- Sampling, Field Measurement and Testing Works (Stage 4)

Implementation Schedule for Air Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation
			Agent	Des	С	0	Dec	and Guidelines
Constructio	on Phase							
For the Wh		0	1					
\$3.6.5	Four times a day watering of the work site with active operations.	Work site / during construction	Contractor		V			EIAO-TM
S3.8.1	 Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts. Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition; Watering during excavation and material handling; Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. 	Work site / during construction	Contractor		V			

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- Sampling, Field Measurement and Testing Works (Stage 4)

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation	
	g		Agent	Des	С	0	Dec	and Guidelines	
\$3.5.6	For the dredging activities carried out in the vicinity of Police Officers' Club, the dredging operation will be restricted to only 1 small close grab dredger to minimise the odour impact during the dredging activity. The dredging rate should be reduced as much as practicable for the area in close proximity to the Police Officers' Club. The sediments contain highly contaminated mud which may be disposed with the use of geosynthetic containers (details shall refer to Section 6), grab dredger has to be used for filling up the geosynthetic containers on barges. the dredging rate for the removal of the sediments at the south-west corner of the typhoon shelter shall be slowed down or restricted to specific non-popular hours in weekdays when it is necessary during construction.	Corner of CBTS/implementation of harbour-front enhancement	CEDD <u>1</u>		1			EIAO-TM	
\$3.8.8	Carry out dredging at the corner of CBTS to remove the sediment and clean the slime attached on the CBTS shoreline seawall	Corner of CBTS & CBTS shoreline seawall/implementation of harbour-front enhancement	CEDD ²		V			EIAO-TM	
Operation									
For the Wh	ole Project								

¹ CEDD will identify an implementation agent.

² CEDD will identify an implementation agent.

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation
	Environmental Protection Measures / Mitigation Measures	Docution, Thining	Agent	Des	С	0	Dec	and Guidelines
\$3.10.2	Monthly (from July to September) monitoring of odour impacts, for a period of 5 years, is proposed during the operational phase of the Project to ascertain the effectiveness of the Enhancement Package over time, and to monitor any on- going odour impacts at the ASRs.	Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase	CEDD ¹			V		EIAO-TM
For DP1 - 0	CWB (Within the Project Boundary)							
\$3.6.53 – \$3.6.54	The design parameters of the East and Central Ventilation Buildings as set in Tables 3.10 and 3.11	East and Central Ventilation Buildings / During operation of the Trunk Road	HyD			V		
\$3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			V		EIAO-TM

• Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

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Table A13.2 Implementation Schedule for Noise Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages* Des C O Dec				Relevant Legislation and Guidelines
Construction					-			

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	ion	Relevant Legislation and Guidelines		
LIII KU	Environmental Protection Measures / Mitigation Measures	Location / Thining	Agent	Des	С	0	Dec			
S4.9.4	Good Site Practice:	Work Sites / During	Contractor					EIAO-TM, NCO		
	 Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program. 	Construction								
	 Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program. 									
	• Mobile plant, if any, shall be sited as far away from NSRs as possible.									
	 Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum. 									
	 Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. 									
	• Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- site construction activities.									
For DP1 -	CWB (Within the Project Boundary)									

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*			on	Relevant Legislation	
	g		Agent	Des	С	0	Dec	and Guidelines	
\$4.8.3 – \$4.8.5	 Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: Slip road 8 tunnel Construction of diaphragm wall and substructures of the tunnel approach ramp Excavation Construction of slabs Backfill Demolition and construction of substructures for the IEC Demolition works of existing piers and crossheads of the marine section of the existing IEC Use of PME grouping for the following tasks: At-grade road construction Substructure for IECL connection 	Work Sites / During Construction	Contractor		V			EIAO-TM, NCO	
For DP2 –	WDII Major Roads (Road P2)								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: • Temporary road diversion • Resurfacing • At-grade roadwork	Work Sites / During Construction	Contractor		V			EIAO-TM, NCO	
For DP3 -	Reclamation Works								
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following task: Filling behind seawall Seawall construction	Work Sites / During Construction	Contractor		V			EIAO-TM, NCO	

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*				Relevant Legislation
LITRO	Environmental Protection Measures / Mugation Measures	Location / Thining	Agent	Des	С	0	Dec	and Guidelines
For DP5 -	Wan Chai East Sewage Outfall							
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section)	Work Sites / During Construction	Contractor		V			EIAO-TM, NCO
	Use of quiet powered mechanical equipment and movable noise barrier for the following tasks:Installation of a new pipeline (land section)							
For DP6 -	Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui							
S4.8.3 – S4.8.4	Use of quiet powered mechanical equipment for the following tasks: • Submarine pipelines (marine section) •	Work Sites / During Construction	Contractor		N			EIAO-TM, NCO

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 EIA Ref
 Environmental Protection Measures / Mitigation Measures
 Location / Timing
 Implementation Agent
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- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	ion	Relevant Legislation
LIII KU	Environmental Frotection (Acasares / Anagaton Acasares	Docution / Thining	Agent	Des	С	0	Dec	and Guidelines
S4.8.14 – S4.8.18	 For Existing NSRs about 235m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC about 230m length of noise semi-enclosure with transparent panel covering the main carriageways (eastbound and westbound) of the CWB and IEC about 135m length of 5.5m high cantilevered noise barrier with 3m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC about 95m length of 5.5m high cantilevered noise barrier with 1m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC 	Near North Point / Before commencement of operation of road project	HyD	~	V	V		EIAO-TM
	 about 350m length of 3.5m high vertical noise barrier with transparent panel on the eastbound slip road to the IEC low noise road surfacing for the trunk road (except tunnel section and beneath the landscaped deck at the eastern portal area) with speed limit of 70 km/hour For Future/Planned NSRs about 265m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC 	In between the Electric Centre (next to City Garden) and CDA(1) site / Before occupation of Planned NSRs in CDA and CDA(1) sites.	HyD	V	√ #			

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Staş		on	Relevant Legislation
			Agent	Des	С	0	Dec	and Guidelines
	• The openable windows of the temple, if any, should be	Near Causeway Bay Fire	Project					
	orientated so as to avoid direct line of sight to the existing	Station / During detailed	Proponent for					
	Victoria Park Road as far as practicable.	design of the re-	the					
		provisioned Tin Hau	re-provisioned					
		Temple	Tin Hau Temple					

* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

* Only the steel frame for this section of noise semi-enclosure would be erected in advance during the construction of the westbound slip road.

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Table A13.3 Implementation Schedule for Water Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entatio ges*	on	Relevant Legislation
	Zin (il olimetrati i rotection i rotabili co / i ritigation riteadul co	Timing	Agent	Des	С	0	Dec	and Guidelines
Constructio	on Phase							
For DP3 – 1 Boundary)	Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbo	our Water Mains	from Wan Chai to T	Tsim Sh	a Tsu	i), DP.	1 – CW	B (within the Project
\$5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		\checkmark			EIAO-TM, WPCO
\$5.8	 Dredging shall be carried out by closed grab dredger for the following works: Seawall construction in all the reclamation areas; Construction of the CWB Tunnel Construction of the proposed WSD water mains; and Construction of the proposed Wan Chai East sewage outfall pipelines. 	Work site / During the construction period	Contractor		\checkmark			EIAO-TM, WPCO
S5.8, Figure 5.3	 Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: Dredging along the proposed cross-harbour water mains; Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA). 	Work site / During the construction period	Contractor		\checkmark			EIAO-TM, WPCO

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EIA Ref	Environmental Protection Measures / I	Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
		5	Timing	Agent	Des	С	0	Dec	and Guidelines
\$5.8	The water body behind the temporary rec typhoon shelter shall not be fully enclose	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO	
S5.8	As a mitigation measure, to avoid the acc within the temporary embayment be impermeable barrier, suspended from a and extending down to the seabed, will the HKCEC1 commences. The bar discharge flows from Culvert L to the contractor will maintain this barrier	tween CRIII and HKCEC1, an floating boom on the water surface be erected by the contractor before rier will channel the stormwater outside of the embayment. The until the reclamation works in	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
S5.8, Figure 5.3	HKCEC2W are carried out and the new 0 The total dredging rates in each of the m than the maximum production rates state production rates without considering the	arine works zones shall not be more ad in the table below. These are the	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
	Maximum Dredging Rate Maximum Dredging Reclamation Area m³ per day m³ per (for 16 hrs per day) Maximum Dredging Declaring Language mg per (hour (for 16 hrs) per day) Maximum Dredging								
	Dredging along seawall or breakwater North Point Shoreline Zone (NPR) Causeway Bay TBW Shoreline Zone TCBR PCWA Zone TCBR	6,000 375 42,000 1,500 94 10,500 6,000 375 42,000 5,000 313 35,000							

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Wan Chai Shoreline Zone (WCR) HKCEC Shoreline Zone HKCEC Shoreline Zone	0	n wicasui co	Environmental Protection Measures / Mitigation Measures		Implementation	Implementation Stages*				Relevant Legislation
				Timing	Agent	Des	С	0	Dec	and Guidelines
HKCEC Shoreline Zone HKCEC Stage 1 & 3	6,000	375	42,000							
	1,500	94	10,500							
(HKCEC) HKCEC Stage 2	6,000	375	42,000							
Cross Harbour Water Mains	1,500	94	10,500							
Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500							
Note: $1,500 \text{ m}^3$ per day shall be appli seawall of WCR1.	ed for c	onstruction	of the western							
1,500m ³ per day for construction of the proximity of the WSD intake), followed t western seawall (above high water mark	western by partial c) to prot	seawall (wh seawall con	ich is in close struction at the	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
partially constructed to protect the ner dredging activities. For example, at T seawalls shall be constructed first (abo seawater intakes at the inner water would	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO			
				Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
as stated below: Interim Construction Location of A. Stage Scenario 2A in early WSD saltwar 2009 with concurrent Bay, Sheung V	pplicatio r ter intake Van, Wan	ns es at Sai Wa Chai, Kowloo	an Ho, Quarry on South	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO
	seawall of WCR1. Dredging along the seawall at WCR1 1,500m ³ per day for construction of the proximity of the WSD intake), followed to western seawall (above high water mark much as possible from further dredging a For dredging within the Causeway Bay partially constructed to protect the ner dredging activities. For example, at T seawalls shall be constructed first (abb seawater intakes at the inner water would the remaining dredging activities along the Silt curtains shall be deployed around seawall dredging and seawall trench fill TCBR and NP. Silt screens shall be applied to seawater in as stated below: Interim Construction Stage Scenario 2A in early 2009 with concurrent dredging activities at Cooling wate	Wan Chai East Submarine Sewage Pipeline 1,500 Note: 1,500 m³ per day shall be applied for c seawall of WCR1. Dredging along the seawall at WCR1 shall l Jrodging along the seawall at WCR1 shall l 1,500 m³ per day for construction of the western proximity of the WSD intake), followed by partial western seawall (above high water mark) to prot much as possible from further dredging activities. For dredging within the Causeway Bay typhoor partially constructed to protect the nearby seaw dredging activities. For example, at TCBR1W, seawalls shall be constructed first (above high seawater intakes at the inner water would be prote the remaining dredging activities along the northe Silt curtains shall be deployed around the closeawall dredging and seawall trench filling in th TCBR and NP. Silt screens shall be applied to seawater intakes at as stated below: Interim Construction Location of Application Stage Scenario 2A in early 2009 with concurrent dredging activities at Cooling water intakes	Wan Chai East Submarine Sewage Pipeline 1,500 94 Note: 1,500 minimity 94 Note: 1,500 minimity 94 Note: 1,500 minimity 94 Dredging along the seawall at WCR1 shall be undertak 1,500m ³ per day for construction of the western seawall (wh proximity of the WSD intake), followed by partial seawall con western seawall (above high water mark) to protect the adja much as possible from further dredging activities. For dredging within the Causeway Bay typhoon shelter, se partially constructed to protect the nearby seawater intake dredging activities. For example, at TCBR1W, the southe seawalls shall be constructed first (above high water mar seawater intakes at the inner water would be protected from th the remaining dredging activities along the northern boundary Silt curtains shall be deployed around the closed grab di seawall dredging and seawall trench filling in the areas of H TCBR and NP. Silt screens shall be applied to seawater intakes at interim consastated below: Interim Construction Location of Applications Stage Scenario 2A in early WSD saltwater intakes at Sai Wa 2009 with concurrent dredging activities at Cooling water intakes for Hong Kod Cooling water intakes for Hong Kod	Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary. Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Silt screens shall be applied to seawater intakes at interim construction stages as stated below: Interim Construction Location of Applications Stage Scenario 2A in early WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Crobing water intakes for Hong Kong Convention	Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / Dredging along the seawall at WCR1 shall be undertaken initially at 1,500 m³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. Work site / During the construction period For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawall shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / During the construction stages as stated below: Interim Construction Stage Silt screens shall be applied to seawater intakes at interim construction stages as stated below: WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention Work site /	Wan Chai East Submarine Sewage Pipeline1,5009410,500Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1.Work site / During the construction per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes and partially constructed to protect the nearby seawater intakes form further dredging activities.Work site / During the construction periodContractorFor dredging within the Causeway Bay typhoon shelter, seawall shall be artially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawatel intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.Work site / During the construction periodSilt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.Work site / During the construction seawater intakes at interim construction stages as stated below:Contractor During the construction periodSilt screens shall be applied to seawater intakes at interim construction stages ow stated below:WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon SouthWork site / During the construction period	Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / During the construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. Work site / During the construction period For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary. Work site / During the construction period Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / During the construction stages as stated below: Silt screens shall be applied to seawater intakes at interim construction stage as stated below: Location of Applications Work site / During the construction period Silt screens shall be applied to seawater intakes at Sai Wan Ho, Quarry 2009 with concurrent day, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention Work site / During the construction period	Wan Chai East Submarine Sewage Pipeline 1.500 94 10.500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / Contractor Dredging along the seawall at WCR1 shall be undertaken initially at 1,500 m³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. Work site / Contractor √ For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBRIW, the southern and eastern seawall dredging activities along the northern boundary. Work site / Contractor √ Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / During the construction period Contractor √ Silt screens shall be applied to seawater intakes at interim construction stages as stated below: Location of Applications Work site / During the construction period Contractor √ Silt screens shall be applied to seawater intakes at Sai Wan Ho, Quarry 2009 with concurrent dredging activities at Chai, Kowloon South Cooling water intakes for Hong Kong Convention Work site / Contractor √ <td>Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / Contractor √ Dredging along the seawall at WCR1 shall be undertaken initially at 1,500 m³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction intakes as much as possible from further dredging activities. Work site / During the construction period For dredging within the Causeway Bay typhon shelter, seawall shall be dredging activities. For example, at TCBRIW, the southern and eastern seawall shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary. Contractor √ Silt curtains shall be deployed around the closed grab dredgers during seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / During the construction stages as taited below: Interim Construction Location of Applications Work site / During the construction period Ouring the construction period Sitt screens shall be applied to seawater intakes at interim construction stages as stated below: Mork site / Contractor √ Interim Construction Location of Applications Bay, Sheung Wan, Wan Chai, Kowloon South dredging activities at Contractor Contractor</td> <td>Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / During the construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. For example, at TCBR1W, the southern and eastern seawall shall be constructed first (above high water mark) so that the seawall interes at the inpacts from the remaining dredging activities along the northern boundary. Work site / Contractor √ Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / Contractor √ Silt screens shall be applied to seawater intakes at a interim construction stages asted below: Location of Applications Work site / Contractor √ Interim Construction graph with concurrent of drage activities at the intakes at the intakes at the interim construction stages asted below: Work site / Contractor √ Silt screens shall be applied to seawater intakes at Sai Wan Ho, Quarry 2009 with concurrent of X, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention Work site / Contractor √</td>	Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / Contractor √ Dredging along the seawall at WCR1 shall be undertaken initially at 1,500 m³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction intakes as much as possible from further dredging activities. Work site / During the construction period For dredging within the Causeway Bay typhon shelter, seawall shall be dredging activities. For example, at TCBRIW, the southern and eastern seawall shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary. Contractor √ Silt curtains shall be deployed around the closed grab dredgers during seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / During the construction stages as taited below: Interim Construction Location of Applications Work site / During the construction period Ouring the construction period Sitt screens shall be applied to seawater intakes at interim construction stages as stated below: Mork site / Contractor √ Interim Construction Location of Applications Bay, Sheung Wan, Wan Chai, Kowloon South dredging activities at Contractor Contractor	Wan Chai East Submarine Sewage Pipeline 1,500 94 10,500 Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1. Work site / During the construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities. For example, at TCBR1W, the southern and eastern seawall shall be constructed first (above high water mark) so that the seawall interes at the inpacts from the remaining dredging activities along the northern boundary. Work site / Contractor √ Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP. Work site / Contractor √ Silt screens shall be applied to seawater intakes at a interim construction stages asted below: Location of Applications Work site / Contractor √ Interim Construction graph with concurrent of drage activities at the intakes at the intakes at the interim construction stages asted below: Work site / Contractor √ Silt screens shall be applied to seawater intakes at Sai Wan Ho, Quarry 2009 with concurrent of X, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention Work site / Contractor √

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EIA Ref	Environmental Protection	n Measures / Mitigation Measures	Location /	Implementation	In	nplem Stag		on	Relevant Legislation
			Timing	Agent	Des	С	0	Dec	and Guidelines
	TBW, NP and Water Mains Zone	Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre							
	Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.	WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.							
	Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.	WSD saltwater intakes at Sheung Wan and Reprovisioned WSD Wan Chai saltwater intake. Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House.							
S5.8	spillage and sealed ti	include: used, shall be designed and maintained to avoid ghtly while being lifted. For dredging of any sed watertight grabs must be used;	Work site / During the construction period	Contractor		V			ProPECC PN 1/94; WPCO (TM-DSS)
	vessels and the seabe	d so that adequate clearance is maintained between ed in all tide conditions, to ensure that undue rated by turbulence from vessel movement or							
		dredgers shall be fitted with tight fitting seals to o prevent leakage of material;							
		shall not cause foam, oil, grease, scum, litter or tter to be present on the water within the site or							
	dredged material into the	noppers shall be controlled to prevent splashing of he surrounding water. Barges or hoppers shall not t will cause the overflow of materials or polluted r transportation; and							

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
		Timing	Agent	Des	С	0	Dec F	and Guidelines
	• before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain.							
S5.8	Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period.	Work site / During the construction period	Contractor		V			EIAO-TM, WPCO

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In	nplem Stag	entati ges*	on	Relevant Legislation
	· · · · · · · · · · · · · · · · · · ·	Timing	Agent	Des	С	0	Dec	and Guidelines
\$5.8	Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only 1 small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented.	Causeway Bay typhoon shelter/Imple mentation of harbour-front enhancement.	CEDD <u>3</u>					WPCO

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In		entati ges*	on	Relevant Legislation
LETRO	Livitoimientai Frocedon Measares / Mitigation Measares	Timing	Agent	Des	С	0	Dec	and Guidelines
For the Wh	ole Project							
S5.8	Construction Runoff and Drainage	Work site	Contractor		\checkmark			ProPECC PN 1/94; WPCO (TM-DSS)
	 use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow; 	/ During the constructi on period						wPCO (IM-DSS)
	 Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC PN 1/94; 							
	 a sediment tank constructed from pre-formed individual cells of approximately 6 - 8 m3 capacity can be used for settling ground water prior to disposal; 							
	 oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall have a bypass to prevent flushing during periods of heavy rain; 							
	 precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. Particular attention shall be paid to the control of any silty surface runoff during storm events; 							
	 on-site drainage system shall be installed prior to the commencement of other construction activities. Sediment traps shall be installed in order to minimise the sediment loading of the effluent prior to discharge; 							
1	 All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer 							

³ CEDD will identify an implementation agent.

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- Sampling, Field Measurement and Testing Works (Stage 4)

Implementation Location / Implementation Relevant Legislation Stages* EIA Ref **Environmental Protection Measures / Mitigation Measures** Timing and Guidelines Agent Des С 0 Dec required. All fuel tanks and store areas shall be provided with locks and be sited . on sealed areas, within bunds of a capacity equal to 110% of the storage capacity. Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase. ProPECC PN 1/94; S5.8 Sewage from Construction Work Force Work site / Contractor V During the WPCO (TM-DSS) Construction work force sewage discharges on site shall be connected to the construction existing trunk sewer or sewage treatment facilities. The construction sewage period shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices. S5.8 Floating Debris and Refuse WPCO Work site and Contractor λ adjacent water Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the / During the construction water within the site boundary and the neighbouring water free from rubbish. period.

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
		Timing	Agent	Des	С	0	Dec	and Guidelines
\$5.8	Storm Water Discharges Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.	Work site and adjacent water / During the design and construction period.	Contractor	V	V			WPCO
Operation	Phase							
	B (within the Project Boundary)							1
S5.8	 For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO: The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes. 	CWB/During design and operational period	HyD/TD ³	V		V		WPCO
	• Petrol interceptors shall be regularly cleaned and maintained in good working condition.							
	 Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance. 							
	• Sewage arising from ancillary facilities of CWB (for examples, car park,							

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- Sampling, Field Measurement and Testing Works (Stage 4)

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location /	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
	· · · · · · · · · · · · · · · · · · ·	Timing	Agent	Des	С	0	Dec	and Guidelines
	 control room, ventilation and administration buildings and turportals) shall be connected to public sewerage system. Suffic capacity in public sewerage shall be made available to the propractities. Road drainage shall also be provided with adequately designed silt to minimize discharge of silty runoff. The design of the operational stage mitigation measures for CWB stake into account the guidelines published in ProPECC PN 5 "Drainage Plans subject to Comment by the EPD." All operatididischarges from the CWB into drainage or sewerage systems required to be licensed by EPD under the WPCO. 	ent eed all 93 nal						

* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

³ if employ Management, Operation and Maintenance (MOM) Contract

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

Table A13.4 Implementation Schedule for Waste Management

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	ion	Relevant Legislation
LITRI	Environmental Protection Measures / Mitigation Measures	Location / Thing	Agent	Des	С	0	Dec	and Guidelines
Constructio	on Phase							
For DP3 –	Reclamation Works							
	Marine Sediments	Work site / During the construction period	Contractor		\checkmark			ETWB TCW No. 34/2002
\$6.7.2	The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit.							
86.7.3	Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm ³ . A feasible containment method is proposed whereby the dredged sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal.							

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
		0	Agent	Des	С	0	Dec	and Guidelines
S6.7.5	It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered							
S6.7.6	 During transportation and disposal of the dredged marine sediments requiring Type 1 and Type 2 disposal, the following measures shall be taken to minimise potential impacts on water quality: Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved. 							

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*		Relevant Legislation		
LITRO	Environmental Protection Measures / Mitigation Measures	Docution / Thining	Agent	Des	С	0	Dec	and Guidelines
	 Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation. 							
\$6.6.12	<i>Floating Refuse</i> During the construction phase, the project proponent's contractor will be responsible for the collection of any refuse within their works area. Floating booms will be provided on the water surface to confine the refuse from the working barges as well as to avoid the accumulation of pollutants within temporary embayment as mentioned in Table 13.3.	Work site / During the construction period	Contractor		V			

For the Whole Project

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
	and the second sec		Agent	Des	С	0	Dec	and Guidelines
\$6.7.7	 Good Site Practices Recommendations for good site practices during the construction activities include: nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; training of site personnel in proper waste management and chemical waste handling procedures; provision of sufficient waste disposal points and regular collection for disposal; appropriate measures to minimise windblown litter and dust during transporting wastes in enclosed containers; regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites). 	Work site / During the construction period	Contractor	Des		0	Dec	Waste Disposal Ordinance (Cap. 354)

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	g Agent $Biages$ and Des C O Dec and $Contractor$ $$ $$	Relevant Legislation				
		Liocution / Timing	Agent	Des	С	0	Dec	and Guidelines
S6.7.8	 Waste Reduction Measures Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; 	Work site / During planning and design stage, and construction stage	Contractor	V	V			
	 to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force; 							
	• any unused chemicals or those with remaining functional capacity shall be recycled;							
	 use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material. 							
	 prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill; 							
	• proper storage and site practices to minimise the potential for damage or contamination of construction materials; and							
	 plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 							

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- Sampling, Field Measurement and Testing Works (Stage 4)

Implementation Implementation Relevant Legislation Stages* EIA Ref **Environmental Protection Measures / Mitigation Measures** Location / Timing and Guidelines Agent Des С 0 Dec S6.7.10 General Refuse Work site / During the Contractor Public Health and construction period Municipal Services General refuse shall be stored in enclosed bins or compaction Ordinance (Cap. 132) units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material. S6.7.11 Chemical Wastes Work site / During the Waste Disposal Contractor $\sqrt{}$ (Chemical Waste) construction period After use, chemical wastes (for example, cleaning fluids, (General) Regulation solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage Code of Practice on of Chemical Wastes. Spent chemicals shall be collected by a the Packaging, licensed collector for disposal at the CWTF or other licensed Labelling and facility in accordance with the Waste Disposal (Chemical Storage of Chemical Waste) (General) Regulation. Wastes S6.7.12 ETWB TCW No. Construction and Demolition Material Work site / During the Contractor $\sqrt{}$ construction period 33/2002, 31/2004, C&D material shall be sorted on-site into inert C&D material 19/2005 (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.

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- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
LIII KU	En monitentin i rotection measures / mitigation measures	Docution / Thinng	Agent	Des	С	0	Dec	and Guidelines
\$6.7.13	In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.	Work site / During the construction period	Contractor and Independent Environmental Checker		V			ETWB TCW No. 31/2004
S6.7.14	<i>Bentonite Slurry</i> The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows:	Work site / During the construction period	Contractor		V			ProPECC PN 1/94
	• If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.							
	• If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.							
	• If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.							

* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

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Table A13.5 Implementation Schedule for Land Contamination

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
Lint Ker	Environmental Protection Measures / Mitigation Measures	Location / Timing	Agent	Des	С	0	Dec	and Guidelines
Constructio	on Phase							
For the Wh	ole Project							
S.12.6	The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground.	A King Marine / Before commencement of construction activities at A King Marine.	Project proponent for the re- provisioned Tin Hau Temple	V				"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops" published by EPD, HKSAR EPD ProPECC Note No. 3/94
\$7.10	 During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation: Excavation profiles must be properly designed and executed; In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; Quantities of soil to be excavated must be estimated; It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination. Temporary storage of soil at intermediate depot or on-site 	A King Marine / During soil remediation works	Contractor	V				Air Pollution Control Ordinance Noise Control Ordinance Waste Disposal Ordinance Waste Disposal (Chemical Waste) (General) Regulation

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- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures Location / Timing	Implementation	In	nplem Sta	entati ges*	Relevant Legislation		
			Agent	Des	С	0	Dec	and Guidelines
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	 Supply of suitable clean backfill materials is needed after excavation. Care must be taken of existing buildings and utilities. Precautions must be taken to control of ground settlement Speed controls for vehicles shall be imposed on dusty site areas. Vehicle wheel and body washing facilities at the site's exit points shall be established and used. The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities: 							Water Pollution Control Ordinance

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation
			Agent	Des	С	0	Dec	and Guidelines
	 <u>Air Quality Mitigation Measures</u> The loading, unloading, handling, transfer or storage of cement shall be carried out in an enclosed system. The loading, unloading, handling, transfer or storage of other materials which may generate airborne dust emissions such as untreated soil and oversize materials sorted out from the screening plant and stabilized soil stockpiled in the designated handling area, shall be carried out in such a manner to prevent or minimise dust emissions. These materials shall be adequately wetted prior to and during the loading, unloading and handling operations. All practicable measures, including speed controls for vehicles, shall be taken to prevent or minimize the dust emission caused by vehicle movement. Tarpaulin or low permeable sheet shall be put on dusty vehicle loads transported between site locations. 							
	 Noise Mitigation Measures The mixing facilities shall be sited as far as practicable to the nearby noise sensitive receivers. Simultaneous operation of mixing facilities and other equipment shall be avoided. Mixing process and other associated material handling activities shall be properly scheduled to minimise potential cumulative noise impact on the nearby noise sensitive receivers. Construction Noise Permit shall be applied for the operation of powered mechanical equipment during restricted hours (if any). 							

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	Relevant Legislation	
		Location, Thining	Agent	Des	С	0	Dec	and Guidelines
	Water Quality Mitigation Measures							
	• Stockpile of untreated soil shall be covered as far as							
	practicable to prevent the contaminated material from							
	leaching out. The leachate shall be discharged following							
	the requirements of WPCO.							
	Waste Mitigation Measures							
	• Treated oversize materials will be used as filling material							
	for backfilling within the site. Sorted materials of size							
	smaller than 5 cm will be collected and transferred to the							
	mixing plant for further decontamination treatment.							
	• Stabilized soils shall be broken into suitable size for							
	backfilling or reuse on site.							
	 A high standard of housekeeping shall be maintained within the mining plant area 							
	within the mixing plant area.							
	 If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials. 							

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

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Table A13.6 Implementation Schedule for Marine Ecology

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	Implementation Stages*			on	Relevant Legislation
			Agent	Des	С	0	Dec	and Guidelines
Constructio	on Phase							
For the Who	ole Project - Schedule 3 DP							
S.9.7.2	Alternative design of the Trunk Road constructed in tunnel shall be adopted to avoid permanent reclamation in CBTS and ex-PWCA Basin.	-	CEDD/HyD	V				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
For DP3 – I	Reclamation Works							
S.9.7.3	Translocation of those potentially affected coral colonies to the nearby suitable habitats such as Junk Bay is recommended. A detailed translocation plan (including translocation methodology, monitoring of transplanted corals, etc.) should be drafted and approval by AFCD during the detailed design stage of the Project.	Ex-PCWA Basin and along seawall next to a public pier which is about 250 m away from the CBTS	CEDD/HyD	V				EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In		entati ges*	on	Relevant Legislation
		Liocanon, Timing	Agent	Des	С	0	Dec	and Guidelines
S.9.7.4	 During dredging and filling operations, a number of mitigation measures to control water quality shall be adopted to confine sediment plume within reclamation area and protect marine fauna in proximity to the reclamation. The mitigation measures include the following: Installation of silt curtains during dredging activities Use of tightly-closed grab dredger Reduction of dredging rate Control of grab descending speed Construction of leading edges of seawall in the early stages of the reclamation works 	Work site / during construction phase	Contractor		~			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
	Adoption of multiple-phase construction schedule							

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- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem Sta	entati ges*	on	Relevant Legislation and Guidelines
		0	Agent	Des	С	0	Dec	and Guidelines
S.9.7.6	 To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended: Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible. Adoption of multiple-phase construction schedule. General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented. 	Work site / during construction phase	Contractor		V			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		V			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		V			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

- Sampling, Field Measurement and Testing Works (Stage 4)

Table A13.7 Implementation Schedule for Landscape and Visual

EIA Ref	Envir	onmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Ir		entati ges*	on	Relevant Legislation and Guidelines
				0	Des	С	0	Dec	
Construction	Phase								
For the Whole	e Project								
Table 10.5	CM1	Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM2	Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	V	\checkmark			EIAO TM
Table 10.5	CM3	Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM4	Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM5	Control of night-time lighting.	Work site / During Construction Phase	Contractor		\checkmark			EIAO TM
Table 10.5	CM6	Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		\checkmark			EIAO TM
For DP1 - CV	VB (With	in the Project Boundary)							
Table 10.5	CM1	Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During Construction Phase	Contractor		V			EIAO TM
Table 10.5	CM2	Existing trees to be retained on site shall be carefully protected during construction.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM3	Trees unavoidably affected by the works shall be transplanted where practical.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM4	Compensatory tree planting shall be provided to compensate for felled trees.	Work site / During Construction Phase	Contractor	V	V			EIAO TM
Table 10.5	CM5	Control of night-time lighting.	Work site / During Construction Phase	Contractor		\checkmark			EIAO TM

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EIA Ref	Envir	onmental Protection Measures / Mitigation Measures	Location / Timing	Implementation	In	nplem		on	Relevant Legislation
				Agent	-		ges*	-	and Guidelines
					Des	С	0	Dec	
Table 10.5	CM6	Erection of decorative screen hoarding compatible with	Work site / During	Contractor					EIAO TM
		the surrounding setting.	Construction Phase						
For DP2 - WD.	II Majo	r Roads (Road P2)	1	I					
Table 10.5	CM1	Topsoil, where identified, shall be stripped and stored for	Work site / During	Contractor		\checkmark			EIAO TM
		re-use in the construction of the soft landscape works,	Construction Phase						
		where practical.							
Table 10.5	CM2	Existing trees to be retained on site shall be carefully	Work site / During	Contractor					EIAO TM
		protected during construction.	Construction Phase						
Table 10.5	CM3	Trees unavoidably affected by the works shall be	Work site / During	Contractor	\checkmark				EIAO TM
		transplanted where practical.	Construction Phase						
Table 10.5	CM4	Compensatory tree planting shall be provided to	Work site / During	Contractor	V	\checkmark			EIAO TM
	~ ~ ~ ~	compensate for felled trees.	Construction Phase	~		1			
Table 10.5	CM5	Control of night-time lighting.	Work site / During	Contractor					EIAO TM
T 11 10 5	CNAC		Construction Phase	<u> </u>		-			FILLO TRA
Table 10.5	CM6	Erection of decorative screen hoarding compatible with	Work site / During	Contractor					EIAO TM
For DP3 – Rec	annatio	the surrounding setting.	Construction Phase						
Table 10.5		Control of night-time lighting.	Work site / During	Contractor					EIAO TM
1 able 10.5	CIVIS	Control of hight-time righting.	Construction Phase	Contractor		v			EIAO IWI
Table 10.5	CM6	Erection of decorative screen hoarding compatible with	Work site / During	Contractor		V			EIAO TM
1000 1000	01110	the surrounding setting.	Construction Phase	Contractor		`			
For DP5 - War	Chai I	East Sewage Outfall		1					
Refer to EIA-	CM2	Minimisation of works areas.	Work site / During	Contractor					EIAO TM
058/2001			Construction Phase						
Table 10.13									
Refer to EIA-	CM3	Erection of decorative hoardings.	Work site / During	Contractor		\checkmark			EIAO TM
058/2001			Construction Phase						
Table 10.13									

Wan Chai Development Phase II and Central-Wanchai Bypass - Sampling, Field Measurement and Testing Works (Stage 4)

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EIA Ref	Envir	onmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	In	Sta	entati ges*	on	Relevant Legislation and Guidelines
					Des	С	0	Dec	
Refer to EIA- 058/2001 Table 10.13	CM4	Control night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM5	Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		V			EIAO TM
	ss-Harh	our Water Mains from Wan Chai to Tsim Sha Tsui							
Refer to EIA- 058/2001 Table 10.13		Minimisation of works areas.	Work site / During Construction Phase	Contractor		V			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM3	Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		V			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM4	Control night-time lighting.	Work site / During Construction Phase	Contractor		V			EIAO TM
Refer to EIA- 058/2001 Table 10.13	CM5	Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		V			EIAO TM
Operation Pha	se		1						l
For the Whole	Project	- Schedule 3 DP				-			
Table 10.6, Figure 10.5.1- 10.5.5	OM1	Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD	V	V	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM2	Shrub and Climbing Plants to soften proposed structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD	\checkmark	V	V		ETWB TCW 2/2004

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- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref Environmental Protection Measures / Mitigation Measures Location / Timing Implementation Implementation **Relevant Legislation** Stages* and Guidelines Agent Des С 0 Dec Table 10.6. OM3 Buffer Tree and Shrub Planting to screen proposed roads Work site / During CEDD/HyD/ ETWB TCW 2/2004 ٦l 1 Figure 10.5.1and associated structures. Design Stage and 10.5.5 Operation Phases Table 10.6, Figure 10.5.1-Work site / During ETWB TCW 2/2004 OM4 Aesthetic design of proposed waterfront promenade. $CEDD^4$ $\sqrt{}$ V $\sqrt{}$ Design Stage and 10.5.5 Operation Phases ETWB TCW 2/2004 Table 10.6, OM5 Aesthetic streetscape design. Work site / During CEDD/HyD $\sqrt{}$ V $\sqrt{}$ Figure 10.5.1-Design Stage and 10 5 5 Operation Phases Table 10.6, Aesthetic design of roadside amenity areas. CEDD/HyD ETWB TCW 2/2004 OM6 Work site / During $\sqrt{}$ V $\sqrt{}$ Figure 10.5.1-Design Stage and 10.5.5 **Operation Phases** For DP1 – CWB (Within the Project Boundary) ETWB TCW 2/2004 Table 10.6. OM1 Aesthetic design of buildings and road-related structures, Work site / During HyD $\sqrt{}$ V $\sqrt{}$ Figure 10.5.1including viaducts, vent buildings, subways, footbridges Design Stage and 10.5.5 and noise barriers and enclosure Operation Phases ETWB TCW 2/2004 Table 10.6. OM2 Shrub and Climbing Plants to soften proposed structures Work site / During HyD $\sqrt{}$ $\sqrt{}$ $\sqrt{}$ Figure 10.5.1 Design Stage and 10.5.5 Operation Phases Buffer Tree and Shrub Planting to screen proposed roads ETWB TCW 2/2004 Table 10.6. OM3 HyD Work site / During $\sqrt{}$ V $\sqrt{}$ Figure 10.5.1-10.5.5 and associated structures. Design Stage and Operation Phases OM5 ETWB TCW 2/2004 HyD Table 10.6 Aesthetic streetscape design. Work site / During V V $\sqrt{}$ Figure 10.5.1 Design Stage and 10.5.5 **Operation Phases** ETWB TCW 2/2004 Table 10.6. OM6 Aesthetic design of roadside amenity areas. Work site / During HyD $\sqrt{}$ $\sqrt{}$ $\sqrt{}$ Figure 10.5.1-Design Stage and Operation Phases 10.5.5 For DP2 - WDII Major Roads (Road P2)

⁴ CEDD will identify an implementation agent

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 4)

EIA Ref	Enviro	onmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	In	nplem Sta	entati ges*	on	Relevant Legislation and Guidelines
					Des	С	0	Dec	
Table 10.6, Figure 10.5.1- 10.5.5	OM1	Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD		V	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM3	Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD		V	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM5	Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD		V	V		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1- 10.5.5	OM6	Aesthetic design of roadside amenity areas	Work site / During Design Stage and Operation Phases	CEDD/HyD		V	V		ETWB TCW 2/2004
For DP3 - Rec	lamation		r.	r					a.
Table 10.6, Figure 10.5.1- 10.5.5	OM4	Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD ⁵	V	V	V		ETWB TCW 2/2004

*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

 5 CEDD will identify an implementation agent

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