

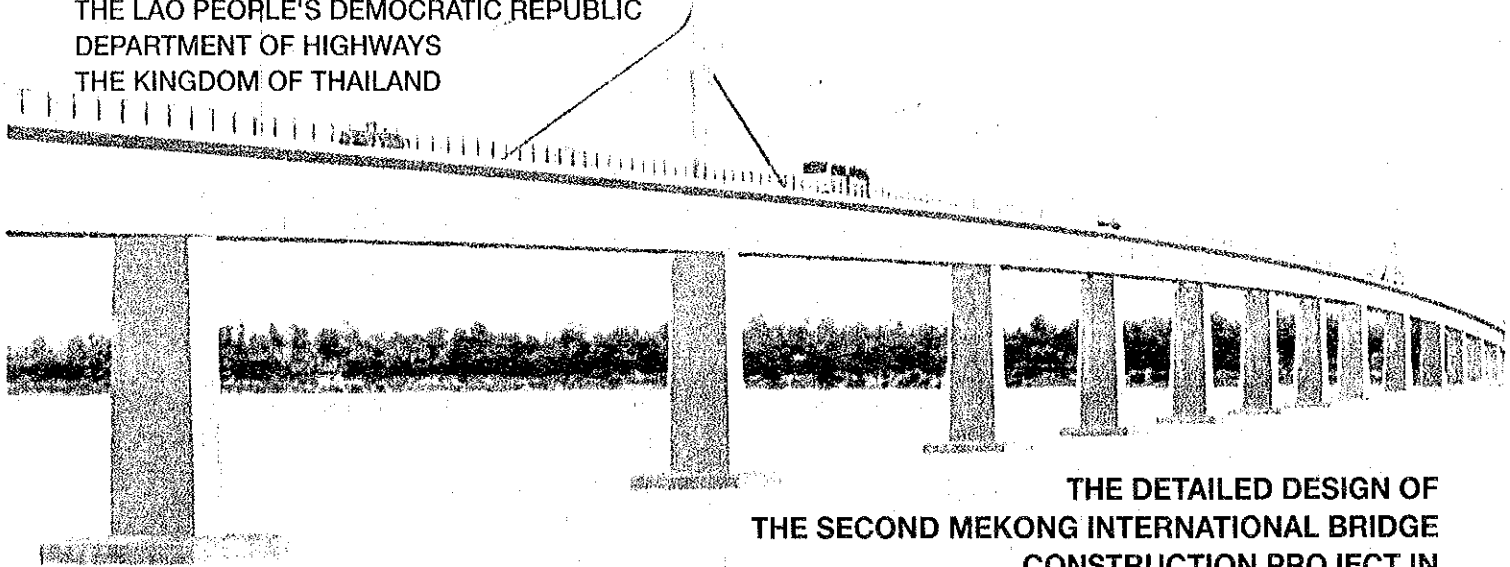
JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

DEPARTMENT OF HIGHWAYS

THE KINGDOM OF THAILAND



THE DETAILED DESIGN OF
THE SECOND MEKONG INTERNATIONAL BRIDGE
CONSTRUCTION PROJECT IN
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC AND
THE KINGDOM OF THAILAND

FINAL REPORT

JUNE 2000



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ORIENTAL CONSULTANTS COMPANY LIMITED
NIPON KOEI CO., LTD.

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JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC
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FINAL REPORT
DRAFT BIDDING DOCUMENTS (PACKAGE 3)
VOLUME 3

JUNE 2000



ORIENTAL CONSULTANTS COMPANY LIMITED



NIPPON KOEI CO., LTD.



1158431 [5]

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FORM OF BID

Name of Contract: The Second Mekong International Bridge Construction Project, Package 3:
Border Control Facilities and Connecting Roads Works.....

To : The Project Director, The Second Mekong International Bridge Construction Project,
Department of Highways, Ministry of Transport and Communications, Sri Ayutthaya Road,
Bangkok, 10400, Thailand.....

Gentlemen:

1. Having examined the Conditions of Contract, Specification, Drawings, and Bill of Quantities and Addenda Nos. 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 Conditions of Contract, Specification, Drawings, Bill of Quantities and Addenda for the sum of

(.....)

as specified in the Appendix to Bid or such other sums as may be ascertained in accordance with the said Conditions.

2. We acknowledge that the Appendix forms part of our Bid.
3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Bid.
4. We agree to abide by this Bid for the period of 180 days from the date fixed for receiving the same, and it shall remain binding upon us and 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 bid you may receive.

Dated this day of (state year).....

Signature in the capacity of duly

authorized to sign bids for and on behalf of

[in block capitals or typed]

Address

Witness

Address

Occupation

APPENDIX TO BID

Sub-Clause

Amount of Performance Security	10.1	_10_ percent of the Contract Price (for banker's guarantee)
Minimum amount of Third party insurance	23.2	Yen10,000,000 per occurrence, with the number of occurrences unlimited
Time for issue of the notice to commence	41.1	Within _30_ days after the Letter of Acceptance
Time for Completion	43.1	_24_ calendar months after the commencement date
Amount of liquidated damage	47.1	Yen150,000 per day
Limit of liquidated damages	47.1	_10_ percent of the Contract Price
Defects Liability Period	49.1	_12_ calendar months
Source for obtaining rates of exchange for currencies used by the bidder in calculation its bid price	72.2	-Exchange rate shall be the selling rate of <u>The Krung Thai Bank, Bangkok, Thailand</u>
Minimum amount of Interim Monthly Payment Certificates	60.2	_2_ percent of the Contract Price
Retention Money	60.5	_10_ percent of Interim Monthly Payment Certificates
Advance Payment	60.7	_10_ percent of the Contract Price
Start Repayment of Advance Payment	60.7	After certification of _30_ percent of the Contract Price less Provisional Sums
Monthly amortization of Advance Payment	60.7	_20_ percent of the amount of Interim Monthly Payment Certificates
Procedure for Settlement of Disputes ¹	67	The procedure for Settlement of Dispute is: Version 2 or "Clause 67 of FIDIC General Conditions"
	67.1	Number of members of Dispute Adjudication Board (one or three) <u>three</u>

	67.1	Member of Dispute Adjudication Board (if not agreed) to be appointed by _____ [delete when the original FIDIC Clause 67 is retained]
Number of arbitrators	67.3 (67.4 if Version 2)	three (3)
Place of arbitration	67.3 (67.4if Version 2)	_____ [indicate country]
Language of arbitration	67.4	English
Factors for price adjustment formulae	70.3	[See table below]

Section of the Works:

Factor and Description	Value	*Range of Value
(a) Fixed	0.100	Fixed
(b) Material		
(c) Steel		
(d) Cement		
(e) General National Consumer		
(e) Asphalt		
(g) Equipment		
(h) Fuel		
	Sum = 1.000	

*Range of value is to be finalized prior to the bidding.

Sources of Indices 70.4 [See table below]

Indices for Thai Baht

Index for: (factor)	Origin of Input (country)	Currency of Index	Published Source of Index	Base Value On ___/___/___
M Materials	Thailand	Baht	Thai Ministry of Commerce	
S Steel	Thailand	Baht	Thai Ministry of Commerce	
C Cement	Thailand	Baht	Thai Ministry of Commerce	
A Asphalt	Thailand	Baht	Thai Ministry of Commerce	
E Equipment	Thailand	Baht	Thai Ministry of Commerce	
F Fuel	Thailand	Baht	Thai Ministry of Commerce	

Indices for Lao Kip

Index for: (factor)	Origin of Input (country)	Currency of Index	Published Source of Index	Base Value On ___/___/___
L Labour	Lao PDR	Kip	Ministry of Labour and Social Welfare	
M Materials	Thailand	Baht	Thai Ministry of Commerce	
S Steel	Thailand	Baht	Thai Ministry of Commerce	
C Cement	Thailand	Baht	Thai Ministry of Commerce	
A Asphalt	Thailand	Baht	Thai Ministry of Commerce	
E Equipment	Thailand	Baht	Thai Ministry of Commerce	
F Fuel	Lao PDR	Kip	Lao State Oil Company	

Contract Amount in
Various Currencies

72.2

[See Table Below]

Summary of currencies of bid in which the contract price is payable.

Currency (Name)	Percentage Payable in Currency	Rate of Exchange: One Foreign Equals "X" Local
Thai Baht		
Japanese Yen		
US Dollar		
Lao Kip		
Total	100%	

FORM OF BID SECURITY (BANK GUARANTEE)

WHEREAS, [Name of Bidder] (hereinafter called "the Bidder") has submitted his bid dated [Date] for the construction of the Second Mekong International Bridge Package 3 : Border Control Facilities and Connecting Road Works in Thailand side (hereinafter called "the Bid").

KNOW ALL MEN by these presents that We [Name of Bank] of [Name of Country] having our registered office at (hereinafter called "the Bank") are bound unto the Department of Highways, Ministry of Transport and Communications, Government of the Kingdom of Thailand (hereinafter called "the Employer") in the sum of for which payment well and truly to be made to the said Employer the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this day of (state year)

THE CONDITIONS of this obligation are:

- (1) If the Bidder withdraws his Bid during the period of bid validity specified in the Form of Bid: or
- (2) If the Bidder does not accept the correction of arithmetical errors of his bid price in accordance with the Instructions to Bidders: or
- (3) If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of bid validity:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders,

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 28 days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE SIGNATURE OF THE BANK

WITNESS SEAL

.....
(Signature, Name, and Address)

**LIST OF ELIGIBLE COUNTRIES OF
JBIC ODA LOANS**

SECTION 6 – BILL OF QUANTITIES

**PREAMBLE
TO
BILL OF QUANTITIES**

1. Attention is directed to the Form of Contract, the Conditions of Contract, the Technical Specifications and the Drawings and these documents are to be read in conjunction with the Bill of Quantities.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive value of the work described under the several items, including all costs and expenses which may be required in and for the construction of the work described, together with all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is to be based.
4. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related items of Work.
5. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
6. A price or rate is to be entered against each item in the Bill of Quantities, except for those marked Not Applicable or "N/A". If a unit rate is omitted from an item being not a lump sum item, but the Estimated Amount for the item has been entered in the sixth column of the Schedule, the appropriate unit rate may be derived by division of the said estimated amount by the estimated quantity set out in the fourth column of the Schedule. Nothing contained in this Preamble to the Bill of Quantities shall in any way limit or restrict or otherwise impair the operation of the Instructions to Bidders, to which attention is particularly directed.
7. All items are measured and paid for in accordance with the measurement and payment methods described in the Technical Specifications.

8. General directions and description of works and material given in the Technical Specifications is not repeated in the Bill of Quantities. Reference is to be made to the said documents for this information.
9. All prices and rates in the Bill of Quantities must be quoted entirely in Thai Baht and no other currency will be acceptable.
10. Abbreviations used are:

ea or each	=	Each
cu.m.	=	Cubic Meter
l	=	Liter
l.s.	=	Lump Sum
sq.m.	=	Square Meter
ton	=	Metric Ton (1000 kilograms)
l.m.	=	Linear Meter
h	=	Hour
11. Where "N/A" appears instead of figure in the column "Estimated Quantity", it means that the item does not apply to this Contract.
12. In the event of any discrepancy in item number, descriptions or units, or in quantities of work between this bidding documents and the "Summary of Quantities" forming part of the contract Drawings the details given in this bidding document shall take precedence.

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT
PACKAGE 3**

(BORDER CONTROL FACILITIES AND ROAD WORKS)

STA.0+000 - STA.0+950

(0.95 km.)

GRAND SUMMARY OF PRICES

NO.	ITEM	AMOUNT (BAHT)
Part - 2 Part - 3 Part - 4	CIVIL WORK BUILDING WORK UTILITY WORK	
	TOTAL AMOUNT IN BAHT	
	GRAND TOTAL AMOUNT IN BAHT (VAT 0%)	

GRAND TOTAL AMOUNT WRITTEN IN WORDS :

.....

.....

Date : _____

Signature : _____

Title : _____

On behalf of : _____

Corporate Seal : _____

PART 2 CIVIL WORKS

BILL OF QUANTITIES

SUMMARY OF PRICES

PART-2 CIVIL WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

NO.	ITEM	UNIT	QUANTITY	UNIT RATE	AMOUNT BAHT
1	EARTH WORK	each	1		
2	SUBBASE AND BASE COURSES	each	1		
3	SURFACE COURSES	each	1		
4	INCIDENTALS	each	1		
TOTAL OF PART-2 IN BAHT					

BILL OF QUANTITIES

SECTION 2 - EARTH WORK

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
2.1(1)	Clearing and Grubbing	sq.m.	145,449		
2.2(1)	Excavation and Embankment, Earth	cu.m.	82,030		
2.2(2)	Excavation, Unsuitable Material	cu.m.	10,127		
2.2(3)	Excavation and Embankment, Soft Rock	cu.m.	N/A		
2.2(4)	Excavation and Embankment, Hard Rock	cu.m.	N/A		
2.2(5)	Excavation, Asphaltic Concrete Pavement	cu.m.	924		
2.4(1)	Channel Excavation and Embankment, Earth	cu.m.	N/A		
2.4(2)	Channel Excavation and Embankment, Soft Rock	cu.m.	N/A		
2.4(3)	Channel Excavation and Embankment, Hard Rock	cu.m.	N/A		
2.5(1)	Structure Excavation, Type 1 Unclassified	cu.m.	N/A		
2.5(2)	Structure Excavation, Type 2 Unclassified	cu.m.	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 2 - EARTH WORK

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
2.5(3)	Bailing Stone	cu.m.	N/A		
2.6(1)	Embankment by Borrow Material	cu.m.	92,350		
2.6(2)	Earth Fill in Median Island and Shoulder	cu.m.	27,393		
TRANSFER SECTION 2 TOTAL TO SUMMARY OF PRICES				BAHT	

BILL OF QUANTITIES

SECTION 3 - SUBBASE AND BASE COURSES

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
3.1(1)	Subbase	cu.m.	12,202		
3.1(2)	Sand Layer Cushion	cu.m.	2,900		
3.2(1)	Aggregate Base Course	cu.m.	5,970		
3.3(1)	Soil Aggregate Shoulder	cu.m.	N/A		
TRANSFER SECTION 3 TOTAL TO SUMMARY OF PRICES				BAHT	

BILL OF QUANTITIES

SECTION 4 - SURFACE COURSES

PACKAGE 3
BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
4.2(1)	Asphaltic Prime Coat	sq.m.	28,506		
4.3(1)	Asphaltic Tack Coat	sq.m.	27,317		
4.4(1)	Asphaltic Concrete for Wearing Course	cu.m.	1,388		
4.4(2)	Asphaltic Concrete for Binder Course	cu.m.	1,387		
4.5(1)	Portland Cement Concrete Pavement, 25 cm	sq.m.	29,100		
TRANSFER SECTION 4 TOTAL TO SUMMARY OF PRICES				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.1(1)	Gabion Mattress (t=50cm)	sq.m.	N/A		
6.1(2)	Stairs on River Bank Protection	l.m.	N/A		
6.1(3)	RC. Chute Drain on Liver Bank Protection	each	N/A		
6.2(1)	Subdrain, Perforated PVC Pipe, 15cm diameter	l.m.	690		
6.3(1).1	Reinforced Concrete Pipe, 40cm diameter L	l.m.	N/A		
6.3(1).2	Reinforced Concrete Pipe, 40cm diameter T	l.m.	N/A		
6.3(1).3	Reinforced Concrete Pipe, 60cm diameter L	l.m.	N/A		
6.3(1).4	Reinforced Concrete Pipe, 60cm diameter T	l.m.	970		
6.3(1).5	Reinforced Concrete Pipe, 80cm diameter L	l.m.	N/A		
6.3(1).6	Reinforced Concrete Pipe, 80cm diameter T	l.m.	227		
6.3(1).7	Reinforced Concrete Pipe, 100cm diameter L	l.m.	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.3(1).8	Reinforced Concrete Pipe, 100cm diameter T	l.m.	N/A		
6.3(1).9	Reinforced Concrete Pipe, 120cm diameter L	l.m.	N/A		
6.3(1).10	Reinforced Concrete Pipe, 120cm diameter T	l.m.	44		
6.3(1).11	Reinforced Concrete Pipe, 150cm diameter L	l.m.	N/A		
6.3(1).12	Reinforced Concrete Pipe, 150cm diameter T	l.m.	N/A		
6.3(2)	RC. Pipe Headwall, Reinforced Concrete	cu.m.	22		
6.3(3).1	Box Culvert, 2.40x2.40m, at Sta.0+980.000 T	l.m.	N/A		
6.3(3).2	Box Culvert, 3x3.60x3.60m, at Sta.1+017.000 T	l.m.	N/A		
6.3(3).3	Box Culvert, 2.50x2.50m, at Sta.4+781.000 L	l.m.	N/A		
6.3(3).4	RC U-Wall for Rc.Box Culvert T	l.m.	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.3(4).1	Reinforced Concrete U-ditch, 0.30mx0.30m	l.m.	370		
6.3(4).2	Reinforced Concrete U-ditch, 0.30mx0.50m L	l.m.	N/A		
6.3(4).3	Reinforced Concrete U-ditch, 0.30mx0.50m T	l.m.	N/A		
6.3(4).4	Reinforced Concrete U-ditch, 0.30mx0.80m T	l.m.	N/A		
6.3(4).5	Reinforced Concrete U-ditch, 0.45mx0.45m L	l.m.	N/A		
6.3(4).6	Reinforced Concrete U-ditch, 0.50mx0.50m T	l.m.	N/A		
6.3(4).7	Reinforced Concrete U-ditch, 0.50mx0.50m T, With	l.m.	N/A		
6.3(4).8	Reinforced Concrete U-ditch, 0.50mx0.60m T	l.m.	N/A		
6.3(4).9	Reinforced Concrete U-ditch, 0.50mx0.80m L/T,	l.m.	690		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3
BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.3(4).10	Reinforced Concrete U-ditch, 0.50mx0.80m L/T,	l.m.	27		
6.3(4).11	Reinforced Concrete U-ditch, 0.60mx0.60m T	l.m.	N/A		
6.3(4).12	Reinforced Concrete U-ditch, 1.00mx1.00m L	l.m.	N/A		
6.3(4).13	Reinforced Concrete U-ditch, 1.10mx1.00m L	l.m.	N/A		
6.3(4).14	Reinforced Concrete U-ditch, 1.20mx1.20m T	l.m.	N/A		
6.3(4).15	Reinforced Concrete U-ditch, 1.20mx1.20m T, With	l.m.	N/A		
6.3(4).16	Reinforced Concrete U-ditch, 1.30mx1.00m L	l.m.	N/A		
6.3(5).1	Reinforced Concrete Chute Drain 0.4mx0.4m T	l.m.	N/A		
6.3(5).2	Reinforced Concrete Chute Drain 1.0mx1.0m L	l.m.	N/A		
6.3(5).3	Reinforced Concrete Chute Drain 1.0mx1.0m T	l.m.	164		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.3(6).1	Reinforced Concrete Side Ditch	l.m.	N/A		
6.3(6).3	Stone Masonry T=20cm for Open Side Ditch	sq.m.	885		
6.3(7).1	Manholes, 0.8m =< W < 1.0m With RC Cover	each	110		
6.3(7).2	Manholes, 0.8m =< W < 1.0m With Steel Grating	each	N/A		
6.3(7).3	Manholes, 1.0m =< W With RC Cover	each	13		
6.3(7).4	Manholes, 1.0m =< W With Steel Grating	each	2		
6.3(8).1	Catch Basin 0.6mx0.6m T	each	8		
6.3(8).2	Catch Basin 0.7mx0.7m T	each	N/A		
6.3(8).3	Catch Basin 1.0mx1.0m T	each	N/A		
6.3(8).4	Catch Basin 1.5m.x1.6m L	each	N/A		
6.3(8).5	Catch Basin 1.5m.x1.7m L	each	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.3(8).6	Catch Basin 1.5m.x1.9m L	each	N/A		
6.3(8).7	Catch Basin 1.2m.x1.2m L	each	N/A		
6.3(9)	Drop Inlet 1.0mx1.6m L	each	N/A		
6.3(10).1	Curb Inlet and Side Inlet Drain L	l.m.	N/A		
6.3(10).2	Curb Inlet and Side Inlet Drain T	l.m.	278		
6.3(10).3	Inlet Drain RC rectangular Pipe	l.m.	N/A		
6.4(1).1	Concrete Curb Type 1	l.m.	4,118		
6.4(1).2	Concrete Curb Type 2	l.m.	1,950		
6.4(1).3	Concrete Curb Type 3	l.m.	180		
6.4(1).4	Concrete Curb Type 4	l.m.	N/A		
6.4(2)	Curb and Concrete Barrier Markings	sq.m.	2,786		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.5(1)	Concrete Paving Block for Sidewalk	sq.m.	11,500		
6.6(1)	Block Sodding	sq.m.	39,420		
6.6(2)	Strip Sodding	sq.m.	N/A		
6.7(1)	Steel Guard Rail, W-Beam	l.m.	N/A		
6.8(1)	Topsoil	cu.m.	2,940		
6.9(1)	Security Fence L	l.m.	N/A		
6.9(2)	Security Fence T	l.m.	1,300		
6.9(3)	Bared Wire Fence	l.m.	N/A		
6.9(4)	Net Fence	l.m.	93		
6.9(5)	Custom Checkpoint Gate	each	N/A		
6.9(6)	Minor Gate	each	2		
6.9(7)	Main Gate	l.m.	1		
6.9(8)	Permanent Timber Barricade	l.m.	9		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.9(9)	Handrail	l.m.	N/A		
6.10(1)	Guide Post	each	N/A		
6.11(1)	Concrete Post And Foundation For Road Sign, Size	l.m.	185		
6.11(2)	Concrete Post And Foundation For Road Sign, Size	l.m.	45		
6.11(3)	Steel Post And Foundation For Road Sign, Type L1	each	N/A		
6.11(4)	Steel Post And Foundation For Road Sign, Type L2	each	N/A		
6.11(5)	Steel Post And Foundation For Road Sign, Type L3	each	N/A		
6.11(6)	Steel Post For Road Sign, On Bridge	each	N/A		
6.11(7)	Steel Post And Foundation For Overhanging Sign,	each	N/A		
6.11(8)	Steel Post And Foundation For Overhanging Sign,	each	2		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.11(9)	Steel Post And Foundation For Overhanging Sign,	each	N/A		
6.11(10)	Steel Post And Foundation For Overhanging Sign,	each	4		
6.11(11)	Steel Frame And Foundation For Overhead Sign	each	1		
6.11(12)	Road Signs L	sq.m.	N/A		
6.11(13)	Road Signs T	sq.m.	51		
6.11(14)	Overhanging Signs L	sq.m.	N/A		
6.11(15)	Overhanging Signs T	sq.m.	59		
6.11(16)	Overhead Signs	sq.m.	11		
6.12(1)	10m Tapered Steel Pole with One High Pressure	each	N/A		
6.12(2)	10m Tapered Steel Pole with One High Pressure	each	70		
6.12(3)	High Mast with Lanterns for Lao Side Connectiong	each	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

**PACKAGE 3
BORDER CONTROL FACILITIES AND ROAD WORKS**

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.12(4)	Electric Facilities for Street Lighting, SP1	each	1		
6.12(5)	Electric Facilities for Street Lighting, SP2	each	N/A		
6.12(6)	Electric Facilities for Street Lighting, SP5	each	N/A		
6.12(7)	Electric Facilities for Street Lighting, SP6	each	N/A		
6.12(8)	Electric Facilities for Street Lighting, SP7	each	N/A		
6.12(9)	Electric Facilities for Street Lighting, SP8	each	N/A		
6.12(10)	Electric Facilities for Street Lighting, SP78	each	N/A		
6.13(1)	Traffic Signals at Sta. 1+120.000	l.s.	N/A		
6.14(1)	Road Marking Without Reflectorized Beads	sq.m.	35		
6.14(2)	Road Marking With Reflectorized Beads in the	sq.m.	1,888		
6.15(1)	Planting Palm Tree	each	N/A		
6.15(2)	Planting Champa	each	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.15(3)	Planting Paper Tree	each	N/A		
6.15(4)	Planting Shrub	each	N/A		
6.15(5)	Planting Chaiyaphruk (Koon) (Cassia Fistula L.)	each	633		
6.15(6)	Planting Parad Ooban	each	131		
6.15(7)	Planting Rajcha Phruk	each	14		
6.15(8)	Planting Kalapra Phruk	each	9		
6.15(9)	Planting Songbadarn	each	35		
6.16(1)	Kilometer Post L	each	N/A		
6.16(2)	Kilometer Post T	each	1		
6.16(3)	Right-of-Way Monuments L	each	N/A		
6.16(4)	Right-of-Way Monuments T	each	51		
6.17(1)	Road Stad	each	N/A		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 6 - INCIDENTALS

PACKAGE 3

BORDER CONTROL FACILITIES AND ROAD WORKS

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
6.18(1)	Porous Backfill for Abutment	cu.m.	N/A		
6.19(1)	Flag Pole	each	1		
TRANSFER SECTION 6 TOTAL TO SUMMARY OF PRICES				BAHT	

PART 3 BUILDING WORKS

BILL OF QUANTITIES

SUMMARY OF PRICES

PART-3 BUILDING WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

NO.	ITEM	UNIT	QUANTITY	UNIT RATE	AMOUNT BAHT
1	MAIN OFFICE				
	(1) ARRIVAL BUILDING	each	1		
	(2) DEPARTURE BUILDING	each	1		
2	PUBLIC TOILETS	each	2		
3	MAIN INSPECTION ROOF	each	1		
4	CARGO INSPECTION ROOF	each	2		
5	SUSPECTED INSPECTION ROOF	each	1		
6	INSPECTION BOOTHS (IMM. & CUSTOM)	each	13		
7	INSPECTION BOOTHS (IMM. & QUARANTINE)	each	7		
8	CHECKING OFFICE (ENT. & EXIT)	each	2		
9	CHECK & TOLL FEE OFFICE (EXIT)	each	1		
10	CHECK POINT BOOTHS	each	2		
11	OFFICER'S PARKING ROOF (LONG)	each	1		
12	OFFICER'S PARKING ROOF (SHORT)	each	2		
13	POWER HOUSE	each	1		
14	CARBAGE PUMP SHED	each	2		
15	CAR INSPECTION PIT	each	1		
TOTAL OF PART-3 IN BAHT					

BILL OF QUANTITIES

3.1(1) ARRIVAL BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
7	GENERAL REQUIREMENT				
7.3 (1)	Geological Survey , Auger Boring	l.m.	20		
7.3 (2)	Standard Penetration Test and Laboration Test	ls.	1		
SUB-TOTAL OF SECTION. 7					
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	568		
8.3(1)	Backfilling	cu.m.	517		
8.3(2)	Embankment	cu.m.	N/A		
8.6(1)	Rubble Foundation	sq.m.	N/A		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(2)	Prestressed Spun Concrete Pile 300mm ϕ L = 18.0m	l.m.	1,116		
9.3(4)	Pile Head Cut	each	62		
9.3(5)	Static Load Test on Prestressed Spun Concrete Piles	eeach	1		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE AND FORMWORK REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	263		
10.2(2)	Concrete (Type F)	cu.m.	3		
10.2(4)	Ordinary Form	sq.m.	2,175		
10.2(5)	Reinforcing Bar	ton	35.03		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(1)	Half Brick, t=70mm	sq.m.	940		
SUB-TOTAL OF SECTION. 12					

BILL OF QUANTITIES

3.1(1) ARRIVAL BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	472		
SUB-TOTAL OF SECTION. 13					
14	TERRAZZO WORK				
14.3(1)	Terrazzo in-situ	sq.m.	86		
14.3(3)	Terrazzo Skirting,H=100	l.m.	88		
SUB-TOTAL OF SECTION. 14					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	252		
15.2(3)	Ceramic Tile to Floor, 200x200x6	sq.m.	71		
SUB-TOTAL OF SECTION. 15					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	2,078		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	24		
16.6(1)	Washed Gravel	sq.m.	78		
SUB-TOTAL OF SECTION. 16					
17	DOOR AND WINDOW WORK				
17.2(3)	Wooden Panel Door	sq.m.	59		
17.4(1)	Aluminum Sliding Window	sq.m.	76		
17.4(2)	Aluminum Top Hinge Window	sq.m.	9		
17.4(3)	Aluminum Fixed Window	sq.m.	17		
17.4(4)	Aluminum Louver	sq.m.	77		
17.4(5)	Aluminum Door	sq.m.	39		
SUB-TOTAL OF SECTION. 17					

BILL OF QUANTITIES

3.1(I) ARRIVAL BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	1,278		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	1,376		
18.3(6)	Vanish Paint to Wood	sq.m.	154		
SUB-TOTAL OF SECTION. 18					
19	CARPENTRY AND JOINERY WORK				
19.2(2)	Wood Door Frame	l.m.	168		
SUB-TOTAL OF SECTION. 19					
20	INTERIOR FINISHING WORK				
20.2(1)	Acoustical Tile Ceiling, t=15	sq.m.	428		
20.2(3)	Gypsum Board Ceiling, t=9	sq.m.	171		
20.2(5)	Vinyl Floor Tile, 300x300x2	sq.m.	312		
20.2(6)	Vinyl Soft Base, H=100	l.m.	284		
SUB-TOTAL OF SECTION. 20					
21	MISCELLANEOUS METAL WORK				
21.3(1)	Roof Drain , C.I. 100 ϕ	each	4		
21.3(4)	Floor Drain , C.I. 100 ϕ	each	6		
21.3(6)	Stainless Handrail	each	N/A		
SUB-TOTAL OF SECTION. 21					
22	MISCELLANEOUS WORK				
22.3(1)	Kitchen Sink Unit , L = 1800	each	2		
22.3(4)	Downspout , PVC: 100 Dia.	l.m.	55		
22.3(9)	Room Name Plates	each	N/A		
22.3(11)	Shower Curtain and Rail	sq.m.	N/A		
22.3(13)	Concrete Roof Tiling w/Complete Parts	sq.m.	N/A		
22.3(22)	Mirrors	l.m.	8		
SUB-TOTAL OF SECTION. 22					

BILL OF QUANTITIES

3.1(1) ARRIVAL BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
23	OUTDOOR WORK				
23.2(1)	Plant Box	l.m.	16		
SUB-TOTAL OF SECTION. 23					
TRANSFER 3.1(1) TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.1(2) DEPARTURE BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	568		
8.3(1)	Backfilling	cu.m.	517		
8.3(2)	Embankment	cu.m.	4		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(2)	Prestressed Spun Concrete Pile 300mm ϕ L = 18.0m	l.m.	1,116		
9.3(4)	Pile Head Cut	each	62		
9.3(5)	Static Load Test on Prestressed Spun Concrete Piles	each	1		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	263		
10.2(2)	Concrete (Type F)	cu.m.	3		
10.2(4)	Ordinary Form	sq.m.	2,175		
10.2(5)	Reinforcing Bar	ton	35.03		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(1)	Half Brick, t=70mm	sq.m.	866		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	472		
SUB-TOTAL OF SECTION. 13					

BILL OF QUANTITIES

3.1(2) DEPARTURE BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
14	TERRAZZO WORK				
14.3(1)	Terrazzo in-situ	sq.m.	86		
14.3(3)	Terrazzo Skirting,H=100	l.m.	140		
SUB-TOTAL OF SECTION. 14					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	240		
15.2(3)	Ceramic Tile to Floor,200x200x6	sq.m.	68		
SUB-TOTAL OF SECTION. 15					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	2,016		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	24		
16.6(1)	Washed Gravel	sq.m.	78		
SUB-TOTAL OF SECTION. 16					
17	DOOR AND WINDOW WORK				
17.2(3)	Wooden Panel Door	sq.m.	59		
17.4(1)	Aluminum Sliding Window	sq.m.	76		
17.4(2)	Aluminum Top Hinge Window	sq.m.	9		
17.4(3)	Aluminum Fixed Window	sq.m.	17		
17.4(4)	Aluminum Louver	sq.m.	77		
17.4(5)	Aluminum Door	sq.m.	39		
SUB-TOTAL OF SECTION. 17					
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	1,278		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	1,249		
18.3(6)	Vanish Paint to Wood	sq.m.	N/A		
SUB-TOTAL OF SECTION. 18					

BILL OF QUANTITIES

3.1(2) DEPARTURE BUILDING

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
19	CARPENTRY AND JOINERY WORK				
19.2(2)	Wood Door Frame	l.m.	168		
SUB-TOTAL OF SECTION. 19					
20	DIVISION 20 - INTERIOR FINISHING WORK				
20.2(1)	Acoustical Tile Ceiling, t=15	sq.m.	430		
20.2(3)	Gypsum Board Ceiling, t=9	sq.m.	169		
20.2(5)	Vinyl Floor Tile, 300x300x2	sq.m.	314		
20.2(6)	Vinyl Soft Base, H=100	l.m.	279		
SUB-TOTAL OF SECTION. 20					
21	MISCELLANEOUS METAL WORK				
21.3(5)	Non-Slip Nosing, W=40	l.m.	N/A		
21.3(8)	Stainless Handrail	each	N/A		
SUB-TOTAL OF SECTION. 21					
22	DIVISION 22 - MISCELLANEOUS WORK				
22.3(1)	Kitchen Sink Unit, L = 1800	each	2		
22.3(4)	Downspout, PVC. 100 Dia.	l.m.	55		
22.3(9)	Venetian Blinds	sq.m.	N/A		
22.3(11)	Roof Insulation, t=50	sq.m.	N/A		
22.3(13)	Window Flashing Frames	sq.m.	N/A		
22.3(22)	Mirrors	l.m.	8		
SUB-TOTAL OF SECTION. 22					
23	OUTDOOR WORK				
23.2(1)	Plant Box	l.m.	16		
SUB-TOTAL OF SECTION. 23					
TRANSFER 3.1(2) TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.2 PUBLIC TOILETS

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	29		
8.3(1)	Backfilling	cu.m.	25		
8.3(2)	Embankment	cu.m.	1		
SUB-TOTAL OF SECTION. 8					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	86		
10.2(2)	Concrete (Type F)	cu.m.	1		
10.2(4)	Ordinary Form	sq.m.	182		
10.2(5)	Reinforcing Bar	ton	2.57		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(1)	Half Brick, t=70mm	sq.m.	14		
12.2(2)	Concrete Hollow Block, t=100mm.	sq.m.	95		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	42		
SUB-TOTAL OF SECTION. 13					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	70		
15.2(3)	Ceramic Tile to Floor, 200x200x6	sq.m.	35		
SUB-TOTAL OF SECTION. 15					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	58		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	15		
16.6(1)	Washed Gravel	sq.m.	45		
SUB-TOTAL OF SECTION. 16					

BILL OF QUANTITIES

3.2 PUBLIC TOILETS

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
17	DOOR AND WINDOW WORK				
17.2(3)	Wooden Panel Door	sq.m.	10		
17.4(3)	Aluminum Fixed Window	sq.m.	6		
SUB-TOTAL OF SECTION. 17					
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	80		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	16		
18.3(6)	Vanish Paint to Wood	sq.m.	9		
SUB-TOTAL OF SECTION. 18					
19	CARPENTRY AND JOINERY WORK				
19.2(2)	Wood Door Frame	l.m.	10		
SUB-TOTAL OF SECTION. 19					
20	INTERIOR FINISHING WORK				
20.2(4)	Gypsum Board Ceiling, t=9	sq.m.	35		
SUB-TOTAL OF SECTION. 20					
21	MISCELLANEOUS METAL WORK				
21.3(1)	Roof Drain ,C.I. 100 φ	each	1		
21.3(16)	Fittings for Handicapped	ls.	1		
SUB-TOTAL OF SECTION. 21					
22	MISCELLANEOUS WORK				
22.3(4)	Down Spout, PVC, 100Dia.	l.m.	6		
22.3(15)	Window Flashing Frames	l.m.	9		
SUB-TOTAL OF SECTION. 22					

BILL OF QUANTITIES

3.2 PUBLIC TOILETS

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
23	OUTDOOR WORK				
23.4(1)	Drain Ditch ; W = 300	l.m.	9		
SUB-TOTAL OF SECTION. 23					
TRANSFER 3.2 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES**3.3 MAIN INSPECTION ROOF**

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	37		
8.3(1)	Backfilling	cu.m.	16		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(3)	Prestressed Spun Concrete Pile 400mm ϕ L = 18.0m	l.m.	192		
9.3(4)	Pile Head Cut	each	16		
9.3(5)	Static Load Test on Prestressed Spun Concrete Piles	each	1		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	136		
10.2(2)	Concrete (Type F)	cu.m.	2		
10.2(4)	Ordinary Form	sq.m.	93		
10.2(5)	Reinforcing Bar	ton	5.93		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Structural Steel	ton	466.30		
SUB-TOTAL OF SECTION. 11					
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	5,404		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(13)	Roof Gutter, 300x400	l.m.	348		
21.3(15)	Formed Steel Roofing	l.s.	5,054		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES

3.3 MAIN INSPECTION ROOF

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(5)	Downspout,PVC,200 ϕ	l.m.	142		
22.3(20)	Aluminium Cadding	sq.m.	84		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.3 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.4 CARGO INSPECTION ROOF

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	37		
8.3(1)	Backfilling	cu.m.	16		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(3)	Prestressed Spun Concrete Pile 400mm ϕ L = 18.0m	l.m.	192		
9.3(4)	Pile Head Cut	each	16		
9.3(5)	Static Load Test on Prestressed Spun Concrete Piles	each	1		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	273		
10.2(2)	Concrete (Type F)	cu.m.	5		
10.2(4)	Ordinary Form	sq.m.	93		
10.2(5)	Reinforcing Bar	ton	11.85		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Steel Structure	ton	181.45		
SUB-TOTAL OF SECTION. 11					
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	1,628		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(13)	Roof Gutter, 300x400	l.m.	50		
21.3(15)	Formed Steel Roofing	l.s.	1,969		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES

3.4 CARGO INSPECTION ROOF

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(5)	Downspout, PVC, 200 φ	l.m.	142		
22.3(20)	Aluminium Cadding	sq.m.	95		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.4 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.5 SUSPECTED INSPECTION ROOF

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	37		
8.3(1)	Backfilling	cu.m.	16		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(3)	Prestressed Spun Concrete Pile 400mm ϕ L = 18.0m	l.m.	192		
9.3(4)	Pile Head Cut	each	16		
9.3(5)	Static Load Test on Prestressed Spun Concrete Piles	each	N/A		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	68		
10.2(2)	Concrete (Type F)	cu.m.	1		
10.2(4)	Ordinary Form	sq.m.	93		
10.2(5)	Reinforcing Bar	ton	2.96		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Steel Structure	ton	150.02		
SUB-TOTAL OF SECTION. 11					
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	682		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(13)	Roof Gutter, 300x400	l.m.	52		
21.3(15)	Formed Steel Roofing	l.s.	521		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES**3.5 SUSPECTED INSPECTION ROOF***PACKAGE 3**BORDER CONTROL FACILITY AND CONNECTING ROAD*

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(5)	Downspout,PVC,200 φ	l.m.	86		
22.3(20)	Aluminium Cadding	sq.m.	93		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.5 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.6 INSPECTION BOOTHS (IMM. & CUSTOM)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	10		
10.2(4)	Ordinary Form	sq.m.	4		
10.2(5)	Reinforcing Bar	ton	0.10		
SUB-TOTAL OF SECTION. 10					
16	PLASTERING WORK				
16.2(2)	Cement Mortar Plaster ,Floor	sq.m.	10		
SUB-TOTAL OF SECTION. 16					
21	MISCELLANEOUS METAL WORK				
21.3(17)	Security Cage	ls.	1		
SUB-TOTAL OF SECTION. 21					
22	MISCELLANEOUS WORK				
22.3(17)	Inspection Booths, 2400x4000	each	1		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.6 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES**3.7 INSPECTION BOOTHS (IMM. & QUARANTINE)**

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	6		
10.2(4)	Ordinary Form	sq.m.	3		
10.2(5)	Reinforcing Bar	ton	0.09		
SUB-TOTAL OF SECTION. 10					
16	PLASTERING WORK				
16.2(2)	Cement Mortar Plaster , Floor	sq.m.	5		
SUB-TOTAL OF SECTION. 16					
21	MISCELLANEOUS METAL WORK				
21.3(17)	Security Cage	ls.	1		
SUB-TOTAL OF SECTION. 21					
22	MISCELLANEOUS WORK				
22.3(18)	Inspection Booths,2400 x 2050	each	1		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.7 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.8 CHECKING OFFICE (ENT. & EXIT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	3		
8.3(1)	Backfilling	cu.m.	1		
8.3(2)	Embankment	cu.m.	0		
SUB-TOTAL OF SECTION. 8					
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	12		
10.2(2)	Concrete (Type F)	cu.m.	0		
10.2(4)	Ordinary Form	sq.m.	137		
10.2(5)	Reinforcing Bar	ton	1.41		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(2)	Concrete Hollow Block, t=100	sq.m.	24		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	17		
SUB-TOTAL OF SECTION. 13					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	13		
15.2(3)	Ceramic Tile to Floor, 200x200x6	sq.m.	13		
SUB-TOTAL OF SECTION. 16					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	42		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	3		
SUB-TOTAL OF SECTION. 16					

BILL OF QUANTITIES

3.8 CHECKING OFFICE (ENT. & EXIT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
17	DOOR AND WINDOW WORK				
17.2(3)	Wooden Panel Door	sq.m.	3		
17.4(1)	Aluminum Sliding Window	sq.m.	4		
17.4(3)	Aluminum Fixed Window	sq.m.	5		
17.4(5)	Aluminum Door	sq.m.	3		
SUB-TOTAL OF SECTION. 17					
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	47		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	11		
SUB-TOTAL OF SECTION. 18					
20	INTERIOR FINISHING WORK				
20.2(4)	Gypsum Board Ceiling, t=9	sq.m.	6		
SUB-TOTAL OF SECTION. 20					
22	MISCELLANEOUS WORK				
22.3(13)	Window Flashing Fraames	sq.m.	8		
22.3(22)	Mirrors	l.m.	1		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.8 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES**3.9 CHECK & TOLL FEE OFFICE (EXIT)**

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	10		
8.3(1)	Backfilling	cu.m.	3		
8.3(2)	Embankment	cu.m.3	0		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(2)	Prestressed Spun Concrete Pile	l.m.	162		
	300mm ϕ L = 18.0m				
9.3(4)	Pile Head Cut	each	9		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	37		
10.2(2)	Concrete (Type F)	cu.m.	0		
10.2(4)	Ordinary Form	sq.m.	351		
10.2(5)	Reinforcing Bar	ton	4.50		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(1)	Half Brick, t=70mm	sq.m.	84		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	63		
SUB-TOTAL OF SECTION. 13					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	37		
15.2(4)	Ceramic Tile to Floor, 200x200x6	sq.m.	20		
SUB-TOTAL OF SECTION. 15					

BILL OF QUANTITIES

3.9 CHECK & TOLL FEE OFFICE (EXIT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	187		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	28		
16.6(1)	Washed Gravel	sq.m.	9		
SUB-TOTAL OF SECTION. 16					
17	DOOR AND WINDOW WORK				
17.2(3)	Wooden Panel Door	sq.m.	8		
17.4(1)	Aluminum Sliding Window	sq.m.	11		
17.4(2)	Aluminum Top Hinge Window	sq.m.	1		
SUB-TOTAL OF SECTION. 17					
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	96		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	35		
18.3(6)	Vanish Paint to Wood	sq.m.	18		
SUB-TOTAL OF SECTION. 18					
19	CARPENTRY AND JOINERY WORK				
19.2(2)	Wood Door Frame	l.m.	24		
SUB-TOTAL OF SECTION. 19					
20	INTERIOR FINISHING WORK				
20.2(1)	Acoustical Tile Ceiling, t=15	sq.m.	28		
20.2(4)	Gypsum Board Ceiling, t=9	sq.m.	8		
20.2(5)	Vinyl Floor Tile, 300x300x2	sq.m.	28		
20.2(6)	Vinyl Soft Base, H=100	l.m.	2		
SUB-TOTAL OF SECTION. 20					
21	MISCELLANEOUS METAL WORK				
21.3(1)	Roof Drain , C.I. 100 Dia.	each	2		
21.3(5)	Non-Slip Nosing, W=40	l.m.	15		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES

3.9 CHECK & TOLL FEE OFFICE (EXIT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(4)	Downspout ; PVC , 100 φ	l.m.	7		
22.3(11)	Roof Insulation,t=50	sq.m.	36		
22.3(13)	Window Flashing Frames	sq.m.	14		
22.3(22)	Mirrors	lm.	1		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.9 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.10 CHECK POINT BOOTHS

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	25		
8.3(1)	Backfilling	cu.m.	23		
8.3(2)	Embankment	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
10	CONCRETE, FORMWORK AND REINFORCEMENT				
10.2(1)	Concrete (Type D)	cu.m.	4		
10.2(2)	Concrete (Type F)	cu.m.	0		
10.2(4)	Ordinary Form	sq.m.	42		
10.2(5)	Reinforcing Bar	ton	0.32		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(2)	Concrete Hollow Block,t=100	sq.m.	9		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	7		
SUB-TOTAL OF SECTION. 13					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	18		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	9		
SUB-TOTAL OF SECTION. 16					
17	DOOR AND WINDOW WORK				
17.4(1)	Aluminum Sliding Window	sq.m.	4		
17.4(5)	Aluminum Door	sq.m.	3		
SUB-TOTAL OF SECTION. 17					

BILL OF QUANTITIES

3.10 CHECK POINT BOOTHS

*PACKAGE 3
BORDER CONTROL FACILITY AND CONNECTING ROAD*

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	31		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	28		
SUB-TOTAL OF SECTION. 18					
20	INTERIOR FINISHING WORK				
20.2(4)	Gypsum Board Ceiling, t=9	sq.m.	7		
SUB-TOTAL OF SECTION. 20					
22	MISCELLANEOUS WORK				
22.3(13)	Window Flashing Frames	l.m.	3		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.10 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.11 OFFICER'S PARKING ROOF (LONG)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	7		
8.3(2)	Embankment	cu.m.	N/A		
8.6(1)	Rubble Foundation	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(1)	Precast Reinforced Concrete Pile I-Shape 180mmx180mm,L=6.0m.	l.m.	72		
9.3(4)	Pile Head Cut	each	18		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	5		
10.2(2)	Concrete (Type F)	cu.m.	0		
10.2(4)	Ordinary Form	sq.m.	32		
10.2(5)	Reinforcing Bar	ton	0.42		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Structural Steel	ton	3.03		
SUB-TOTAL OF SECTION. 11					
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	128		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(13)	Roof Gutter,300x400	l.m.	40		
21.3(15)	Formed Steel Roofing	sq.m.	316		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES**3.11 OFFICER'S PARKING ROOF (LONG)**

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(4)	Downspout,PVC 100 φ	l.m.	13		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.11 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.12 OFFICER'S PARKING ROOF (SHORT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	4		
8.3(2)	Embankment	cu.m.	N/A		
8.6(1)	Rubble Foundation	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(1)	Precast Reinforced Concrete Pile I-Shape 180mmx180mm,L=6.0m.	l.m.	48		
9.3(4)	Pile Head Cut	each	12		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	4		
10.2(2)	Concrete (Type F)	cu.m.	0		
10.2(4)	Ordinary Form	sq.m.	22		
10.2(5)	Reinforcing Bar	ton	0.28		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Structural Steel	ton	1.99		
SUB-TOTAL OF SECTION. 11					
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	81		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(13)	Roof Gutter ,300x400	l.m.	25		
21.3(15)	Formed Steel Roofing	sq.m	198		
SUB-TOTAL OF SECTION. 21					

BILL OF QUANTITIES

3.12 OFFICER'S PARKING ROOF (SHORT)

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
22	MISCELLANEOUS WORK				
22.3(4)	Downspout,PVC 100 φ	l.m.	10		
SUB-TOTAL OF SECTION. 22					
TRANSFER 3.12 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.13 POWER HOUSE

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	15		
8.3(1)	Backfilling	cu.m.	2		
8.3(2)	Embankment	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(2)	Prestressed Spun Concrete Pile 300mm ϕ L = 18.0m	l.m.	180		
9.3(4)	Pile Head Cut	each	10		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	55		
10.2(2)	Concrete (Type F)	cu.m.	1		
10.2(4)	Ordinary Form	sq.m.	540		
10.2(5)	Reinforcing Bar	ton	6.58		
SUB-TOTAL OF SECTION. 10					
12	MASONRY WORK				
12.2(2)	Concrete Hollow Block, t=100mm	sq.m.	143		
SUB-TOTAL OF SECTION. 12					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(1)	Membrane Waterproof, t=2mm, including joint seal, flashing, caulking	sq.m.	75		
SUB-TOTAL OF SECTION. 13					
16	PLASTERING WORK				
16.2(1)	Cement Mortar Plaster, Wall	sq.m.	286		
16.2(2)	Cement Mortar Plaster, Floor	sq.m.	84		
SUB-TOTAL OF SECTION. 16					

BILL OF QUANTITIES

3.13 POWER HOUSE

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
17	DOOR AND WINDOW WORK				
17.3(1)	Steel Flush Door	sq.m.	18		
17.4(1)	Aluminum Sliding Window	sq.m.	2		
17.4(4)	Aluminum Louver	sq.m.	12		
SUB-TOTAL OF SECTION. 17					
18	PAINTING WORK				
18.3(3)	Acrylic Emulsion Paint, Exterior	sq.m.	143		
18.3(4)	Acrylic Emulsion Paint, Interior	sq.m.	218		
SUB-TOTAL OF SECTION. 18					
21	MISCELLANEOUS METAL WORK				
21.3(1)	Roof Drain, C.I.100 ϕ	each	1		
21.3(12)	Cable Trench Cover	sq.m.	5		
SUB-TOTAL OF SECTION. 21					
22	MISCELLANEOUS WORK				
22.3(4)	Down Spout PVC, 100 ϕ	l.m.	6		
22.3(7)	Expansion Joint Filler, t=20	l.m.	33		
22.3(13)	Window Flashing Frames	sq.m.	31		
SUB-TOTAL OF SECTION. 22					
23	OUTDOOR WORK				
23.4(1)	Drain Ditch, w=300	l.m.	41		
23.4(2)	Catch Basin, 600 X 600	each	1		
TRANSFER 3.13 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.14 GARBAGE PUMP SHED

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	3		
8.3(1)	Backfilling	cu.m.	1		
8.3(2)	Embankment	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
9	PILE WORK				
9.3(1)	Precast Reinforced Concrete Pile I-Shape 180mmx180mm,L=6.0m.	0.00	80		
9.3(4)	Pile Head Cut	0.00	20		
SUB-TOTAL OF SECTION. 9					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	7		
10.2(2)	Concrete (Type F)	cu.m.	1		
10.2(4)	Ordinary Form	sq.m.	26		
10.2(5)	Reinforcing Bar	ton	0.39		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Structural Steel	ton	0.06		
SUB-TOTAL OF SECTION. 11					
12	MASONRY WORK				
12.2(2)	Concrete Hollow Block,t=100mm	sq.m.	35		
SUB-TOTAL OF SECTION. 12					
17	DOOR AND WINDOW WORK				
17.3(1)	Steel Flush Door	sq.m.	8		
SUB-TOTAL OF SECTION. 17					

BILL OF QUANTITIES

3.14 GARBAGE PUMP SHED

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	24		
SUB-TOTAL OF SECTION. 18					
TRANSFER 3.14 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

BILL OF QUANTITIES

3.15 CAR INSPECTION PIT

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
8	EARTH WORKS				
8.2(1)	Excavation	cu.m.	23		
8.3(1)	Backfilling	cu.m.	15		
8.6(1)	Rubble Foundation	cu.m.	N/A		
SUB-TOTAL OF SECTION. 8					
10	CONCRETE, FORMWORK AND REINFORCMENT				
10.2(1)	Concrete (Type D)	cu.m.	8		
10.2(2)	Concrete (Type F)	cu.m.	1		
10.2(4)	Ordinary Form	sq.m.	54		
10.2(5)	Reinforcing Bar	ton	0.31		
SUB-TOTAL OF SECTION. 10					
11	STEEL STRUCTURE WORK				
11.2(1)	Structural Steel	ton	1.57		
SUB-TOTAL OF SECTION. 11					
13	WATERPROOFING AND DAMPROOFING WORKS				
13.2(3)	Membrane Waterproofing ,t=2mm., including joint seal,flashing,caulking	sq.m.	20		
SUB-TOTAL OF SECTION. 13					
15	TILE WORK				
15.2(2)	Ceramic Tile to Interior Wall, 200x200x6	sq.m.	20		
15.2(5)	Ceramic Tile to Floor,200x200x6	sq.m.	10		
SUB-TOTAL OF SECTION. 15					
16	PLASTERING WORK				
16.3(1)	Waterproof Cement Motar	sq.m.	30		
SUB-TOTAL OF SECTION. 16					

BILL OF QUANTITIES

3.15 CAR INSPECTION PIT

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	UNIT PRICE	AMOUNT BAHT
18	PAINTING WORK				
18.3(1)	Oil Paint to Steel	sq.m.	8		
SUB-TOTAL OF SECTION. 18					
TRANSFER 3.15 TOTAL TO SUMMARY OF PRICES TOTAL				BAHT	

PART 4 UTILITY WORKS

BILL OF QUANTITIES

SUMMARY OF PRICES

PART-4 UTILITY WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

NO.	ITEM	UNIT	QUANTITY	UNIT RATE	AMOUNT BAHT
1	ELECTRICAL WORK	each	1		
2	MECHANICAL WORK	each	1		
TOTAL OF PART-4 IN BAHT					

BILL OF QUANTITIES

SECTION 25 - ELECTRICAL WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	Unit Price (BAHT)	AMOUNT (BAHT)
25.1(1)	Power receiving facility	nos	1		
25.1(2)	Power receiving payment to PEA	Ls	1		
25.2(1)	Emergency Diesel Generator	nos	1		
25.3(1)	L/V PANEL	nos	1		
25.3(2)	LP-ICA-I	nos	1		
25.3(3)	LP-ICA-C	nos	1		
25.3(4)	LP-ICD-I	nos	1		
25.3(5)	LP-ICD-C	nos	1		
25.3(6)	L-P	nos	1		
25.3(7)	L-BA-I	nos	1		
25.3(8)	L-BA-C	nos	1		
25.3(9)	L-BD-I	nos	1		
25.3(10)	L-BD-C	nos	1		
25.3(11)	L-BA-I-A1 : 10	nos	10		
25.3(12)	L-BA-C-A1 : 10	nos	10		
25.3(13)	L-BD-I-D1 : 9	nos	9		
25.3(14)	L-BD-C-D1 : 9	nos	9		
25.3(15)	L-BA-CH-A	nos	1		
25.3(16)	L-BA-Q-A	nos	1		
25.3(17)	L-BD-CH-D	nos	1		
25.3(18)	L-TA, L-TD	nos	2		
25.3(19)	L-CHT-1 : 2	nos	2		
25.3(20)	L-CHO	nos	1		
25.3(21)	L-OL	nos	1		
25.3(22)	L-BRL	nos	1		
25.3(23)	L-OLH	nos	1		
25.4(1)	UPS	nos	2		
25.5(1)	Highmast lighting	nos	12		
25.6(1)	XLPE/PVC 185SQ-1C	lm	240		
25.6(2)	XLPE/PVC 2.5SQ-2C	lm	1,800		
25.6(3)	XLPE/PVC 6SQ-2C	lm	700		
25.6(4)	XLPE/PVC 10SQ-2C	lm	1,140		
25.6(5)	XLPE/PVC 16SQ-2C	lm	3,350		
25.6(6)	XLPE/PVC 25SQ-2C	lm	190		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 25 - ELECTRICAL WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	Unit Price (BAHT)	AMOUNT (BAHT)
25.6(7)	XLPE/PVC 50SQ-2C	lm	860		
25.6(8)	XLPE/PVC 95SQ-2C	lm	320		
25.6(9)	XLPE/PVC 185SQ-2C	lm	550		
25.6(10)	XLPE/PVC 6SQ-4C	lm	730		
25.6(11)	XLPE/PVC 10SQ-4C	lm	720		
25.6(12)	XLPE/PVC 25SQ-4C	lm	1,450		
25.6(13)	XLPE/PVC 35SQ-4C	lm	160		
25.6(14)	XLPE/PVC 70SQ-4C	lm	1,020		
25.6(15)	XLPE/PVC 95SQ-4C	lm	440		
25.6(16)	PVC/PVC 2.5SQ-3C	lm	5,690		
25.6(17)	PVC/PVC 4SQ-3C	lm	670		
25.6(18)	PVC/PVC 2.5SQ-4C	lm	850		
25.6(19)	TIEV 0.65MM-2C	lm	3,010		
25.6(20)	TPEV 0.65MM-15P	lm	40		
25.6(21)	TPEV 0.65MM-20P	lm	30		
25.6(22)	TPEV 0.65MM-50P	lm	430		
25.6(23)	Coaxial cable for TV	lm	240		
25.6(24)	Ararm cable for Public announcing	lm	360		
25.6(25)	PVC 1.5SQ	lm	1,290		
25.6(26)	PVC 2.5SQ	lm	1,170		
25.6(27)	PVC 6SQ	lm	1,200		
25.6(28)	PVC 70SQ	lm	810		
25.7(1)	EFLEX 30	lm	3,360		
25.7(2)	EFLEX 50	lm	3,270		
25.7(3)	EFLEX 80	lm	680		
25.7(4)	EFLEX 100	lm	2,570		
25.7(5)	Manhole	nos	8		
25.7(6)	Handhole-1	nos	49		
25.7(7)	Handhole-2	nos	5		
25.8(1)	Rigid metal conduit (EMT 1/2 INCH)	lm	100		
25.8(2)	Rigid metal conduit (EMT 3/4 INCH)	lm	30		
25.8(3)	Rigid metal conduit (EMT 1 INCH)	lm	850		
25.8(4)	Rigid metal conduit (EMT 2 INCH)	lm	280		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 25 - ELECTRICAL WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	Unit Price (BAHT)	AMOUNT (BAHT)
25.8(5)	Rigid metal conduit (EMT 2-1/2 INCH)	lm	30		
25.8(6)	Rigid metal conduit (EMT 3 INCH)	lm	40		
25.8(7)	Flexible tube (PFLEX-CD 22)	lm	960		
25.8(8)	Flexible tube (PFLEX-CD 28)	lm	990		
25.8(9)	Flexible tube (PFLEX-CD 36)	lm	260		
25.8(10)	Pull box (200*200*200)	nos	24		
25.8(11)	Pull box (300*300*300)	nos	17		
25.9(1)	FL 40W*2 w/louwer recessed	nos	127		
25.9(2)	FL 40W*2 w/louwer,BT recessed	nos	54		
25.9(3)	FL 40W*2 recessed	nos	21		
25.9(4)	FL 40W*1 recessed	nos	28		
25.9(5)	FL 40W*2 w/cover,BT recessed	nos	29		
25.9(6)	FL 40W*1 wall mounted	nos	77		
25.9(7)	FL 18W*1 recessed (Ceiling lighting)	nos	76		
25.9(8)	FL 20W*1 w/BT surface mounted	nos	9		
25.9(9)	FL 40W*1 w/BT wall mounted (Stairway guide)	nos	7		
25.9(10)	FL 20W*5 w/cover recessed	nos	9		
25.9(11)	FL 13W*1 w/BT recessed (Emergency lighting)	nos	5		
25.9(12)	FL 40W*1 surface mounted WP	nos	26		
25.9(13)	FL 40W*1 surface mounted w/BT	nos	5		
25.9(14)	Highbay HID 250W*1(Sodium lamp)	nos	27		
25.9(15)	Highbay HID 250W*1(Mercury lamp)	nos	65		
25.9(16)	Power outlet 2P-16A-2 Wall recessed w/ET	nos	215		
25.9(17)	Power outlet 2P-16A-2 Wall recessed w/ET WP	nos	27		
25.9(18)	Power outlet 2P-16A-2 Surface mounted	nos	3		
25.9(19)	Tumbler switch : 1(one) switch wall recessed	nos	168		
25.9(20)	Tumbler switch : 2(two) switch wall recessed	nos	20		
25.9(21)	Tumbler switch : 3(three) switch wall recessed	nos	15		
25.9(22)	Tumbler switch : 1(one) switch surface mounted	nos	3		
25.10(1)	PBX	nos	1		
25.10(2)	Terminal box 20P	nos	2		
25.10(3)	Terminal box 50P	nos	2		
25.10(4)	Telephone outlet	nos	100		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

BILL OF QUANTITIES

SECTION 26 - MECHANICAL WORK

PACKAGE 3

BORDER CONTROL FACILITY AND CONNECTING ROAD

ITEM NO.	DESCRIPTION (with unit price written in words)	UNIT	QUANTITY	Unit Price (BAHT)	AMOUNT (BAHT)
26.1(1)	Water tower	nos	1		
26.1(2)	Septic tank-1	nos	2		
26.1(3)	Septic tank-2	nos	1		
26.1(4)	Gate valve 1 inch	nos	41		
26.1(5)	Gate valve 2 inch	nos	25		
26.1(6)	Check valve 2 inch	nos	4		
26.1(7)	Valve box	nos	25		
26.1(8)	PVC pipe 3/4 inch (class 13.5) Indoor	lm	260		
26.1(9)	PVC pipe 1 inch (class 13.5) Indoor	lm	140		
26.1(10)	PVC pipe 2 inch (class 13.5) Indoor	lm	180		
26.1(11)	PVC pipe 2 inch (class 8.5) Indoor	lm	210		
26.1(12)	PVC pipe 3 inch (class 8.5) Indoor	lm	290		
26.1(13)	PVC pipe 4 inch (class 8.5) Indoor	lm	160		
26.1(14)	PVC pipe 1 inch (class 13.5) Under ground	lm	750		
26.1(15)	PVC pipe 2 inch (class 13.5) Under ground	lm	1,930		
26.1(16)	PVC pipe 3 inch (class 13.5) Under ground	lm	210		
26.1(17)	PVC pipe 4 inch (class 8.5) Under ground	lm	120		
26.1(18)	Invert 900sq * 1200H	nos	20		
26.1(19)	Control pipe 150mm	lm	40		
26.1(20)	Catch basin 600*1000*1600	nos	4		
26.1(21)	Water closet	nos	30		
26.1(22)	Urinal	nos	20		
26.1(23)	Lavatory	nos	32		
26.1(24)	Slop sink	nos	9		
26.1(25)	Faucet for kitchen sink	nos	6		
26.1(26)	Fauset for outdoor sprinkle	nos	45		
26.1(27)	Hot shower unit	nos	5		
26.1(28)	Clean out	nos	24		
26.1(29)	Floor drain	nos	31		
26.2(1)	Air conditioner AC-1 (12500BTU/HR)	nos	22		
26.2(2)	Air conditioner AC-2 (18000BTU/HR)	nos	12		
26.2(3)	Air conditioner AC-3 (22200BTU/HR)	nos	11		
26.2(4)	Air conditioner AC-4 (9000BTU/HR)	nos	39		
CARRY SUBTOTAL FORWARD TO FOLLOWING SHEET				BAHT	

SECTION 7 – FORM OF AGREEMENT

AGREEMENT (Package 3)

This Agreement made this day of (state year)
between of the Department of Highways, Ministry of
Transport and Communications, Government of the Kingdom of Thailand (hereinafter called "the
Employer") of the one part and of
..... (hereinafter called "the Contractor") of the other part

Whereas the Employer is desirous that certain Works should be executed by the Contractor, viz. .
..... 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) The Letter of Acceptance;
 - (b) Addenda / or Memorandum of Understanding;
 - (c) The Bid and the Appendix to Bid;
 - (d) The said Bid;
 - (e) The Conditions of Particular Application (Part II);
 - (f) The General Conditions (Part I);
 - (g) The Specifications;
 - (h) The Drawings;
 - (i) The Priced Bill of Quantities; and
 - (j) The Schedules of Supplementary Information.
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer 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 or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of

..... was hereunto affixed in the presence of:

or

Signed, Sealed, and Delivered by the said

..... in
the presence of:

Binding Signature of Employer

Binding Signature of Contractor

SECTION 8 – FORMS OF SECURITIES

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FORM OF PERFORMANCE SECURITY

(Bank Guarantee)

THIS AGREEMENT is made on the day of (state month and year) between [name of bank] of [address of bank] (hereinafter called "the Guarantor") of the part and [name of Employer] of [address of Employer] (hereinafter called "the Employer") of the other part.

WHEREAS

- (1) this agreement is supplemental to a contract (hereinafter called "the Contract") made between [name of Contractor] of [address of Contractor] (hereinafter called "the Contractor") of the part and the Employer of the other part whereby the Contractor and agreed and undertook to execute the works of [name of Contractor and brief description of the works] for the sum of [amount in Contract Currency] being the Contract Price ; and
- (2) the Guarantor has agreed to guarantee the due performance of the Contract in the hereinafter appearing.

NOW , THEREFORE, the Guarantor hereby agrees with the Employer as follows;

- (a) If the Contractor (unless relieved from the performance by any clause of the Contract or by statute or by the decision of a tribunal of competent jurisdiction) shall in any respect fail to execute the Contract or commit any breach of his obligations thereunder then the Guarantor will indemnify and pay the Employer the aggregate sum of [amount of Guarantee] [in words], such sum being payable in the types and amounts of currencies in which the Contract Price is payable, provided that the Employer or his authorized representative has notified the Guarantor to that effect and has made a claim against the Guarantor before the Issue of the Defects Liability Certificate.
- (b) The Guarantor shall not be discharged or released from his guarantee by an arrangement between the Contractor and the Employer, with or without the consent of the Guarantor, or by any alteration in the obligations undertaken by the Contractor, or by any forbearance on the part of the Contractor, whether as to payment, time, performance, or other wise, and any notice to the Guarantor of any such arrangement, alteration, or forbearance is hereby expressly waived.

This Guarantee shall be valid until a date 28 days from the date of issue of the Taking-Over Certificate.

Given under our hand on the date first mentioned above.

SIGNED BY..... SIGNED BY.....

for and on behalf of the
Guarantor in the presence of

for and on behalf of the
Employer in the presence of

.....
(Witness)

.....
(Witness)

FORM OF ADVANCE PAYMENT SECURITY

(BANK GUARANTEE)

To: _____ *[name of Employer]*
_____ *[address of Employer]*
_____ *[name of Contract]*

Gentlemen:

In accordance with the provisions of the Conditions of Particular Application, Sub-Clause 60.7 ("Advance Payment") of the above-mentioned Contract, _____ *[name and Address of Contractor]* (hereinafter called "the Contractor") shall deposit with _____ *[name of Employer]* a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____ *[amount of Guarantee]* of _____ *[in words]*.

We, the _____ *[bank or financial institution]*, as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ *[name of Employer]* on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding _____ *[amount of Guarantee]* of _____ *[in words]*.

We further agree that no change or addition to or other modification of the terms of the Contract or of Works to be performed thereunder or of any of the Contract documents which may be made between _____ *[name of Employer]* and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____ *[name of Employer]* receives full repayment of the same amount from the Contractor.

Yours truly, _____

SIGNATURE AND SEAL: _____

JICA

