



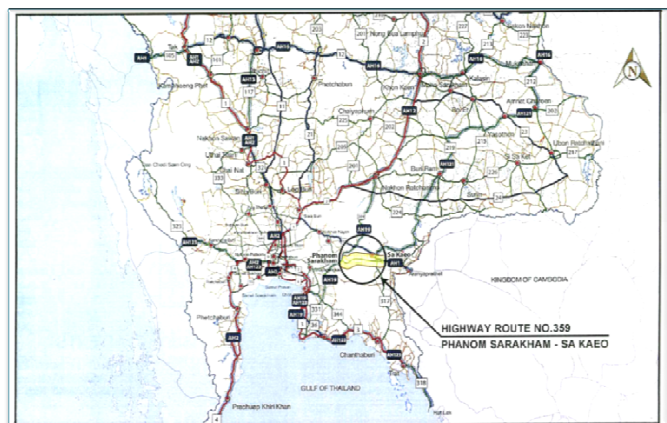
## HIGHWAY ROUTE NO. 359

PHANOM SAKHAM - SA KAE0

DEPARTMENT OF HIGHWAYS



### Project Location



**Loan ADB 2608 - THA:**  
**Greater Mekong Subregion**  
**Highway Expansion Project**  
[The Four - Lane Highway Widening  
Project (Phase II)]

## Project Background

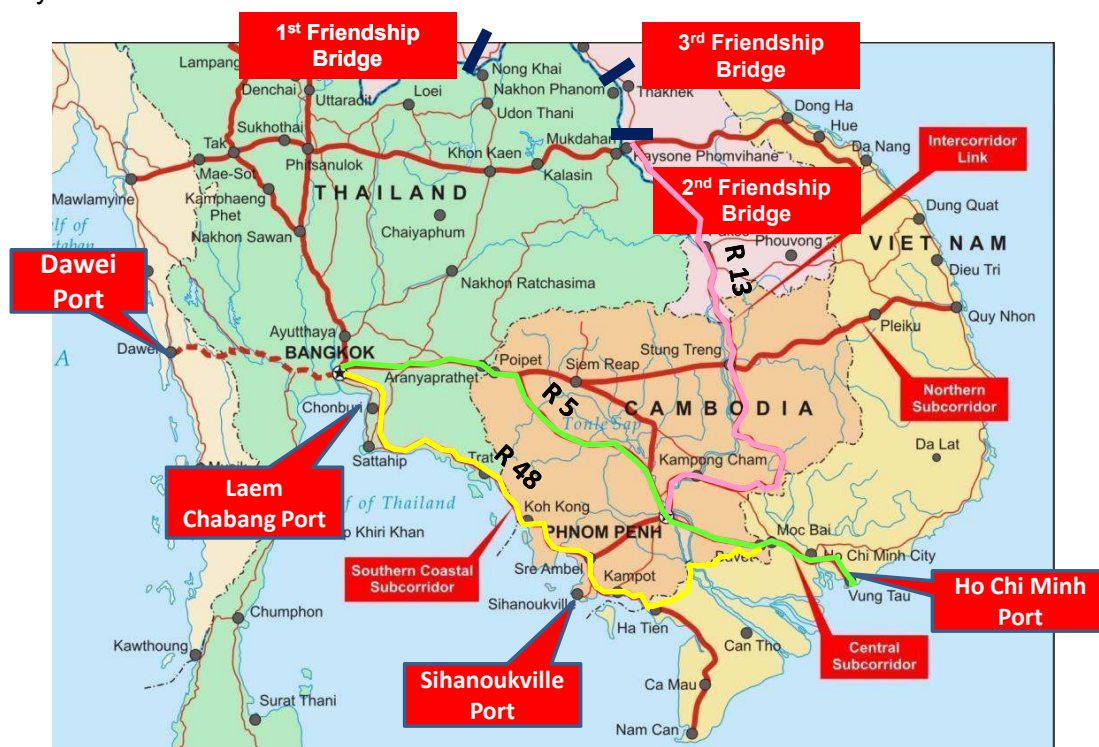
• The Department of Highways has planned to improve its network by initiating Highway expansion Project known as [The Four - Lane Highway Widening Project (Phase II)]

Network	Finished	Under Cons.	Remain	Total
1: Nakonsawan-Nan	459.54	38.60	65.47	563.61
2: Tak-Mukdahan	553.80	155.07	125.16	834.03
3: Saraburi-Leoi	276.32	-	93.75	370.07
4: Saraburi-Sra Kaeo	167.15	-	30.36	197.51
5: Nakonpahom-Saraburi	194.61	-	40.48	235.09
6: Nakonsawan-Ubon	295.82	5.00	366.25	667.07
7: Rayong-Mukdahan	646.30	160.10	126.90	933.30
8: Surathani-Songkhla	294.52	43.80	5.04	343.36
9: Phuket-Patthalung	338.49	48.25	-	386.74
10: Leoi-Nakonphanom	171.77	42.94	101.67	316.38
11: Others	140.28	164.60	118.43	423.31
<b>Total</b>	<b>3,538.60</b>	<b>658.37</b>	<b>1,073.50</b>	<b>5,270.46</b>
<b>Percentage</b>	<b>67.14</b>	<b>12.49</b>	<b>20.37</b>	<b>100.00</b>



## Project Background

• The Project is a part of GMS (Greater Mekong Subregion) Economic Corridor as International Connectivity Route for AEC.





## Asian Highway (AH) Network in Thailand



AH	From-To	Distance (km)
1	Mae Sot - Aranyaprathet	701
2	Mae Sai - Sa Dao	1,913
3	Chiang Khong - Chiang Rai	116.5
12	Nongkhai - Saraburi	511.5
13	Nan - Nakhon Sawan	557
15	Udon Thani - Nakhon Phanom	242.5
16	Tak - Mukdahan	688.5
18	Hat Yai - Sungai Kolok	268
19	Bangkok-Laem Chabang - Nakhon Ratchasima	459.5
Total Distance		5,457.5

Source: Department of Highways, Thailand

## Project Background

มูลค่าการค้าชายแดนไทย - กัมพูชา (รายด้าน)													
ปี 2556-2558													
หน่วย : ล้านบาท													
ด้าน	2556				2557				2558				
	รวม	ส่งออก	นำเข้า	ดุลการค้า	รวม	ส่งออก	นำเข้า	ดุลการค้า	รวม	ส่งออก	Δ%	นำเข้า	Δ%
ด้านจันทบุรี	4,935.38	4,753.48	181.90	4,571.57	6,874.92	6,749.14	125.78	6,623.36	12,135.82	12,061.74	78.72	74.08	-41.10
ด้านคลองใหญ่	26,825.81	25,431.83	1,393.98	24,037.85	29,636.49	27,555.18	2,081.31	25,473.87	31,816.99	29,073.24	5.51	2,743.75	31.83
ด้านช่องจอม	1,996.94	1,851.96	144.99	1,706.97	2,711.95	2,442.40	269.56	2,172.84	2,847.62	1,968.20	-19.42	879.42	226.24
ด้านส่วนกลางอื่นๆ	1.79	0.00	1.79	-1.79	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	N/A
ด้านพิบูลมังสาหาร	424.79	424.79	0.00	424.79	470.72	470.72	0.00	470.72	338.90	338.90	-28.00	0.00	N/A
ด้านอรัญประเทศ	57,854.76	51,625.85	6,228.91	45,396.94	72,600.78	59,508.78	13,092.00	46,416.77	71,989.79	61,061.42	2.61	10,928.37	-16.53
-จุดผ่อนปรนบ้านคาพรหม	377.50	0.00	377.50	-377.50	544.44	0.00	544.44	-544.44	1,382.95	0.00	N/A	1,382.95	154.01
-จุดผ่อนปรนบ้านหนองเรือ	709.24	0.00	709.24	-709.24	883.58	0.00	883.58	-883.58	1,551.19	0.00	N/A	1,551.19	75.56
-จุดผ่อนปรนบ้านเจดีย์	710.10	0.00	710.10	-710.10	742.96	0.00	742.96	-742.96	2,249.38	0.00	N/A	2,249.38	202.76
รวม	93,836.31	84,087.90	9,748.41	74,339.49	114,465.84	96,726.22	17,739.62	78,986.60	124,312.64	104,503.50	8.04	19,809.14	11.67

ที่มา : ศูนย์เทคโนโลยีสารสนเทศและการสื่อสาร กรมการค้าต่างประเทศ โดยความร่วมมือจากกรมศุลกากร

หมายเหตุ : Δ % หมายถึงอัตราการเปลี่ยนแปลง

กลุ่มศูนย์ข้อมูลการค้าชายแดน  
กองความร่วมมือการค้าและการลงทุน  
กรมการค้าต่างประเทศ

## Project Background

มูลค่าการก้าวยแดนไทย - กัมพูชา (รายสินค้า)					
ปี 2556 - 2558					
: การส่งออก			หน่วย : ล้านบาท		
ลำดับที่	รายการสินค้าส่งออก	2556	2557	2558	Δ % 58/57
1	เครื่องดื่มที่ไม่มีแอลกอฮอล์	3,940.47	4,933.18	6,769.77	37.23
2	รถยนต์ อุปกรณ์และส่วนประกอบ	3,388.18	3,967.92	5,216.12	31.46
3	ยานพาหนะอื่น ๆ และส่วนประกอบ	2,660.26	4,424.06	4,409.01	-0.34
4	รถจักรยานยนต์และส่วนประกอบ	2,755.92	3,334.75	4,367.46	30.97
5	เครื่องเล่นเสียงพกพาในแบบลูกสูบฯ	3,686.55	4,157.78	4,278.30	2.90
6	เครื่องจักรกลและส่วนประกอบ อื่น ๆ	2,398.91	2,641.63	4,205.99	59.22
7	ปูนซีเมนต์	1,898.58	2,466.52	2,896.20	17.42
8	น้ำมันเบนซิน	2,470.60	3,220.51	2,792.23	-13.30
9	ผลิตภัณฑ์เหล็กและเหล็กกล้า	2,001.55	2,251.08	2,746.43	22.00
10	เครื่องสำอาง เครื่องหอมและสบู	3,158.19	2,606.41	2,675.07	2.63
รวม 10 อันดับ		28,359.21	34,003.84	40,356.58	18.68
อื่นๆ		55,728.69	62,722.38	64,146.92	2.27
มูลค่ารวม		84,087.90	96,726.22	104,503.50	8.04
: การนำเข้า			หน่วย : ล้านบาท		
ลำดับที่	รายการสินค้านำเข้า	2556	2557	2558	Δ % 58/57
1	ผักและของปรุงแต่งจากผัก	1,730.26	2,072.99	5,629.57	171.57
2	เครื่องรับ-ส่งสัญญาณและอุปกรณ์ติดตั้ง	1,436.21	6,172.65	5,565.38	-9.84
3	ถั่วและถั่วฝักยาว ที่หั่นฉนวน	1,206.41	2,200.87	2,963.70	34.66
4	อะลูมิเนียมและผลิตภัณฑ์	481.23	1,069.83	1,056.20	-1.27
5	วัตถุดิบและผลิตภัณฑ์กึ่งสำเร็จรูปอื่นๆ	440.26	536.46	824.95	53.78
6	เครื่องจักรที่ใช้ในอุตสาหกรรมฯ	194.38	510.85	517.45	1.29
7	มอเตอร์ไฟฟ้า ชุดเครื่องกำเนิดไฟฟ้า	567.48	546.11	490.82	-10.12
8	เสื้อผ้าสำเร็จรูป	146.21	345.07	418.50	21.28
9	ผลิตภัณฑ์สิ่งทออื่น ๆ	82.21	521.26	416.12	-20.17
10	พืชน้ำมันและผลิตภัณฑ์	68.81	197.57	273.22	38.29
รวม 10 อันดับ		6,353.46	14,173.66	18,155.91	28.10
อื่นๆ		3,394.95	3,565.96	1,653.23	-53.64
มูลค่ารวม		9,748.41	17,739.62	19,809.14	11.67

ที่มา : ศูนย์เทคโนโลยีสารสนเทศและการสื่อสาร กรมการค้าต่างประเทศ โดยความร่วมมือจากกรมศุลกากร

หมายเหตุ : Δ % หมายถึงอัตราการเปลี่ยนแปลง

กลุ่มสินค้าส่งออกที่ขยายตัว  
กองความร่วมมือการค้าและการลงทุน  
กรมการค้าต่างประเทศ

## Annual Average Daily Traffic (AADT)

2012

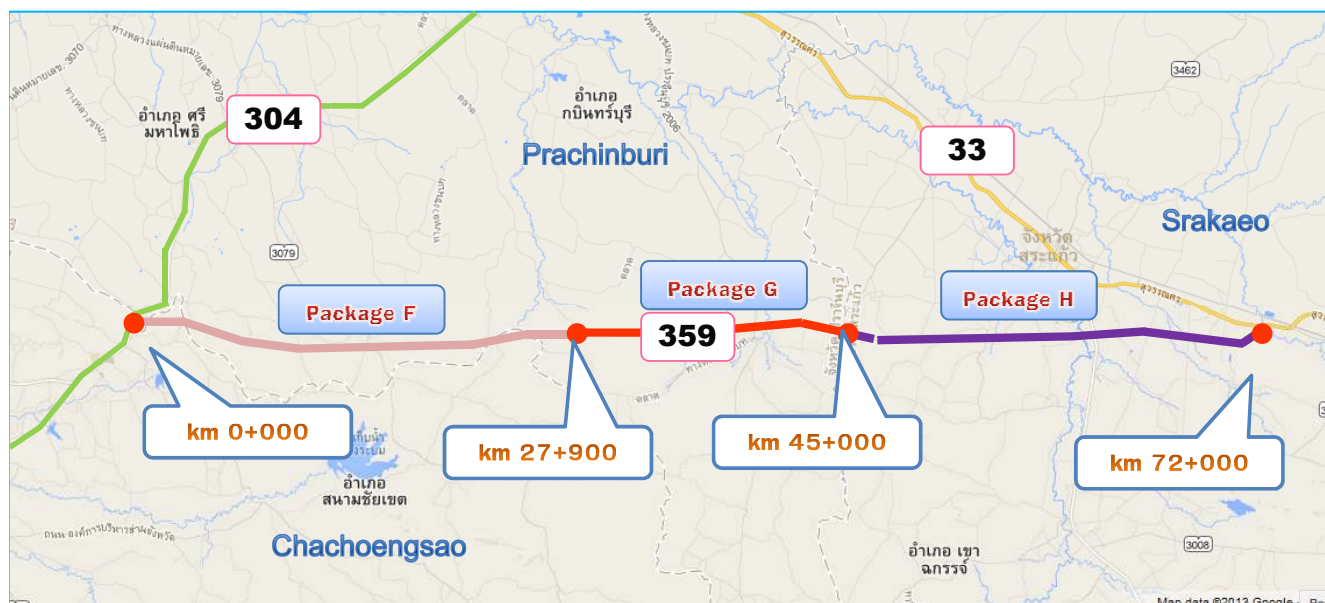
NO	ROUTE Control	NAME DISTRICT CHANGWAT	STATION (KM.) TYPE	IN/ OUT	CAR ≤ 7 P	CAR > 7 P	LIGHT BUS	MEDIUM BUS	HEAVY BUS	LIGHT TRUCK	MEDIUM TRUCK	HEAVY TRUCK	FULL TRAILOR	SEMI TRAILOR	TOTAL	%HEVY VEH	B1+TR1 CYCLE	MOTOR CYCLE	Route OLD Control OLD KM. OLD
861	359 100	JCT.R.NO.304 - KM.45+851(SA KABO DIST.)  Road : CHACHOENGSAO - SA K District : PRACHIN BURI Changwat : PRACHIN BURI	15+000  ( C )	IN OUT ALL	2,538 2,340 4,878	824 1,913 2,737	196 659 855	48 40 88	89 210 298	4,449 3,176 7,625	221 506 727	199 544 742	229 699 928	201 655 856	8,992 10,742 19,734	10.95 24.71 18.44	23 38 61	232 164 396	
862	359 200	KM.45+821(PRACHIN BURI DIST.) - R.NO.33(KHLONG YANG)  District : SA KABO Changwat : SA KABO	54+050  ( C )	IN OUT ALL	1,613 1,665 3,278	1,647 1,264 2,911	163 112 275	8 10 18	160 150 310	1,923 2,526 4,449	216 174 390	331 298 629	417 302 719	290 267 557	6,768 6,768 13,536	21.01 17.75 19.38	30 45 75	983 818 1,801	

2013

NO	ROUTE Control	NAME DISTRICT CHANGWAT	STATION (KM.) TYPE	IN/ OUT	CAR ≤ 7 P	CAR > 7 P	LIGHT BUS	MEDIUM BUS	HEAVY BUS	LIGHT TRUCK	MEDIUM TRUCK	HEAVY TRUCK	FULL TRAILOR	SEMI TRAILOR	TOTAL	%HEVY VEH	B1+TR1 CYCLE	MOTOR CYCLE	Route OLD Control OLD KM. OLD
842	359 102	SRA KHWAN - KHAO MAK  District : SA KABO Changwat : SA KABO	18+595  ( C )	IN OUT ALL	1,790 1,655 3,445	1,704 1,724 3,428	125 110 235	16 22 38	111 117 228	1,891 2,284 4,165	164 191 355	199 234 433	200 373 573	198 303 501	6,388 7,013 13,401	13.90 17.88 15.88	23 22 45	1,051 975 2,026	359 200 54+050
843	359 200	KHAO MAK - KHAO HIN SON  Road : CHACHOENGSAO - SA KABO District : PRACHIN BURI Changwat : PRACHIN BURI	41+793  ( C )	IN OUT ALL	2,828 2,937 5,765	2,558 2,030 4,588	700 631 1,331	73 129 202	295 208 501	3,147 4,999 8,046	797 576 1,373	879 728 1,607	962 1,283 2,245	1,024 1,227 2,251	13,263 14,646 27,909	30.39 28.33 29.31	14 8 22	234 268 492	359 100 15+000



## Route Alignment

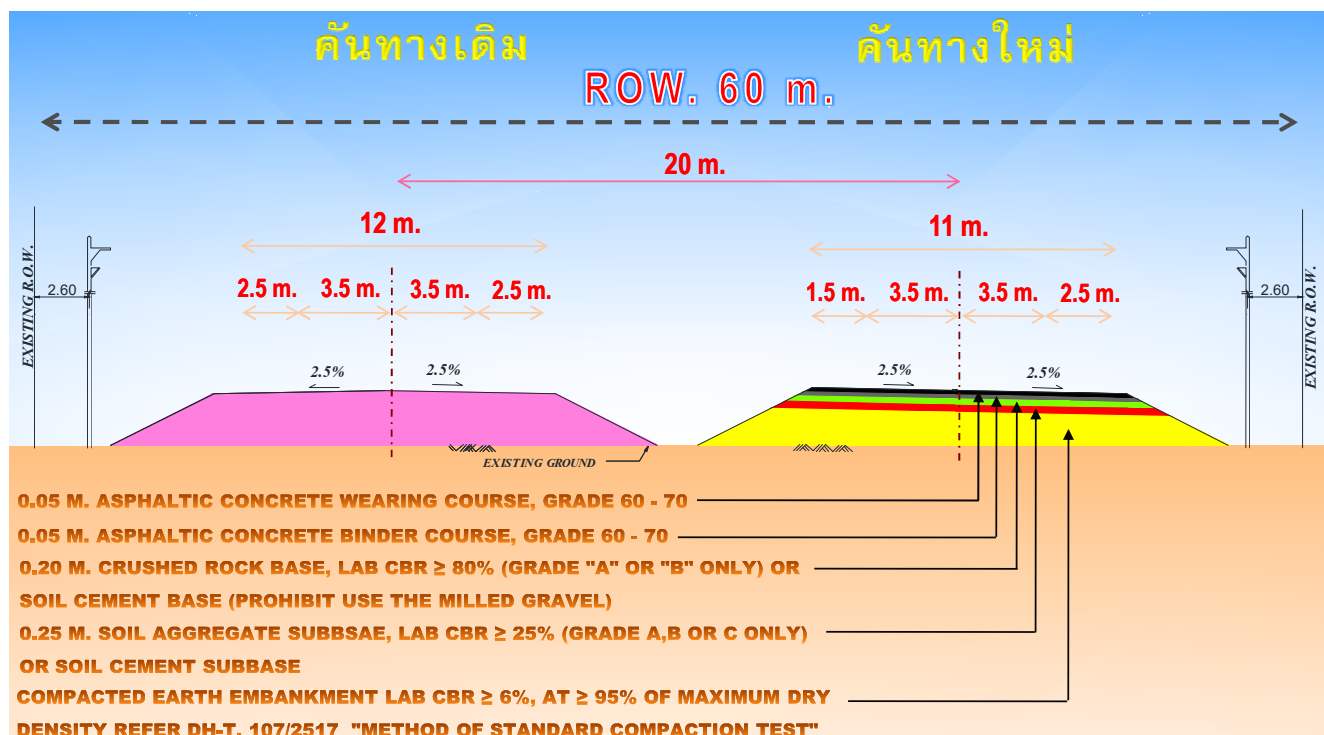


### Contract Data Package F

Item	Detail
Contract Package	ADB 2608-THA HEP/ICB Package F
Highway No.	Highway 359, Phanom Sarakham – Sa Kaeo Section I
Beginning – Ending	Km. 0+000 to Km. 27+900
Total Length	27.9 kilometers
Widening	Widening right side of existing carriage way
Contractor	Donmuuang Karnchang Co.,Ltd.
Contract Amount	THB 450,760,225.00
Time of Completion	720 Days
Commencement Date	05 February 2013
Completion Date	25 January 2015
Taking-Over Certificate Issued	23 January 2015
Delay Damages for the Works	0.5% of the final Contract Price
Defects Notification Period	Civil Work 730 days Street Lighting 1,095 days

#### Bill of Quantities Package F (from Bidding Document)

No.	Description	Amount (THB)
1	Division 1 – GENERAL	6,740,000.00
2	Division 2 – EARTHWORKS	72,144,200.00
3	Division 3 – SUBBASE AND BASE COURSES	84,195,000.00
4	Division 4 – SURFACE COURSE	247,388,000.00
5	Division 5 – STRUCTURES	16,618,500.00
6	Division 6 – INCIDENTALS	22,474,525.00
7	Division 7 – TRAFFIC MANAGEMENT DURING CONSTRUCTION	1,200,000.00
	<b>TOTAL</b>	<b>450,760,225.00</b>



### Contract Data Package G

Item	Detail
Contract Package	ADB 2608-THA HEP/ICB Package G
Highway No.	Highway 359, Phanom Sarakham – Sa Kaeo Section II
Beginning – Ending	Km. 27+900 to Km. 45+000
Total Length	17.1 kilometers
Widening	Widening right side of existing carriage way
Contractor	Saengchaichok Co.,Ltd.
Contract Amount	THB 362,534,005.00
Time of Completion	720 Days + 150 Days + 44 Days = 914 Days
Commencement Date	05 February 2013
Completion Date	07 August 2015
Taking-Over Certificate Issued	15 July 2015
Delay Damages for the Works	0.5% of the final Contract Price
Defects Notification Period	Civil Work 730 days Street Lighting 1,095 days

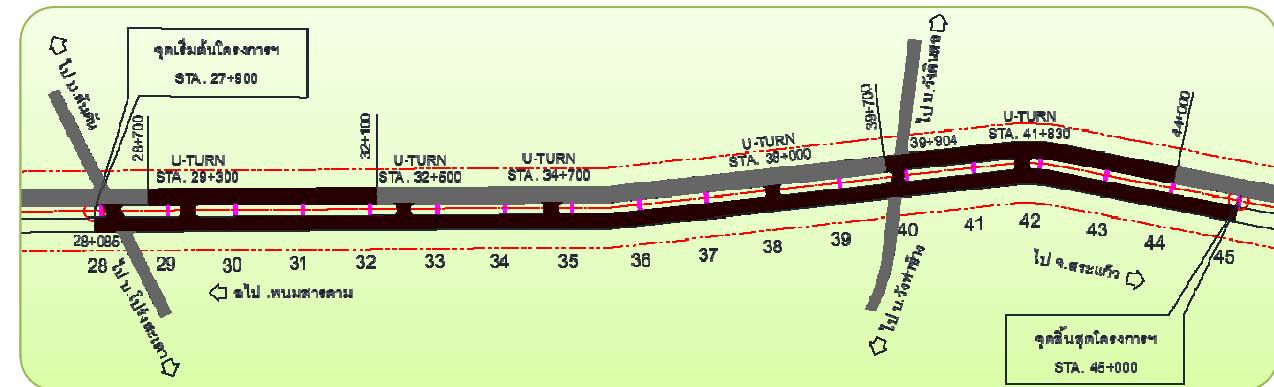
### Bill of Quantities Package G (from Bidding Document)

No.	Description	Amount (THB)
1	Division 1 – GENERAL	8,735,000.00
2	Division 2 – EARTHWORKS	49,320,660.00
3	Division 3 – SUBBASE AND BASE COURSES	72,073,000.00
4	Division 4 – SURFACE COURSE	201,181,810.00
5	Division 5 – STRUCTURES	17,976,200.00
6	Division 6 – INCIDENTALS	12,297,335.00
7	Division 7 – TRAFFIC MANAGEMENT DURING CONSTRUCTION	950,000.00
	<b>TOTAL</b>	<b>362,534,005.00</b>





## PLAN & PROFILE



### Contract Data Package H

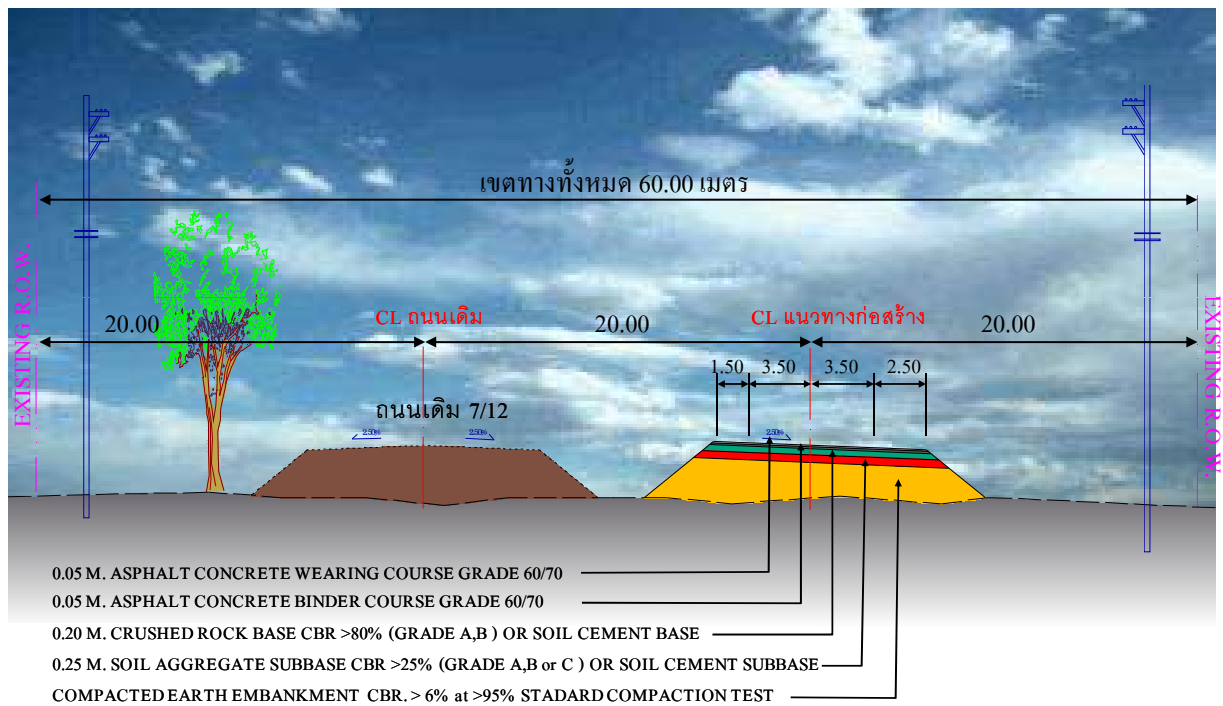
Item	Detail
<b>Contract Package</b>	ADB 2608-THA HEP/ICB Package H
<b>Highway No.</b>	Highway 359, Phanom Sarakham – Sa Kaeo Section III
<b>Beginning – Ending</b>	Km. 45+000 to Km. 72+700
<b>Total Length</b>	27.7 kilometers
<b>Widening</b>	Widening right side of existing carriage way
<b>Contractor</b>	S.P.T. Civil Group Ltd., Part.
<b>Contract Amount</b>	THB 419,500,100.00
<b>Time of Completion</b>	720 Days + 150 Days = 870 Days
<b>Commencement Date</b>	05 February 2013
<b>Completion Date</b>	24 June 2015
<b>Taking-Over Certificate Issued</b>	23 January 2015
<b>Delay Damages for the Works</b>	0.5% of the final Contract Price
<b>Defects Notification Period</b>	Civil Work 730 days Street Lighting 1,095 days

### Bill of Quantities Package G (from Bidding Document)

No.	Description	Amount (THB)
1	Division 1 – GENERAL	7,900,000.00
2	Division 2 – EARTHWORKS	75,514,400.00
3	Division 3 – SUBBASE AND BASE COURSES	70,390,000.00
4	Division 4 – SURFACE COURSE	223,873,700.00
5	Division 5 – STRUCTURES	22,099,000.00
6	Division 6 – INCIDENTALS	18,823,000.00
7	Division 7 – TRAFFIC MANAGEMENT DURING CONSTRUCTION	900,000.00
	<b>TOTAL</b>	<b>419,500,100.00</b>

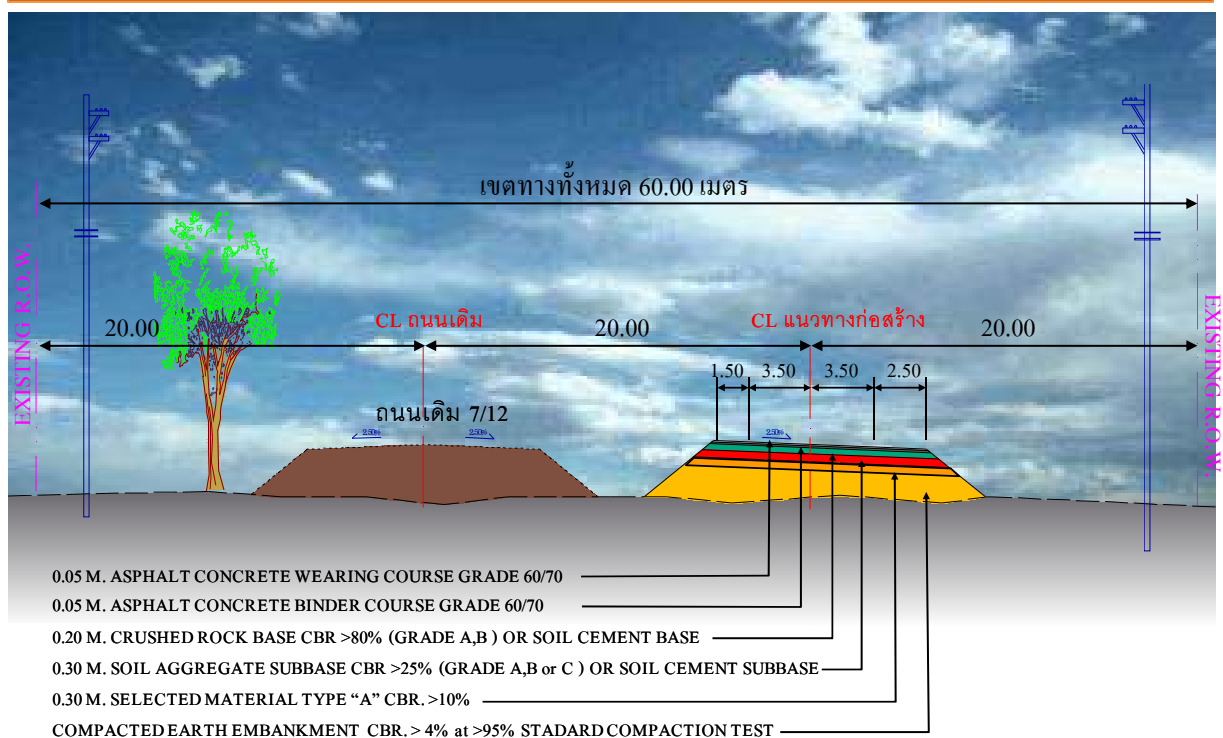
## TYPICAL CROSS SECTION 1

STA.45+000 – 61+100

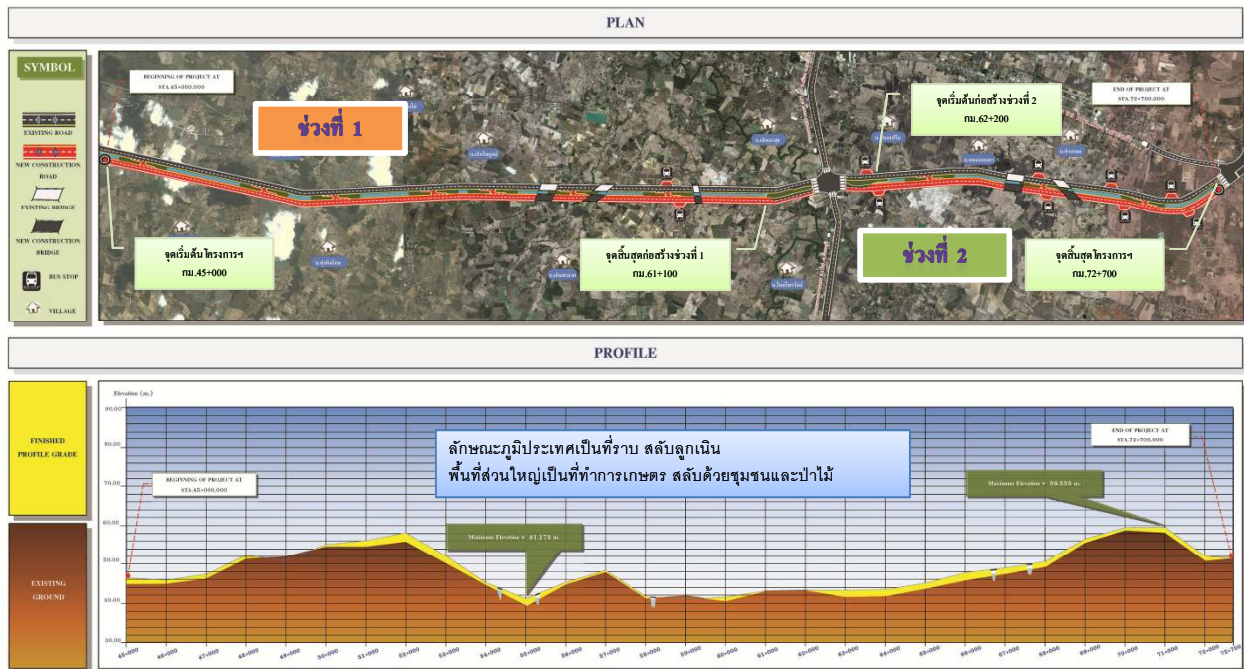


## TYPICAL CROSS SECTION 2

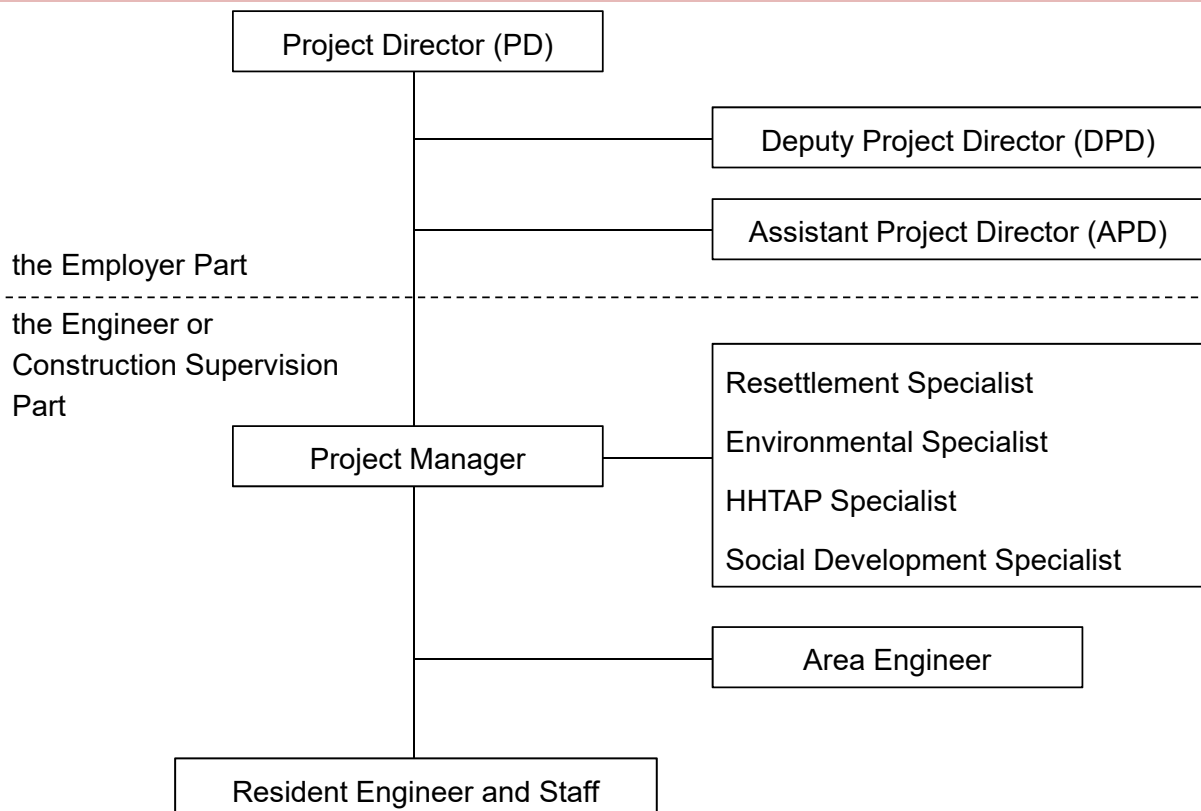
STA.62+200 – 72+700



# PLAN & PROFILE

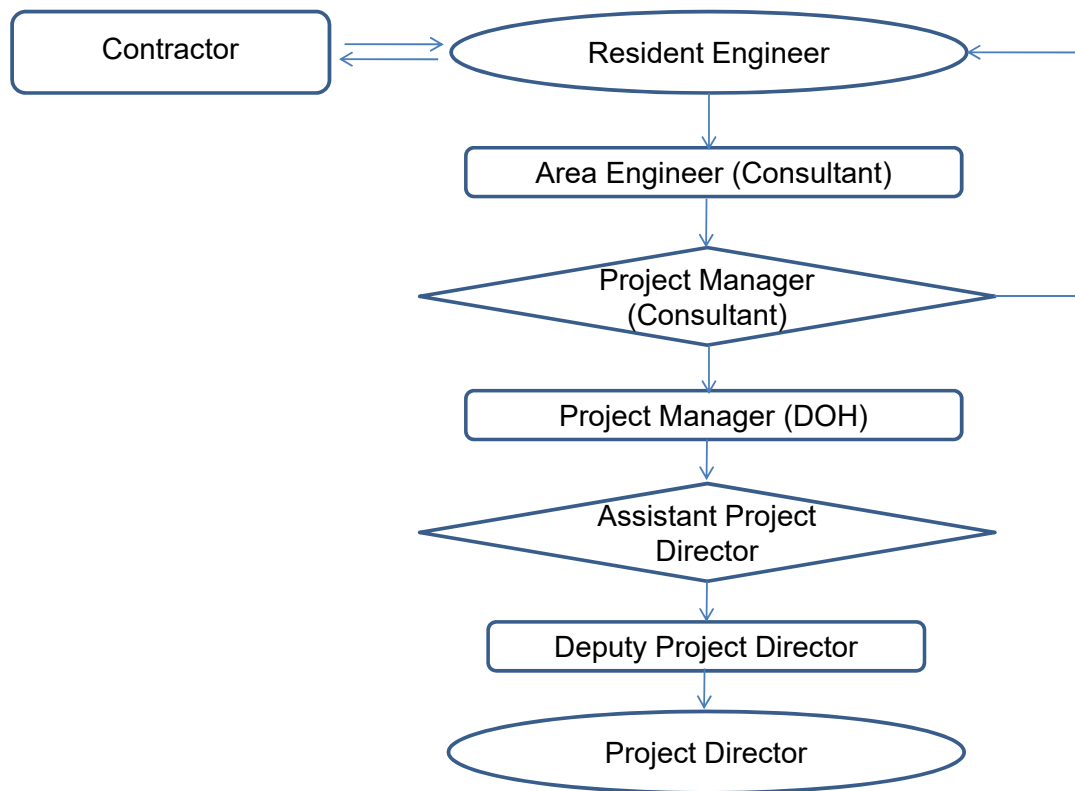


## Contractual Matter and Work Flow

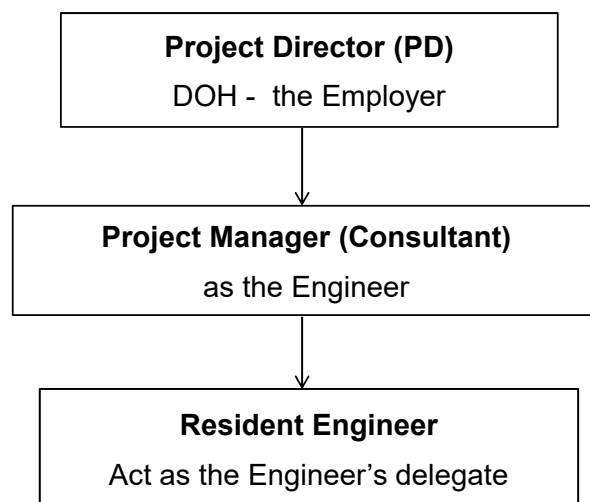




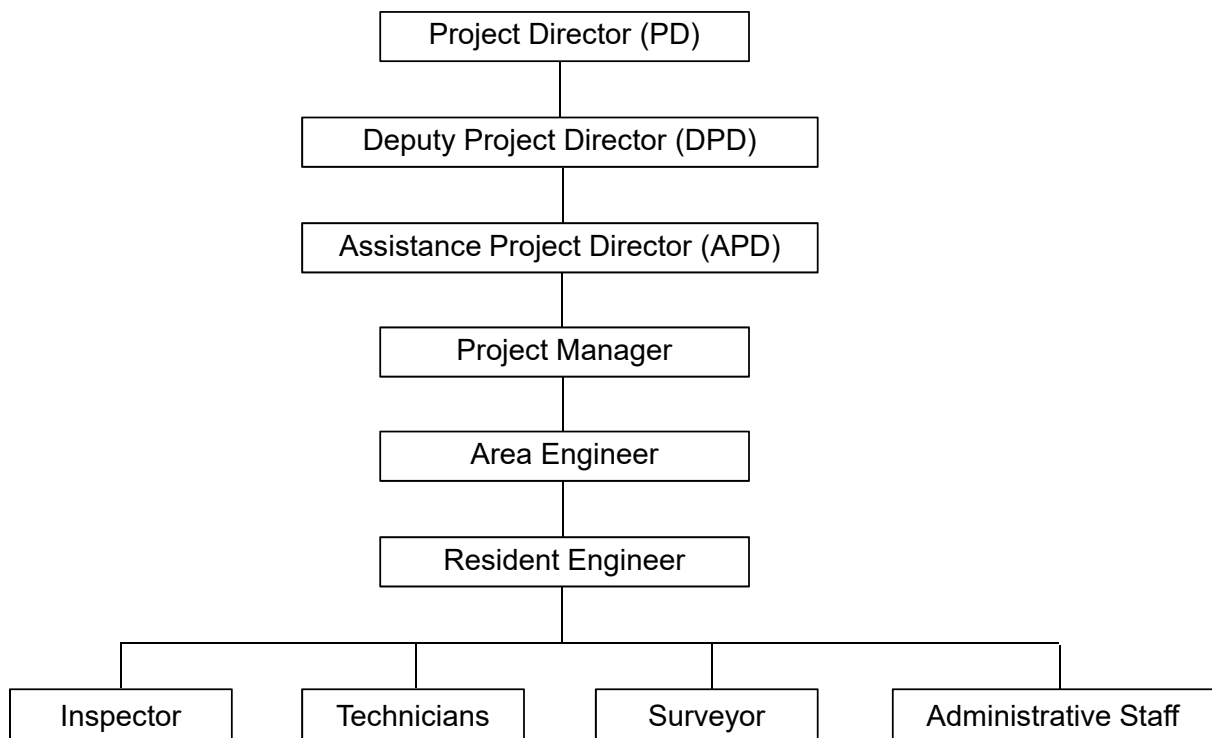
## Flow Chart of Project Management



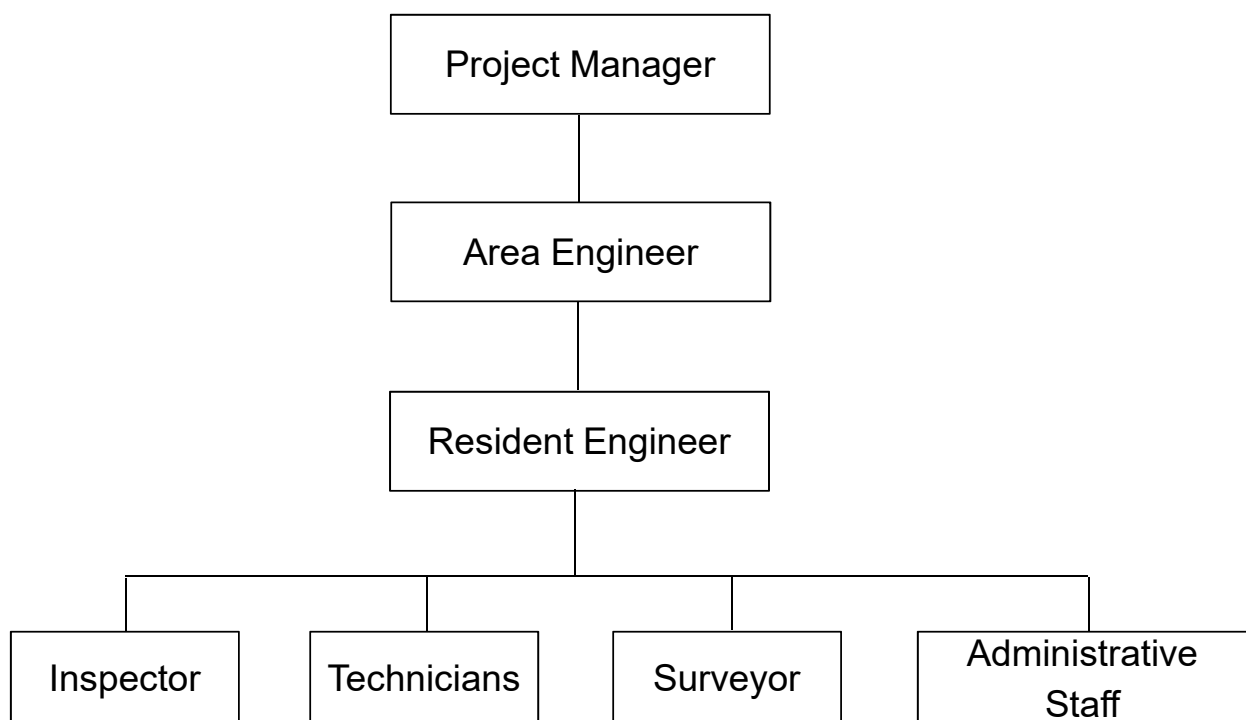
## Flow Chart of Contractual Authority



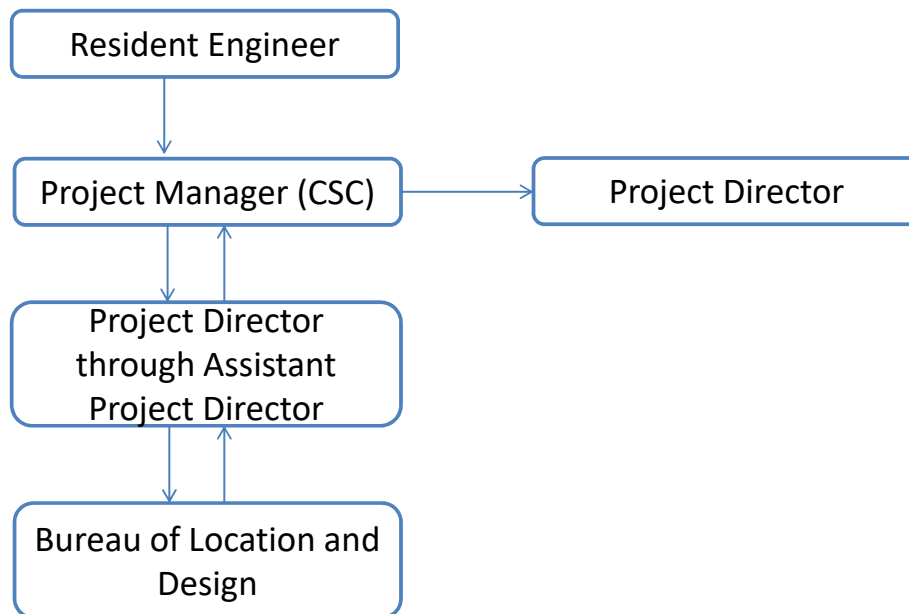
## Flow of Document



## Construction Supervision Organization



# Flow of Change Order and Variation Order



## 2. Construction Supervision

### Highway Route 359: Phanom Sarakham - Sa Kaeo

Contract Package	Accumulated Complete		Actual Accumulated Complete		Ahead (+)	Delay (-)
	Million Baht	Percent	Million Baht	Percent		
Package F (Section I) Donmuang Kanchang	450.760	100.000	450.754	99.999	Completed TOC 23 Jan. 2015	
Package G (Section II) Saengchaichok	358.261	98.821	361.009	99.579	Completed TOC 24 Jul. 2015	
Package H (Section III) S.P.T Civil Group	365.374	87.098	419.440	99.981	Completed TOC 23 Jan. 2015	



## 2. Construction Supervision

### Route No. 359 Package F

All construction work has been completed 100%. CSC issued the *“Taking-Over Certificate”* on January 23, 2015.



Before



After

Sta. 5+500

## 2. Construction Supervision

### Route No. 359 Package F



Before



After

Sta. 13+000

## 2. Construction Supervision

### Route No. 359 Package F



Before



After

Sta. 22+500

## 2. Construction Supervision

### Route No. 359 Package F



Traffic Sign



## 2. Construction Supervision

### Route No. 359 Package F



**Concrete Slope Protection  
Km 13+123**



**Electricity Pole at Krok  
Somboon Intersection**

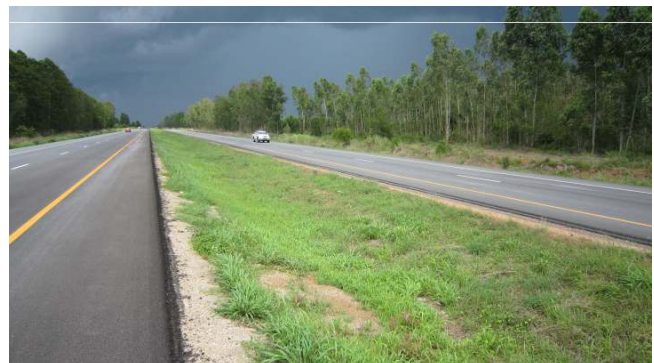
## 2. Construction Supervision

### Route No. 359 Package G

All construction work has been completed 100%. CSC issued the “*Taking-Over Certificate*” on July 24, 2015.



**Before**



**After**

**Sta. 30+000**



## 2. Construction Supervision

### Route No. 359 Package G



Before



After

Sta. 38+000

## 2. Construction Supervision

### Route No. 359 Package G



Before



After

Sta. 41+000

## 2. Construction Supervision

### Route No. 359 Package G



**9.00 m. (Mounting Height) Tapered Steel Pole Single Bracket with High Pressure Sodium Lamp 250 Watts, Cut - Off**

## 2. Construction Supervision

### Route No. 359 Package H

All construction work has been completed 100%. CSC issued the *"Taking-Over Certificate"* on January 23, 2015.



Before



After

Sta. 51+000

## 2. Construction Supervision

### Route No. 359 Package H



Before



After

Sta. 66+000

## 2. Construction Supervision

### Route No. 359 Package H



Before



After

Sta. 71+000



## 3. Resettlement Plan

### Progress of CAP Implementation

- All measurements of CAP for both NH 12 and NH 359 have been done according to plan.
- NH 359 :The final RCCs for both Sub-district have been organized in April 2015.
- NH 12 :The final RCC has been organized for Khao Kor Sub-district in January 2015 but not for Wang Thong Sub-district yet.
- The completion report has not finished yet.

## 3. Resettlement Plan



18-04-2015, the RCC meeting at Mrs. Vitamine's restaurant.

### 3. Resettlement Plan



One AH from Km 59+400 has moved to rent the shop from Mrs. Vitamin at Km 54+027.

### 3. Resettlement Plan



One AH at Km 57+800 has re-opened her business at her house.



### 3. Resettlement Plan



Five AHs have moved to open their business at Mr.Paitoon's market.

CAP Plan and Environmental Monitoring

# 1. Progress of CAP Implementation

## Route No.359

29 October 2013, CSC accompanied with the ADB Resettlement Specialist to monitor the progress of CAP implementation, 2 RCC meetings were organized as follows:

- Simahapot Sub-District; at the meeting room of Wangthachang Tambon Administrative Organization (TAO) with 8 RCC members and 7 observers.
- Sakaeo Sub-District; at Mrs. Vitamine's restaurant 9 RCC members and 4 observers .

# 1. Progress of CAP Implementation

## Route No.359



**RCC meeting of Simahapot Sub-District** at Wangthachang Tambon Administrative Organization meeting room.

# 1. Progress of CAP Implementation

Route No.359



**To level the land and make access way in front of Mrs. Saifon Niemgon's house at km 37+250 will be completed by the end of January of 2014.**

# 1. Progress of CAP Implementation

Route No.359



**To prepare the new relocation Site at Wangthachang (at Km 39+700):**  
The AHs will be allowed to temporarily set up stalls at the former location to sell during the period of December 30, 2013 – January 5, 2014 and after that they will move to the new stalls that they rent from Mr. Paitoon.

# 1. Progress of CAP Implementation

Route No.359



**The RCC meeting of Sakaeo Sub-District** has been organized at Mrs. Vitamine's restaurant.

# 1. Progress of CAP Implementation

Route No.359



**To level the land in front of Mrs. Vitamine's restaurant (at Km 54+027):** The drainage pipes in front of Mrs. Vitamin restaurant which need to be improved.



# 1. Progress of CAP Implementation

Route No.359



**Help build new stalls for 7 AHs (at Km 57+800-57+909):** The Contractor will do the filling and leveling of the vacant land of Mr.Singha and another AH and will cut down the steep access way as the road earth work progress.

# 1. Progress of CAP Implementation and Cutting Trees within the ROW

Route No.359



**To prepare new relocation site for the stalls of 6 AHs (at Km 59+400):** Temporary stalls at the intersection of Route 359 and Route 33 which are allowed to be operated until 05-01-2014.



# 1. Progress of CAP Implementation and Cutting Trees within the ROW

Route No.359



**To prepare new relocation site for the stalls of 6 AHs (at Km 59+400):** New relocation site for the stalls of 6 AHs at Km 59+400 which will be improved by December 2013.

## 2. Environmental Management Plan

1

- Environmental Monitoring

2

- Wastewater Treating Facilities

# 1. Environmental Monitoring

- CSC visited:-
  - *24 October 2013:- Visited Package F, Package G and Package H on Highway Route No. 359*

# 1. Environmental Monitoring

Highway Route No. 359: Package F



There were no effective drainage canals around workshop with a small oil and grease trapper.

# 1. Environmental Monitoring

Highway Route No. 359: Package F



Much of waste found on ground floor outside the camp.

# 1. Environmental Monitoring

Highway Route No. 359: Package F



A trace of waste burning on the site.



# 1. Environmental Monitoring

Highway Route No. 359: Package F



A number of waste bins beside the camp needed a space for waste accumulation.

# 1. Environmental Monitoring

Highway Route No. 359: Package F



Wastewater found in small pond beside site office kitchen.



# 1. Environmental Monitoring

Highway Route No. 359: Package F



Small drainage canals in the camp site.

# 1. Environmental Monitoring

Highway Route No. 359: Package F



Km 2+700, workers were wearing PPE while working.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



Maintenance works at the camp site without workshop.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



A first aid room seemed to be not ready for service.



# 1. Environmental Monitoring

Highway Route No. 359: Package G



Waste was found at back yard of worker camp.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



Oil drums were found placing on ground floor.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



A drainage canal in front of camp site.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



Km35+125, Workers at a bridge construction works were working without PPE.



# 1. Environmental Monitoring

Highway Route No. 359: Package G



Oil and grease trapper was cleaned.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



A lot of solid waste inside a room of worker camp.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



A first aid kit and a fire extinguisher tube hanging on camp wall.

# 1. Environmental Monitoring

Highway Route No. 359: Package G



Km 48+90, workers did not wear PPE.

# 1. Environmental Monitoring

## Highway Route No. 359: Package G



Km 50+200, traffic cones placing on curb for warning motorist.

## 2. Wastewater Treating Facilities

- Trapping oil and grease from workshop
- Trapping discharge/overflow suspended solid from camp site



## 2. Wastewater Treating Facilities

Highway Route No. 359: Package F



Oil & grease trapper at workshop to be enlarged

## 2. Wastewater Treating Facilities

Highway Route No. 359: Package F



A sedimentation pond to be improved



## 2. Wastewater Treating Facilities

Highway Route No. 359: Package G



Recommended to build a sedimentation pond at the end of drainage canal

## 2. Wastewater Treating Facilities

Highway Route No. 359: Package H



Oil & grease trapper inside a workshop

## 2. Wastewater Treating Facilities

Highway Route No. 359: Package H



A sedimentation pond to be improved at the end of sub-contractor drainage camp