| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|-------------------------------------|--|
| | tion Phase | | | | | |
| A1 | Good housekeeping to minimize dust generation, e.g. by properly handling and storing dusty materials | To minimize dust generation | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A2 | Adopt dust control measures, such as dust suppression using water spray on exposed soil, in areas with dusty construction activities, and during material handling | To minimize dust generation due to erosion | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A3 | Dust suppression shall be applied to the working area immediately before, during and immediately after site clearance, excavation or earth moving operation to keep the surface wet. | To minimize dust generation due to erosion | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A4 | Use water spray to wet the remaining dusty materials on the floor after removing stockpile. The surface of roads or streets shall be free from dust | To minimize dust generation due to erosion | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A5 | Storage of dusty materials and debris shall be either entirely covered by impervious sheeting or stored in a three-side and top enclosed area. Alternatively, it should be sprayed with water or a dust suppression chemical to maintain the entire surface wet | To minimize dust generation due to erosion | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A6 | All demolished items (e.g. trees, vegetation, structures, debris and rubbish) that may dislodge dust particles shall be covered entirely by impervious sheeting or placed in a three-side and top enclosed area within a day of demolition. | To minimize dust generation | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A7 | Store cement bags in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags | To prevent leakage of cement | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A8 | Cement bag shall be debagged, batched and mixed in a three- side and top enclosed area | To minimize dust generation | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A9 | Maintain a reasonable height when dropping excavated materials to limit dust generation | To minimize dust generation during movement of excavated materials | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A10 | Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating, soil compacting or paving | To minimize dust generation due to erosion | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |

Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|-------------------------------|---|--|
| A11 | Cover materials on trolleys and trucks before leaving the site to prevent debris from dropping during traffic movement or being blown away by wind | To prevent falling of debris during traffic movement and by wind | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A12 | Water or a dust suppression chemical shall be continuously sprayed on the surface where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation is carried out, unless the process is accompanied by the operation of an effective dust extraction and filtering device | To minimize dust emission | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A13 | Regular maintenance of plant equipment to prevent black smoke emission | To minimize black smoke emission | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A14 | Throttle down or switch off unused machines or machine in intermittent use | To minimize unncessary emission | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A15 | Minimize excavation area as far as possible | To minimize dust emission and potential release of odour from exposed ground | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A16 | Cover open stockpiles of construction materials (e.g. aggregates, sand and fill materials) with impermeable materials such as tarpaulin during rainstorms. | To prevent soil erosion under rainstorm | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A17 | Hoarding of not less than 2.4 m high shall be erected from ground level to surround the work area except for a site entrance or exit | To minimize dust emission | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |
| A18 | Carry out air quality monitoring throughout the construction period | To monitor construction dust level | HyD's Contractor | At representative ASRs | Prior to and throughout construction phase | EIAO-TM |
| A19 | Carry out regular site inspection to audit the implementation of mitigation measures | To check the implemenation status and effectiveness of mitigation measures | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|-------------------------------|-------------------------------------|--|
| Noise Im | | | | | | |
| Construct | tion Phase | | | XX 71 1 | | |
| N1 | Schedule noisy activities to minimise exposure of nearby NSRs to high levels of construction noise | To minimize construction noise level | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N2 | Use hand-held plant equipment or manual equipment as far as possible | To minimize construction noise level | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N3 | Use Quality Powered Mechanical Equipment (QPME) which produces lower noise level | To minimize construction noise level | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N4 | In the direction of noise sensitive receivers, erect mobile barriers with 3m in height from a few metres of stationary plants, and from about 5m of more mobile plant such as hydraulic breaker to prevent direct view. The barrier should have skid footing and a small cantilevered upper portion. The minimum surface density of the movable noise barrier is 7 kg/m ² and provide with noise absorbing material. | To lower noise transmission | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N5 | Position mobile noisy equipment in location and direction away from NSR | To minimize noise transmission to NSR | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N6 | Use silencer or muffler on plant equipment and should be properly maintained | To minimize noise transmission | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N7 | Operate noisy plant equipment such as air compressor, generator and concrete pump within enclosure | To minimize noise transmission | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N8 | Cover the noisy part of piling machine with acoustic mat | To minimize noise transmission | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N9 | Throttle down or switch off unused machines or machine in intermittent use between work | To mimize noise production | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N10 | Avoid carrying out noisy activities at the same time | To mimize noise production | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |

Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|-------------------------------|---|--|
| N11 | Reduce the percentage on-time for some noisy PMEs | To mimize noise production | HyD's Contractor | Whole construction site | Throughout construction phase | NCO, EIAO-TM |
| N12 | Carry out noise monitoring throughout the construction period | To monitor construction noise level | HyD's Contractor | At representative NSRs | Prior to and throughout construction phase | EIAO-TM |

| Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|---|--|--|---|---|--|
| | | | | | |
| Works in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the watertight cofferdam. The cofferdam can only be removed after completion of work. | To prevent the excavated materials or cuttings from falling into the water and being carried into the sea | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM |
| Install sheet piles by vibratory action. | To minimize dispersion of sand | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Erect water-tight temporary working platform that can contain falling debris above Wang Tong River. The platform shall be sheltered by tarpaulin for directing rainwater away from the working platform. | To prevent falling of debris and generation of surface runoff into the river | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Water removed from the cofferdam should be desilted before discharge. | To prevent discharge of silty water | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM |
| Set up sedimentation tank for settling suspended solids in wastewater before discharge into storm drains. Sand/silt removal facilities such as sand traps, silt traps and sedimentation basin should be provided with adequate capacity. | To reduce the amount of suspended solid in wastewater | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Maintain silt removal facilities, channels, manholes before and after rainstorm. | To prevent failure that may lead to flooding | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Remove silt and grit from silt trap at regular interval. | To prevent blockage that may lead to flooding | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Design works program carefully to minimize work areas, hence minimize soil exposure and site runoff. | To minimize surface runoff and chance of erosion | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| Arrange excavation works outside rainy seasons (April to September) as far as possible. If this cannot be achieved, the following measures should be implemented: Cover temporary exposed slope surfaces with impermeable materials, e.g. tarpaulin Protect temporary access roads by crushed stone or gravel Carry out adequate surface protection measures well before | To minimize surface runoff and chance of erosion | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| | Parality Impact tion Phase Works in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the watertight cofferdam. The cofferdam can only be removed after completion of work. Install sheet piles by vibratory action. Erect water-tight temporary working platform that can contain falling debris above Wang Tong River. The platform shall be sheltered by tarpaulin for directing rainwater away from the working platform. Water removed from the cofferdam should be desilted before discharge. Set up sedimentation tank for settling suspended solids in wastewater before discharge into storm drains. Sand/silt removal facilities such as sand traps, silt traps and sedimentation basin should be provided with adequate capacity. Maintain silt removal facilities, channels, manholes before and after rainstorm. Remove silt and grit from silt trap at regular interval. Design works program carefully to minimize work areas, hence minimize soil exposure and site runoff. Arrange excavation works outside rainy seasons (April to September) as far as possible. If this cannot be achieved, the following measures should be implemented: - Cover temporary exposed slope surfaces with impermeable materials, e.g. tarpaulin - Protect temporary access roads by crushed stone or gravel | Recommended Mitigation MeasuresRecommended Measure & Main Concerns to addressuality Impacttion PhaseWorks in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the watertight cofferdam. The cofferdam can only be removed after completion of work.To prevent the excavated materials or cuttings from falling into the water and being carried into the seaInstall sheet piles by vibratory action.To minimize dispersion of sandErect water-tight temporary working platform that can contain falling debris above Wang Tong River. The platform shall be sheltered by tarpaulin for directing rainwater away from the working platform.To prevent falling of debris and generation of surface runoff into the riverWater removed from the cofferdam should be desilted before discharge.To prevent discharge of silty waterSet up sedimentation tank for settling suspended solids in wastewater before discharge into storm drains. Sand/silt removal facilities such as sand traps, silt traps and sedimentation basin should be provided with adequate capacity.To prevent failure that may lead to floodingMaintain silt removal facilities, channels, manholes before and inimize soil exposure and site runoff.To prevent blockage that may lead to floodingDesign works program carefully to minimize work areas, hence following measures should be implemented: - Cover temporary access roads by crushed stone or gravelTo minimize surface runoff and chance of erosion- Protect temporary access roads by crushed stone or gravel- Carry out adequate surface protection measures well beforeTo minimize surface runoff and chance of erosion | Recommended Mitigation MeasuresRecommended Measure & Main Concerns to addressImplement the measureuality Impacttion PhaseWorks in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the watertight cofferdam. The cofferdam can only be removed after completion of work.To prevent the excavated materials or cuttings from faling into the water and being carried into the seaHyD's ContractorInstall sheet piles by vibratory action.To minimize dispersion of sand generation of surface runoff into the riverHyD's ContractorErect water-tight temporary working platform that can contain faling debris above Wang Tong River. The platform shall be sheltered by tarpaulin for directing rainwater away from the working platform.To prevent falling of debris and generation of surface runoff into the riverHyD's ContractorWater removed from the cofferdam should be desilted before discharge.To prevent discharge of silty waterHyD's ContractorSet up sedimentation tank for settling suspended solids in wastewater before discharge into storm drains. Sand/silt removal facilities such as sand traps, silt traps and sedimentation basin should be provided with adequate capacity.To prevent failure that may lead to floodingHyD's ContractorRemove silt and grit from silt trap at regular interval.To prevent blockage that may lead to floodingHyD's ContractorDesign works program carefully to minimize work areas, hence minimize soil exposure and site runoff.To minimize surface runoff and chance of erosionHyD's ContractorArrange excavation works o | Recommended Mitigation MeasuresRecommended Measure & Main Concerns to addressImplement the measureDetailon of the measureuality Impacttion PhaseWorks in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the wateright cofferdam. The cofferdam can only be removed after completion of work.To prevent the excavated materials or cuttings from falling into the water and being carried into the seaHyD's ContractorWhole construction siteInstall sheet piles by vibratory action.To minimize dispersion of sand generation of surface runoff into the riverHyD's ContractorWhole construction siteErect water-tight temporary working platform that can contain falling debris above Wang Tong River. The platform shall be sheltered by tarpaulin for directing rainwater away from the working platform.To prevent discharge of silty Wole ContractorHyD's ContractorWhole construction siteWater removed from the cofferdam should be desilted before discharge.To reduce the amount of suspended solid in wastewater before discharge into storm drains. Sand/silt removal facilities such as sand traps, silt traps and sedimentation basin should be provided with adequate capacity.To revent failure that may lead to floodingHyD's ContractorWhole construction siteMaintain silt removal facilities, channels, manholes before and after rainstorm.To prevent blockage that may tead to floodingHyD's ContractorWhole construction siteDesign works program carefully to minimize work areas, hence minimize works program carefully to mi | Recommended Mitigation MeasuresRecommended Measure & Main Concerns to addressImplement the measureImplement the measureuality Impacttion PhaseWorks in the river (excavation within highwater mark and cutting of pier of Old Bridge) shall be carried out inside the watertight cofferdam. The cofferdam can only be removed after falling into the water and being completion of work.To prevent the excavated materials or cuttings from falling into the water and being contractorHyD's ContractorWhole construction siteThroughout construction siteInstall sheet piles by vibratory action.To minimize dispersion of sand falling debris and genaration of surface runoff into the riverHyD's ContractorWhole construction siteThroughout construction on surface runoffFeret water high temporary working platform that can contain falling debris and genaration for directing rainwater away from the working platform.To prevent falling of debris and genaration of surface runoffHyD's ContractorWhole construction phaseWater removed from the cofferdam should be desilted before discharge.To prevent discharge of silty waterHyD's ContractorWhole construction supended solids in wastewater before discharge into sourd rains. 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Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|-------------------------------------|--|
| W10 | Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating, soil compacting or paving | To prevent soil erosion under rainstorm | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| W11 | Cover open stockpiles of construction materials (e.g. aggregates, sand and fill materials) with impermeable materials such as tarpaulin during rainstorms. | To prevent soil erosion under rainstorm | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| W12 | Cover and temporary seal manholes to prevent silt, construction materials or debris and surface runoff from entering foul sewers. | To prevent overloading of foul sewers | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| W13 | Placing equipment, materials and wastes away from Wang Tong River and Silver Mine Bay | To prevent water contamination | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM |
| W14 | Remove waste from the site regularly. | To prevent waste accumulation | HyD's Contractor | Whole construction site | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| W15 | Apply discharge license for effluent discharge. Treat the discharge to comply with the requirement in TM-DSS. | To ensure compliance with effluent discharge requirement | HyD's Contractor | Whole construction site | Throughout construction phase | WPCO, TM-DSS, EIAO-TM |
| W16 | Reuse treated effluent onsite, e.g. dust suppression and general cleaning. | To minimize wastewater generation | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| W17 | Monitor effluent water quality. | To ensure compliance with effluent discharge requirement | HyD's Contractor | Whole construction site | Throughout construction phase | WPCO, EIAO-TM |
| W18 | Register as chemical waste producer if chemical waste will be generated. | To control chemical waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM |
| W19 | Perform maintenance of vehicles and equipment that have oil leakage and spillage potential on hard standings within a bunded area with sumps and oil interceptors. | To prevent oil leakage or spillage | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM |
| W20 | Dispose chemical waste in accordance to Waste Disposal Ordinance. Follow the <i>Code of Practice on the Packaging,</i> <i>Labelling and Storage of Chemical Wastes</i> , examples as follows: - Store chemical wastes at designated safe location with adequate space | To avoid accident in waste storage and handling | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| W21 | Placing chemical toilet away from waterbodies as far as possible and on stable, impermeable surface | To minimize accidental leakage of sewage into waterbodies | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM |

| | Appendix A - Im | plementation Schedule of Recommended Mitigation Measures | |
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| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|---|--|
| W22 | Carry out water quality monitoring at water sensitive receivers | To identify any water quality impact due to the project | HyD's Contractor | Whole construction site | Before, throughout and after construction phase | EIAO-TM |
| W23 | Carry out regular site inspection to audit the implementation of mitigation measures | To check the implemenation status and effectiveness of mitigation measures | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM, APCO |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|-------------------------------------|--|
| Ecologic | al Impact | | | | | |
| Construc | tion Phase | | | | | |
| E1 | Before site clearance, the work area should be inspected by ecologist to confirm no active bird nest is present. If any active bird nest is identified, suitable size of buffer area should be established until the nest is abandoned. | To minimize direct impact on the breeding activity of Black- collared Starling | HyD's Contractor | Whole construction site | Before site clearance | EIAO-TM |
| E2 | Erection of hoarding, fencing or provision of clear demarcation of work zones | To minimize direct impact outside work boundary | HyD's Contractor | Whole construction site | Throughout construction phase | EIAO-TM |

Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|-------------------------------------|--|
| | anagement | | | | | |
| Construc | tion Phase | | | | | Γ |
| WM1 | Allocate an area for waste sorting and storage of C&D materials into the following categories for reuse, recycle or disposal if possible. Remove waste from the Site for sorting once generated if no suitable space can be identified. | - To minimize waste generation | HyD's | Whole | Throughout | Waste Disposal Ordinance, EIAO- TM |
| W WI | excavated material suitable for reuse inert C&D materials for reuse/disposal offsite non-inert C&D materials for disposal at landfills chemical waste general refuse | | Contractor | site | phase | |
| | Adopt good site practice as follows: - Provide training to workers on site cleanliness, waste management (waste reduction, reuse and recycle) and chemical handling procedures | To proper handling of waste | | | | |
| WM2 | Provide sufficient waste collection points and regular removal Cover waste materials with tarpaulin or in enclosure during transportation Maintain drainage systems, sumps and oil interceptors Sort out chemical waste for proper handling and treatment | | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| | onsite or offsite Adopt waste reduction measures as follows: | | | | | |
| WM3 | Allocate area/containers for sorting, recovering and storing waste for reuse, recycle or disposal (e.g. demolition debris and excavated materials, general refuse like aluminium cans). Remove waste from the Site for sorting once generated if no suitable space can be identified. | To minimize waste generation | HyD's Contractor | Whole construction site | Throughout construction phase | construction TM |
| | - Allocate area for proper storage of construction materials to prevent contamination | | | | | |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|-------------------------------|-------------------------------------|--|
| WM4 | Prepare and implement a site specific Waste Management Plan (WMP) as part of Environmental Management Plan (EMP) in accordance with ETWB TCW No. 19/25. Detail waste management method in the form of avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal according to the recommendations on the EIA and EM&A Manual. It should be approved by the ER and regularly reviewed. | To provide guidance to waste management | HyD's Contractor | Whole construction site | Throughout construction phase | ETWB TCW No. 19/2005, EIAO- TM |
| | Store waste materials properly as follows: | | | | | |
| | - Avoid contamination by proper handling and storing waste | | HyD's | Whole | Throughout construction phase | ProPECC PN 1/94, EIAO-TM |
| WM5 | Prevent erosion by covering waste Maintain and clean storage area regularly Sort and stockpile different materials at designated location to enhance reuse | | Contractor | construction site | | |
| WM6 | Apply for relevant waste disposal permits in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28). | To properly dispose waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28), Dumping at Sea Ordinance (Cap. 466), EIAO- TM |
| WM7 | Implement trip-ticket system for recording the amount of waste generated, recycled and disposed, including chemical wastes | To monitor movement of waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal (Chemical Waste) (General) Regulation, Waste Disposal Ordinance, EIAO-TM |
| WM8 | Reduce water content in wet spoil generated from piling work by mixing with dry materials. Only dispose treated spoil with less than 25% dry density to Public Fill Reception Facilities | To minimize load to reception facilities | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| WM9 | Dispose dry waste or waste with less than 70% water content by weight to landfill | To minimize load to reception facilities | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |

Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & | Who to Implement | Location of the measure | When to implement the | What requirements or standard for the measure to achieve |
|--------------|--|--|------------------------------------|-------------------------------|--|--|
| WM10 | Follow the <i>Code of Practice on the Packaging, Labelling and</i> <i>Storage of Chemical Waste</i> as follows: Store chemical wastes with suitable containers. Seal and maintain the container to avoid leakage or spillage during storage, handling and transport Label chemical waste containers in both English and Chinese with instructions in accordance to Schedule 2 of the Waste Disposal (Chemical Waste) (General) Regulation The container capacity should be smaller than 450 litres unless agreed by the EPD | Main Concerns to address To avoid accident in waste storage and handling | the measure HyD's Contractor | Whole construction site | measure Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| W11 | Comply with the requirement of the chemical storage area: - Store only chemical waste and label clearly the chemical characters of the waste - Have at least 3 sides enclosed and protected from rainfall with cover - Provide sufficient ventilation - Have impermeable floor and has bunds to contain 110% of the capacity of the largest container or 20% of the total volume of the stored waste in the area, whichever is larger - Adequately spaced incompatible materials | To ensure proper storage of chemical waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| W12 | Transfer used lubricants, waste oils and other chemicals to oil recycling companies, if possible, and empty oil drums for reuse or refill. No direct or indirect discharge is permitted | To ensure proper disposal of chemical waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM |
| W13 | Hire licensed chemical waste disposal contractors for waste collection and removal. Dispose chemical waste at the approved CWTC at Tsing Yi or other licensed facility | To ensure proper disposal of chemical waste | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal (Chemical Waste) (General) Regulation, EIAO-TM |
| W14 | Provide recycling bins for sorting out recyclables for collection by recycling companies. Non-recyclables should be removed to designated landfills every day by licensed collectors to prevent environmental and health nuisance. | To ensure proper recycling and disposal of general refuse | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |
| W15 | Terminate excavation work if contaminated soil is found. Prepare Land Contamination Plan (CAP) in accordance with EPD's Guidance Note for Contaminated Land Assessment and Remediation for identifying soil and groundwater sampling locations, followed by testing and remediation where necessary. | To identify presence of contaminated soil and provide proper remediation | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|-------------------------------|-------------------------------------|---|
| W16 | Marine sediment shall be cement solidified and and sent to laboratory for Toxicity Characteristics Leaching Procedure (TCLP) test according to USEPA Method 1311 and 6020. The results are considered satisfactory if Universal Treatment Standards (UTS) are being met as per Table 4.6 of Practice Guide of Investigation and Remediation of Contaminated Land. The Unconfined Compressive Strength (UCS) of the solidified sediment shall also reach 1000kPa according to the above Practice Guide.If the TCLP and UCS testing results cannot meet the criteria, the sediment shall be retreated by cement solidification. After passing the tests, the solidified sediment shall be backfilled on land after the piling work (e.g. for construction of new piers and abutments). Alternatively, the solidified sediment shall be delivered to public fill reception facilities for beneficial reuse as the last resort. | To prevent leakage of contaminants to water. | HyD's Contractor | Whole construction site | Throughout construction phase | Waste Disposal Ordinance, EIAO- TM, Practice Guide of Investigation and Remediation of Contaminated Land |

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve | | |
|--------------|--|--|------------------------------------|---|-------------------------------------|--|--|--|
| Landsca | Landscape and Visual | | | | | | | |
| Construc | Construction Phase | | | | | | | |
| CM1 | The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape. (Measure for mitigating Landscape and Visual impacts) | To minimise landscape footprint and reduce potential for visual impact | HyD's Contractor | Adjacent to existing bridge | Construction Phase | To approved Detailed Design and RLA's Approval | | |
| CM2 | Reduction of construction period to practical minimum. (Measure for mitigating Visual impact) | To reduce duration of impacts | HyD's Contractor | N/A | Construction Phase | To approved Detailed Design and RLA's Approval | | |
| CM3 | Construction traffic (land and sea) including construction plant, construction vessels and barges should be kept to a practical minimum. (Measure for mitigating Visual impact) | To minimise temporary visual impacts | HyD's Contractor | Connecting roads to site and Silver Mine Bay | Construction Phase | To approved Detailed Design and RLA's Approval | | |
| CM4 | Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours. (Measure for mitigating Visual impact) | To screen works sites and plant | HyD's Contractor | Around works areas | Construction Phase | To approved Detailed Design and RLA's Approval | | |
| CM5 | Avoidance of excessive height and bulk of site buildings and structures. (Measure for mitigating Visual impact) | To reduce temporary visual impacts | HyD's Contractor | Within works sites | Construction Phase | To approved Detailed Design and RLA's Approval | | |
| CM6 | Control of night-time lighting by hooding all lights and through minimisation of night working periods. (Measure for mitigating Visual impact) | To reduce temporary visual impacts | HyD's Contractor | Within works sites | Construction Phase | To approved Detailed Design and RLA's Approval | | |

Appendix A - Implementation Schedule of Recommended Mitigation Measures

| EM&A Ref. | Recommended Mitigation Measures | Objectives of the Recommended Measure & Main Concerns to address | Who to Implement the measure | Location of the measure | When to implement the measure | What requirements or standard for the measure to achieve |
|--------------|---|--|------------------------------------|--|-------------------------------------|--|
| CM7 | All existing trees shall be carefully protected before, during construction and after construction. A Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees or trees to be transplanted, including trees in contractor's works areas for approval by the Registered Landscape Architect (RLA). This method statement for tree protection and transplanting shall make reference to "Guidelines on Tree Preservation during Construction" and "Guidelines on Tree Transplanting" published by GLTM of the DEVB. Early preparation of trees to be transplanted shall be undertaken to increase their likely survival rate following transplanting. (Measure for mitigating Landscape impact) | To minimise tree impacts and maximise tree preservation | HyD's Contractor | Within and adjacent to works sites | Construction Phase | To approved Detailed Design and RLA's Approval |
| CM8 | Minimisation of Impacts to Wang Tong River through minimised and carefully controlled dredging for pile/abutment removal/construction works. (Measure for mitigating Landscape impact) | To minimise contamination of Wang Tong River | HyD's Contractor | Wang Tong River | Construction Phase | To approved Detailed Design and RLA's Approval |