

### Appendix 18.3 – Details of Schedule 2 Designated Projects for Environmental Permit Application

**Table A Project Scope and Key Mitigation Measures for DP1**

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
Primary Distributor Road P1 and District Distributor Roads D1, D2, D3, D4, D5 and D6	A carriageway for motor vehicles that is an expressway, trunk road, primary distributor road or district distributor road.	The location of the Project is shown in <b>Figure A</b> .	Construction and operation of primary distributor road P1, district distributor road D1, D2, D3, D4, D5 and D6 at San Tin/Lok Ma Chau Development Node	<p>Air Quality</p> <ul style="list-style-type: none"> <li>Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimise construction dust impact.</li> </ul> <p>Noise Impact</p> <ul style="list-style-type: none"> <li>The use of QPME associated with the construction works is prescribed in EPD's QPME database, which contains the sound power levels (SWLs) for quality/quiet PME of various types, brands and models.</li> <li>Providing Low Noise Road Surfacing (LNRS) and Noise Barrier (NB) on the Project Roads. The extent of LNRS and NB refers to Figure 4.13. Before the commencement of construction of the road projects, a detailed noise mitigation plan to minimize the adverse traffic noise impacts of roads shall be submitted to EPD for approval.</li> </ul> <p>Water Quality</p> <ul style="list-style-type: none"> <li>Construction works at the existing ponds / wet areas should be conducted only after dewatering of these ponds / wet areas is fully completed. The drained water generated from the dewatering of these ponds / wet areas to be removed should be temporarily stored in appropriate storage tanks or containers for reuse on-site as far as possible. Any surplus drained water should be tankered away for disposal at the sewage treatment works (STW) in a controlled manner.</li> <li>It is recommended to drain only one pond at a time to minimise the potential water quality impact. Dewatering works at ponds / wet areas should be conducted within dry season to minimise the quantity of drained water. No direct discharge of drained water to the stormwater drainage system or marine water should be allowed.</li> <li>Surface run-off from construction site should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.</li> <li>Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when</li> </ul>

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				<p>rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm.</p> <ul style="list-style-type: none"> <li>• There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.</li> <li>• The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.</li> <li>• Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from neighbouring waters.</li> <li>• The site practices outlined in the ProPECC PN 2/23 “Construction Site Drainage” and ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should be adopted for the proposed demolition or diversion of watercourses where applicable.</li> </ul> <p>Waste Management</p> <ul style="list-style-type: none"> <li>• Preparation of a Waste Management Plan in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.</li> <li>• Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>• Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away.</li> </ul>

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				<ul style="list-style-type: none"> <li>• Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets.</li> <li>• In order to monitor the disposal of C&amp;D materials at the designated public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should also be installed at the vehicular entrance and exit of the site to monitor handling of C&amp;D materials disposal. To prohibit illegal dumping and landfilling of C&amp;D materials, the dump trucks engaged on site should be equipped with GPS or equivalent automatic system for real time tracking and monitoring of their travel routings, parking locations and disposal activities.</li> </ul> <p>Land Contamination</p> <ul style="list-style-type: none"> <li>• Potentially contaminated sites were identified in area allocated for District Distributor Roads D1, D2, D3, D4 and D5 in this EIA Study. Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling and testing strategy, should be prepared for District Distributor Roads D1, D2, D3, D4 and D5 and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.</li> <li>• For sites requiring further appraisal and non-contaminated sites identified in this EIA Study, after the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant for site re-appraisal to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval.</li> <li>• Further arsenic assessment should be carried out during site formation and during construction of foundation. The Government will treat the high arsenic containing soil in the shallow region before land allocation or land lease. The treatment depth will depend on the future land use in RODP. Subsequent Developer/Works Departments will treat HAC soil in deep regions for excavations required for basements, piles and utilities.</li> </ul>

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				<p>Ecology</p> <ul style="list-style-type: none"> <li>• Construction of road D2 is of close proximity to MPLV Egretty, except for the minor encroachment, encroachment into the trees at the core area shall be strictly avoided during construction phase.</li> <li>• A buffer area 100 m from the footprint of MPLV Egretty should be established. Stringent seasonal control would be implemented within the buffer area, where construction activities shall be avoided during the ardeid breeding period (i.e. from March to early September). Construction activities shall be conducted from September to February in the following year. Tree crown pruning works at the egretty shall be avoided as best as possible, and where necessary, shall also be conducted and completed outside the ardeid breeding season to minimise disturbance to any breeding ardeids that may be present. Method Statement on construction activities near the egretty and necessary tree crown pruning works shall be submitted to AFCD in advance of the works.</li> <li>• Other stringent control measures shall also be implemented (e.g. establishment of hoarding and regular auditing). Aside from the construction activities, any associated temporary works areas (e.g. site office, stockpiling / material storage area, etc.) shall be strictly restricted outside the footprint of the egretty as well. Potential pruning works shall only be conducted where necessary, limited at overgrown tree branches that may affect construction activities.</li> <li>• Pre-construction surveys are necessary to confirm the latest boundary and condition of both MPLV Egretty and MPV Egretty before commencement of the construction works. Findings obtained from desktop study and the pre-construction surveys shall be presented in a Pre-construction Egretty Survey Report, with relevant mitigation measures (e.g. set-up of a 100m Buffer Area, relevant seasonal control, etc.) presented in the Report and submitted to AFCD and EPD for agreement and approval.</li> </ul> <p>Fisheries</p> <ul style="list-style-type: none"> <li>• During the construction stage, all ponds to be removed shall be isolated and not connected to any existing watercourse. The pond would then be drained before filling up these areas or before commencement of any excavation and construction works. To maintain bund stability of remaining adjacent ponds, a layer of shoring or sheet pile wall should be erected along the site boundary adjacent to fishponds. In addition, the shoring / sheet pile wall should have grouting or a grout curtain to avoid water seepage from the fishpond to the excavation area.</li> </ul> <p>Cultural Heritage</p> <ul style="list-style-type: none"> <li>• With an aim to define the vibration limit and to evaluate if ground-borne vibration, tilting and ground settlement monitoring and structural strengthening measures are required during construction phase, a baseline condition survey and baseline vibration impact assessment should be conducted</li> </ul>

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				<p>for the non-building structures by a qualified building surveyor or qualified structural engineer during pre-construction stage of the proposed developments. These non-building structures include Grave of Man Chung Luen and Grave of Mrs Man Leung.</p> <ul style="list-style-type: none"> <li>• A safe access route to these burial grounds should be maintained for conducting any mitigation measures, in particular during Ching Ming Festival and Chung Yeung Festival.</li> <li>• Further archaeological survey at later stages after land resumption but before site formation works is recommended for Mai Po ASA and Pang Loon Tei ASA. The survey shall be conducted by an archaeologist who must obtain a <i>Licence to Excavate and Search for Antiquities</i> from the Antiquities Authority prior the commencement of the fieldworks. The scope, methodology and programme of the archaeological survey shall be agreed with AMO.</li> <li>• Archaeological Watching Brief is recommended to be carried out in Mai Po Lung (South) ASA should works involve soil disturbance occurred (such as site formation) during the construction phase. The project proponent or future subsequent developer(s) should employ an archaeologist who must obtain a <i>Licence to Excavate and Search for Antiquities</i> from the Antiquities Authority prior the commencement of the fieldworks. The scope, methodology and programme of the archaeological survey shall be agreed with AMO.</li> <li>• If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.</li> </ul> <p>Landscape and Visual Impact</p> <ul style="list-style-type: none"> <li>• During construction phase, mitigation measures recommended include preservation of existing vegetation, transplantation of existing trees, reinstatement of temporarily disturbed landscape areas, minimise disturbance on watercourses, minimise topographical changes, management of construction activities and facilities, control of night-time lighting, construction of decorative hoarding around construction works, and advance planting of screen planting.</li> <li>• During operation phase, mitigation measures recommended include sensitive and aesthetically pleasing design of aboveground structures, landscape integration of built development, provision of roadside planting/ amenity planting/ peripheral screening or planting, provision of new tree planting, incorporation of green roof, sensitive design of noise barriers, control of night-time lighting glare, maximise greening on engineering structures and surfaces, and sensitive layout design of above-ground structures.</li> </ul> <p>EM&amp;A Requirements</p>

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				<ul style="list-style-type: none"><li>EM&amp;A personnel (including Environmental Team (ET) and Independent Environmental Checker (IEC)) shall be employed before commencement of construction of the project and EM&amp;A Manual shall be updated to include the latest EM&amp;A requirements in accordance with the information and recommendations in the EM&amp;A Manual and by taking into account any specific site conditions.</li></ul>

**Table B Project Scope and Key Mitigation Measures for DP2**

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
San Tin / Lok Ma Chau Effluent Polishing Plant	(i) Sewage treatment works with an installed capacity of more than 15,000m <sup>3</sup> per day;  (ii) Sewage treatment works with an installed capacity of more than 5,000m <sup>3</sup> per day; and a boundary of which is less than 200m from the nearest boundary of an existing or planned residential area and educational institution	The location of the Project is shown in <b>Figure B</b> .	- A new effluent polishing plant with a capacity to treat ADWF up to 125,000 m <sup>3</sup> /day  - Sludge treatment facilities  - Facilities for receiving and co-digesting pre-treated food or organic wastes	Air Quality <ul style="list-style-type: none"> <li>Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimise construction dust impact.</li> <li>Provision of deodorising units with odour removal efficiency of 95% for the effluent polishing plant.</li> </ul> Noise Impact <ul style="list-style-type: none"> <li>The use of QPME associated with the construction works is prescribed in EPD's QPME database, which contains the sound power levels (SWLs) for quality/quiet PME of various types, brands and models.</li> <li>A construction noise management plan to clearly list out the mitigation measures to be implemented to minimize construction noise shall be included in the tender document and sent to EPD.</li> </ul> Water Quality / Sewage and Sewerage Treatment <ul style="list-style-type: none"> <li>Surface run-off from construction site should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.</li> <li>Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm.</li> <li>There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent</li> </ul>

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				<p>quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.</p> <ul style="list-style-type: none"> <li>• The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.</li> <li>• Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from neighbouring waters.</li> <li>• The site practices outlined in the ProPECC PN 2/23 “Construction Site Drainage” and ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should be adopted for the proposed demolition or diversion of watercourses where applicable.</li> <li>• The design of STLMC Effluent Polishing Plant (EPP) should include                         <ul style="list-style-type: none"> <li>○ Applied peaking factors for all major treatment units and electrical and mechanical equipment to avoid equipment failure.</li> <li>○ By-pass mechanism would be provided for both coarse screens and fine screens in the inlet to avoid/minimise failure in coarse/fine screens; Interim by-pass would be provided after the primary sedimentation tank to avoid raw sewage by-pass as much as possible.</li> <li>○ Standby unit for all major equipment would be provided in case of unexpected breakdown of pumping and treatment facilities such that the standby pumps and treatment facilities could take over and function to replace the broken pumps.</li> <li>○ Back-up power for dual supply would be provided in case of power failure to sustain the function of pumping and treatment facilities.</li> </ul> </li> <li>• To provide a mechanism to minimise the impact of emergency discharges and facilitate subsequent management of any emergency, an Emergency Response Plan will be formulated prior to commissioning of STLMC EPP to set out the emergency response procedures and actions to be followed in case of equipment or sewage treatment failure. The plant operators of STLMC EPP should carry out necessary follow-up actions according to the procedures of the contingency plan to minimise any impacts on the identified water sensitive receivers (WSRs) due to emergency bypass. Regular maintenances and inspections to all treatment units, penstocks and plant facilities</li> </ul>



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				<p>are necessary to maintain a good operation condition. A follow-up water quality monitoring exercise shall be conducted after each emergency discharge event to monitor the recovery of water quality in the vicinity.</p> <ul style="list-style-type: none"> <li>The effluent from STLMC EPP should follow a stringent standard and fulfil discharge limits of pollutants in Standards for Effluents Discharged into Drainage and Sewage System, Inland and Coastal Waters, the Water Pollution Control Ordinance (CAP 358).</li> </ul> <p>Waste Management</p> <ul style="list-style-type: none"> <li>Preparation of a Waste Management Plan in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.</li> <li>Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away.</li> <li>Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets.</li> <li>In order to monitor the disposal of C&amp;D materials at the designated public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should also be installed at the vehicular entrance and exit of the site to monitor handling of C&amp;D materials disposal. To prohibit illegal dumping and landfilling of C&amp;D materials, the dump trucks engaged on site should be equipped with GPS or equivalent automatic system for real time tracking and monitoring of their travel routings, parking locations and disposal activities.</li> <li>Screenings and grits generated from the EPP is suggested to be disposed of at the NENT or WENT Landfill whereas the dewatered sludge generated from the EPP is suggested to be treated at the STF. The screenings, grits and dewatered sludge will be delivered by road transport in water tight containers or skips to avoid odour emission during transportation. Unloading process will be operated in the designated room inside STF which should be enclosed and served by negative pressure by extracting odorous gas to deodorising unit.</li> </ul> <p>Land Contamination</p> <ul style="list-style-type: none"> <li>Potentially contaminated sites were identified in area allocated for San Tin / Lok Ma Chau Effluent Polishing Plant in this EIA Study. Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling</li> </ul>

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				<p>and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.</p> <ul style="list-style-type: none"> <li>• For sites requiring further appraisal and non-contaminated sites identified in this EIA Study, after the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant for site re-appraisal to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval.</li> <li>• Further arsenic assessment should be carried out during site formation and during construction of foundation. The Government will treat the high arsenic containing soil in the shallow region before land allocation or land lease. The treatment depth will depend on the future land use in RODP. Subsequent Developer/Works Departments will treat HAC soil in deep regions for excavations required for basements, piles and utilities.</li> </ul> <p>Ecology</p> <ul style="list-style-type: none"> <li>• Mitigation measures should be implemented to minimise the disturbance impacts (e.g. noise, glare and dust) to the adjacent habitats and their associated wildlife arising from the construction activities.</li> <li>• Greening opportunities should be explored to integrate the STLMC DN with surrounding environment and promote the overall habitat quality and ecological connection. Native tree, shrub and herb species should be considered as far as possible, with consideration of market availability, for landscape planting and buffer planting in the Project area and Project boundary. Furthermore, native host plants and nectar plants should preferentially be considered in the planting plan to provide a butterfly-friendly environment.</li> </ul> <p>Cultural Heritage</p> <ul style="list-style-type: none"> <li>• Preservation by record must be carried out before the demolition of Tin Tak Heroes Temple. A comprehensive record through 3D scanning, video recording and cartographic and photographic recording should be conducted by the project proponent of subsequent developer(s) prior to any construction works. A copy of these records should be provided to Antiquities and Monuments Office (AMO) for record purpose and future use, such as research, exhibition and educational programmes.</li> </ul>

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				<ul style="list-style-type: none"> <li>• Further archaeological survey at later stages after land resumption but before site formation works is recommended for Mai Po ASA. The survey shall be conducted by an archaeologist who must obtain a <i>Licence to Excavate and Search for Antiquities</i> from the Antiquities Authority prior the commencement of the fieldworks. The scope, methodology and programme of the archaeological survey shall be agreed with AMO.</li> <li>• Archaeological Watching Brief is recommended to be carried out in Mai Po Lung (South) ASA should works involve soil disturbance occurred (such as site formation) during the construction phase. The project proponent or future subsequent developer(s) should employ an archaeologist who must obtain a <i>Licence to Excavate and Search for Antiquities</i> from the Antiquities Authority prior the commencement of the fieldworks. The scope, methodology and programme of the archaeological survey shall be agreed with AMO.</li> <li>• If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.</li> </ul> <p>Landscape and Visual Impact</p> <ul style="list-style-type: none"> <li>• During construction phase, mitigation measures recommended include preservation of existing vegetation, transplantation of existing trees, reinstatement of temporarily disturbed landscape areas, minimise disturbance on watercourses, minimise topographical changes, management of construction activities and facilities, control of night-time lighting, construction of decorative hoarding around construction works, and advance planting of screen planting.</li> <li>• During operation phase, mitigation measures recommended include sensitive and aesthetically pleasing design of aboveground structures, landscape integration of built development, provision of roadside planting/ amenity planting/ peripheral screening or planting, provision of new tree planting, incorporation of green roof, control of night-time lighting glare, maximise greening on engineering structures and surfaces, and sensitive layout design of above-ground structures.</li> </ul> <p>EM&amp;A Requirements</p> <ul style="list-style-type: none"> <li>• EM&amp;A personnel (including Environmental Team (ET) and Independent Environmental Checker (IEC)) shall be employed before commencement of construction of the project and EM&amp;A Manual shall be updated to include the latest EM&amp;A requirements in accordance with the information and recommendations in the EM&amp;A Manual and by taking into account any specific site conditions.</li> </ul>

**Table C Project Scope and Key Mitigation Measures for DP3**

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
San Tin / Lok Ma Chau Water Reclamation Plant	A facility for generating, from sewage effluent treated by a sewage treatment plant, reclaimed water for use by the general public	The location of the Project is shown in <b>Figure C</b> .	A new effluent reuse facilities and reuse of treated sewage effluent for non-portable purposes	<p>Air Quality</p> <ul style="list-style-type: none"> <li>Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimise construction dust impact.</li> </ul> <p>Noise Impact</p> <ul style="list-style-type: none"> <li>The use of QPME associated with the construction works is prescribed in EPD's QPME database, which contains the sound power levels (SWLs) for quality/quiet PME of various types, brands and models.</li> </ul> <p>Water Quality</p> <ul style="list-style-type: none"> <li>Surface run-off from construction site should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.</li> <li>Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm.</li> <li>There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.</li> <li>The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works"</li> </ul>

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				<p>should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.</p> <ul style="list-style-type: none"> <li>• Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from neighbouring waters.</li> <li>• The site practices outlined in the ProPECC PN 2/23 “Construction Site Drainage” and ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should be adopted for the proposed demolition or diversion of watercourses where applicable.</li> </ul> <p>Waste Management</p> <ul style="list-style-type: none"> <li>• Preparation of a Waste Management Plan in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.</li> <li>• Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>• Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away.</li> <li>• Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets.</li> <li>• In order to monitor the disposal of C&amp;D materials at the designated public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should also be installed at the vehicular entrance and exit of the site to monitor handling of C&amp;D materials disposal. To prohibit illegal dumping and landfilling of C&amp;D materials, the dump trucks engaged on site should be equipped with GPS or equivalent automatic system for real time tracking and monitoring of their travel routings, parking locations and disposal activities.</li> </ul> <p>Land Contamination</p> <ul style="list-style-type: none"> <li>• Potentially contaminated sites were identified in area allocated for San Tin / Lok Ma Chau Water Reclamation Plant in this EIA Study. Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.</p> <ul style="list-style-type: none"> <li>For sites requiring further appraisal and non-contaminated sites identified in this EIA Study, after the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant for site re-appraisal to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval.</li> <li>Further arsenic assessment should be carried out during site formation and during construction of foundation. The Government will treat the high arsenic containing soil in the shallow region before land allocation or land lease. The treatment depth will depend on the future land use in RODP. Subsequent Developer/Works Departments will treat HAC soil in deep regions for excavations required for basements, piles and utilities.</li> </ul> <p>Ecology</p> <ul style="list-style-type: none"> <li>Mitigation measures should be implemented to minimise the disturbance impacts (e.g. noise, glare and dust) to the adjacent habitats and their associated wildlife arising from the construction activities.</li> <li>Greening opportunities should be explored to integrate the STLMC DN with surrounding environment and promote the overall habitat quality and ecological connection. Native tree, shrub and herb species should be considered as far as possible, with consideration of market availability, for landscape planting and buffer planting in the Project area and Project boundary. Furthermore, native host plants and nectar plants should preferentially be considered in the planting plan to provide a butterfly-friendly environment.</li> </ul> <p>Cultural Heritage</p> <ul style="list-style-type: none"> <li>If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.</li> </ul> <p>Landscape and Visual Impact</p> <ul style="list-style-type: none"> <li>During construction phase, mitigation measures recommended include preservation of existing vegetation, transplantation of existing trees, reinstatement of temporarily disturbed landscape areas,</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>minimise disturbance on watercourses, minimise topographical changes, management of construction activities and facilities, control of night-time lighting, construction of decorative hoarding around construction works, and advance planting of screen planting.</p> <ul style="list-style-type: none"> <li>During operation phase, mitigation measures recommended include sensitive and aesthetically pleasing design of aboveground structures, landscape integration of built development, provision of roadside planting/ amenity planting/ peripheral screening or planting, provision of new tree planting, incorporation of green roof, control of night-time lighting glare, maximise greening on engineering structures and surfaces, and sensitive layout design of above-ground structures.</li> </ul> <p>EM&amp;A Requirements</p> <ul style="list-style-type: none"> <li>EM&amp;A personnel (including Environmental Team (ET) and Independent Environmental Checker (IEC)) shall be employed before commencement of construction of the project and EM&amp;A Manual shall be updated to include the latest EM&amp;A requirements in accordance with the information and recommendations in the EM&amp;A Manual and by taking into account any specific site conditions.</li> </ul>

**Table D Project Scope and Key Mitigation Measures for DP6**

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
Revitalisation works for San Tin Eastern Main Drainage Channel	A drainage channel or river training and diversion works located less than 300 m from the nearest boundary of an existing or planned conservation area	The location of the Project is shown in <b>Figure D</b> .	Revitalisation works for San Tin Eastern Main Drainage Channel: <ul style="list-style-type: none"> <li>- Naturalisation of channel bank;</li> <li>- Replacing concrete bank with sloped green edge, gabion wall design;</li> <li>- Planting with native vegetation</li> </ul>	Air Quality <ul style="list-style-type: none"> <li>• Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimise construction dust impact.</li> </ul> Noise Impact <ul style="list-style-type: none"> <li>• The use of QPME associated with the construction works is prescribed in EPD's QPME database, which contains the sound power levels (SWLs) for quality/quiet PME of various types, brands and models.</li> <li>• A construction noise management plan to clearly list out the mitigation measures to be implemented to minimize construction noise shall be included in the tender document and sent to EPD.</li> </ul> Water Quality <ul style="list-style-type: none"> <li>• Construction works at the existing ponds / wet areas should be conducted only after dewatering of these ponds / wet areas is fully completed. The drained water generated from the dewatering of these ponds / wet areas to be removed should be temporarily stored in appropriate storage tanks or containers for reuse on-site as far as possible. Any surplus drained water should be tankered away for disposal at the sewage treatment works (STW) in a controlled manner.</li> <li>• It is recommended to drain only one pond at a time to minimise the potential water quality impact. Dewatering works at ponds / wet areas should be conducted within dry season to minimise the quantity of drained water. No direct discharge of drained water to the stormwater drainage system or marine water should be allowed.</li> <li>• Surface run-off from construction site should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.</li> <li>• Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in</li> </ul>



Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm.</p> <ul style="list-style-type: none"> <li>• There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.</li> <li>• The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.</li> <li>• Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from neighbouring waters.</li> <li>• The site practices outlined in the ProPECC PN 2/23 “Construction Site Drainage” and ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should be adopted for the proposed demolition or diversion of watercourses where applicable.</li> </ul> <p>Waste Management</p> <ul style="list-style-type: none"> <li>• Preparation of a Waste Management Plan in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.</li> <li>• Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>• Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away.</li> <li>• Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets.</li> <li>• In order to monitor the disposal of C&amp;D materials at the designated public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. A recording system for the</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should also be installed at the vehicular entrance and exit of the site to monitor handling of C&amp;D materials disposal. To prohibit illegal dumping and landfilling of C&amp;D materials, the dump trucks engaged on site should be equipped with GPS or equivalent automatic system for real time tracking and monitoring of their travel routings, parking locations and disposal activities.</p> <ul style="list-style-type: none"> <li>Any floating refuse trapped within the Project area will be collected by the Contractor and disposed together with other general refuse. Apart from collecting and storing waste with good waste management practice on site to avoid having waste transported to river channels or water bodies under extreme weather conditions, the contractor should be responsible for the collection of refuse, if any, within the works area. Contractor shall collect and remove floating refuse at regular intervals on a daily basis to keep river channels or water bodies within the Project area and the neighbouring water free from rubbish during the construction phase. In case of floating refuse is identified, the floating materials should be removed and eventually stored and disposed of together with the general refuse, after separating the recyclables for recycling.</li> </ul> <p>Land Contamination</p> <ul style="list-style-type: none"> <li>A potentially contaminated site was identified in area allocated for revitalisation works for San Tin Eastern Main Drainage Channel in this EIA Study. Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.</li> <li>For sites requiring further appraisal and non-contaminated sites identified in this EIA Study, after the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant for site re-appraisal to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval.</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<ul style="list-style-type: none"> <li>• Further arsenic assessment should be carried out during site formation and during construction of foundation. The Government will treat the high arsenic containing soil in the shallow region before land allocation or land lease. The treatment depth will depend on the future land use in RODP. Subsequent Developer/Works Departments will treat HAC soil in deep regions for excavations required for basements, piles and utilities.</li> </ul> <p>Ecology</p> <ul style="list-style-type: none"> <li>• Opportunities for ecological enhancement (e.g. bioengineering, creating meanders) would be explored to improve its ecological value. Provision of natural substrate that would encourage colonisation of flora and freshwater fauna in the bottom and banks of the revitalised watercourses would be considered, subject to detailed design of the proposed revitalisation measures. Vegetation species to be planted along the riparian zone would be selected on the basis that it would benefit the wildlife recorded in the vicinity. Fauna species recorded from recent surveys and previous studies would be potentially benefit from the revitalised watercourse (e.g. foraging ground for avifauna species, drinking site for bat species, potential usage by non-flying mammal species).</li> <li>• These proposed enhancement measures would be formulated as part of the detailed design of the proposed river revitalisation, to be provided in the Design stage.</li> </ul> <p>Fisheries</p> <ul style="list-style-type: none"> <li>• During the construction stage, all ponds to be removed (including ponds partially encroached by the Project boundary) shall be isolated and not connected to any existing watercourse. The pond would then be drained before filling up these areas or before commencement of any excavation and construction works. To maintain bund stability of remaining adjacent ponds, a layer of shoring or sheet pile wall should be erected along the site boundary adjacent to fishponds. In addition, the shoring / sheet pile wall should have grouting or a grout curtain to avoid water seepage from the fishpond to the excavation area.</li> </ul> <p>Cultural Heritage</p> <ul style="list-style-type: none"> <li>• If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.</li> </ul> <p>Landscape and Visual Impact</p> <ul style="list-style-type: none"> <li>• During construction phase, mitigation measures recommended include preservation of existing vegetation, transplantation of existing trees, reinstatement of temporarily disturbed landscape areas, minimise disturbance on watercourses, minimise topographical changes, management of</li> </ul>

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				<p>construction activities and facilities, control of night-time lighting, construction of decorative hoarding around construction works, and advance planting of screen planting.</p> <ul style="list-style-type: none"> <li>• During operation phase, mitigation measures recommended include sensitive and aesthetically pleasing design of aboveground structures, landscape integration of built development, provision of roadside planting/ amenity planting/ peripheral screening or planting, provision of new tree planting, incorporation of green roof, control of night-time lighting glare, revitalisation and naturalisation of river to create a blue green network, maximise greening on engineering structures and surfaces, sensitive layout design of above-ground structures, and creation of landscape buffer.</li> <li>• For channelised watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and that the channel meets all its requirements for water flow.</li> </ul> <p>EM&amp;A Requirements</p> <ul style="list-style-type: none"> <li>• EM&amp;A personnel (including Environmental Team (ET) and Independent Environmental Checker (IEC)) shall be employed before commencement of construction of the project and EM&amp;A Manual shall be updated to include the latest EM&amp;A requirements in accordance with the information and recommendations in the EM&amp;A Manual and by taking into account any specific site conditions.</li> </ul>

**Table E Project Scope and Key Mitigation Measures for DP7**

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
San Tin/Lok Ma Chau Development Node - Recreational development within Deep Bay Buffer Zone 2	A residential or recreational development, other than New Territories exempted houses, within Deep Bay Buffer Zone 2	The location of the Project is shown in <b>Figure E</b> .	Recreational development for proposed Sites O.1.1, O.1.2, and O.1.3 (as open space) encroach into Deep Bay Buffer Zone 2	<p><b>Air Quality</b></p> <ul style="list-style-type: none"> <li>Dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimise construction dust impact.</li> </ul> <p><b>Noise Impact</b></p> <ul style="list-style-type: none"> <li>The use of QPME associated with the construction works is prescribed in EPD's QPME database, which contains the sound power levels (SWLs) for quality/quiet PME of various types, brands and models.</li> <li>A construction noise management plan to clearly list out the mitigation measures to be implemented to minimize construction noise shall be included in the tender document and sent to EPD.</li> </ul> <p><b>Water Quality</b></p> <ul style="list-style-type: none"> <li>Construction works at the existing ponds / wet areas should be conducted only after dewatering of these ponds / wet areas is fully completed. The drained water generated from the dewatering of these ponds / wet areas to be removed should be temporarily stored in appropriate storage tanks or containers for reuse on-site as far as possible. Any surplus drained water should be tankered away for disposal at the sewage treatment works (STW) in a controlled manner.</li> <li>It is recommended to drain only one pond at a time to minimise the potential water quality impact. Dewatering works at ponds / wet areas should be conducted within dry season to minimise the quantity of drained water. No direct discharge of drained water to the stormwater drainage system or marine water should be allowed.</li> <li>Surface run-off from construction site should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.</li> <li>Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces. Arrangements should always be in place in</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>such a way that adequate surface protection measures can be safely carried out well before the arrival of rainstorm.</p> <ul style="list-style-type: none"> <li>• There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.</li> <li>• The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.</li> <li>• Construction works at watercourse should be undertaken only after flow diversion or dewatering operation is fully completed to avoid water flow in the works area. Dewatering of watercourse should be performed by diverting the water flow to new or temporary drainage. Where necessary, cofferdams or similar impermeable sheet pile walls should be used to isolate the works areas from neighbouring waters.</li> <li>• The site practices outlined in the ProPECC PN 2/23 “Construction Site Drainage” and ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” should be adopted for the proposed demolition or diversion of watercourses where applicable.</li> </ul> <p>Waste Management</p> <ul style="list-style-type: none"> <li>• Preparation of a Waste Management Plan in accordance with the ETWB TCW No. 19/2005 Environmental Management on Construction Sites and submitted it to the Engineer for approval.</li> <li>• Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.</li> <li>• Stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away.</li> <li>• Waste hauler with appropriate permits should be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets.</li> <li>• In order to monitor the disposal of C&amp;D materials at the designated public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. A recording system for the</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should also be installed at the vehicular entrance and exit of the site to monitor handling of C&amp;D materials disposal. To prohibit illegal dumping and landfilling of C&amp;D materials, the dump trucks engaged on site should be equipped with GPS or equivalent automatic system for real time tracking and monitoring of their travel routings, parking locations and disposal activities.</p> <ul style="list-style-type: none"> <li>Any floating refuse trapped within the Project area will be collected by the Contractor and disposed together with other general refuse. Apart from collecting and storing waste with good waste management practice on site to avoid having waste transported to river channels or water bodies under extreme weather conditions, the contractor should be responsible for the collection of refuse, if any, within the works area. Contractor shall collect and remove floating refuse at regular intervals on a daily basis to keep river channels or water bodies within the Project area and the neighbouring water free from rubbish during the construction phase. In case of floating refuse is identified, the floating materials should be removed and eventually stored and disposed of together with the general refuse, after separating the recyclables for recycling.</li> </ul> <p>Land Contamination</p> <ul style="list-style-type: none"> <li>Potentially contaminated sites were identified in areas allocated for recreational development for proposed Sites O.1.1, O.1.2, and O.1.3 in this EIA Study. Prior to development of these sites, the Project Proponent should appoint a consultant to re-appraise these sites to update the corresponding findings and sampling and testing requirements presented in the Contamination Assessment Plan (CAP). Supplementary CAP(s), incorporating the findings of the site re-appraisal and the updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any site investigation (SI) works. SI works should then be carried out according to the supplementary CAP(s). Contamination Assessment Report (CAR(s)) and, if contaminated soil and/or groundwater identified, Remediation Action Plan (RAP(s)) should be prepared and submitted to EPD for approval.</li> <li>For sites requiring further appraisal and non-contaminated sites identified in this EIA Study, after the sites are handed over to the Project Proponent for development, the Project Proponent should appoint a consultant for site re-appraisal to assess the latest land uses and site conditions. If any of these sites are found to have potential land contamination issues, the Project Proponents appointed consultant should prepare and submit supplementary CAP(s) to EPD for approval prior to conducting any SI works. SI works should then be carried out according to the supplementary CAP(s). CAR(s) and, if contaminated soil and/or groundwater identified, RAP(s) should be prepared and submitted to EPD for approval.</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<ul style="list-style-type: none"> <li>• Further arsenic assessment should be carried out during site formation and during construction of foundation. The Government will treat the high arsenic containing soil in the shallow region before land allocation or land lease. The treatment depth will depend on the future land use in RODP. Subsequent Developer/Works Departments will treat HAC soil in deep regions for excavations required for basements, piles and utilities.</li> </ul> <p>Ecology  <u>O.1.3 (Egretry)</u></p> <ul style="list-style-type: none"> <li>• A buffer area 100 m from the footprint of MPLV Egretry should be established. Stringent seasonal control would be implemented within the buffer area, where construction activities shall be avoided during the ardeid breeding period (i.e. from March to early September). Construction activities shall be conducted from September to February in the following year. Tree crown pruning works at the egretry shall be avoided as best as possible, and where necessary, shall also be conducted and completed outside the ardeid breeding season to minimise disturbance to any breeding ardeids that may be present. Method Statement on construction activities near the egretry and necessary tree crown pruning works shall be submitted to AFCD in advance of the works.</li> <li>• Other stringent control measures shall also be implemented (e.g. establishment of hoarding and regular auditing). Aside from the construction activities, any associated temporary works areas (e.g. site office, stockpiling / material storage area, etc.) shall be strictly restricted outside the footprint of the egretry as well. Potential pruning works shall only be conducted where necessary, limited at overgrown tree branches that may affect construction activities.</li> <li>• Pre-construction surveys are necessary to confirm the latest boundary and condition of both MPLV Egretry and MPV Egretry before commencement of the construction works. Findings obtained from desktop study and the pre-construction surveys shall be presented in a Pre-construction Egretry Survey Report, with relevant mitigation measures (e.g. set-up of a 100m Buffer Area, relevant seasonal control, etc.) presented in the Report and submitted to AFCD and EPD for agreement and approval.</li> <li>• Detailed design of the Open Space O.1.3 shall incorporate enhancement features, which may include:                         <ul style="list-style-type: none"> <li>○ Preservation of trees currently within the core area of the MPLV Egretry;</li> <li>○ Incorporation of water features within the “Open Space” area, adjacent to the existing of MPLV Egretry;</li> <li>○ Planting of mature trees adjacent to the water features, with native species that are currently used as egretry substratum; and</li> </ul> </li> </ul>





Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<ul style="list-style-type: none"> <li>○ Maintaining a buffer area between the water features and the established mature trees from the adjacent land-uses.</li> <li>● The design of water features and vegetation structure shall make reference to the existing egretries occur within man-made urban parks in Hong Kong to promote the potential usage by future breeding ardeids, while the tree species to be planted at the “Open Space” shall also make reference to the tree species used as substratum at the MPLV Egret, as well as tree species commonly used by the target species at MPLV Egret (i.e. Little Egret and Chinese Pond Heron).</li> <li>● An Egret Habitat Enhancement and Management Plan including the details of design plan, site preparation works, works schedule and management plan should be prepared for approval before the commencement of construction works.</li> </ul> <p><u>O.1.1 (Night Roost)</u></p> <ul style="list-style-type: none"> <li>● Roosting opportunity shall be provided along the bank of the diverted and revitalised STWMDC, approximately 110 m east of the original night roost. The reinstated roosting area should instead include mature native tree species recorded in other night roost, including but not limited to mature Ficus spp.. The re-provision of roosting area should be completed before dry season, prior to the arrival of the overwintering birds, in order to provide suitable roosting opportunities.</li> <li>● A pre-construction survey is necessary to confirm the latest boundary and condition of the night roosts before commencement of the construction works. Findings obtained from pre-construction surveys shall be presented in a Pre-construction Night Roost Survey Report, with relevant mitigation measures (e.g. set-up of a 100m Buffer Area, relevant seasonal and timing control, etc.) presented in the Report and submitted to AFCD and EPD for agreement and approval.</li> <li>● Opportunities for ecological enhancement (e.g. bioengineering, creating meanders) would be considered to improve its ecological value. Provision of natural substrate that would encourage colonisation of flora and freshwater fauna in the bottom and banks of the watercourses would be considered, subject to detailed design during the Design stage. Vegetation species to be planted along the riparian zone would be selected on the basis that it would benefit the wildlife recorded in the vicinity. Fauna species recorded from recent surveys and previous studies (e.g. foraging ground for avifauna species, drinking site for bat species) would potentially benefit from the revitalised watercourse.</li> <li>● These proposed enhancement measures would be formulated as part of the detailed design, to be provided in the Design stage.</li> </ul> <p>Fisheries</p> <ul style="list-style-type: none"> <li>● During the construction stage, all ponds to be removed (including ponds partially encroached by the Project boundary) shall be isolated and not connected to any existing watercourse. The pond would</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				<p>then be drained before filling up these areas or before commencement of any excavation and construction works. To maintain bund stability of remaining adjacent ponds, a layer of shoring or sheet pile wall should be erected along the site boundary adjacent to fishponds. In addition, the shoring / sheet pile wall should have grouting or a grout curtain to avoid water seepage from the fishpond to the excavation area.</p> <p>Cultural Heritage</p> <ul style="list-style-type: none"> <li>If antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered, the project proponent is required to inform AMO immediately for discussion of appropriate mitigation measures to be agreed by AMO before implementation by the project proponent to the satisfaction of AMO.</li> </ul> <p>Landscape and Visual Impact</p> <ul style="list-style-type: none"> <li>During construction phase, mitigation measures recommended include preservation of existing vegetation, transplantation of existing trees, reinstatement of temporarily disturbed landscape areas, minimise disturbance on watercourses, management of construction activities and facilities, control of night-time lighting, construction of decorative hoarding around construction works, advance planting of screen planting, and creating interface between ponds, wetland and the proposed Project.</li> <li>During operation phase, mitigation measures recommended include sensitive and aesthetically pleasing design of aboveground structures, landscape integration of built development, provision of roadside planting/ amenity planting/ peripheral screening or planting, provision of new tree planting, incorporation of green roof, maximise greening on engineering structures and surfaces, control of night-time lighting glare, sensitive layout design of above-ground structures, sensitive design of landscape areas / provision of open space and creation of landscape buffer.</li> <li>For channelised watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and that the channel meets all its requirements for water flow.</li> </ul> <p>EM&amp;A Requirements</p> <ul style="list-style-type: none"> <li>EM&amp;A personnel (including Environmental Team (ET) and Independent Environmental Checker (IEC)) shall be employed before commencement of construction of the project and EM&amp;A Manual</li> </ul>

Title of Designated Project	Nature of Designated Project	Location of Designated Project	Scale and Scope of Works	Key Mitigation Measures
				shall be updated to include the latest EM&A requirements in accordance with the information and recommendations in the EM&A Manual and by taking into account any specific site conditions.



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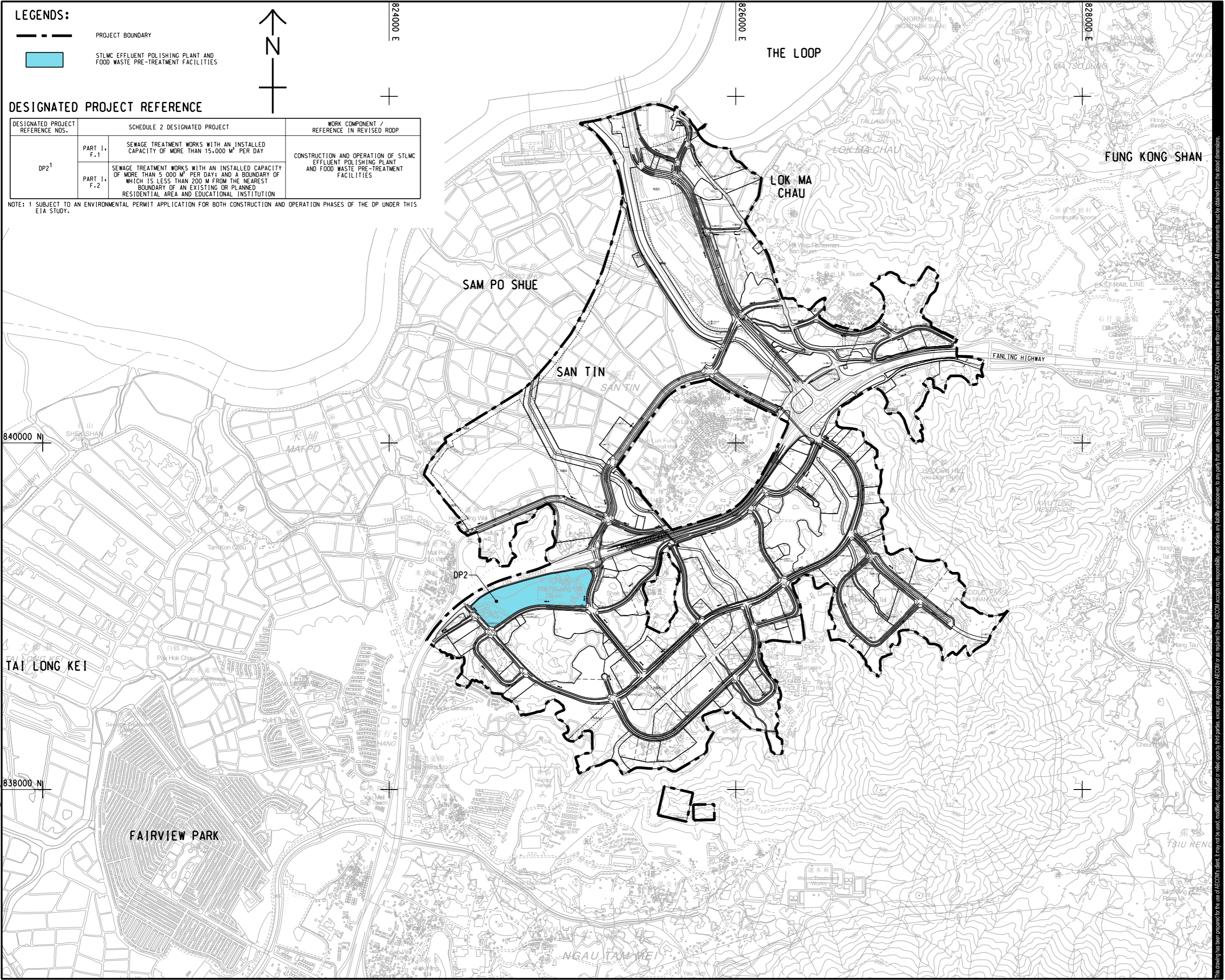
- LEGENDS:**
-  PROJECT BOUNDARY
  -  STLMC EFFLUENT POLISHING PLANT AND FOOD WASTE PRE-TREATMENT FACILITIES



**DESIGNATED PROJECT REFERENCE**

DESIGNATED PROJECT REFERENCE NOS.	SCHEDULE 2 DESIGNATED PROJECT	WORK COMPONENT / REFERENCE IN REVISED ROOP
DP2 <sup>1</sup>	PART 1, F.1 SEWAGE TREATMENT WORKS WITH AN INSTALLED CAPACITY OF MORE THAN 15,000 M <sup>3</sup> PER DAY	CONSTRUCTION AND OPERATION OF STLMC EFFLUENT POLISHING PLANT AND FOOD WASTE PRE-TREATMENT FACILITIES
	PART 1, F.2 SEWAGE TREATMENT WORKS WITH AN INSTALLED CAPACITY OF MORE THAN 5,000 M <sup>3</sup> PER DAY; AND A BOUNDARY OF WHICH IS LESS THAN 200 M FROM THE NEAREST BOUNDARY OF AN EXISTING OR PLANNED RESIDENTIAL AREA AND EDUCATIONAL INSTITUTION	

NOTE: 1 SUBJECT TO AN ENVIRONMENTAL PERMIT APPLICATION FOR BOTH CONSTRUCTION AND OPERATION PHASES OF THE DP UNDER THIS EIA STUDY.



**PROJECT**  
 項目  
**FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION**

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**ISSUE/REVISION**  
 修訂

IR	DATE	DESCRIPTION	CHK.

**STATUS**  
 階段

**SCALE**  
 比例  
 A3 1 : 20000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60670882

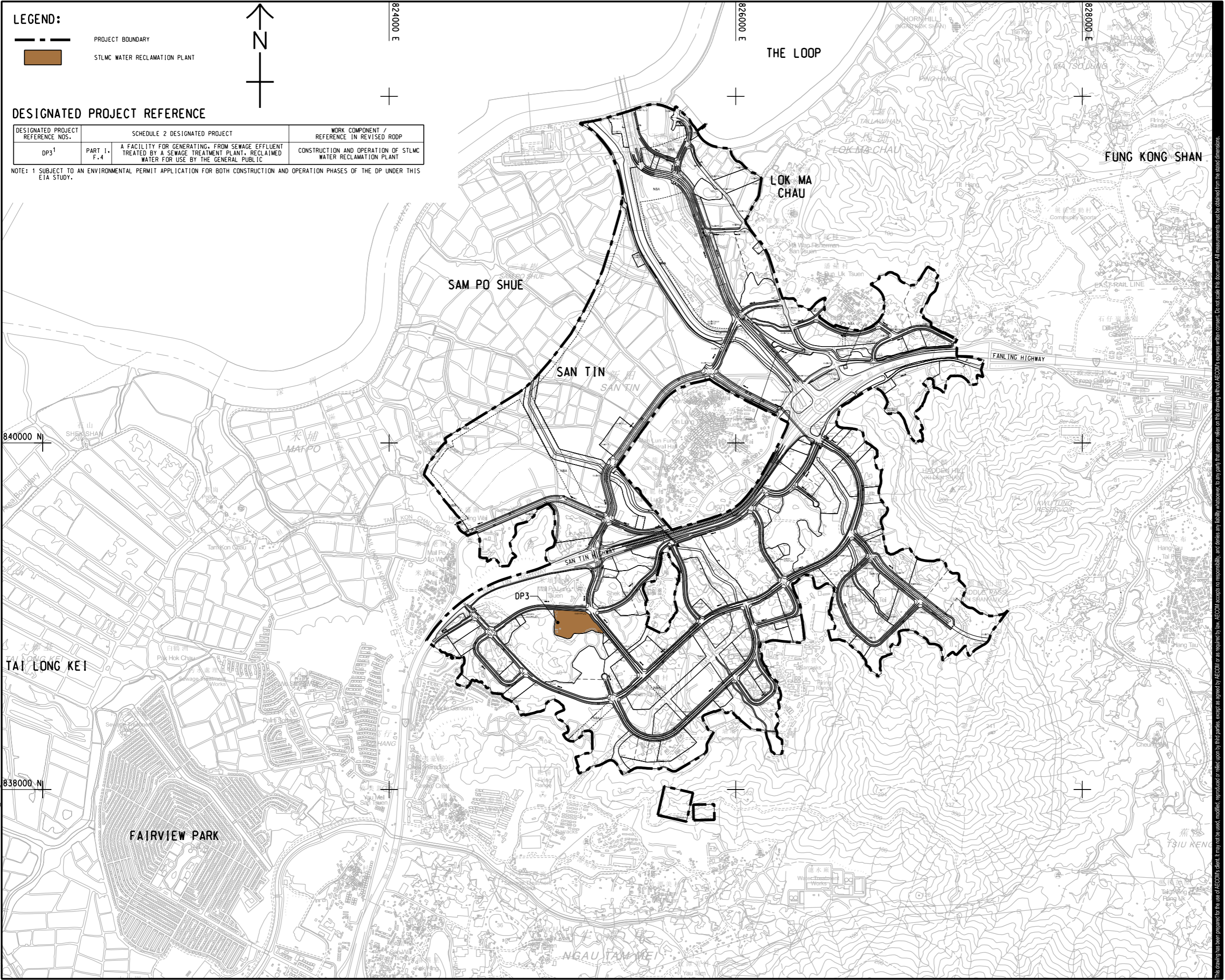
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 協議編號  
 CE 20/2021

**SHEET TITLE**  
 圖紙名稱  
 LOCATION PLAN OF DESIGNATED PROJECT 2 (DP2) - STLMC EFFLUENT POLISHING PLANT AND FOOD WASTE PRE-TREATMENT FACILITIES

**SHEET NUMBER**  
 圖紙編號  
 60670882/A34/FIGURE B

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**LEGEND:**

--- PROJECT BOUNDARY

■ STLMC WATER RECLAMATION PLANT

**DESIGNATED PROJECT REFERENCE**

DESIGNATED PROJECT REFERENCE NOS.	SCHEDULE 2 DESIGNATED PROJECT	WORK COMPONENT / REFERENCE IN REVISED ROOP
DP3 <sup>1</sup>	PART 1, F.4 A FACILITY FOR GENERATING, FROM SEWAGE EFFLUENT TREATED BY A SEWAGE TREATMENT PLANT, RECLAIMED WATER FOR USE BY THE GENERAL PUBLIC	CONSTRUCTION AND OPERATION OF STLMC WATER RECLAMATION PLANT

NOTE: 1 SUBJECT TO AN ENVIRONMENTAL PERMIT APPLICATION FOR BOTH CONSTRUCTION AND OPERATION PHASES OF THE DP UNDER THIS EIA STUDY.



**PROJECT**  
 項目  
 FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION

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 階段

**SCALE**  
 比例  
 A3 1 : 20000

**DIMENSION UNIT**  
 尺寸單位  
 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
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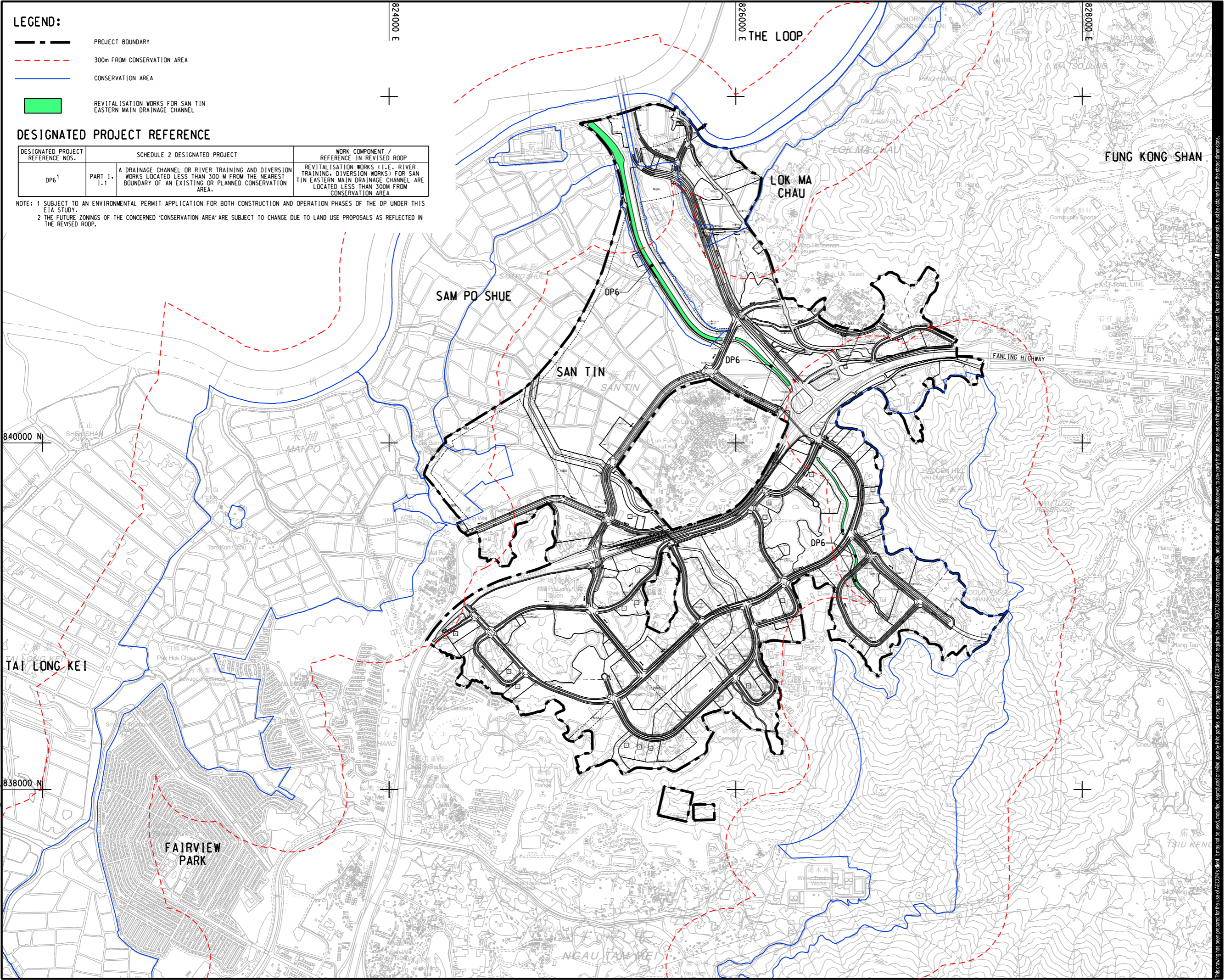
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 CE 20/2021

**SHEET TITLE**  
 圖紙名稱  
 LOCATION PLAN OF DESIGNATED PROJECT 3 (DP3) - STLMC WATER RECLAMATION PLANT

**SHEET NUMBER**  
 圖紙編號  
 60670882/A34/FIGURE C

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- LEGEND:**
- PROJECT BOUNDARY
  - 300m FROM CONSERVATION AREA
  - CONSERVATION AREA
  - REVITALISATION WORKS FOR SAN TIN EASTERN MAIN DRAINAGE CHANNEL

**DESIGNATED PROJECT REFERENCE**

DESIGNATED PROJECT REFERENCE NOS.	SCHEDULE 2 DESIGNATED PROJECT	WORK COMPONENT / REFERENCE IN REVISED RODP
DP6 <sup>1</sup>	PART 1, 1.1 A DRAINAGE CHANNEL OR RIVER TRAINING AND DIVERSION WORKS LOCATED LESS THAN 300 M FROM THE NEAREST BOUNDARY OF AN EXISTING OR PLANNED CONSERVATION AREA.	REVITALISATION WORKS (I.E. RIVER TRAINING, DIVERSION WORKS) FOR SAN TIN EASTERN MAIN DRAINAGE CHANNEL ARE LOCATED LESS THAN 300M FROM CONSERVATION AREA

NOTE: 1 SUBJECT TO AN ENVIRONMENTAL PERMIT APPLICATION FOR BOTH CONSTRUCTION AND OPERATION PHASES OF THE DP UNDER THIS EIA STUDY.  
 2 THE FUTURE ZONINGS OF THE CONCERNED 'CONSERVATION AREA' ARE SUBJECT TO CHANGE DUE TO LAND USE PROPOSALS AS REFLECTED IN THE REVISED RODP.

**AECOM**

PROJECT  
 FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION

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**KEY PLAN**

**PROJECT NO.**      **AGREEMENT NO.**

60670882      CE 20/2021

**SHEET TITLE**

LOCATION PLAN OF DESIGNATED PROJECT 6 (DP6) - REVITALISATION WORKS FOR SAN TIN EASTERN MAIN DRAINAGE CHANNEL

**SHEET NUMBER**

60670882/A34/FIGURE D

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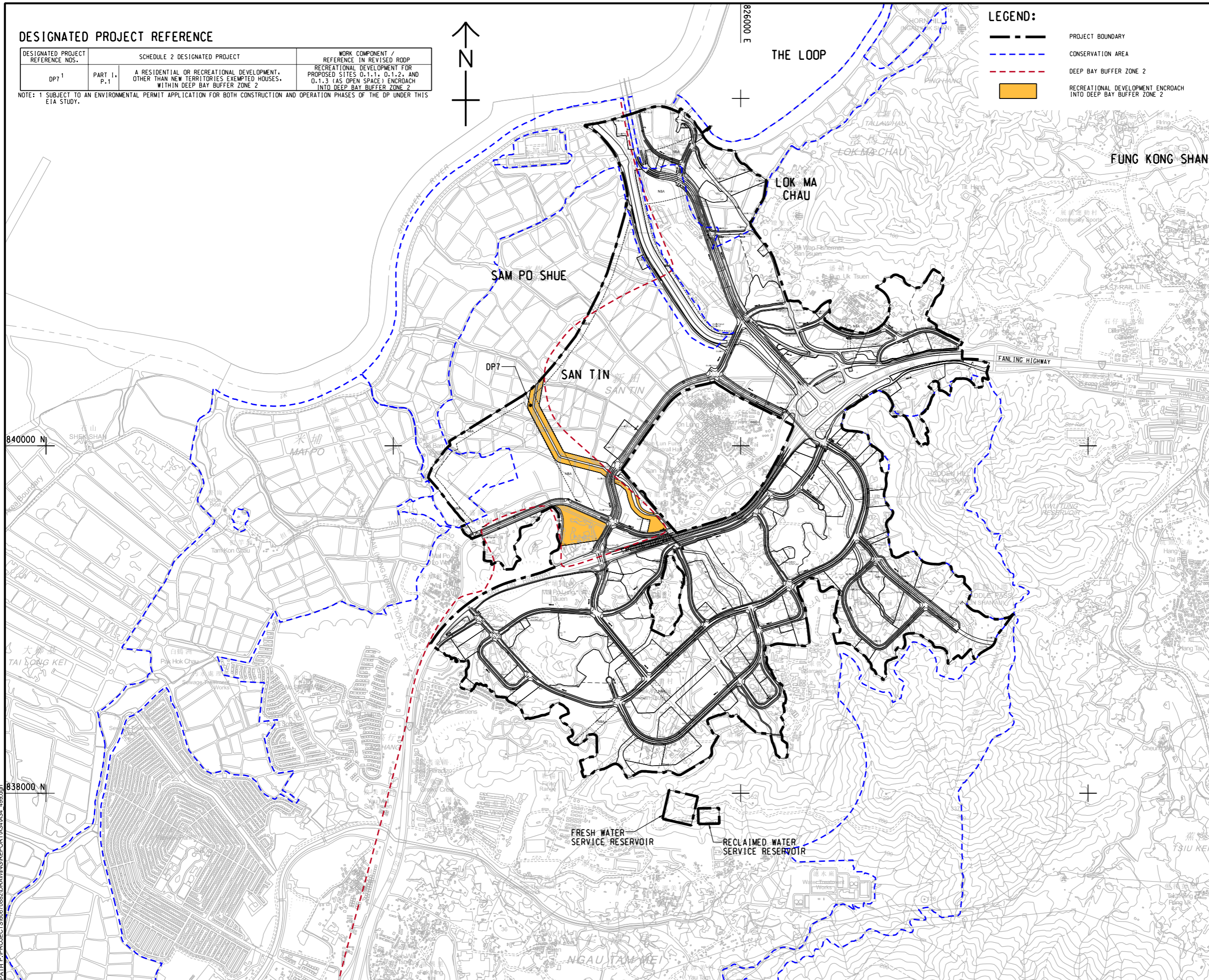
DESIGNATED PROJECT REFERENCE NOS.	SCHEDULE 2 DESIGNATED PROJECT	WORK COMPONENT / REFERENCE IN REVISED ROP
DP7 <sup>1</sup>	A RESIDENTIAL OR RECREATIONAL DEVELOPMENT, OTHER THAN NEW TERRITORIES EXEMPTED HOUSES, WITHIN DEEP BAY BUFFER ZONE 2	RECREATIONAL DEVELOPMENT FOR PROPOSED SITES O.1.1, O.1.2, AND O.1.3 (AS OPEN SPACE) ENCROACH INTO DEEP BAY BUFFER ZONE 2

NOTE: 1 SUBJECT TO AN ENVIRONMENTAL PERMIT APPLICATION FOR BOTH CONSTRUCTION AND OPERATION PHASES OF THE DP UNDER THIS EIA STUDY.



**LEGEND:**

- PROJECT BOUNDARY
- CONSERVATION AREA
- DEEP BAY BUFFER ZONE 2
- RECREATIONAL DEVELOPMENT ENCROACH INTO DEEP BAY BUFFER ZONE 2



**PROJECT**  
 FIRST PHASE DEVELOPMENT OF THE NEW TERRITORIES NORTH – SAN TIN / LOK MA CHAU DEVELOPMENT NODE – INVESTIGATION

**CLIENT**  
 土木工程拓展署  
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 規劃署  
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**KEY PLAN**

**PROJECT NO.**                      **AGREEMENT NO.**  
 60670882                      CE 20/2021

**SHEET TITLE**  
 LOCATION OF DESIGNATED PROJECT 7 (DP7) - RECREATIONAL DEVELOPMENT FOR PROPOSED SITES O.1.1, O.1.2, AND O.1.3 (AS OPEN SPACE) ENCROACH INTO DEEP BAY BUFFER ZONE 2

**SHEET NUMBER**  
 60670882/A34/FIGURE E

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