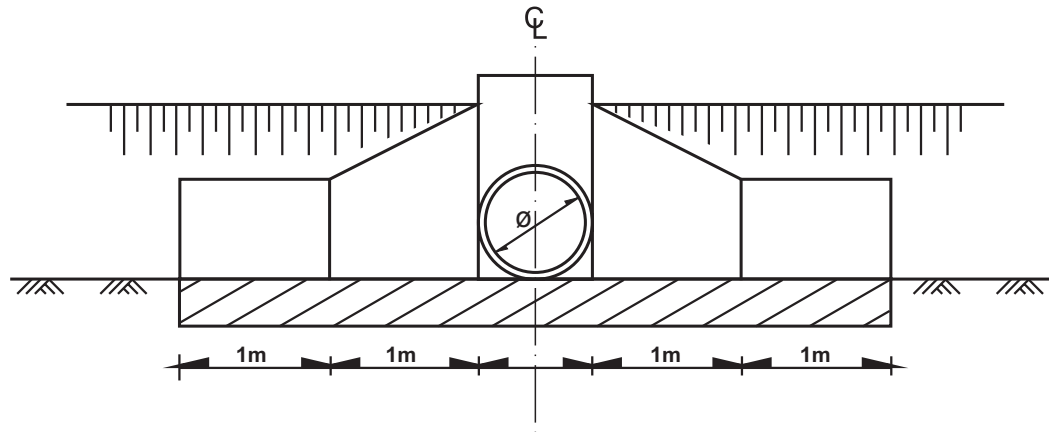
Dated this _____ day of _____

Signature _____ in the capacity of _____

duly authorised to sign bids for and behalf of _____

Address: _____

_____ Phone: _____



Notes:

Aprons, cut-off walls, head walls and wing walls are produced in stone masonry or concrete.

Ministry of Rural Development
Rural Infrastructure Improvement Project

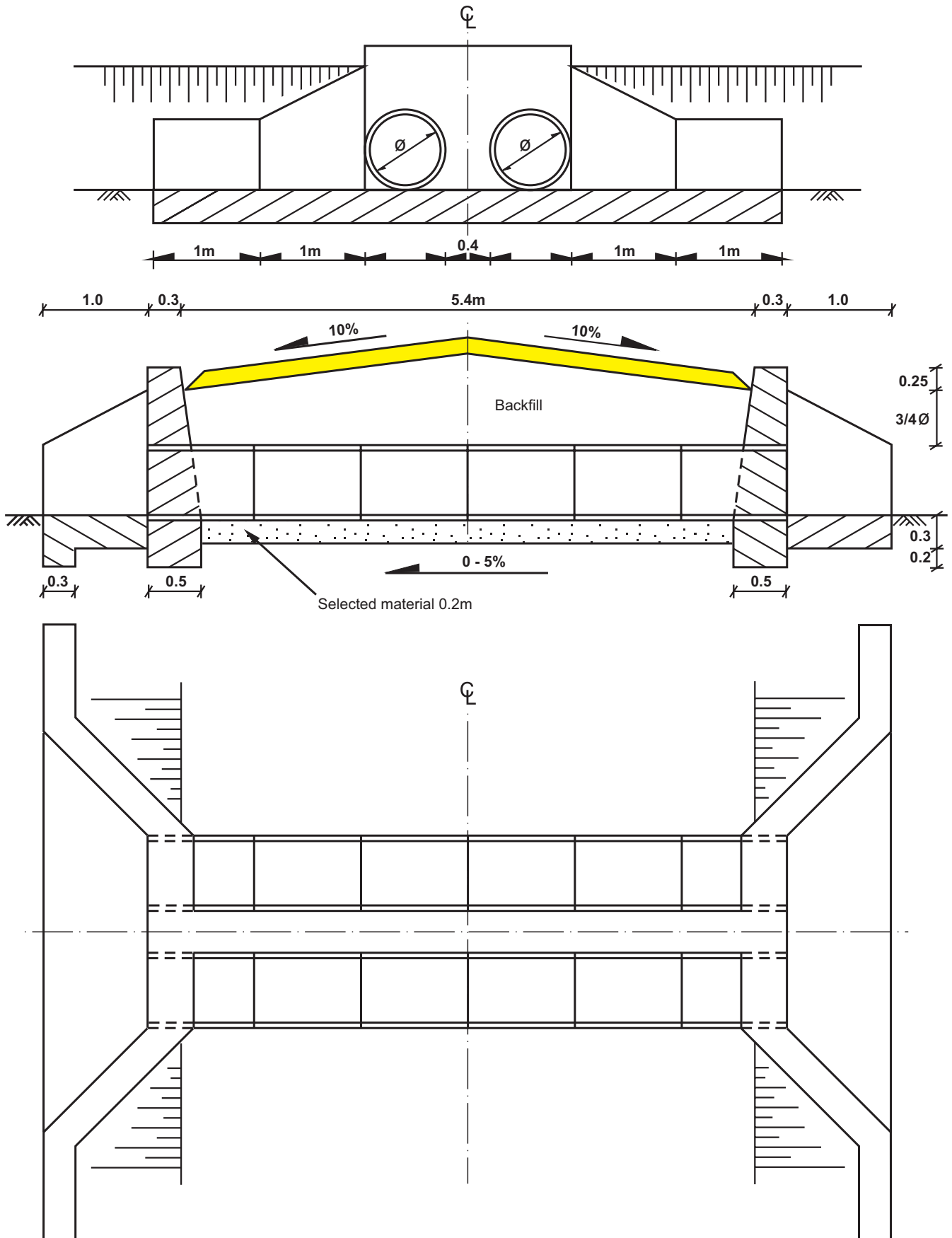
Standard Single Row Culvert

Prepared by:
Bjørn Johannessen
I. T. Transport Ltd
Consultants in Transport
for Rural Development

Approved by:
Toun Sophal
Project Manager

Revision Date: 16 February 1998

Scale: 1:50



Notes:

Aprons, cut-off walls, head walls and wing walls are produced in stone masonry or concrete.

Ministry of Rural Development
Rural Infrastructure Improvement Project

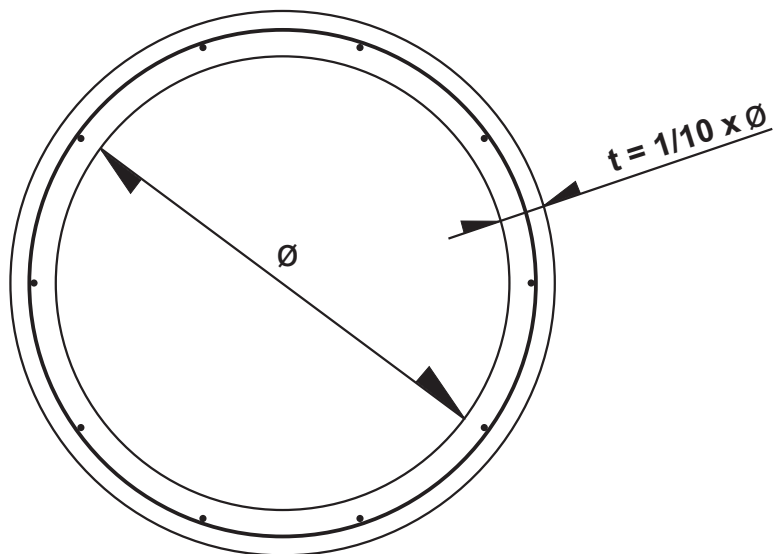
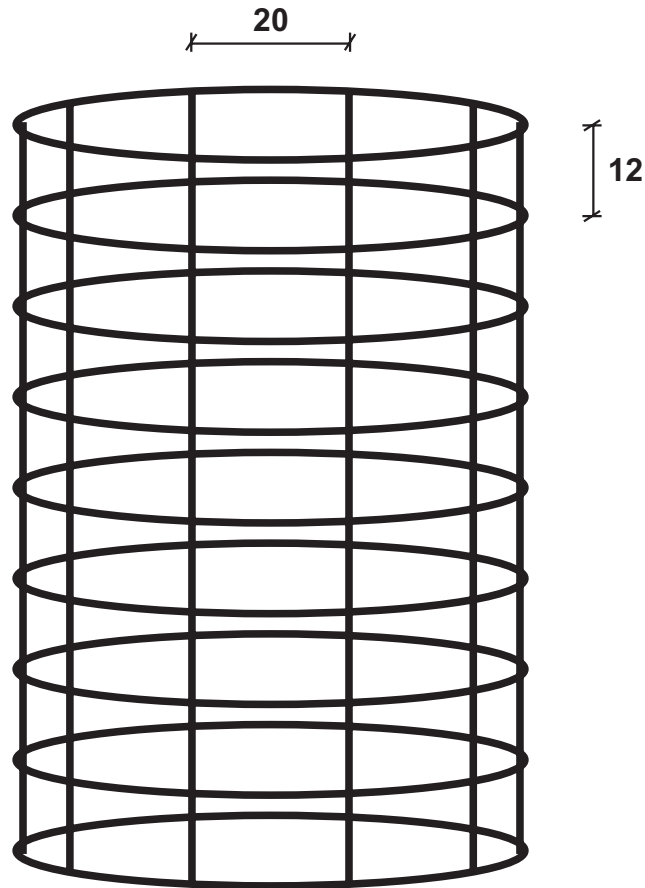
Standard Double Row Culvert

Prepared by:
Bjørn Johannessen
I. T. Transport Ltd
Consultants in Transport
for Rural Development

Approved by:
Toun Sophal
Project Manager

Revision Date: 16 February 1998

Scale: 1:50



Notes:

1. All dimensions in centimetres unless otherwise specified
2. If possible, concrete cover is 4cm, else centre aligned
3. Reinforcement bars as follows:
4. Max. aggregate size:
3/4 inches.

pipe diameter	bar diameter
0.6 m	6 mm
0.8 m	8 mm
1.0 m	8 mm

Ministry of Rural Development
Rural Infrastructure Improvement Project

Standard Culvert Pipes

Prepared by:
Bjørn Johannessen
I. T. Transport Ltd
Consultants in Transport
for Rural Development

Approved by:
Toun Sophal
Project Manager

Revision Date: 19 March 1998



SPECIFICATIONS FOR CULVERT WORKS

1 Setting Out

To comply with the construction standards required using labour-based appropriate technology, the Contractor will be expected to make extensive use of a variety of setting out and other construction aids. These will include:

- ranging rods
- profiles and boning rods
- pegs and string lines
- line levels
- ditch templates

The Contractor shall set out, using pegs and string lines, the various construction operations in sufficient detail to ensure that the required standards and tolerances are achieved, and in such a way that any task work system adopted may be easily checked by the Superintendent.

The inlet and outlet level and gradients of the culvert shall comply with the existing natural water channels or ground levels.

2 Access and Safety

Unless approval in writing has been obtained from the Superintendent, no road shall be closed to traffic or public access. The Contractor shall at all times ensure the safety of traffic and provide safety barriers, adequate signing and other measures as directed by the Superintendent.

3 Materials

The contractor shall be responsible for the supply, storage and payment of all materials to be used in the Works. These materials shall comply with the standards set out below and shall be approved by the Superintendent before being incorporated in the Works.

Culverts shall be constructed in reinforced concrete, mass concrete and masonry.

Concrete for construction shall in all cases be mixed by mechanical means in quantities not less than 0.25 m³ and as close to the final placing position as reasonably possible.

Fine aggregate shall consist of clean, sharp, hard and durable sand or crushed rock which shall be graded between the 5mm and 0.15mm sieves. It shall be free from all organic matter.

Course aggregate shall consist of clean, hard and durable crushed rock, crushed gravel or natural angular gravel, free from organic matter. For concrete works, the nominal size of aggregate shall be 20mm with the following grading:

Sieve Size (mm)	% Passing (by mass)
38	100
19	95 - 100
9.5	25 - 55
4.75	0 - 10

Cement shall be Ordinary Portland Cement complying with British Standard 12 or Sulphate Resisting Portland Cement complying with BS4027. Cement shall be obtained from manufacturers approved in writing by the Superintendent. Cement shall be stored at the site in the original bags until being used, and shall be free of any water damage.

Water for use in mixing concrete and mortar shall be clean and free from salt and organic matter.

4 Mixes

Gauging for concrete mixes shall be done in boxes of appropriate size to suit the mixer capacity. For reinforced concrete, the mix shall be 1:2:4 (cement: fine aggregate: coarse aggregate). For mass concrete, the mix shall be 1:3:6. For mortar, the mix shall be 1:4 (cement: sand). Sufficient water shall be added only for good workability of the mix. The Superintendent may direct that Slump Cones are used to check the acceptability of the concrete for the works.

5 Construction

The location of the culverts shall be established by the Superintendent, and the detailed setting out shall be done by the Contractor. Excavation shall be neat and tidy and to the dimensions and levels shown on drawings or directed by the Superintendent. Excavations shall be kept free of water.

All formwork shall conform to the shape, lines, levels and dimensions shown on the drawings. The centring, shuttering and casing of the concrete shall be true, rigid and properly braced and sufficiently strong to resist, without bulging or distortion, loads and shocks. All joints shall be sufficiently tight to prevent mortar leakage.

Reinforcement shall be cut and bent according to the dimensions shown on the drawings and shall be placed accurately in position. Mesh or bars shall be secured such that no movement occurs while concrete is being placed. Before the placing of any concrete, the mesh or bars shall be thoroughly cleaned of all grease, dirt, scale and rust to the satisfaction of the Superintendent.

Concrete shall be mixed, transported and placed in such a way as to avoid segregation of the mix. Pours shall be complete, and no construction joints shall be permitted except as directed by the Superintendent. Concrete shall be mechanically vibrated to obtain a homogeneous, dense mix until no further air bubbles are visible. Vibration shall be done carefully to avoid contact with the reinforcement bars.

Curing shall be carried out for not less than 4 days following the placing of the concrete by keeping the surface of the concrete continuously damp. The Contractor shall obtain the agreement of the Superintendent for his curing proposals in advance of placing the concrete.

6 Manufacture of Pipes

The Contractor shall be permitted to manufacture culvert pipes on site, provided the arrangements and method of operations are satisfactory to the Superintendent. The moulds used shall be designed to allow the pipes to be released without damage and they shall be capable of being oiled before concrete is poured to allow for a finish without surface defects. Reinforcement shall be set rigidly in the mould such that it retains its position while concrete is poured and vibrated.

Pipes shall remain in the moulds for not less than 2 days or as directed by the Superintendent, following which they shall be adequately cured by a method acceptable to the Superintendent.

Pipes shall preferably have socket and spigot end joints.

7 Concrete Testing

The Superintendent may require that cubes be taken for testing the culvert pipes and structural concrete and this shall be under his direction. Any concrete that fails the test shall be replaced by the Contractor. The tested strengths of structural (1:2:4) concrete shall be:

At 7 days - 10.5 N/mm² and at 28 days - 15.0 N/mm²

The Superintendent shall also use portable impact hammers to test in-situ concrete and concrete pipes and the results of these tests will be accepted as equivalent to official laboratory results.

8 Foundation Preparation

Compacting the foundation and culvert bedding shall be to the lines and levels shown on the drawing or as directed by the Superintendent, and carried out using a mechanical vibrating roller, plate compactor or hand rammers. The foundation shall be inspected before pipe laying can commence. The fill material shall be watered and compacted in 100mm layers at its optimum moisture content to 95% maximum dry density and to the approval of the Superintendent. Work shall cease during wet periods and shall only recommence on the approval of the Superintendent.

The Superintendent shall conduct in-situ density tests using a Dynamic Cone Penetrometer as and when required.

9 Laying of Pipes

Concrete pipes shall be laid on a well compacted bed and firmly abutted together. After laying the complete run, the joints shall be sealed with cement mortar not less than 50mm wide or as specified by the Superintendent.

Where pipes are to be laid in a trench, the excavation shall exceed 400 mm greater than the outside diameter of the pipe.

Backfilling to pipes shall be with suitable granular material free from large or sharp stones. The material shall be compacted at optimal moisture content in layers not exceeding 150 mm loose thickness, brought up evenly on both sides of the pipe. Hand rammers or plate vibrators may be used, and care shall be taken not to make contact with the pipe. Backfilling shall continue above the pipe to not less than three quarters of the pipe diameter or as directed by the Superintendent.

The slide slopes of embankments shall be trimmed to line and hand compacted sufficiently to prevent the formation of erosion gullies.

10 Borrow Pits

Should there be insufficient suitable material adjacent to the road to complete the earth works, the Superintendent may instruct the Contractor to open a borrow pit, and to transport the material by suitable approved means. Any such borrow pit, selected and approved by the Superintendent, shall be operated in such a way as to cause the minimum of environmental damage to the location and nuisance to the public.

11 Masonry Works

Where indicated on the drawings, culvert head walls, wing walls and aprons shall be constructed in stone masonry.

Stone to be used in the construction shall be hard, clean and compact, carefully selected and with roughly flat sides. The stones shall, in proportion, have lengths not exceeding four times their height, and their thickness shall not be less than 100mm. Smaller stones may be used to fill gaps in the construction with the agreement of the Superintendent.

Stones shall be jointed and pointed in cement mortar and walls shall be built up in roughly horizontal bond to the lines and dimensions shown on the drawings.

12 Stone Pitching

Stones used for pitching shall be hard, durable and such that they will not disintegrate when exposed to water or severe weather conditions. Stones may vary from 10 to 100 kg in weight and not less than 25% shall weigh over 5.0kg.

Pitching shall be constructed on a firm, compacted base and stones placed to provide a reasonably uniform surface free from excessive humps or depressions. Stones shall be placed in close contact with each other and any gaps filled with smaller stones to form a tight mosaic. Where directed by the Superintendent, stone pitching shall be grouted with cement mortar (1:4) which shall completely fill the interstices. Before the final set of the grout, the surface shall be brushed to produce a smooth water flow path.



ACTIVITY SCHEDULE

Contract No: _____ Date: _____
 Contract Name: *Supply and Installation of Concrete Culverts*
 Location: _____ Province: _____

Item No.	Chainage	No. of Pipe Rows	Culvert Diameter (m)	Remarks	Price (US\$)
TOTAL PRICE					

Total Price in Words: _____

Name of Bidder: _____

Bidder's Signature: _____

Bidder's Address: _____



GENERAL CONDITIONS OF CONTRACT

1 Definitions, Interpretations and Powers

1.1 In the Contract, the following words have the meanings assigned to them except when the context otherwise requires:

- Principal: means the organisation named in the Form of Tender/Bid who will employ the Contractor to undertake the Works.
- Contract: means all the documents comprising the tender/bid as defined in the conditions of tendering/bidding.
- Contractor: means the person or persons firm or company whose tender/bid has been accepted by the Principal and includes his, their or any of their personal representatives, successors and permitted assigns.
- Superintendent: means the Superintendent appointed from time to time by the Principal and notified in writing to the Contractor to act as Superintendent for the purposes of the Contract with defined duties and powers.
- Works: means the Works to be executed in accordance with the Contract.
- Contract Price: means the sum named in the Letter of Agreement subject to such additions and deductions as may be made under the provisions of the Contract.

1.2 Words importing the singular only also include the plural and vice versa where the context requires and words importing persons shall also include bodies corporate or incorporate.

1.3 The Superintendent shall have power to give instructions for:

- (a) any variation to the Works including additions or omissions;
- (b) carrying out any test or investigation;
- (c) the supervision of the Works in accordance with the provisions of the Contract;
- (d) any change in the intended sequence of the Works;
- (e) measures necessary to overcome or deal with any adverse physical condition or artificial obstruction;
- (f) the removal and/or re-execution of any work or materials not in accordance with the Contract;
- (g) the explanation of any matter to enable the Contractor to meet his obligations under the Contract;
- (f) the exclusion from Site of any person employed thereon, which power shall not be exercised unreasonably.

2 General Obligations

The Contractor shall execute the Works in accordance with the contract to the satisfaction of the Superintendent and shall be solely liable for the care of the works, temporary works, materials and constructional plant until the Superintendent has certified that the whole of the Works have been satisfactorily completed by the Contractor.

The Contractor shall provide all materials, labour, plant, equipment, tools and everything whether of a temporary or a permanent nature required for the execution of the Works except where otherwise stated in the Contract.

3 Requirement of Statues and for Safety

The Contractor shall observe and comply with the provisions of all relevant Acts of Parliament, regulations, by-laws, orders, rules, determinations and Awards and all requirements of any authority as shall be in force in the place where the Works are to be executed and as may relate to the Works and shall pay all fees or charges in relation thereto.

The Contractor shall provide and maintain all reasonable safety precautions required for the protection of the Works or other property and for the safety and convenience of the workmen and the public.

If the Contractor or any Sub-contractor defaults in the performance or observance of the requirements of this clause, the Superintendent may direct the Contractor to rectify the default within a reasonable period. If the Contractor or any Sub-contractor refuses or declines to rectify the default, then the Superintendent may suspend the work relative to the default until the default is rectified and the Contractor shall be responsible for all costs arising out of or in consequence of the default and the suspension.

4 Contractor's Risk and Public Liability Insurance

Without limiting his obligations and responsibilities the Contractor in the joint names of the Principal and the Contractor for their respective rights, interests and liabilities and subject to a cross liabilities clause, shall take out insurance.

- (a) Where stated in the *Appendix* under a Contractor's Risk Policy for the total amount of tender/bid for the contract period to the date of Practical Completion.
- (b) Where stated in the *Appendix* under a Third Party Liability Policy during the currency of the Contract in respect of death or bodily injury to any person and damage to property.

The Contractor shall lodge certificates of proof thereof with the Superintendent before the commencement of the Works.

5 Insurance of Employees

The Contractor shall effect and keep in effect during the currency of the Contract such insurance as may be necessary to adequately protect the Contractor and the Principal in respect of liability for payment of compensation to any employee of the Contractor or Sub-contractor of the Contractor, at not less than the amount stated in the *Appendix*.

The Contractor shall lodge certificates of proof thereof with the Superintendent before the commencement of the Works.

6 Patent Rights and Royalties

The Contractor shall save harmless and indemnify the Principal from and against all claims and proceedings for or on account of infringement of any patent rights, design, trade mark or name or other protected right in respect of any machine, plant, work, material or thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the Contractor in connection with the execution of the Contract and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or relation thereof.

7 Assignment and Sub-contracting

The Contractor shall not sub-contract the whole of the Works and shall not assign the Contract or assign, mortgage, charge or encumber any of the monies payable under the

Contract or any other benefit whatsoever arising under the Contract. The Contractor shall not sub-contract any part or parts of the Works without the prior written consent of the Superintendent and he shall submit to the Superintendent the names of his proposed sub-contractors and the nature of the work which it is intended they undertake. The consent of the Superintendent shall not relieve the Contractor from any liability or obligation under the Contract.

8 Commencement

The contractor shall commence the Works within the period stated in the *Appendix* calculated from the date of acceptance of the tender/bid and, unless otherwise stated in the Contract, he shall give three days notice to the Superintendent before commencing the Works. Occupation of the site shall not be deemed to be exclusive possession.

9 Materials and Work

Save in so far as it is legally or physically impossible, the Contractor shall execute, complete and maintain the Works in strict accordance with the Contract and adhere strictly to the Superintendent's instructions and directions on any matter touching or concerning the Works. All materials and work shall be consistent with the nature and character of the Works and of kind suitable for its purpose and in conformity with the contract, or if not described shall be in accordance with the relevant standards.

10 Testing of Materials and Work

Materials and work shall be subject to such tests as are required by the Contract or as may be reasonably directed by the Superintendent to establish the conformity of materials and workmanship with the Contract. Except as otherwise stated in the Contract the work of testing and the cost thereof shall be undertaken by the Contractor.

11 Default of the Contractor

In default of compliance by the Contractor with any order or direction of the Superintendent under clauses 3, 9 or 10, after the expiry of three days the Superintendent may himself do or cause to be done all such acts which may be necessary in order to comply therewith and all costs incurred shall be met by the Contractor.

12 Supervision of Works

The Superintendent may appoint a suitably qualified representative of the Principal to supervise the Works on his behalf and shall so inform the Contractor in writing. The Contractor shall both permit any such person to supervise and inspect the Works and shall also comply with all lawful and delegated directions of such a person.

13 Contractor's Representative

The Contractor shall personally direct the execution of the work under the Contract or have on the site of the Works a competent representative approved by the Superintendent to control the work. Directions of the Superintendent given to the approved representative shall be deemed to be directions given to the Contractor.

14 Interference with the Public

The Contractor shall carry out all the operations involving the execution of the Works, except where otherwise permitted by the Superintendent, in such a manner as not to interfere with the public convenience or the access to use and occupation of public or private roads and foot paths or adjoining public or private properties.

15 Provisional Sums and Items

Every Provisional Sum or Prime Cost Item included in the Contract together with the charges and profit (if any) which the Contractor shall have added to such sum or item shall be deducted from the Contract Price and where work to which the Provisional Sum or Item relates has been ordered by the Superintendent and executed by the Contractor the value of the work so executed, valued in accordance with clause 16, shall be added to the Contract Price.

16 Variations

The Superintendent shall make any Variations of the source, form, quality or quantity of the Works or any part thereof that in his opinion is necessary and the value of the Variation shall be taken into account in determining the final Contract Price.

All such work shall be valued at the tendered rates or prices where such are applicable. If the Contract does not contain any rates or the rates or prices tendered are not applicable to the additional work, then reasonable rates or prices shall be agreed in writing between the Superintendent and the Contractor, failing which such rates or prices shall be determined by the Superintendent. No Variation shall vitiate the Contract. No Variation of the Works shall be made by the Contractor without a written order by the Superintendent.

17 Time for Completion

The Contractor shall complete the Works within the time stated in the *Appendix* calculated from the Date of Acceptance of the tender/bid, subject to any extension of time which may be granted by the Superintendent. The Contractor may apply in writing within fourteen days of the occurrence of any action or event not attributable to the act or default of the Contractor or his servants or agents for an extension of time, stating the matters involved and on receipt thereof the Superintendent shall determine whether an extension be granted and if granted the length of the extension and advise accordingly in writing.

18 Liquidated Damages

If the Contractor shall fail to complete the Works within the time stated or such extended time as shall be granted by the Superintendent, then the Contractor shall pay the Principal the sum stated (if any) in the *Appendix* as Liquidated Damages for such default, and not as or in the nature of a penalty, for every week or part of a week by which completion of the Works is delayed.

19 Defects Liability Period

As soon as, in the opinion of the Superintendent, the Works shall have been substantially completed in accordance with the Contract and on receiving a written undertaking by the Contractor to finish any outstanding work during the Defects Liability Period, the Superintendent shall issue a Certificate of Practical Completion and the Defects Liability Period stated in the *Appendix* shall be calculated from the date so certified. The Works shall at or as soon as practicable after the expiration of the Defects Liability Period be delivered up to the Principal fully completed in accordance with the Contract and in good condition (fair wear and tear excepted) to the satisfaction of the Superintendent, who shall thereupon issue a Final Certificate. The Contractor shall at his own expense execute all work of repair, amendment, reconstruction and making good of defects, imperfections, shrinkages or other faults as may be required by the Superintendent during the Defects Liability Period or within fourteen days after its expiration as a result of an inspection made prior to its expiration.

20 Cleaning up by Contractor

The Contractor shall keep the Works clean and tidy during the Contract and on the completion of the Works the Contractor shall clear away and remove from the site of the Works all plant, surplus material, rubbish and temporary works of every kind and fill and consolidate and level off all excavations (other than those forming part of the Works) made by the Contractor on the site and leave the whole of the site and works clean and tidy and free of rubbish and surplus material to the satisfaction of the Superintendent.

21 Rise and Fall in Costs

The Contract shall not be subject to adjustment for rise and fall in costs.

22 Payments

The Works shall be measured and valued as provided for in the Contract. Unless otherwise stated in the Contract, and subject to the provisions of the Contract, the Contractor may submit to the Superintendent at intervals of not less than one month a statement showing the estimated value of the Works executed up to the end of that period. Within 28 days of the delivery of such statement the Superintendent shall certify and the Principal shall pay to the Contractor such sum as the Superintendent considers is properly due less the retention as set out in the *Appendix* and any other deductions due to be made under the provisions of the Contract.

One half of the retention money shall be paid to the Contractor within 14 days after the issue by the Superintendent of the Certificate of Practical Completion. The remainder of the retention less any amounts used by the Superintendent under the provisions of the Contract shall be paid to the Contractor within 14 days after the issue of the Final Certificate by the Superintendent.

In the event that a Mobilisation Advance or any other advance payment has been made to the Contractor against which deductions may be made under the provisions of the Contract from monies owed to the Contractor, the repayment procedure shall be set out in the *Appendix*.

23 Default or Bankruptcy of Contractor

If the Superintendent shall certify to the Principal that the Contractor has failed to commence the Works within the period stated, or has failed to execute the Works at a rate of progress satisfactory to the Superintendent, or has neglected or omitted to execute any instruction of the Superintendent or has failed to complete the whole of the Works within the period stated for completion or such extended time as the Superintendent may grant, or has intimated that he is unwilling or unable to complete the Works, or has committed an act of bankruptcy, then the Principal may, after giving seven days of notice in writing of his intention to do so, cancel the Contract, and all monies held by the Principal may be used by the Principal for the purpose of completing the Works.

24 Serving Documents

Any notice or document to be given to or served on the Contractor under the terms of the Contract shall be deemed to have been given or served if it is handed to the Contractor, or is sent by prepaid post, or is left at the address stated on the Form of Tender and when sent by prepaid post it shall be deemed to have been given or served at the time of posting.

25 Cambodian Laws

The Contract shall in all respects be interpreted in accordance with the laws of Cambodia and with respect to any proceeding claim action or demand under or arising out of the

Contract, the Courts of Cambodia shall have exclusive jurisdiction.

26 Notification of Claims

It shall be a condition precedent to the Principal being liable to meet any claim for additional payment that the Contractor shall inform the Superintendent in writing not later than 14 days after the date of the occurrence of the events or circumstances on which the claim for additional payment is based.

27 Arbitration

If any dispute or difference shall arise between the Principal or the Superintendent on behalf of the Principal and the Contractor as to any matter arising out of the Contract which cannot be settled during the period of the Contract, then it may be referred at the conclusion of the Contract to an Arbitration Panel of one nominee of each Party and one to be mutually agreed between the Parties.



SPECIAL CONDITIONS OF CONTRACT

1 Labour-based Appropriate Technology

The Contractor shall carry out the Works using a labour-based technology which will maximise the use of effective labour and minimise the use of plant and equipment consistent with the Contractor's obligations regarding standards of work and all other provisions of the Contract.

The Superintendent shall advise the Contractor, if requested to do so, on the most practical working methods to be adopted in order to fulfil this requirement.

2 Detailed Work Programme

Following the notification of the award of the Contract, the Contractor shall prepare, in such detail as shall be satisfactory to the Superintendent, a work programme indicating the mix and balance of labour, plant and equipment which the Contractor intends to use for the Works. The Contractor shall not commence the Works until the work programme has been approved by the Superintendent.

3 Limited Use of Plant

The Superintendent shall have the power to limit the use of any plant or equipment engaged on the Works and the Contractor shall not bring any plant or equipment to the Site without the prior approval of the Superintendent, except for plant and equipment approved in the works programme.

4 Employment Records

The Contractor shall keep full, complete and accurate records of the employment of labour at the Site of Works. These shall include the names, ages, gender, home village, identity number, payments and deductions (if any). These records shall be available for inspection at all reasonable times and summarised on a monthly basis.

5 Superintendent's Power to Inspect

The Superintendent or his authorised representative shall have the power to inspect the employment records and pay sheets of the Contractor's labour force, at any reasonable time, without prior notice to the Contractor. The Superintendent may suspend works where it is found that workers are not engaged in accordance with the labour law and regulations of Cambodia and being paid less than the established minimum wage.

6 Provincial Labour Inspectorate

The designated officers of the Provincial Labour Inspectorate of the Ministry of Social Affairs, Labour and Veterans shall have the right to visit the site of the Works at any reasonable time for the purpose of inspecting labour records and otherwise checking the Contractor's compliance with labour laws and regulations. The inspectorate shall also have the right to call for meetings of the workers for the purpose of explaining their rights and obligations under the statutory regulations.

7 Labour Law of Cambodia

The Contractor shall be thoroughly conversant with the provisions of the Labour Law of Cambodia and its statutory additions and amendments. The Contractor shall ensure that the regulations pertaining to the employment of labour for the Works are fully understood and effected during the period of the Contract. In particular, he shall take note of those regulations regarding employment of women and children, equal pay and conditions, payment of workers, recruitment procedures and right of free association.

The Contractor may be entitled to operate a task work, daily wage or other system of remuneration which is allowed for in the Labour Law regulations.

8 Superintendent's Power to Pay Workers

In the event of default by the Contractor in paying the labour after not more than one month of working, the Superintendent shall have the power to pay the outstanding wages and allowances (if any) in accordance with the pay sheet records and to deduct the amount from any monies due to the Contractor. Continuing default by the Contractor may be a cause for suspension of work under the provisions of the contract.

9 Immediate Payment of Wages

At the request of the Contractor for immediate payment of the labour wages, the Superintendent may agree to certify, at intervals of not less than one month, the total amount of the Contractor's labour wages and allowances (if any) in accordance with the pay sheets, with an additional 10 percent for administrative overheads. The Principal shall pay the certified amount to the Contractor within three days of the receipt of the certificate.

The Contractor shall pay the amount of the wages and allowances (if any) to the workers within three days of receiving the amount from the Principal. Failure by the Contractor to pay within this time may result in the withdrawal of this payment arrangement by the Superintendent. The Superintendent shall have the power to discontinue this payment arrangement if he decides that it is no longer required for the satisfactory completion of the Contract.

The amount of any payment made under this Clause shall be deducted from any monies due to the Contractor, for work completed, under a subsequent interim payment certificate.

10 Recruitment of Workers

As far as reasonably possible, the Contractor shall recruit his un-skilled labour force from areas adjacent to the Works and in any case within reasonably walking distance of the site. The Contractor shall recruit new labour from time to time as the work progresses and he shall agree the recruitment systems and procedures with the Provincial Labour Inspectorate for compliance with the regulations in force at the time.

11 Power to Fix Rates

The Superintendent shall have the power to fix all or any of the unit rates for the work items in the Contract after taking due account of the method of working; the workers productivity; the cost of materials labour and equipment; the Contractors supervision and other overhead costs; and an allowance for profits. If the Contractor does not accept all or any of the rates so fixed, he may request the Principal to review the rates and to make a decision on the rates in dispute.

12 Deductions

The Principal shall have the power to deduct from monies payable to the Contractor under the Contract any amount due from the Contractor in respect of Advance Payments made; plant or equipment received; or materials delivered, whether subject to an agreed repayment schedule or not. The Principal shall take due account of any reasonable request from the Contractor for an agreed repayment schedule.

13 Sub-Contractors and Nominated Sub-Contractors

The Contractor shall be responsible for the performance of any sub-contractor in the execution of Works as if it was the performance of the Contractor and the provisions of the Contract shall equally apply.

A Nominated Sub-Contractor shall be deemed the same as a sub-contractor except that the Contractor shall not be obliged to accept the employment of a sub-contractor, nominated by the Principal, against whom the Contractor may raise reasonable objection.

14 Progress Meetings

The Superintendent shall have the right to call the Contractor to regular progress meetings at not less than one month intervals to review the construction. If required to do so the Contractor shall submit revised and updated work plans indicating how he intends to complete the Works within the contract period. Failure to submit satisfactory plans may result in the Superintendent withholding payment due under the Contract for such a period as he considers appropriate.

15 Contractor's Staff

The Contractor shall employ site supervision staff who are sufficiently experienced in labour-based construction technology. All staff shall be approved by the Superintendent before being engaged on site and the Superintendent shall have power to require the removal from site of any staff he considers insufficiently skilled for this type of construction.

16 Technical Manual

Where a labour-based construction Technical Manual exists, the Contractor shall be expected to follow the methods and standards set out and the Principal shall provide the Contractor with sufficient copies of the Manual for this purpose.

17 Substantial Completion in Parts

At the request of the Contractor, the Superintendent may agree the substantial completion of sections of works. The Maintenance (Defects Liability) period for such sections will commence from the date of the certificate of substantial completion as set out in the General Conditions.



APPENDIX TO CONDITIONS OF CONTRACT - CONTRACT DATA

Contract No: _____

Contract Name: *Supply and Installation of Culverts*

Name of Principal: Ministry of Rural Development

Name of Superintendent: Ministry of Rural Development represented by Provincial Departments in collaboration with I.T. Transport Ltd.

Province: _____

Name of Contractor: _____

Date of Commencement: _____

Date of Completion: _____

Site Location(s): _____

Amount of Retention Money: 15 percent

Currency of Payment: United States Dollars

Defects Liability Period: 3 months

Minimum Amount of Interim Certificate: US\$ 500:-

Time for Payment to be Made after Issue of Certificate: 1 week

Payment Schedule: Upon completion of each of the items listed in the Activity Schedule. Measurement will be carried out on a monthly basis.

Minimum Insurance Cover for Workers Compensation: US\$ 10,000:-



FORM OF AGREEMENT

Contract No: _____ Contract Name: _____

This agreement made this _____ day of _____ 20____

between the Ministry of Rural Development (hereinafter called the Principal) of the one part,
and _____ (hereinafter called the Contractor)
of the other part.

Whereas the Principal is desirous that certain works should be executed by the Contractor, viz. the *Supply and Installation of Pipe Culvert Drains* at _____ in _____ Province, and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

Now this Agreement witnesseth as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:

a) Form of Agreement,	d) Specific Conditions of Contract,
b) Form of Bid,	e) Specifications and Drawings, and
c) General Conditions of Contract,	f) Priced Activity Schedule.
3. In consideration of payments to be made by the Principal to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Principal to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Principal hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price of such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
5. In witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

Signed and approved: _____	Date: _____
on behalf of the Contractor	

Signed and Approved: _____	Date: _____
Provincial Project Manager on behalf of the Principal	

Witnessed: _____	Date: _____
Field Engineer, Project Implementation Consultant	



EVALUATION OF BIDS for CULVERT WORKS

Contract No: _____ Province: _____

Rating	Company Name	Quotation (US\$)	Remarks
1			
2			
3			
4			
Engineer's Estimate			

The Provincial Project Manager hereby recommends the selection of:

for the execution of culvert works at _____,

at the total price of: _____

Justification:

Verified by Field Engineer: _____ Date: _____
(Project Implementation Consultant)

Signature of Provincial Project Manager: _____ Date: _____

APPROVAL BY PROJECT MANAGEMENT OFFICE

Submitted:	_____	Date: _____
	National Project Manager	
Endorsed:	_____	Date: _____
	Team Leader, Project Implementation Consultant	
Approved:	_____	Date: _____
	Project Director	
Final Approval:	_____	Date: _____
	Project Coordinator	



INTERIM PAYMENT CERTIFICATE FOR CULVERT WORKS

Road Name: _____ Contract No: _____
 Province: _____ Certificate No: _____
 Contractor: _____
 Address: _____
 Commencement Date: _____ Completion Date: _____

This is to certify that the construction of culvert drains works as detailed in the table below and referred to in the Activity Schedule of the above mentioned Contract have been accepted to the satisfaction of the Project in accordance with the terms and conditions of the Contract.

Item No.	Chainage	No. of Pipe Rows	Culvert Diameter (m)	Remarks	Price (US\$)
TOTAL PRICE					

It is hereby advised that payment is made as follows:

- | | | |
|---|------------|--|
| 1. Total value of works carried out: | | |
| 2. Less 15% retention money (ref. Contract Data) | (1) x 0.15 | |
| 3. Less other deductions: _____
(specify) | | |

4. Amount Due:	(1)-(2)-(3)	
-----------------------	-------------	--

Amount in words: _____

Works	inspected by: _____ Date: _____ Provincial Engineer	
	Endorsed: _____ Date: _____ Field Engineer, Project Implementation Consultant	
	Approved: _____ Date: _____ Provincial Project Manager	



CERTIFICATE OF PRACTICAL COMPLETION OF CULVERT WORKS

Road Name: _____ Contract No: _____
 Province: _____ Certificate No: _____
 Contractor: _____
 Address: _____

This is to certify that the construction of culvert drains works at the above mentioned road (s) as specified in the Contract and referred to in detail in the Activity Schedule have been completed and accepted to the satisfaction of the Project in accordance with the terms and conditions of the Contract.

It is hereby advised that payment is made as follows:

1. Total Contract Value:		
2. Less previous paid amounts:		
3. Less 7.5% retention money (ref. Contract Data)	(1) x 0.075	
4. Less other deductions: _____		
(specify)		

5. Amount Due:	(1)-(2)-(3)-(4)	
-----------------------	-----------------	--

Amount in words: _____

The final payment of _____ (7.5%) shall be withheld until the Defects Liability Period is expired, starting from the below date of inspection and will be for a three month period. After final inspection and subject to approval, the Final Certificate shall thus be issued on _____, at which date the last payment shall be made.

Works		
inspected by:	_____	Date: _____
	Provincial Engineer	
Endorsed:	_____	Date: _____
	Field Engineer, Project Implementation Consultant	
Approved:	_____	Date: _____
	Provincial Project Manager	



FINAL CERTIFICATE OF COMPLETION OF CULVERT WORKS

Road Name: _____ Contract No: _____
 Province: _____ Certificate No: _____
 Contractor: _____
 Address: _____

This is to certify that the construction of culvert drains works at the above mentioned road (s) as specified in the Contract have been fully completed and accepted to the satisfaction of the Project after inspection following the Defects Liability Period in accordance with the terms and conditions of the Contract.

It is hereby advised that payment is made to the Contractor for the remaining retention monies, comprising 7.5% of the total Contract value, calculated as follows:

1. Total Contract Value:

2. Amount Due:	<small>(1) x 0.075</small>	
-----------------------	----------------------------	--

Amount in words: _____

Date of Practical Completion: _____

Date of End of Defects Liability Period: _____

Works	inspected by: _____	Date: _____
	Provincial Engineer	
Endorsed:	_____	Date: _____
	Field Engineer, Project Implementation Consultant	
Approved:	_____	Date: _____
	Provincial Project Manager	



EXPRESSION OF INTEREST

Company: _____

Company Address: _____

Telephone: _____ Fax: _____

To: National Project Manager
Rural Infrastructure Improvement Project
Ministry of Rural Development
P.O. Box 136
Phnom Penh

Sir:

1. We hereby apply to be considered by the Ministry of Rural Development as a bidder for works to be constructed under this project:

- | | |
|---|---|
| <input type="checkbox"/> pipe culvert supply and installation | <input type="checkbox"/> concrete bridge construction |
| <input type="checkbox"/> laterite supply and delivery | <input type="checkbox"/> rural market construction |
| <input type="checkbox"/> well construction | <input type="checkbox"/> construction of buildings |
| <input type="checkbox"/> rural road construction | <input type="checkbox"/> rural road maintenance |

2. We authorise the Ministry of Rural Development or its authorised representatives or consultants to conduct any investigations to verify the statements, documents and information submitted and to clarify the financial and technical aspects of this application. For this purpose, we hereby authorise any public official, engineer, bank, depository, manufacturer, distributor, etc. or any other person or firm to furnish pertinent information deemed necessary and requested by Ministry of Rural Development to verify statements and information provided in this application or regarding our competence and standing.

3. The names and positions of persons who may be contacted for further information, if required, are as follows:

- | | |
|----------------------|--------------|
| (a) Technical: _____ | Phone: _____ |
| (b) Financial: _____ | Phone: _____ |
| (c) Personnel: _____ | Phone: _____ |

4. We declare that the statements made and the information provided in the duly completed application are true to the best of our knowledge and belief, and we understand that, if any false or deliberately misleading information has been given, our application may be disqualified.

Respectfully,

Name:(print)

Signature:

Date:

Position in company:

A. GENERAL

1. Name of company: _____

2. Registered office address (postal): _____

(location) _____

3. Other office address (postal): _____

(location) _____

Tel. No(s). _____ Fax _____

4. Company constitution: limited liability partnership sole proprietorship.
 Cambodian registered foreign registered

Enclose details, where applicable.

5. Year of establishment: _____

6. Has the company ever changed its name? Yes no

If so, what was the previous name and what year was it changed?

7. Areas of operation (Provinces): _____

8. Is the company registered at other Ministries? Which one(s) and in which category?

9. Is your company registered with any association? Yes no

If yes, with which association? _____

10. What type of civil engineering works is your company mostly carrying out (e.g. major/minor roads, construction/ maintenance, concrete building, drainage structures/bridges, water supply, etc.):

B. MANAGEMENT AND STAFF

1. Particulars of promoters, i.e. major shareholders/partners/proprietors:

Name	Age	Professional Qualifications	Shareholding in Company: Amount, Percent

2. Particulars of other business interests of above promoters:

Promoter's Name	Name of Company	Nature of Business	Share and Nature of Interest

3. List all permanent management staff, with qualifications (if any), stating position in company:

Name	Position	Qualifications

4. List all permanent non-management staff (e.g. surveyors, draughtsmen, artisans, operators, office staff):

Name	Position	Name	Position

5. List any part-time management staff with average input to company (e.g. accountant 2 days per month).

Name	Position	Input (days/month)

6. Indicate number of labourers employed on contracts in the last three years.

Name of Contract	No. of Labourers

C. EXPERIENCE

1. List the works carried out during the past five years, either as main contractor or as a sub-contractor (including your present works contracts).

(a) Equipment-based Projects

Province	Client/Title of Contract	Brief Description of Works	Value of Contract (US\$)	Contract Duration/Completion Date

(b) Labour-based Work Projects

Province	Client/Title of Contract	Brief Description of Works	Value of Contract (US\$)	Contract Duration/Completion Date

E. FINANCIAL

1. Yearly turnover: US\$ _____

2. Amount company can raise in loans: US\$ _____

3. Indicate indebtedness to other financial institutions:

4. List immovable property assets of the company i.e. land, buildings, etc. (attach separate list, if necessary):

(a) Description of property: _____

(b) Location: _____

(c) Registered owners: _____

(d) Current value: _____

(e) Outstanding mortgage: _____

(f) Mortgage holder: _____

(g) Net current value: _____

Total net current value
of all property: _____

5. List value of capital assets:

(a) Cash in bank(s): _____

(b) Outstanding payment certificates due: _____

(c) Other capital assets (e.g. investments): _____

LESS:

(d) Total owing to outstanding creditors
(e.g. suppliers, labour, tax, etc.): _____

Total capital assets: _____

F BANKING FACILITIES

1. Does your company use a bank for conducting business? Yes no

If yes, with which bank? _____

2. Have you obtained bank guarantees or insurances for previous or on-going work contracts? Yes no

If yes, from which bank?

3. Indicate your possibilities of obtaining guarantees and insurance for the works envisaged under this project.

poor fair good

G. ADDITIONAL INFORMATION

1. Add any other information regarding the company which you consider important for the contractor prequalification exercise:
