

ANNEX VIII-2

FIELD CHECK IN RATTANAK KIRI PROVINCE

Table of Contents

1. Introduction	1
2. Cover Rattanak Kiri area (Map sheets : 6335, 6435, 6535, 6336, 6436, 6536, 6337, 6437)	1
3. Metheology : For the field check conducted two group :.....	2
4. Located Resources.....	3
5. Data correction : For the whole Rattanak Kiri province :.....	3
6. Data Comparition :	4
6.1. V.I. Along the road 78 From Stueng Srae Pork bridge to Vietnam border and connected :	4
6.1.1. From Ban Lung to Vietnam border:	4
6.1.2. Ban Lung to Stueng Srae Pok bridge	12
7. Road No. 76 From Ou Cheng to Lumphat disriect :.....	13
8. Along the road 78a From banlong to Veun Sai disriect :.....	17
9. Along the road 76a From Banlung to Ta Veng disriect :	18

Figure

Figure 2-1 Rottanak Kiri Province.....	1
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Sites

Site 1	Road Number : Road to Boeng Yak Laom Observation location: X = . 718309, Y = . 1520110.	5
Site 2	Road Number : 78 (from this point wiil be change the condition) Observation location : X = .723476, Y = . 1520280	6
Site 3	Road Number : Road connected to phum kamaen Observation location : X = .733804, Y = . 1515886.....	7
Site 4	Road Number : Road connected to Andoung Meas district Observation location : X = .738098, Y = . 1514813.....	8
Site 5	Road Number: Road connected to khum Pa Te (Seila programme for development) Old road code : 7 New road code : 4 Observation location : X = .753840, Y = . 1512330.....	9
Site 6	Road Number : Road connected to phum Trang Old road code : 6 New road code : 4 Observation location: X = .753031, Y = . 1512567.....	9
Site 7	Number : Road connected to phum Ten Soh Old road code : 6 New road code : 5 Observation location : X = .756688, Y = . 1512875.....	10
Site 8	Road Number : Road connected to phum Pak Por Old road code : 6 New road code : 5 Observation location : X = .760226, Y = . 1518724.....	10
Site 9	Road Number: Along the road 78 Old bridge data : 0 New bridge data : foot bridge Observation location : X = .766233, = . 1522315.....	11

Site 10	Road Number : Along the road 78 Old bridge data : 0 New bridge data : ford Observation location : X = .766752, Y = . 1522340.....	11
Site 11	Road Number: 78 Old bridge data : N/A New bridge data : bridge Observation location : X = .713444, Y = . 1518758	12
Site 12	Road Number : Road connected to stueng Kachanh + 1 bridge (see map) Old road code : 5 New road code : 3 Observation location: X = .713131, Y = . 1518261	12
Site 13	Road Number : Road connected to stueng Cha Ong Old road code : 6, 7 New road code : 5, 6 (see map) Observation location : X = .713131, Y = . 1518261	13
Site 14	Road Number : Road to Lumphat district Old road code : 6 New road code : 5 Observation location : X = . 711383, Y = . 1503916.....	14
Site 15	Road Number : Along the road 76 Old bridge data : N/A New bridge data : steel bridge Observation location : X = .711220 , Y = . 1504306	14
Site 16	Road Number : Along the road 76 Old bridge data : N/A New bridge data : steel bridge Observation location : X = .714434, Y = . 1596343.	15
Site 17	Road Number : Along the road 76 Old bridge data : N/A New bridge data : Wooden bridge Observation location : X = .710054, Y = . 1511911	15
Site 18	Road Number : Along the road 76 Old bridge data : N/A New bridge data : Wooden bridge Observation location : X = .711561, Y = . 1502757	16
Site 19	Road Number : Along the road 76 Old bridge data : N/A New bridge data : Wooden bridge Observation location : X = .711502, Y = . 1503650	16
Site 20	Road Number : Along the road 78a (Ou Chum I) Old bridge data : N/A New bridge data : Wooden bridge Observation location : X = .711502, Y = . 1503650	17
Site 21	Road Number : Along the road 78a (Ou Chum II) Old bridge data : N/A New bridge data : Wooden bridge Observation location : X = .715881, Y = . 1526054	17
Site 22	Road Number : Road 76a to Ta Veng district Old road code : 6 New road code : 5 Observation location : X = . 716798, Y = . 1526829.....	18

Tables

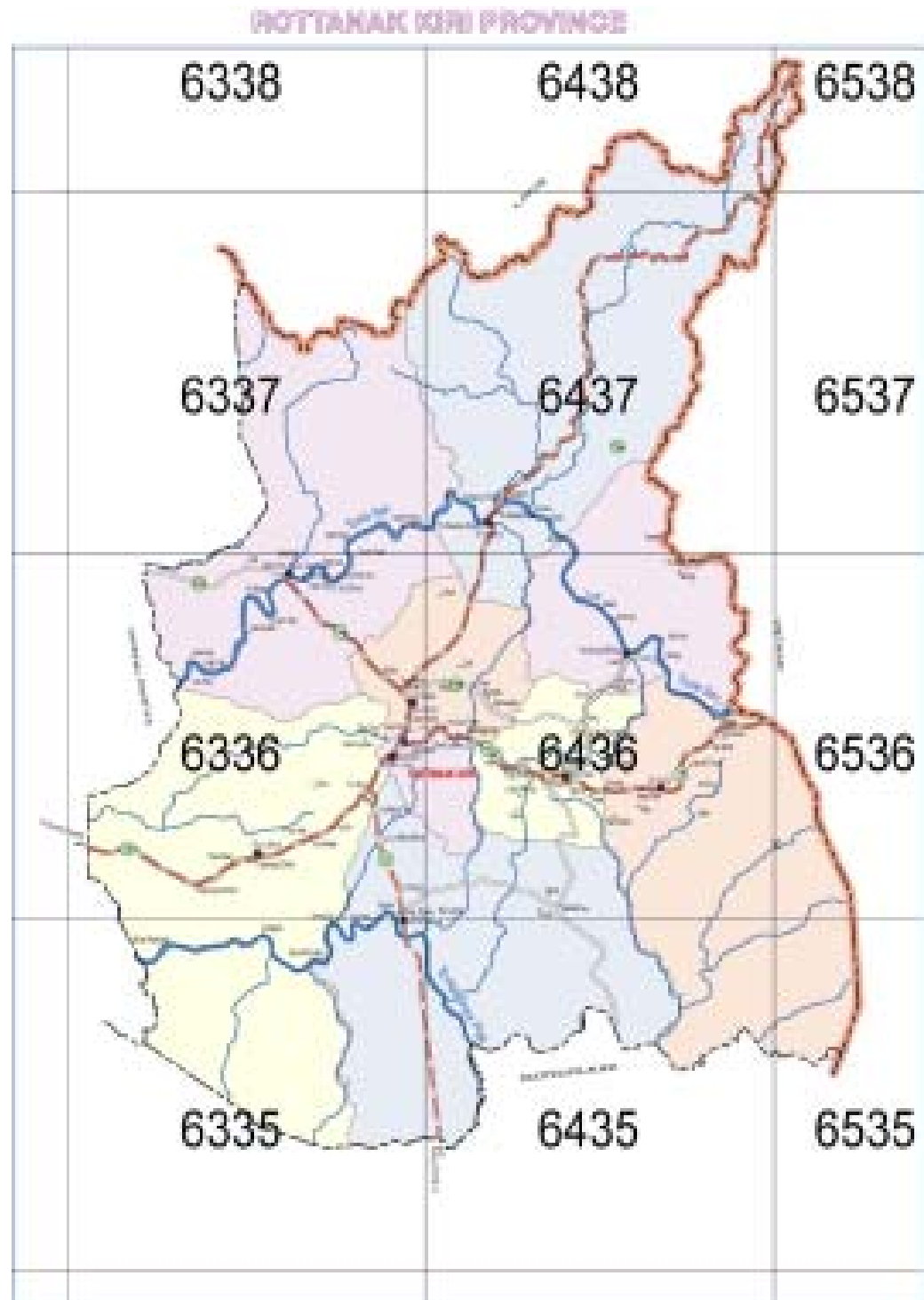
Table 7-1	Bridge Data for Road 76 from Ou Cheng to Lumphat.....	13
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1. Introduction

The study area covered the Eastern part of the Mekong river in Cambodia. The provincial areas are Ratanakiri, MondulKiri, Stung Treng and Kratie. But for the field check we divided 4 group for each provinces.

2. Cover Rattanak Kiri area (Map sheets : 6335, 6435, 6535, 6336, 6436, 6536, 6337, 6437)

Figure 2-1 Rottanak Kiri Province



3. Metheology : For the field check conducted two group :

1. For Infrastructure data covered road, new road, bridge will be conducted by Ministry of Public works and Transport staff.
2. For the infrastructure data covered School, temple, play ground, administrative location and name etc. will be conducted by National Geographic Department(NGD) staff.

The Infrastructure data covered road, road number, road classification, bridge location, ferry and ford...

The methodology for field check is indicated in the following :

1. **Road classification** : Check all road class on the draft map, the road class should be written in red color on the map, picked up GPS point for all road change condition and noted on road form.
2. **New road** : All the road are not present on the draft map. For these road we discussed with the provincial public works officer(PPWO) and provincial rural development officer and collected data, then these road will be draft on the old topographic map of scale 1/100,000 by using red pen and all so depend on the length of the road. The minimum road length are 5 km and we went to the field to picked up GPS point for each road, noted on new road form.
3. **Road number** : Check all road number per each map sheet. Road number should be written in red color which only national road number(RN 7), other national road number (RN 78).
4. **Bridge location** : Check all the bridges, ferry, ford we pasted and picked up GPS point and note on the bridge form. For the bridge type are concreted bridge, steel bridge, wooden bridge, foot bridge and culvert.
5. **Other data** : There are airfield, port etc. We needed picked up GPS point and noted in the special form.

The road classification that use to label on the road line data are:

<i>Code</i>	<i>Road classification</i>
1	- All weather Hard surface, two or more lanes wide
2	- All weather Hard surface, one lane wide.
3	- All weather Looses surface, one lane wide
4	- All weather Loose surface, one lane wide

- 5 - Dry weather Loose surface
- 6 - Cart track
- 7 - Footpath
- 8 - Streets in Built-up Areas
- 60 - Ferry
- 61 - Ford

4. Located Resources

1- Staffs :

1. Ministry of Public Works and Transport staff :

1- Mao Phnarith

2- Pang Bopharath

2-Provincial Public Works officer :

1- Suong Piseth

2- Pha Tha

3-Provincial Rural Development officer :

1- Suon Sitha

2- Material :

1- Hand GPS

2- Draft map scale 1/100,000

3- Camera

4- Old topographic map scale 1/100,000

5- Stationary

3-Equipment :

- Computer

- Scanner

- Software : Microsoft Exel, Arcview, Arcinfo

5. Data correction : For the whole Rattanak Kiri province :

- The result checking road number 78 from Ban Lung to Vietnam border 71 Km are 1 bridge and 1 ford 17 rural road we needed to change road code.

- The result checking road number 78 from Ban Lung to Srae Pork bridge 63.9 Km are 35 bridge and 5 rural crossection road we needed to change road code.

-The result checking road number 78a from Ban Lung to Voien Sai 38 Km are 3 bridge and 2 rural road we needed to change road code.

- The result checking road number 76 from Ban Lung to Lumphat district 40 Km are 23 bridge and all rural road we needed to change road code.
- The result checking road number 76a from Ban Lung to Ta Veang district 40 Km are 1 rural road we needed to change road code.
- The result checking road number 303 from Barkaev district to Andoung Meas district 30 Km are 3 bridge and 2 rural road we needed to change road code.

6. Data Comparison :

For the study area covered the Eastern part of the Mekong river in Cambodia. The provincial areas are Rattanak Kiri, Mondul Kiri, Stung Treng and Kratie we used deference date of data sources :

1. Aerial photo 1/25 000 (1994-1996) produced by Cambodia National Mekong Committee (CNMC).
2. PASCO Spot (10mx10m resolution), Raw Landsat 2000 (30mx30m resolution).

By Using existing road network from Topographic map 1/50 000. We added extract road from the SPOT and corrected with the aerial photo and sometime we used raw landsat to check road code. Using old aerial photo 1/25 000 (1994-1996) with stereo scop to check bridge location.

The result of road condition and bridge location other the field check to Rattanak Kiri are not the same. For these matter please see the Example bellow for all change :

6.1. V.I. Along the road 78 From Stueng Srae Pork bridge to Vietnam border and connected :

6.1.1. From Ban Lung to Vietnam border:

Site 1

Road Number : Road to Boeng Yak Laom

Observation location: X = . 718309, Y = . 1520110.

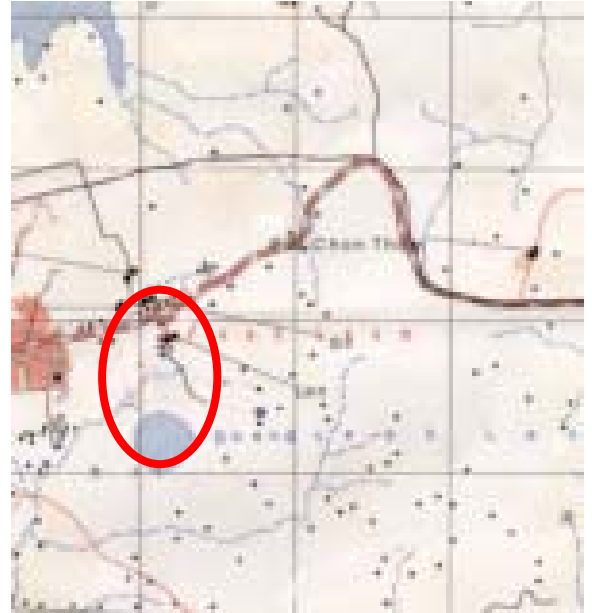
Before field check

Old road code : 6

Aerial Photo



Draft map



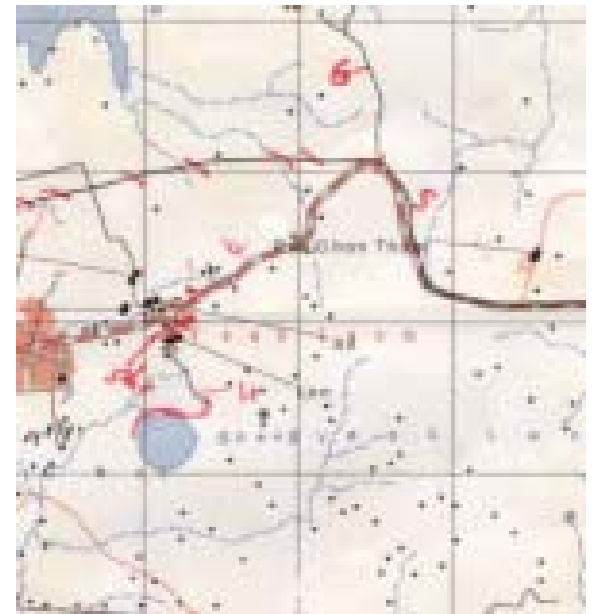
After field check

New road code : 4

Photo



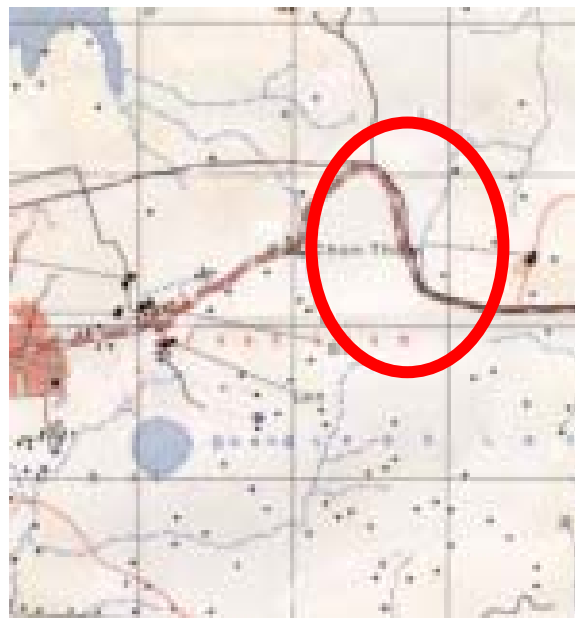
Draft map corrected



Site 2 **Road Number : 78 (from this point will be change the condition)**
Observation location : X = .723476, Y = . 1520280
Before field check
Old road code : 3

Spot

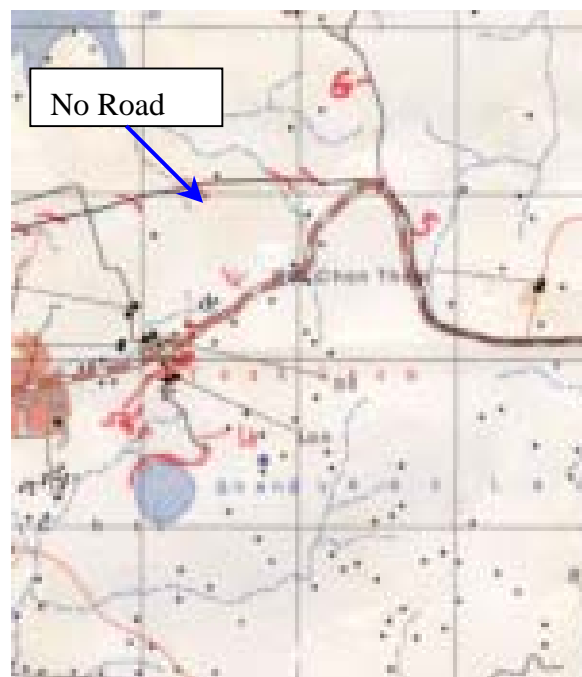
Draft map



After field check
New road code : 5

Photo

Draft map corrected



Site 3

Road Number : Road connected to phum kamaen

Observation location : X = .733804, Y = . 1515886

Before field check

Old road code : 3

Aerial photo



Draft map



After field check

New road code : 7

Photo



Draft map corrected

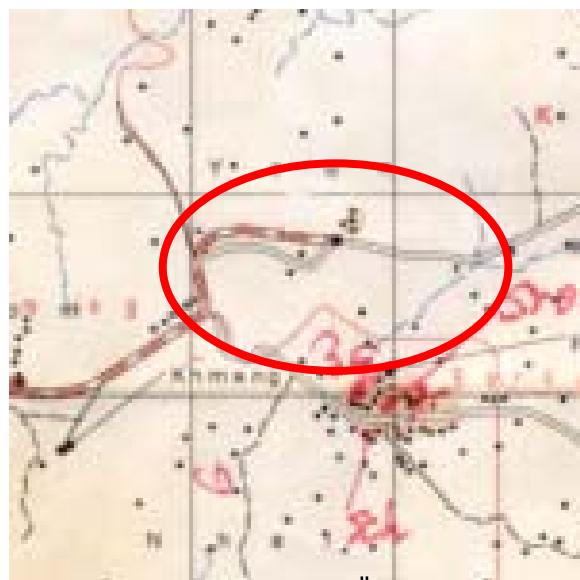


Site 4 **Road Number :** Road connected to Andoung Meas district
Observation location : X = .738098, Y = . 1514813
Before field check
Old road code : 3, 5

Spot



Draft map

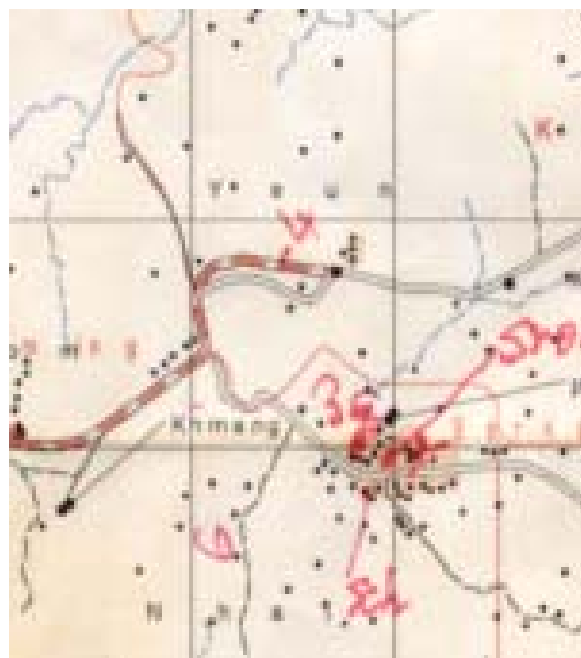


After field check
New road code : 4

Photo



Draft map corrected



Site 5 **Road Number:** Road connected to khum Pa Te (Seila programme for development)

Old road code : 7 **New road code :** 4

Observation location : X = .753840, Y = . 1512330

Spot

Photo



Site 6 **Road Number :** Road connected to phum Trang

Old road code : 6 **New road code :** 4

Observation location: X = .753031, Y = . 1512567

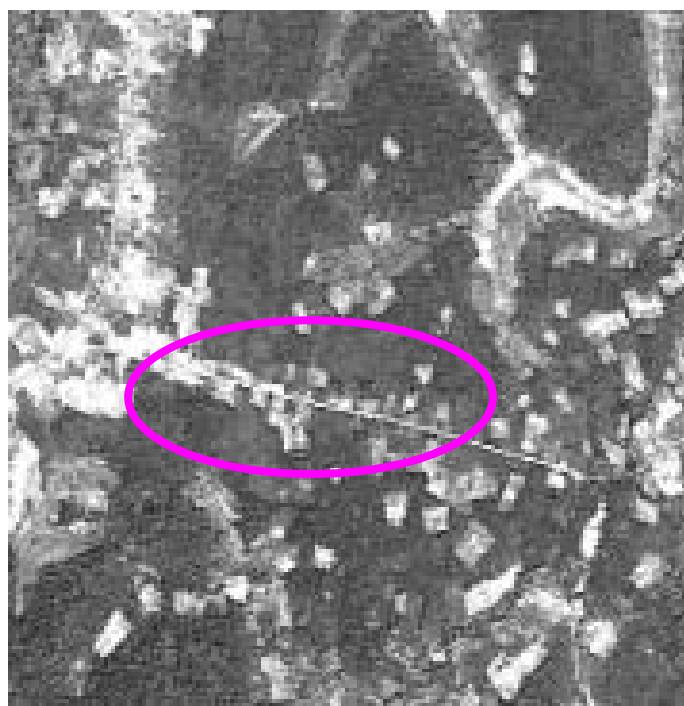
Spot

Photo



Site 7 **Number :** Road connected to phum Ten Soh
Old road code : 6 **New road code :** 5
Observation location : X = .756688, Y = . 1512875
Aerial photo

Photo



Site 8 **Road Number :** Road connected to phum Pak Por
Old road code : 6 **New road code :** 5
Observation location : X = .760226, Y = . 1518724
Spot

Photo



Site 9

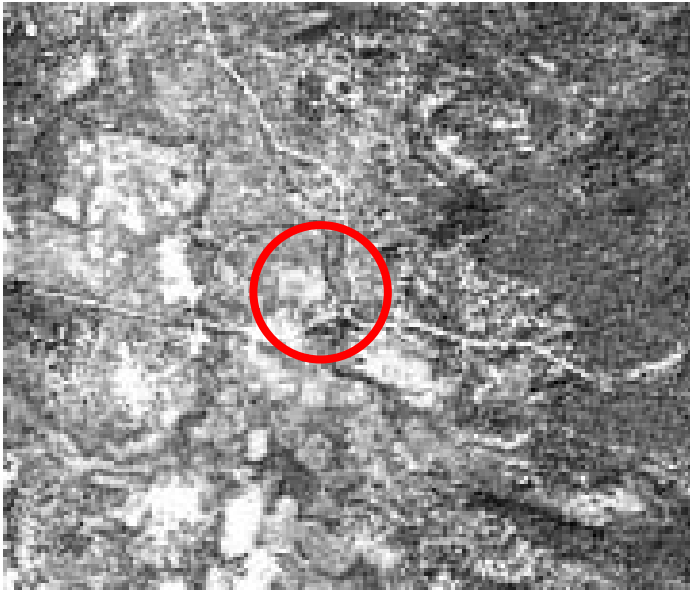
Road Number: Along the road 78

Old bridge data : 0 New bridge data : foot bridge

Observation location : X = .766233, = . 1522315

Aerial photo

Photo



Site 10

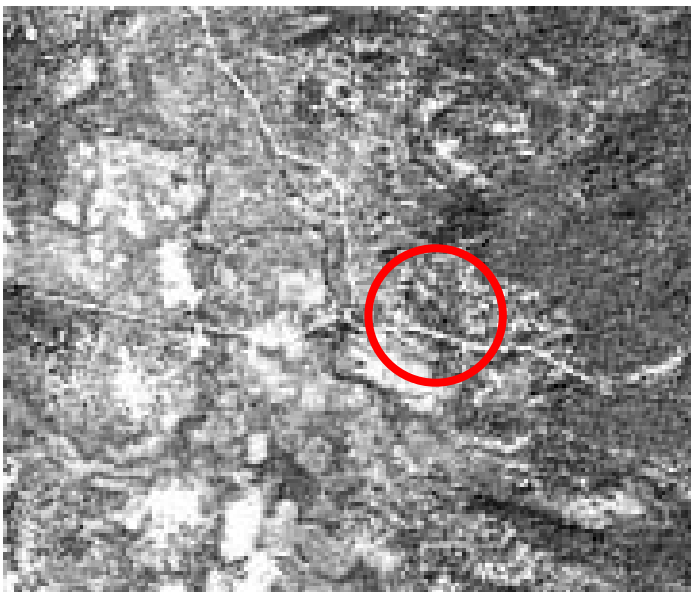
Road Number : Along the road 78

Old bridge data : 0 New bridge data : ford

Observation location : X = .766752, Y = . 1522340

Spot

Photo



6.1.2. Ban Lung to Stueng Srae Pok bridge

Site 11

Road Number: 78

Old bridge data : N/A

New bridge data : bridge

Observation location : X = .713444, Y = . 1518758

Aerial photo

Photo



Site 12

Road Number : Road connected to stueng Kachanh + 1 bridge (see map)

Old road code : 5 New road code : 3

Observation location: X = .713131, Y = . 1518261

Aerial photo

Photo



Site 13

Road Number : Road connected to stueng Cha Ong
 Old road code : 6, 7 New road code : 5, 6 (see map)
 Observation location : X = .713131, Y = . 1518261

Spot

Photo



7. Road No. 76 From Ou Cheng to Lumphat district :

Table 7-1

Bridge Data for Road 76 from Ou Cheng to Lumphat

BRIDGE DATA FOR ROAD 76 FROM OU CHENG TO LUMPHAT					
No	x	v	Length(m)	River Name	Bridge
2	710054	1511911	10	Ou Cheng	w h
3	710469	1511322	10		w h
4	710330	1509577	7		w h
5	710445	1509095	7		w h
6	710647	1508586	5		w h
7	710873	1505587	5		w h
8	710849	1505558	15		w h
9	710846	1505371	10		w h
10	711029	1504959	5		w h
11	711220	1504306	32	Ou Totueng	s b
12	711268	1504103	10		w h
13	711502	1503650	10		w.b
14	711561	1502757	25		w h
15	712052	1502162	7		w.b
16	712670	1500516	12		w h
17	713047	1499732	5		w.b
18	713267	1499259	5		w h
19	714361	1496659	12		w.b
20	714434	1496343	37	Ou Kan	s.b
21	714475	1492777	30		w.b
22	714450	1493307	10		w.b
23	713978	1492274	50		s.b

For this section, we found one segment of the road 76 and 3 connected road have changed and 2 steel bridges 21 wooden bridges

Site 14 **Road Number :** Road to Lumphat district
Old road code : 6 **New road code :** 5
Observation location : X = . 711383, Y = . 1503916

Spot

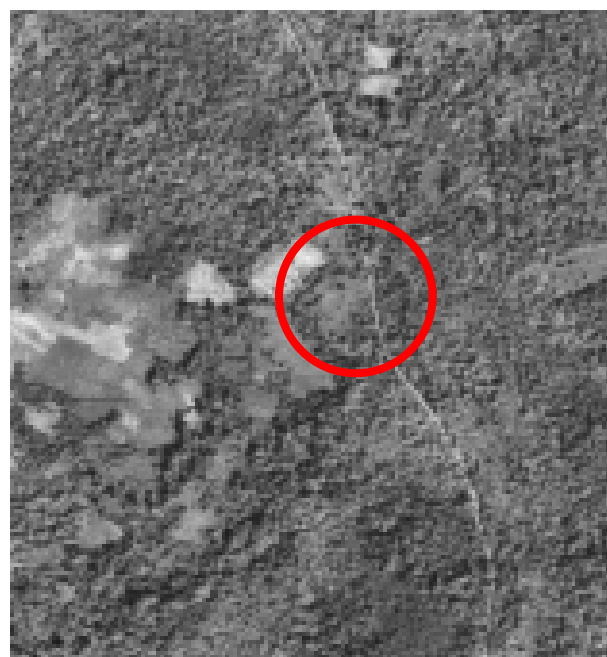


Photo



Site 15 **Road Number :** Along the road 76
Old bridge data : N/A **New bridge data :** steel bridge
Observation location : X = .711220 , Y = . 1504306

Aerial photo



Photo



Site 16

Road Number : Along the road 76

Old bridge data : N/A

New bridge data : steel bridge

Observation location : X = .714434, Y = . 1596343

Aerial photo

Photo



Site 17

Road Number : Along the road 76

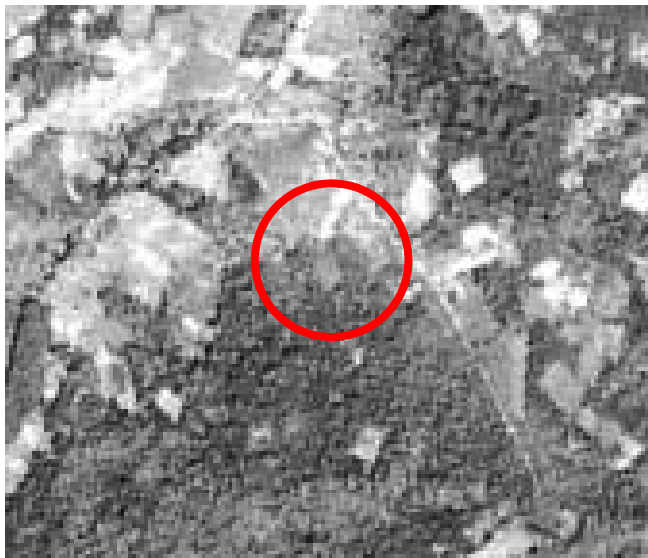
Old bridge data : N/A

New bridge data : Wooden bridge

Observation location : X = .710054, Y = . 1511911

Spot

Photo



Site 18

Road Number : Along the road 76

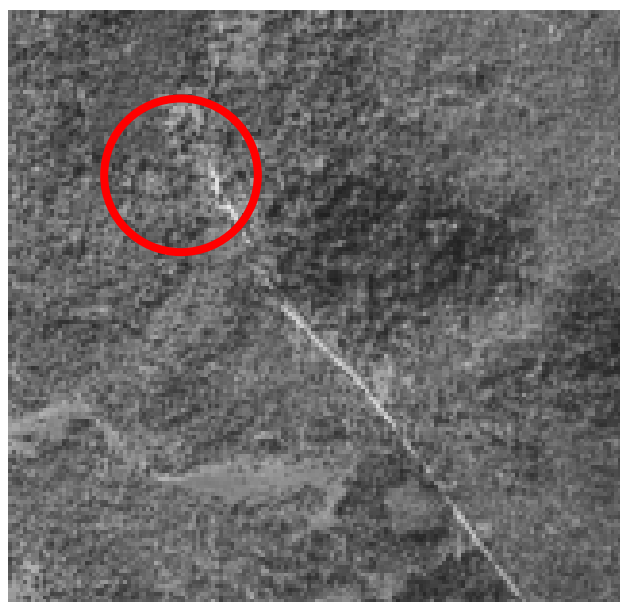
Old bridge data : N/A

New bridge data : Wooden bridge

Observation location : X = .711561, Y = . 1502757

Aerial photo

Photo



Site 19

Road Number : Along the road 76

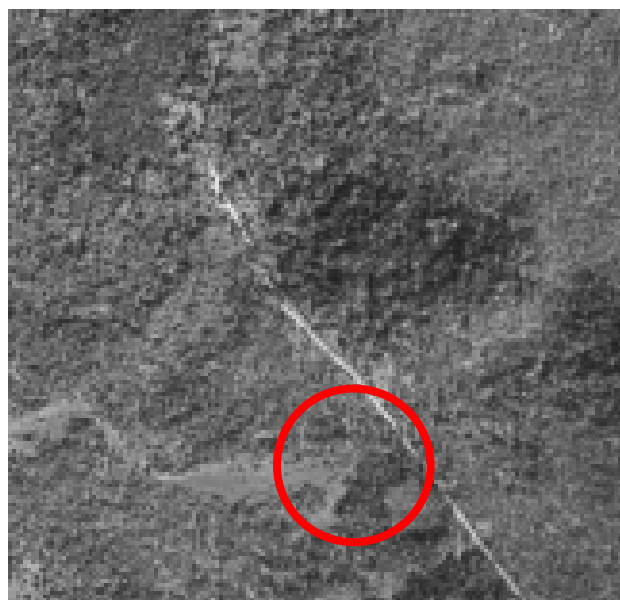
Old bridge data : N/A

New bridge data : Wooden bridge

Observation location : X = .711502, Y = . 1503650

Aerial photo

Photo



8. Along the road 78a From banlong to Veun Sai district :

Site 20

Road Number : Along the road 78a (Ou Chum I)

Old bridge data : N/A

New bridge data : Wooden bridge

Observation location : X = .711502, Y = . 1503650

Aerial photo



Photo



Site 21

Road Number : Along the road 78a (Ou Chum II)

Old bridge data : N/A

New bridge data : Wooden bridge

Observation location : X = .715881, Y = . 1526054

Aerial photo



Photo



9. Along the road 76a From Banlung to Ta Veng district :

Site 22

Road Number : Road 76a to Ta Veng district

Old road code : 6

New road code : 5

Observation location : X = . 716798, Y = . 1526829

Aerial photo

Photo



And other provincial road (Road No. 301, 302, 303, 304...) and rural road are all constructed by rural development (Seila programm for rural development) and community action (world food programm) there are all most good road with laterite. But still all bridge are very bad.

For the study area covered the Eastern part of the Mekong river in Cambodia. The provincial areas are Rattanak Kiri we used deferrence date of data sources. The result for infrastructure are all most not correct so we need fiel check for all provinces.