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# **CHAPTER I. SCOPE OF WORKS**



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## 1. BRIEF DESCRIPTION OF THE SCOPE OF WORKS

### 1.1 Project

The Danang-Quang Ngai Expressway Project (DQEP) connects Danang city with Quang Ngai province through three (03) provinces and city including; Danang, Quang Nam, Quang Ngai. Total length of the project is about 139.52km; of which 131.50km is expressway and 8.02km is linking road.

The starting point: Phu Hoa hamlet, Hoa Nhon commune, Hoa Vang district, Danang city

The end point: La Ha 4 hamlet, Nghia Thuong commune, Tu Nghia district, Quang Ngai province.

### 1.2 Site

The Site of the Contract Package 2 is from Km8+000 (ending point of Contract Package 1) to Km16+880 (beginning point of Contract Package 3A), total length of the Package is of 8,880 metres. The Site is located in Dien Ban District of Quang Nam province

### 1.3 Summary of D/D Results

The summary of D/D results in Package 2 is shown in Table 1.

Table 1 Summary of D/D Results

No.	Items	Main Features
01	Road Length	Quang Nam province: 8.880km Beginning Point: Km8+000, Dien Tien Commune, Dien Ban District, Quang Nam Province. Ending Point: Km16+880, Dien Tho Commune, Dien Ban District, Quang Nam Province.
02	Road Classification	Expressway: Type A, Class 120
03	Design Speed	Expressway: 120 km/hr
04	Nos. of Lane	4 lanes (Ultimate stage: Widened to 6 lanes)
05	Road With	Expressway: Road 25.5m, Bridges: 25.5m
06	Bridge	15 bridges (L=1529.68m)  River Bridge : 5 bridges (L=617.38m); Canal Bridge : 2 bridges (L=070.20m); Viaduct : 5 bridges (L=598.80m); Overpass : 1 bridge (L=040.60m); Cross Road Flyover : 1 bridge (L=058.60m); IC Rampway bridge: 1 bridge (L=144.10m).
07	Underpass	5 cross roads (Thruway: 5, Rampway: 0)
08	Culvert	Culvert Box: 7 (Thruway: 7, Rampway: 0) Culvert Pipe: 18 (Thruway: 13, Rampway: 5)
09	Interchange	KM13+260, My Son IC, PR609
10	Frontage Road	3,843m
11	Crossing Road	3,676m

The summary of bridge design results in Package 2 is shown in Table 2

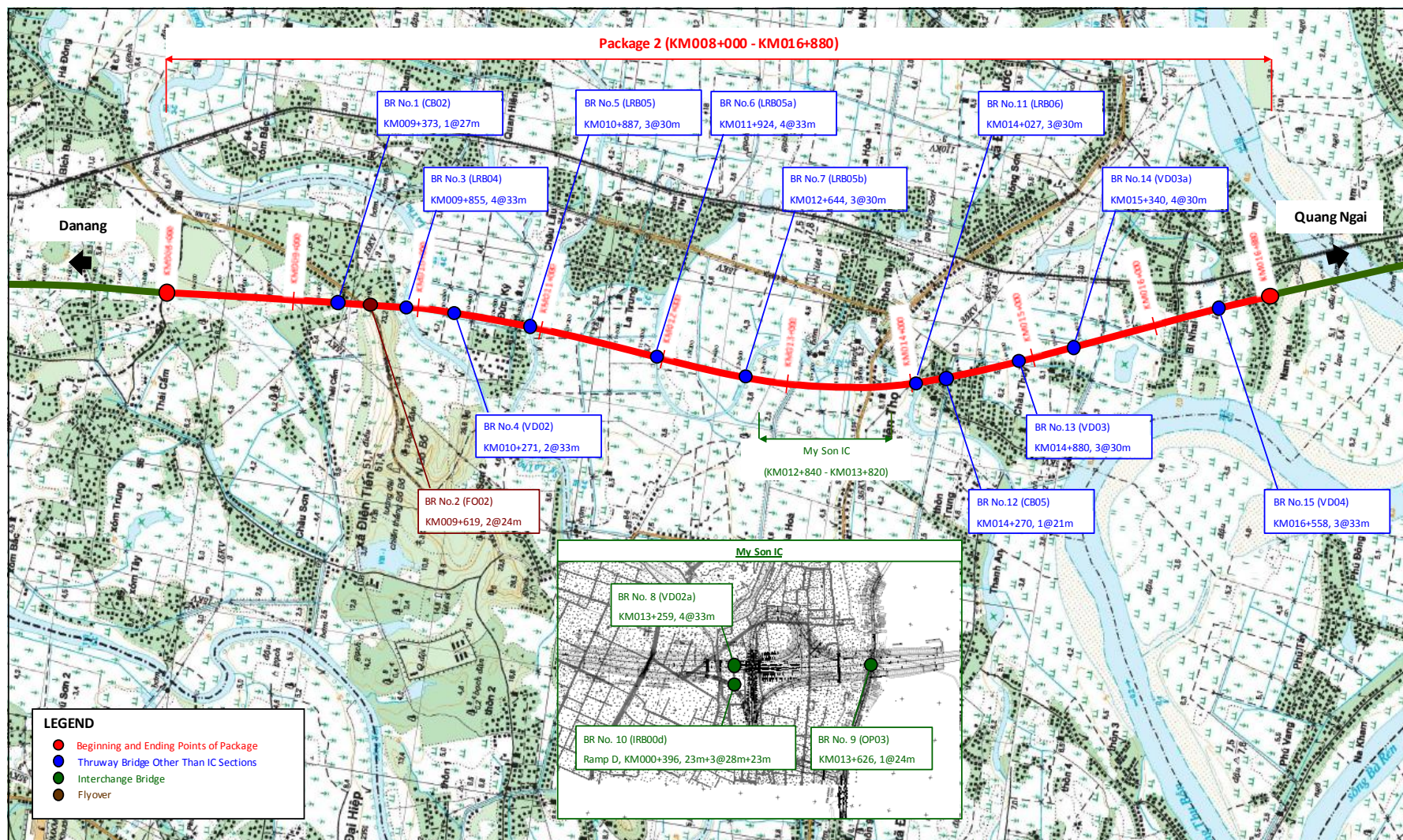
Table 2 Summary of Bridge Design Results in Package 2

No.	Bridge Code <sup>1)</sup>	Jurisdiction			Bridge Location				Design Results		
		City/ Province	District	Commune	Expressway/Linking Road		Cross Road		D/D (This Report)		
					Thruway	Interchange			Bridge Station	Girder Type	Girder Arrange.
1	CB02	Quang Nam	Dien Ban	Dien Tien	•				KM009+372.80	PC-I Girder	1@27m
2	FO02							•	KM009+619.08	PC Void Slab	2@24m
3	LRB04				•				KM009+854.85	PC-I Girder	4@33m
4	VD02				•				KM010+271.00	PC-I Girder	2@33m
5	LRB05				•				KM010+887.25	PC-I Girder	3@30m
6	LRB05a				•				KM011+924.00	PC-I Girder	4@33m
7	LRB05b				•				KM012+644.00	PC-I Girder	3@30m
8	VD02a					•			KM013+258.62	PC-I Girder	4@33m
9	OP03					•			KM013+626.25	PC-I Girder	1@24m
10	IRB00d						•		RW-D, KM000+395.60	PC Void Slab	(23+3@28+23)m
11	LRB06				•				KM014+026.50	PC-I Girder	3@30m
12	CB05				•				KM014+270.00	PC-I Girder	1@21m
13	VD03				•				KM014+880.00	PC-I Girder	3@30m
14	VD03a				•				KM015+340.00	PC-I Girder	4@30m
15	VD04				•				KM016+558.00	PC-I Girder	3@33m

1) ORB: Other River Bridge (Medium 25m<L<100m) and Small (L<25m), CB: Canal Bridge, VD: Viaduct, OP: Overpass, FO: Flyover



## Bridge Location Map in PKG 2



## **2. MAJOR CONTRACT COMPONENTS**

The works shall, inter alia, include the following:

### **2.1 Survey**

- a) Confirm the benchmarks as detailed in the Contract.
- b) Establish all required temporary benchmarks (TBMs) to enable proper setting out and monitoring of the Works

### **2.2 Shop Drawings**

The prudent Contractor might adopt advanced construction methods and technical improvement to complete the Work within the Time for Completion. Notwithstanding this, it is essential to meet the geometrical dimensions and technical standards of the design. The Contractor shall prepare the shop drawings and commentary describing the construction methods he intends to use and then submit the same to the Engineer for approval prior to the start of construction.

### **2.3 Road Works**

The construction of roads in the Works includes but is not limited to:

- a) Site clearance and removal of obstructions;
- b) Embankment and cut constructions;
- c) One interchanges constructions;
- d) Collaborate with and provide the smooth connection to other Packages;

### **2.4 Bridge Works include but are not limited to:**

- a) Construction of small and medium bridges;
- b) Construction of all required drainage works as shown in the Drawings;
- c) Coordination with other Contractors for connection to the other Packages.

### **2.5 Incidental Works including but not limited to:**

- a) Construction of; drainage to the road and bridge sections, barriers and builder's work in connection with the installation of lighting systems.

### **2.6 Other Items of Work**

- a) As may be required for proper completion of the Works in all respects and in accordance with the provisions of the Contract.
- b) Maintain the flow of traffic on the roads used by the Contractor for the construction of the Works to ensure the safety of the public and residents along the roads and minimum disruption to flow of traffic.

Maintain drainage and waterways (with appropriate navigation clearance as necessary) during the construction of the Works to ensure the safety of the public and residents in the area and minimum disruption to drainage and the flow of waterway traffic.

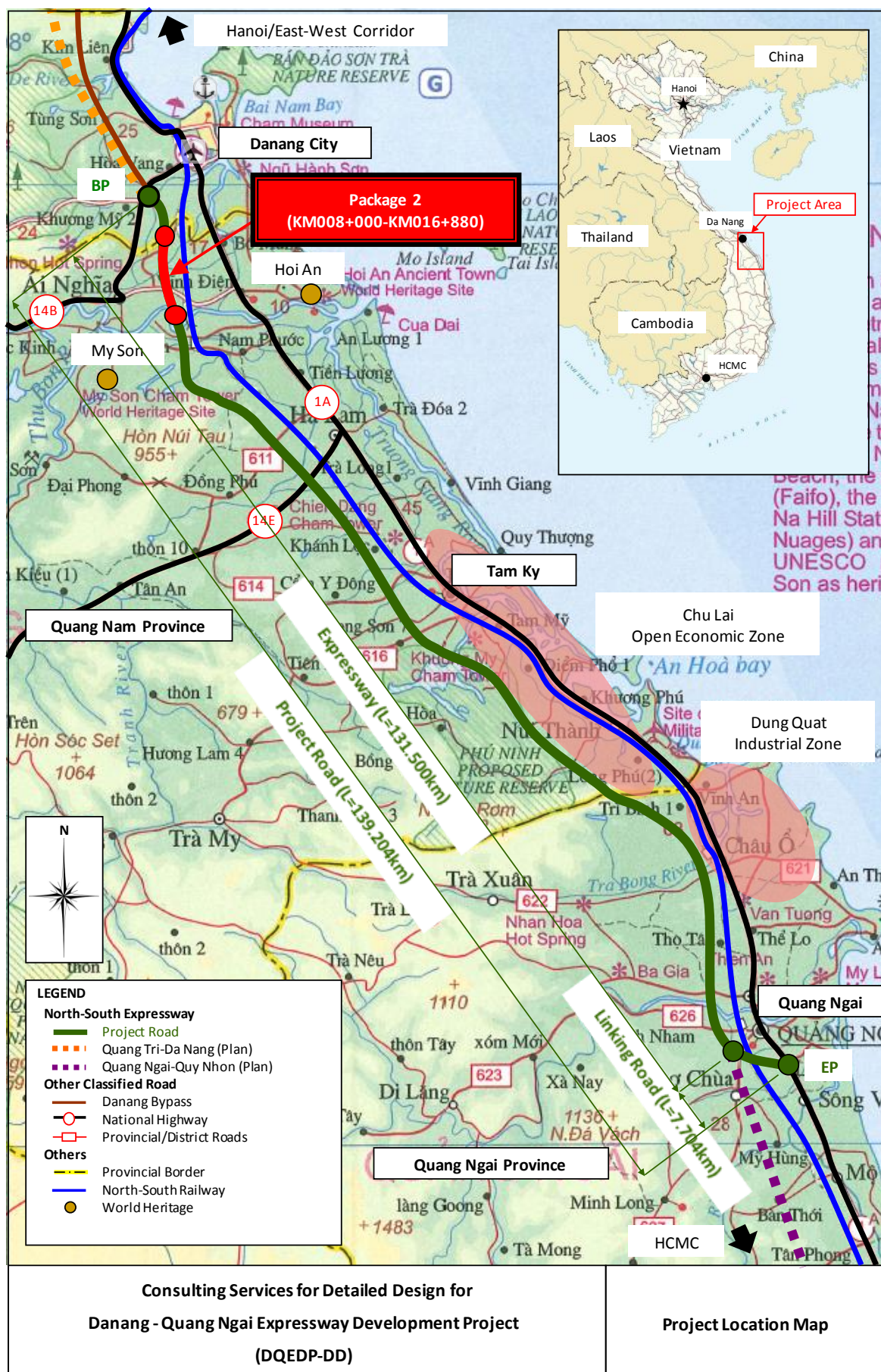
### **3 TIME FOR COMPLETION**

Time for Completion is one thousand and eighty (1080) calendar days as given in Part A-Contract Data, Section VIII-Particular Conditions, Part 3-Conditions of Contract.

### **4. CONSTRUCTION SITE**

The location of this package is shown in the map below:







## 5. TEMPORARY ROAD PLAN

The sketch below represents the Employer's provision for access to the Site in accordance with subclause 4.13 of the Conditions of Contract.

