2.0 PROJECT DESCRIPTION

2.1 Key Work Elements

The Project includes the widening of a section of the existing Tai Po Road between Sha Tin Rural Committee Road and Fo Tan Road from its existing dual 2-lane width to a dual 3-lane standard. The Project also includes the modification of the diamond shape interchange at J/O Tai Po Road and Sha Tin Rural Committee Road, and reconstruction of the section of Tai Po Road between Lion Rock Tunnel Road and Sha Tin Road.

The layout for the Project and the Study Area are shown on Figures 2.1a to 2.1c. The major work elements of the Project are:-

(i) Widening of about 1.4 km of Tai Po Road between Sha Tin Rural Committee Road and Fo Tan Road from the existing dual 2-lane to dual 3-lane standard;

(ii) Improvement of the existing diamond shape interchange at Tai Po Road / Sha Tin Rural Committee Road;

(iii) Reconstruction of the section of Tai Po Road between Lion Rock Tunnel Road and Sha Tin Rural Committee Road;

(iv) Reprovisioning of the grade separated cycle track and footpath at the junction of Tai Po Road/Sha Tin Rural Committee Road;

(v) Modification of the existing supports of the footbridge (NF40) at Wo Che Street to accommodate road widening;

(vi) Construction of retaining walls as required; and

(vii) Diversions and augmentation of drainage, landscape, lighting and other works associated with this Project.

2.2 Construction Works and Timing

Based on the required administrative and statutory procedures, the earliest commencement date for the Project is anticipated to be by late 2002 and for completion by year 2006 (extension of time included).

The construction works for each item of the scope of project mentioned in Section 2.1 above and the associated use of the construction equipment by the works is provided in Tables 2.1. The works involved in the use of different equipment is grouped into different working scenarios. It is anticipated that 7 working scenarios will be involved and the quantity of equipment to be used in each working scenario is presented in Table 2.2.

The combinations of works for each working scenario are given below:

(i) Scenario 1: it involves the breaking of carriageway using excavator mounted breaker and the foundation construction for noise barriers.

(ii) Scenario 2: it involves the trimming edge of excavated trenches and breaking of minor structures, such as manholes, and the foundation construction for noise barriers.

(iii) Scenario 3: it involves the breaking of the exiting structures, including the piers, of the diamond shape interchange, and the foundation construction for noise barriers.

(iv) Scenario 4: it involves placing concrete to the foundation, pile cap, piers, retaining walls and decking etc. of the diamond shape interchange and noise barriers. Lifting construction materials and structural elements etc.

(v) Scenario 5: it involves the loading of excavated material and the construction of foundation for noise barriers.

(vi) Scenario 6: it involves the laying and compaction of sub-base, road base, wearing course and friction course, and the foundation construction for noise barriers.

(vii) Scenario 7: it involves the lifting of construction materials in place such as structural members of noise barriers, steel bars and falsework and formwork etc.

Table 2.1 Equipment Used during Reconstruction and Widening

Type	SWL dB(A)
Asphalt paver (CNP004)	*109*
Breaker, excavator mounted (CNP027)	122
Air Compressor (CNP002)	102
Breaker, hand held (CNP024)	108
Lorry (CNP141)	112
Crane, mobile/barge mounted (CNP048)	112
Piling, earth auger, auger (CNP167)	114
Roller (CNP186)	108

Table 2.2 Total Sound Power Level (SWL) for each working scenario (1 to 7)

Type	SWL, dB	Quantities	1	2	3	4	5	6	7
Asphalt Paver (CNP004)	*109*	*1*						√*(1)*	
Breaker, excavator mounted (CNP027)	122	1	√		√	√	√		
Air Compressor (CNP002)	102	1			√				
Breaker, hand held (CNP024)	108	1		√	√				
Lorry (CNP141)	112	2	√			√	√	√	
Crane, mobile/barge mounted (CNP048)	112	1				√			√
Piling, earth auger, auger (CNP167)	114	2	√	√	√		√	√	
Roller (CNP186)	*108*	*1*						√*(1)*	

(1) Either Roller or Asphalt Paver could be used.