APPENDIX F ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
Air Quality Im	pact – Const	ruction Phase					
3.91	2.2	Dust Control Measures	Construction Dust	Contractor	Project	Construction	
		To achieve compliance with the FSP, RSP and TSP criteria			construction site /	phase	
		during the construction phase, good practices for dust control			Duration of the		
		should be implemented to reduce dust impacts. The dust control			construction phase		
		measures are detailed as follows:			/ Prior to		
		• Use of regular water spraying (once every 1.25 hours or 8			commencement of		^
		times per day) to reduce dust emissions from heavy			operation		
		construction activities (including ground excavation, earth					
		moving, etc.) at all active works area exposed site					
		surfaces and unpaved roads, particularly during dry					
		weather.					
		Covering 80% of stockpiling area by impervious sheets					
		and spraying all dusty material with water immediately					N/O
		prior to any loading transfer operations to keep the dusty					
		materials wet during material handing at the stockpile					
		areas.					
		Relevant dust control practices as stipulated in the Air Pollution					
		Control (Construction Dust) Regulation should be adopted:					
		Good Site Management					
		Good site management is important to help reduce					^
		potential air quality impact down to an acceptable level.					

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			address (What			(When)	
			Requirements)				
		As a general guide, the Contractor should maintain high					
		standards of housekeeping to prevent emissions of					
		fugitive dust. Loading, unloading, handling and storage of					
		raw materials, wastes or byproducts should be carried out					
		in a manner so as to minimise the release of visible dust					
		emission. Any piles of materials accumulated on or					
		around the work areas should be cleaned up regularly.					
		Cleaning, repair and maintenance of all plant facilities					
		within the work areas should be carried out in a manner					
		minimising generation of fugitive dust emissions. The					
		material should be handled properly to prevent fugitive					
		dust emission before cleaning.					
		Disturbed Parts of the Roads					
		Main temporary access points should be paved with					^
		concrete, bituminous hardcore materials or metal plates					
		and be kept clear of dusty materials; or					
		Unpaved parts of the road should be sprayed with water or					
		a dust suppression chemical so as to keep the entire road					^
		wet.					
		Exposed Earth					
		Exposed earth should be properly treated by compaction,					^
		hydroseeding, vegetation planting or seating with latex,					

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	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		vinyl, bitumen within six months after the last					
		construction activity on the site or part of the site where					
		the exposed earth lies.					
		Loading, Unloading or Transfer of Dusty Materials					
		All dusty materials should be sprayed with water					N/O
		immediately prior to any loading or transfer operation so					
		as to keep the dusty material wet.					
		Debris Handing					
		Any debris should be covered entirely by impervious					^
		sheeting or stored in a debris collection area sheltered on					
		the top and the three sides.					
		Before debris is dumped into a chute, water should be					N/O
		sprayed onto the debris so that it remains wet when it is					
		dumped.					
		Transport of Dusty Materials					
		Vehicles used for transporting dusty materials/spoils					^
		should be covered with tarpaulin or similar material. The					
		cover should extend over the edges of the sides and					
		tailboards.					
		Wheel Washing					
		Vehicle wheel washing facilities should be provided at					*
		each construction site exit. Immediately before leaving the					

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	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		construction site, every vehicle should be washed to					
		remove any dusty materials from its body and wheels.					
		Use of Vehicles					
		The speed of the trucks within the site should be					^
		controlled to about 10 km/hour in order to reduce adverse					
		dust impacts and secure the safe movement around the					
		site					
		Immediately before leaving the construction site, every					N/O
		vehicle should be washed to remove any dusty materials					
		from its body and wheels.					
		Where a vehicle leaving the construction site is carrying a					N/O
		load of dusty materials, the load should be covered					
		entirely by clean impervious sheeting to ensure that the					
		entirely by clean impervious sheeting to ensure that the					
		dusty materials do not leak from the vehicle.					
		Site hoarding					
		Where a site boundary adjoins a road, street, service lane					
		or other area accessible to the public, hoarding of not less					
		than 2.4m high from ground level should be provided					N/O
		along the entire length of that portion of the site boundary					14/0
		except for a site entrance or exit.					

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			address (What			(When)	
			Requirements)				
Noise Impact -	- Constructio	on Phase					
4.4.6	3.2	Good Site Practice	Maintain good site practice	Contractor	Within the	Construction Phase	
		Good site practice and noise management can significantly	to minimise / avoid		Project site /		
		reduce the impact of construction site activities on nearby NSRs.	construction noise impact		During		
		The following package of measures should be followed during			construction		
		each phase of construction:			phase / Prior to		
		Only well-maintained plant to be operated onsite and			commencement		N/O
		plant should be serviced regularly during the construction			of operation.		
		works;					
		Machines and plant that may be in intermittent use to be					^
		shut down between work periods or should be throttled					
		down to a minimum;					
		Plant known to emit noise strongly in one direction,					^
		should, where possible, be orientated to direct noise away					
		from the NSRs;					
		Mobile plant should be sited as far away from NSRs as					^
		possible; and					
		Material stockpiles and other structures to be effectively					,
		utilised, where practicable, to screen noise from on-site					, ,
		construction activities.					
4.4.6	3.2	Adoption of QPME	Minimise/ avoid	Contractor	Within the	Construction Phase	
		QPME should be adopted as far as applicable.	construction noise				۸

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			address (What			(When)	
			Requirements)				
4.4.6	3.2	Use of Movable Barriers	impacts to the		Project site /		
		Movable noise barriers should be placed along the active	surrounding NSRs		During		^
		works area and mobile plants to block the direct line of			construction		
		sight between PME and the NSRs.			phase / Prior to		
4.4.6		Use of Noise Enclosure/ Acoustic Shed			commencement		
		Noise enclosure or acoustic shed should be used to cover			of operation.		N/A
		stationary PME such as air compressor and generator.					
4.4.6		Use of Noise Insulating Fabric					^
		Noise insulating fabric can also be adopted for certain					^
		PME (e.g. pilling machine etc.).					
Water Quality I	Impact – Co	nstruction Phase					
5.6.1.1	4.2	General Construction Activities	Maintain good site practices	Contractor	Within the Project	Construction Phase	
		The following measures should be implemented:	to avoid pollution of water		site / During		
		Construction waste, debris and refuse generated on-site	courses		construction phase		^
		should be stored or contained appropriately to prevent					
		them entering nearby watercourses or blocking					
		stormwater drains.					
		Regular off-site removal of these materials should be					^
		maintained to minimise the volume of waste present on					
		the construction site at any one time.					
		Stockpiles of construction materials such as cement and					^

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			address (What			(When)	
			Requirements)				
		excavated material should be covered when not in use to					
		reduce the potential for water pollution.					
5.6.1.2	4.2	Construction Site Runoff	Minimise / control	Contractor	Within the Project	Construction Phase	
		The site practices outlined in ProPECC Note PN 1/94 should be	construction site runoff to		site / During		
		followed as far as practicable in order to minimise surface runoff	avoid pollution of water		construction phase		
		and the chance of erosion. The following measures are	courses				
		recommended:					
		Temporary site drainage facilities are to be designed and					*
		implemented by the Contractor prior to commencement of					
		construction to convey surface runoff to storm drains					
		applying adequately designed silt/sand removal traps and					
		sediment basins.					
		Perimeter cut-off drains shall be installed in advance of					*
		any earthworks and site formation work to convey site					
		runoff from the works areas to the silt removal facilities.					
		Runoff into the excavation areas during rainstorm events					^
		shall be minimised as far as practicable. Any wastewater					
		pumped out of the excavation areas shall be treated to					
		remove suspended solids prior to discharge.					
		Maintenance and inspection of the drainage system and					*
		sediment removal facilities should be carried out regularly					
		to remove any sediment and blockages, especially when					

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			address (What			(When)	
			Requirements)				
		rainstorms are forecast.					
		Final surface levels should be compacted and final surface					^
		protections installed to prevent erosion caused by					
		rainstorms.					
		Open stockpiles of material should be covered on site					*
		with waterproof layers such as tarpaulin to reduce the					
		potential for sediment laden runoff entering the drainage					
		system.					
		The wheels of all vehicles and plant should be cleaned					*
		before leaving the works areas to remove sediment, soil					
		and debris from the tracks. The washwater should be					
		treated to remove any suspended sediment.					
		Surface water from concrete batching areas and the rest of					^
		the site should be separated as far as possible. Wastewater					
		from any concrete batching plant (if required) shall be					
		treated to the required standards including pH adjustment					
		and settlement of suspended sediments before discharging					
		to stormwater drains					
		Manholes (including those constructed as part of the					^
		Project) should be adequately covered and temporarily					
		sealed at all times to prevent silt, construction materials or					
		debris from entering the drainage system, and to prevent					

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			address (What			(When)	
			Requirements)				
		storm runoff from entering foul sewers. The discharge of					
		surface runoff into foul sewers should be prevented so as					
		not to overload the sewerage system.					
		Discharges should be collected by the temporary drainage system					^
		installed by the Contractor and treated on-site to remove					
		sediment prior to discharge to the off-site drainage areas. The					
		Contractor is required to obtain a discharge licence from EPD					
		under the WPCO for all discharges from site with all discharges					
		meeting the water quality requirements of the Technical					
		Memorandum on Standards for Effluents Discharged into					
		Drainage and Sewerage Systems, Inland and Coastal Waters					
		(TM-DSS).					
5.6.1.3	4.2	Accidental Spillage of Chemicals	Prevent accidental discharge	Contractor	Within the Project	Construction phase	
		In accordance with the Waste Disposal (Chemical Waste)	of chemicals into the		site / During		
		(General) Regulation (Cap 354C), the following measures should	surrounding environment		construction phase		
		be implemented:					
		The labelling and storage of chemicals should be in					^
		accordance with the Code of Practice on the Packaging,					
		Labelling and Storage of Chemical Wastes and maintained					
		at all times by the Contractor.					
		Oils and fuels should only be stored in designated areas					*
		which have appropriate pollution prevention control					

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	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		facilities such as oil and grease traps.					
		The maintenance of vehicles should only be undertaken in					^
		areas of the site served by appropriate pollution					
		prevention control facilities.					
		To prevent the spillage of fuels and solvents to nearby					^
		stormwater drains, all fuel tanks and storage areas should					
		be locked and sited on sealed areas of the site, within					
		bunded areas with a capacity equal to 110% of the storage					
		capacity of the largest container. The bund should be kept					
		free of surface water at all times and after each rainfall					
		event.					
5.6.1.4	4.2	Sewage from Construction Workforce	Prevent discharge of sewage	Contractor	Within the Project	construction phase	
		Portable toilets should be available throughout the construction	into the surrounding		site / During		^
		phase and regularly maintained, collected and disposed by a	environment		construction phase		
		licensed waste collector to a public sewage treatment works for					
		suitable treatment.					
5.6.1.5	4.2	Construction Works in Close Proximity to Inland	Minimise/ control	Contractor	Within the Project	construction phase	
		Watercourses	construction site discharges		site / During		
		Mitigation measures such as such as temporary diversions of	to avoid pollution of nearby		construction phase		
		existing drainage culverts/ watercourses before construction	watercourses				
		commences and during construction should be implemented, in					
		addition to those listed in ProPECC Note PN1/94 Construction					

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	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
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			address (What			(When)	
			Requirements)				
		Site Drainage and ETWB TC (Works) No. 5/2005 Protection of					
		Natural Streams/rivers from Adverse Impacts Arising from					
		Construction Works. Measures include the following:					
		Stockpiling of construction materials and spoil, should be					N/A
		properly covered and located away from any natural					
		stream/river.					
		Construction works close to the inland waters should be					N/A
		carried out in dry season as far as practicable where the					
		flow in the surface channel or stream is low.					
		Removal of existing vegetation alongside the riverbanks					N/A
		should be avoided or minimised. When disturbance to					
		vegetation is unavoidable, all disturbed areas should be					
		hydroseeded or planted with suitable vegetation to blend					
		in with the natural environment upon completion of					
		works.					
Waste Manage	ment Implica	ations - Construction Phase					
7.5.1.1	6.2	Good Site Practice	Implement good site	Contractor	Project	Construction phase	
		Recommendations for good site practices during the construction	practices to minimize waste		construction site /		
		activities include:	generation		Throughout		
		Nomination of an approved person, such as a site			construction stage		*
		manager, to be responsible for good site practices,			/ Until completion		
		arrangements for collection and effective disposal to an			of all construction		

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			address (What			(When)	
			Requirements)				
		appropriate facility, of all wastes generated at the site			activities		
		Training of site personnel in proper waste management					*
		and chemical handling procedures					
		Provision of sufficient waste disposal points and regular					*
		collection of waste					
		Appropriate measures to minimise windblown litter and					^
		dust/odour during transportation of waste by either					
		covering trucks or by transporting wastes in enclosed					
		containers					
		Stockpiles of C&D materials should be kept covered by					^
		impervious sheets to avoid windblown dust					
		All dusty materials including C&D materials should be					^
		sprayed with water immediately prior to any loading					
		transfer operation so as to keep the dusty material wet					
		during material handling at the stockpile areas					
		Provision of wheel washing facilities before the trucks					*
		leaving the works area so as to minimise dust introduction					
		to public roads					
		Well planned delivery programme for off-site disposal					^
		such that adverse environmental impact from transporting					
		the inert or non-inert C&D materials is not anticipated					
7.5.1.2	6.2	Waste Reduction Measures	Implement good	Contractor	Project	Construction phase	

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			address (What			(When)	
			Requirements)				
		Good management and control can prevent the generation of a	management and control to		construction site /		
		significant amount of waste. Waste reduction is best achieved at	minimize waste generation		Throughout		
		the planning and design stage, as well as by ensuring the			construction stage		
		implementation of good site practices. Recommendations to			/ Until completion		
		achieve waste reduction include:			of all construction		
		Sort non-inert C&D materials to recover any recyclable			activities		^
		portions					
		Segregation and storage of different types of waste in					^
		different containers or skips or stockpiles to enhance reuse					
		or recycling of materials and their proper disposal					
		Encourage collection of recyclable waste such as waste					^
		paper and aluminum cans by providing separate labelled					
		bins to enable such waste to be segregated from other					
		general refuse generated by the work force					
		Proper site practices to minimize the potential for damage					^
		or contamination of inert C&D materials					
		Plan the use of construction materials carefully to					^
		minimise amount of waste generated and avoid					
		unnecessary generation of waste					
7.5.1.3	6.2	Inert and Non-inert C&D Materials	Minimise impacts resulting	Contractor	Project	Construction phase	
		In order to minimise impacts resulting from collection and	from collection and		construction site /		^
		transportation of inert C&D materials for off-site disposal, the	transportation of inert C&D		Throughout		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
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		inert C&D materials should be reused on-site as fill material as	materials		construction stage		
		far as practicable. In addition, inert C&D materials generated			/ Until completion		
		from excavation works could be reused as fill materials in local			of all construction		
		projects that require public fill for reclamation.			activities		
		The surplus inert C&D materials will be disposed of at the					^
		Government's PFRFs for beneficial use by other projects in					
		Hong Kong.					
		The C&D materials generated from general site clearance should					^
		be sorted on site to segregate any inert materials for reuse or					
		disposal at PFRFs whereas the non-inert materials will be					
		disposed of at the designated landfill site.					
		In order to monitor the disposal of inert and non-inert C&D					^
		materials at respectively PFRFs and the designated landfill site,					^
		and to control fly-tipping, it is recommended that the Contractor					
		should follow the DEVB Technical Circular (Works) No. 6/2010					
		for Trip Ticket System for Disposal of Construction &					
		Demolition Materials issued by Development Bureau. In					
		addition, it is also recommended that the Contractor should					
		prepare and implement a Waste Management Plan detailing their					
		various waste arising and waste management practices in					
		accordance with the relevant requirements of the ETWB					
		Technical Circular (Works) No. 19/2005 Environmental					

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		Management on Construction Site					
7.5.1.4	6.2	Chemical Waste	Implement good practices to	Contractor	Project	Construction phase	
		If chemical wastes are produced at the construction site, the	avoid chemical waste		construction site /		^
		Contractor will be required to register with the EPD as a	impact.		Throughout		
		chemical waste producer and to follow the guidelines stated in			construction stage		
		the"Code of Practice on the Packaging Labelling and Storage of			/ Until completion		
		Chemical Wastes". Good quality containers compatible with the			of all construction		
		chemical wastes should be used, and incompatible chemicals			activities		
		should be stored separately. Appropriate labels should be					
		securely attached on each chemical waste container indicating					
		the corresponding chemical characteristics of the chemical waste,					
		such as explosive, flammable, oxidising, irritant, toxic, harmful,					
		corrosive, etc. The Contractor should use a licensed collector to					
		transport and dispose of the chemical wastes at the approved					
		Chemical Waste Treatment Centre or other licensed recycling					
		facilities, in accordance with the Waste Disposal (Chemical					
		Waste) (General) Regulation.					
		Potential environmental impacts arising from the handling					
		activities (including storage, collection, transportation and					
		disposal of chemical waste) are expected to be minimal with the					
		implementation of appropriate mitigation measures as					
		recommended					

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7.5.1.5	6.2	General Refuse	Implement good practices to	Contractor	Project	Construction phase	
		General refuse should be stored in enclosed bins or compaction	avoid odour nuisance or		construction site /		*
		units separated from inert C&D materials. A reputable waste	pest/vermin problem and		Throughout		
		collector should be employed by the Contractor to remove	waste impact.		construction stage		
		general refuse from the site, separately from inert C&D			/ Until completion		
		materials. Preferably an enclosed and covered area should be			of all construction		
		provided to reduce the occurrence of 'windblown' light material.			activities		
Land Contami	ination – Con	nstruction Phase					
8.6.1	7.2	In any case where contaminated soil is identified after the	Assessment is required for	Contractor	Project	Design phase	N/A
		commencement of works, a Contamination Assessment Plan	EPD approval in any case		construction site /		
		(CAP) is required to be prepared for EPD's endorsement prior to	where contaminated soil is		Before		
		the site investigation. The Contamination Assessment Report	identified		construction stage		
		(CAR) and/ or Remediation Action Plan (RAP) should be					
		prepared for EPD's approval after the site investigation. If land					
		contamination is confirmed, remediation works should be carried					
		out according to the approved RAP. A Remediation Report (RR)					
		should also be prepared for EPD's endorsement to demonstrate					
		that the clean-up of the contaminated land is completed. No					
		construction work or development of the site should be carried					
		out before the approval of the RR.					
8.6.1	7.2	The following mitigation measures are proposed for	Minimise impacts resulting	Contractor	Project	Construction phase	

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			address (What			(When)	
			Requirements)				
		contaminated material excavation and transportation of	from excavation and		construction site /		
		contaminated materials (if any), in order to minimise the	transportation in the of		Throughout		
		potentially adverse effects health and safety of construction	contaminated materials		construction stage		
		workers and impacts arising from the disposal of potentially			/ Until completion		
		contaminated materials:			of all construction		N/A
		To minimise the chance for construction workers to come			activities		
		into contact with any contaminated materials, bulk					
		earth-moving excavation equipment should be employed;					N/A
		Contact with contaminated materials can be minimised by					
		wearing appropriate clothing and personal protective					
		equipment such as gloves and masks (especially when					
		working directly with contaminated material), provision					
		of washing facilities and prohibition of smoking and					
		eating on site;					N/A
		Stockpiling of contaminated excavated materials on site					
		should be avoided as far as possible;					N/A
		The use of any contaminated soil for landscaping purpose					
		should be avoided unless pre-treatment was carried out;					N/A
		Vehicles containing any excavated materials should be					
		suitably covered to reduce dust emissions and / or release					
		of contaminated wastewater;					N/A
		Truck bodies and tailgates should be sealed to stop any					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		discharge;					N/A
		Only licensed waste haulers should be used to collect and					
		transport contaminated material to treatment/disposal site					
		and should be equipped with tracking system to avoid fly					
		tipping;					N/A
		Speed control for trucks carrying contaminated materials					
		should be exercised;					N/A
		Observe all relevant regulations in relation to waste					
		handling, such as Waste Disposal Ordinance (Cap 354),					
		Waste Disposal (Chemical Waste) (General) Regulation					
		(Cap 354C) and obtain all necessary permits where					
		required; and					N/A
		Maintain records of waste generation, disposal quantities					
		and disposal arrangements.					
Ecological Imp	pact						
9.7.1	8.3	Temporary Protective Fence for Flora Species of	To avoid potential impact on	Contractor	Project	Construction phase	
		Conservation Interest	flora species of conservation		construction site /		
		During construction phase, erection and maintenance of a	interest from construction		Throughout		*
		temporary protective fence enclosing the flora species of	activities such as materials		construction stage		
		conservation interest identified under the detailed vegetation	storage;		/ Until completion		
		survey is recommended.	To make sure that the flora		of all construction		
		Monthly monitoring of any other flora species of conservation	species of conservation		activities		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		interest identified in the detailed vegetation survey should be	interest are not affected by				
		conducted during the construction phase.	the construction activities of				
			the project.				
Golden-headed	d Cisticola (F	Recommended Mitigation Measures from Baseline Survey	Report of Golden-headed	Cisticola)			
-	-	The following mitigation measures are proposed for minimizing	Construction noise	Contractor	Project area –	Construction phase	
		noise impacts induced by construction works:			areas adjacent to		
		Silencers or mufflers on well-maintained construction			sensitive receivers		N/A
		equipment should be utilized and properly maintained			/ During		
		during the construction program			construction phase		
		Noise enclosure or acoustic shed should be effectively					^
		utilized, where practicable					
		Machines or equipment known to emit noise or light					^
		strongly in one direction should, wherever possible, be					
		orientated the noise away from the adjacent habitat					
-	-	The following mitigation measures are proposed for minimizing	To minimize the light	Contractor	Project area –	Construction phase	
		light impacts:	disturbance to avifauna		areas adjacent to		
		Adjusting the outdoor lighting to lower intensity			sensitive receivers		^
		Use of directional lighting to avoid light spill into			/ During		^
		sensitive areas			construction phase		
		Control/timing of lighting periods of some facilities,					^
		particularly those close to the ecological sensitive					
		receivers					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
-	-	Drainage system	Prevent discharge of	Contractor	Project area –	Construction phase	
		Proper drainage system should be installed to collect and	pollutant into the		areas adjacent to		^
		dispose rainwater	surrounding environment		sensitive receivers		
		Installation of sediment/rubbish trapping facilities (e.g.			/ During		^
		catch pits or sand/silt traps to contain the increase in			construction phase		
		suspended solids and materials in the storm water					
		drainage system so as to avoid pollutants being washed					
		out during heavy rainstorms)					
-	-	Good Site Practice Measures	To avoid potential impact on	Contractor	Project area –	Construction phase	
		Placement of stockpiling into designated area should be	Golden-headed Cisticola		areas adjacent to		^
		selected at disturbed area in order to minimize the			sensitive receivers		
		disturbance to wildlife			/ During		
		Open fire should be strictly prohibited			construction phase		^
		The boundary of project boundary should be clearly					^
		demarcated					
		General drainage system arrangement should include					^
		sediment and oil trapper to collect the site run-off					
		Waste bin should be provided to collect the general refuse					^
		and construction waste					

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures (What Measures)	Objectives of the recommended Measures & Main Concerns to address (What Requirements)	Who to implement the measures? (Who)	Location of the measures (Where)	When to Implement the measures? (When)	Implementation Status
-	1	acts – Construction Phase	T	Γ	Γ	Γ	T
Table 10.11	Table	CM01: Trees / woodland within the Project Site which are	Preserve and protect	Contractor	Project area /	Design and	^
	9.1	unaffected by the works shall be protected and preserved during	existing trees		During design	construction phase	
		the detailed design stage and construction phase. The tree			stage /		
		preservation proposals shall be coordinated with the layout and			construction phase		
		design of the engineering and architectural works at detailed			/ Establishment		
		design stage for further retention of individual trees. The			Period		
		preservation of existing tree shall provide instant greening and					
		screening effect for proposed works.					
		Tree protection works will be undertaken in accordance with					
		DEVB TC(W) 7/2015 on "Tree Preservation" and tree risk					
		assessment in accordance with "Guidelines for Tree Risk					
		Assessment and Management Arrangement" by DEVB.					
Table 10.11	Table	CM02: If removal of trees unavoidable due to construction	Preserve and protect	Contractor	Project area /	Design and	^
	9.1	impacts, trees will be transplanted where technically feasible in	existing trees		During design	construction phase	
		accordance with "Guidelines on Tree Transplanting" by DEVB			stage /		
		and HQ/GN/13 and HQ/GN/13 – Interim Guidelines for			construction phase		
		Tree Transplanting Works under Highways Department's			/ Establishment		
		Vegetation Maintenance Ambit where applicable.			Period		
Table 10.11	Table	CM03: Construction area control, where possible, to ensure that	Minimise landscape and	Contractor	Project area /	Construction phase	^

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
	9.1	the landscape and visual impacts arising from the construction	visual impacts.		During design		
		activities are minimised. This includes the reduction of the extent			stage /		
		and location of working areas to avoid sensitive LRs, siting of			construction phase.		
		offices or temporary structures so that they are not visually					
		prominent, and consideration of detailed schedules to shorten the					
		construction period. Temporary landscape treatments are					
		considered to be adopted such as applying hydro-seeding on					
		temporary stockpiles and areas of earthworks to alleviate the					
		potential impacts and minimise soil erosion.					
Table 10.11	Table	CM04: Replanting of existing / disturbed vegetation shall be	Maximise the mitigation	Contractor	Project area /	Construction phase	N/A
	9.1	undertaken as soon as technically feasible during the	effect of the planting to		During design		
		construction phase. The priority shall be areas at the periphery of	minimise landscape and		stage /		
		the site to ensure that proposed planting fulfils its role in	visual impacts.		construction phase		
		mitigating the predicted impacts including screening views of the			/ Establishment		
		proposals as early as possible during the operation phase.			Period		
Table 10.11	Table	CM05: Decorative screen hoarding will be erected along areas of	Minimise landscape and	Contractor	Project area –	Construction phase	^
	9.1	the construction works site boundary where the works site	visual impacts.		areas adjacent to		
		borders publically accessible routes and/or is close to visually			sensitive receivers		
		sensitive receivers (VSRs) to screen undesirable views of the			/ During		
		works site. It is proposed that the screening be compatible with			construction phase.		
		the surrounding environment and where possible, non-reflective,					
		recessive colours be used.					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
Landscape and	Visual Impo	acts (Recommended Mitigation Measures from Landscape	e and Visual Mitigation Pla	an)			
-	-	Tree protection and preservation	To avoid potential impact on	CEDD's and	CEDD: Along	Design and	*
		a. The tree preservation proposals shall be coordinated with the	retained tree from	ArchSD's Contractors	KNP Road where	construction phase	
		layout and design of the engineering and architectural works at	construction activities such		applicable and	of CEDD's and	
		the detailed design stage for further retention of individual trees.	as materials storage; To		slopes within KNP	ArchSD's Contracts	
		b. During construction period, retained trees will be protected	make sure that the retained		Police Facilities		
		from impact from construction activity as per General	tree are not affected by the		Site		
		Specification for Civil Engineering Works (2006 Edition),	construction activities of the		ArchSD: Within		
		Section 26 – Preservation and Protection of Trees and Guidelines	Project		KNP Police		
		on Tree Preservation during Development.			Facilities Site		
-	-	Tree transplantation	To preserve the trees with	CEDD's Contractors	The location of	Construction Stage	٨
		a. If removal of trees unavoidable due to construction impacts,	conservation interest which		three Aquilaria	of CEDD's	
		trees will be transplanted where technically feasible in	are unavoidably affected by		sinensis at Site	contracts	
		accordance with "Guidelines on Tree Transplanting" by DEVB	the construction activities.		Portion B and D,		
		and HQ/GN/13 and HQ/GN/13 - Interim Guidelines for Tree			and the receptor		
		Transplanting Works under Highways Department's Vegetation			site for the		
		Maintenance Ambit where applicable.			transplanted trees		
					opposite Portion		
					B1 of the site.		
-	-	Work area and temporary works area	To minimize the landscape	CEDD's and	CEDD: Along	Construction	^

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		a. Reduction of the extent and location of working areas to avoid	and visual impacts by	ArchSD's Contractors	KNP Road where	Stage of CEDD's	
		sensitive LRs	construction area control		applicable and	and ArchSD's	
		b. Siting of offices or temporary structures so that they are not			slopes within KNP	Contracts	^
		visually prominent			Police Facilities		
		c. Consideration of detailed schedules to shorten the construction			Site		^
		period			ArchSD: Within		
		d. Temporary landscape treatments are considered to be adopted			KNP Police		^
		such as applying hydro-seeding on temporary stockpiles and			Facilities Site		
		areas of earthworks to alleviate the potential impacts and					
		minimise soil erosion.					
-	-	Advance implementation of mitigation planting	To mitigate the predicted	CEDD's and	Whole project site	Construction Stage	N/A
		a. Replanting of existing / disturbed vegetation shall be	impacts including screening	ArchSD's Contractors	area, priority given	of CEDD's and	
		undertaken as soon astechnically feasible during the construction	views of the proposals as		to periphery of the	ArchSD's Contracts	
		phase.	early as possible during the		site		
			operation phase.				
-	-	Decorative screen hoarding	To screen undesirable views	CEDD's and	Along areas of the	Construction Phase	^
		a. Decorative screen hoarding will be erected along areas of the	of the works site.	ArchSD's Contractors	construction works	CEDD's and	
		construction works site boundary where the works site borders			site boundary	ArchSD's Contracts	
		publically accessible routes and/or is close to visually sensitive			where the works		
		receivers (VSRs)			site borders		
		b. It is proposed that the screening be compatible with the			publically		^

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		surrounding environment and where possible, non-reflective,			accessible routes		
		recessive colours be used.			and/or is close to		
					visually sensitive		
					receivers (VSRs)		
-	-	Detail design considerations	To reduce the area allowed	CEDD's Detailed	CEDD: Along	Design Stage of	N/A
		a. Detailed design of development components should reduce	for any development to a	Designers /	KNP Road where	CEDD's and	
		landscape footprint and visibility of structures.	practical minimum	Consultants	applicable and	ArchSD's Contracts	
				ArchSD's	slopes within KNP		
				Detailed Designers /	Police Facilities		
				Consultants	Site		
					ArchSD: Within		
					KNP Police		
					Facilities Site		
-	-	Aesthetically pleasing design and responsive design of	a. To reduce the visibility of	ArchSD's Detailed	Within KNP Police	Design Stage	N/A
		buildings and structures	the development	Designers /	Facilities Site	ArchSD's Contract	
		a. The form, textures, finishes and colours of the proposed	components	Consultants			
		development components should be compatible with the existing	b. To further improve visual				
		surroundings. Light earthy tone colours such as shades of green,	amenity				
		grey, brown and off-white may be utilised where technically	c. To reduce the mass of				
		feasible to reduce the visibility of the development components,	development				
		including all roadwork, buildings and noise barriers etc	d. To minimise the 'wall				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		b. Adopting natural building materials such as stone and timber	effects' and create a subtle				
		should be for architectural features, where technically feasible.	transition at the edges of the				
		c. Using responsive design for the disposition of the main	site				
		elements of the proposed scheme including the locations of	e. To enhance the sense of				
		buildings and utility structures.	visual integration with the				
		d. Grouping of utilities and infrastructure components into	existing context, avoid				
		proposed buildings as far as technically feasible to reduce the	abrupt transitions between				
		mass of development	the existing and proposed				
		e. The disposition and height profile of the developments and	built environment and				
		above ground utilities structures to respond to the existing	reduce the apparent visual				
		context particularly the existing landform and preserved trees,	mass of the proposed				
		f. Creation of setbacks, articulating the development frontage and	developments.				
		maintenance of view corridors when technically feasible					
-	-	Design of engineering structure	To give the engineering	CEDD's Detailed	Whole project site	Design Stage of	^
		a. The design of the proposed Engineering Structures such as the	structures a more natural	Designers /	area	CEDD's Contracts	
		proposed road layout and any ancillary structures including the	appearance that allows them	Consultants			
		sewage pumping station and the Ma Tso Lung Firing Range	to blend into the local rural				
		should pay particular attention to the appearance and	landscape.				
		construction methods.					
		b. The detailed design landscape consultants shall work in unison					
		with the engineers on the aesthetic aspects of the structures and					

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		their relationship with the landscape.					
		c. The design of engineering structures shall avoid any					
		unnecessary visual clutter achieved through the co-ordination of					
		the various engineering disciplines involved to arrive at					
		integrated design solutions.					
-	-	Design of retaining walls and slopes	To give man-made slopes a	CEDD's Detailed	Retaining walls	Design Stage of	^
		a. The proposed treatment of Retaining Wall and Slopes will be	more natural appearance	Designers /	and slopes within	CEDD's Contracts	
		undertaken in accordance with GEO Publication No. 1/2011	blending into the local rural	Consultants	the whole site area		
		"Technical Guidelines on Landscape Treatment and	landscape.				
		Bioengineering for Man-made Slopes and Retaining Walls".					
		b. These engineering structures will be aesthetically enhanced					
		through the use of soft landscape works including tree and shrub					
		planting.					
-	-	Compensatory planting proposal	To compensate for the	CEDD's and	CEDD: Along	Construction Stage	N/A
		a. All compensatory planting of trees is to be carried out in	existing dead trees to be	ArchSD's Contractors	KNP Road where	of CEDD's and	
		accordance with DEVB TCW No. 7/2015. A total woodland	removed and create a more		applicable and	ArchSD's Contract	
		compensation area of 5.54 ha is proposed.	structurally diverse		slopes		
		b. The planting proposals will utilise largely native species in	woodland.		within KNP Police		
		accordance with GLTM/DEVB's - Guiding Principles on Use of			Facilities Site		
		Native Plant Species in Public Works Projects,			ArchSD: Within		
		c. Some compensatory shrub and ground cover planting will also			KNP Police		

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		be provided within the woodland area to create a more			Facilities Site		
		structurally diverse woodland.					
		d. Woodland areas will utilise a combination of large sized tree					
		stock (including heavy standard sized trees) and whip sized trees					
		to create a more naturalistic					
		e. The smaller, younger plant stock will adapt to their new					
		growing conditions more quickly than larger sized stock and					
		establish a naturalistic effect more rapidly.					
		f. Roadside and amenity planting will utilise largely heavy					
		standard sized trees.					
-	-	Landscape buffer tree planting	To improve compatibility	CEDD's and	CEDD: along KNP	Construction Stage	N/A
		a. Tree planting using larger sized tree stock shall be provided to	with the surrounding	ArchSD's Contractors	Road where	of CEDD's and	
		screen the proposed structures and associated facilities.	environment and create a		applicable and	ArchSD's Contract	
		b. The planting will utilise native species wherever possible.	pleasant pedestrian		slopes within KNP		
			environment.		Police Facilities		
					Site		
					ArchSD: within		
					KNP Police		
					Facilities Site		
-	-	Roadside and amenity planting (within KNP Police Facilitate	To enhance the landscape	ArchSD's Contractor	KNP Police	Construction Stage	N/A
		Site)	and visual quality of the		Facilities Site	of ArchSD's	
			existing and proposed				

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		a. Roadside and amenity planting using predominantly native	transport routes and car			Contract	
		species	parks.				
-	-	Grassland (ecological mitigation)	To provide larval food	ArchSD's Contractor	ArchSD: within	Construction Stage	N/A
		a. Creation of new grassland areas approximately 1.02 ha in size.	plants for the butterfly		KNP Police	of ArchSD's	
		Inclusion of common grass species Ischaemum barbatum and	species.		Facilities Site	Contract	
		Tetradium glabrifolium (the larval food plants for butterfly					
		species).					
-	-	Green roof (within KNP Police Facilitate Site)	To enhance the	ArchSD's Contractor	Within KNP	Construction stage	N/A
		a. Green roofs predominantly using native species shall be	sustainability of the design		Police Facilitate	of ArchSD's	
		introduced where technically feasible on proposed buildings to	and mitigate visual impact		Site	Contract	
		reduce exposure of untreated concrete surfaces	to VSRs at high levels				
		b. Location and extent of green roof subject to detailed design.					
-	-	Vertical greening	To soften the hard, vertical	CEDD's and	CEDD: along KNP	Construction Stage	N/A
		a. Vertical planting shall be introduced using predominantly	surfaces of the proposed	ArchSD's Contractors	Road where	of CEDD's and	
		native species.	development components		applicable and	ArchSD's Contracts	
		b. Planting to utilise climbing and trailing plants. Location and	including the walls of the		slopes within KNP		
		extent of vertical greening subject to detailed design.	proposed buildings and		Police Facilitate		
			retaining walls.		Site		
					ArchSD: within		
					KNP Police		
					Facilitate Site		
-	-	Green paving (within KNP Police Facilitate Site)	To reduce the area of	ArchSD's Contractor	Within KNP	Construction stage	N/A

EIA Ref.	EM&A	Recommended Mitigation Measures	Objectives of the	Who to implement	Location of the	When to	Implementation
	Log	(What Measures)	recommended Measures	the measures?	measures	Implement the	Status
	Ref		& Main Concerns to	(Who)	(Where)	measures?	
			address (What			(When)	
			Requirements)				
		a. Green paving approach such as grass-crete or grass-grid to	hard paving		Police Facilitate	of ArchSD's	
		maximise the area of planting and reduce the area of hard paving			Site	Contracts	
		b. Location and extent of green paving subject to detailed design					
		of the ArchSD's contract. This includes the use of permeable					
		paving where grass-crete / grass grid is not practicable.					
-	-	Light control (operation)	To minimize glare impact to	HKPF and HyD	HKPF: Within	Operation Stage	N/A
		a. Street and night time lighting glare will be controlled	adjacent VSRs during the		KNP Police		
			operation stage.		Facilitate Site		
					HyD: Along Kong		
					Nga Po Road		

Implementation status: ^

- Mitigation measure was implemented
- * Observation/reminder was made during site audit but improved/rectified by the contractor
- # Observation/reminder was made during site audit but not yet improved/rectified by the contractor
- X Non-compliance of mitigation measure
- Non-compliance but rectified by the contractor
- N/O Not Observed at this stage in the reporting period