Annex E Implementation Schedule for Environmental Protection Measures

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
Constru	ction Phas	e					
1. Cultura	l Heritage						
S3.9.1 & S3.6.2	S3.2.1	In order to provide appropriate mitigation measures for historic features of the monuments, the relevant comprehensive survey, impact assessment and protection schedule will be conducted during the detailed design stage when closer access to all parts of the buildings will be made possible and when further ground investigations will have been carried out. Closer access at all levels inside and outside the buildings will clarify the condition of the fabric and features and finishes, and the further ground investigations will clarify any strengthening work required. The design and coordination of the services requirements and their integration into each building will be carried during the detailed design stage. The detailed design development of the historic buildings, with the required interventions, strengthening and integrated services for new adaptive uses, will be carried out by the conservation design team and agreed with AMO. For those historical features of significant cultural heritage value will be defined as the character defining elements of the monuments. All the character defining elements (CDE) will be well preserved in-situ and repaired in accordance with the work methodologies approved by the AMO.	To compile comprehensive data for subsequent impact assessment and design on appropriate conservation measures to be adopted	Conservation Architect	Whole Site	During detailed design	International Building Conservation Practices
S3.9.1	S3.2.2	Archival Record A detailed cartographic drawings and photographic records showing the existing condition of all the buildings and identified CDE should be conducted and submitted to the AMO before the construction stage for approval. The archival recording shall compile of a full inventory list together with the protection schedule of the historical features of the monuments, and identify the character defining elements (CDEs) of the monuments from the surveyed significant historical features. All the CDEs must be preserved, repair and maintained properly, and the inventory list shall be updated after the construction and include in the Conservation Management Plan (CMP).	To provide an archival record of the site and a detailed reference for future restoration works	Conservation Architect	Whole Site	During detailed design	
S3.9.1	S3.2.3	Repair and Restoration of Historic Buildings and Structures A restoration proposal with detailed work methodologies of the repair and conservation treatments to different kinds of historic building fabrics and historical features should be worked out by the Conservation Architect and submitted to the AMO for approval.	For statutory approval	Project Proponent and Design Team	Whole site	During detailed design	
S3.9.1	S3.2.4	Addition and alteration (A&A) Works Proposal A detailed proposal of the A&A works by means of plans, drawings, photos, specifications, method statements and/or other formats of presentation shall be submitted to the AMO during the detailed design stage for approval.	To ensure the full compliance of the conservation guidelines and approaches as mentioned in the EIA report is followed.	Project Proponent, Design Team and Contractor(s)	Whole site	During detailed design	-
S3.6.1	S3.2.5	Detailed Structural Assessment A detailed structural report will be prepared by the structural engineer during the detailed stage to evaluate if the strengthening proposal needs to be revised and determine any strengthening work is required for the floors and foundations resulting from the loadings of the new uses, or the alterations, or from the condition of the existing structures. Any structural strengthening proposals will be assessed for their impacts on historic features, particular the CDE, and mitigation measures will be considered.	To ensure that the impact to the historic fabric of the buildings is minimal due to the floor strengthening proposal	Structural Engineer of the Design Team	Whole site	During detailed design	-
S3.9.1	S3.2.6	Archaeological Investigation An archaeological investigation will be conducted to obtain field data for subsequent detailed impact assessment. The archaeological investigation will focus on areas with archaeological potential that may potentially be impacted by the Project (i.e. proposed new development that involves excavation work in archaeological potential areas) and the investigation is considered feasible to be carried out in the detailed design phase. These areas are identified on Figure 3.1.	To obtain field data for subsequent detailed impact assessment	Qualified Archaeologist employed by the Project Proponent	Area with archaeological potential	During detailed design stage	Antiquities and Monuments (AM) Ordinance (Cap. 53)

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S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	To mitigate any identified impacts on the archaeological resources	Project Proponent and Design Team	To be advised	During detailed design and construction	Antiquities and Monuments (AM) Ordinance (Cap. 53)
S3.9.1	S3.2.7	Heritage Operational Strategy and Manuals Detailed Heritage Operational Strategies and Manuals will be developed by the design team and CPS Ltd's advisors for each building and for the management and circulation of the Site (such as distribution of goods and services into and across the Site, control of visitors, etc.) for AMO's approval. To facilitate the future maintenance and repair of the built heritage in the Site at the operation stage, one set of the approved method statement of the repair works to the historic features and historic buildings together with the contact details of the respective work contractors engaged in the project shall be included in the Heritage Operational Manual as part of the heritage maintenance guidelines for the reference of site management and maintenance agents.	To manage the operation of the Site	Project Proponent	Whole site	During detailed design stage	-
S3.9.2	S3.3.1	Vibration Monitoring A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	To minimize the vibration impacts from the on-site construction activities during construction stage	AP and Design Team	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	Antiquities and Monuments (AM) Ordinance (Cap. 53)
S3.9.2	53.3.3	Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, subcontractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures. Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged should be agreed with AMO prior to work commencement. The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.	To check the compliance and effectiveness of the strategies and mitigation measures mentioned in the EIA report	ET & Project Proponent	Whole site	Prior to and during construction	Strategies and Mitigation Measures stated in the EIA Report
S3.9.3	S3.3.4	Archival Recording An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of as-built drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set	To provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments and to be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site	Project Proponent	Whole Site	During detailed design, construction and prior to operation	

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		of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.					
S3.9.3	S3.4.1	Regular audit is recommended for checking the compliance and effectiveness of the strategies and mitigation measures mentioned in Sections 3.7.4 and 3.7.5 should be conducted. The detailed proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc) and the conservation professionals to be engaged should be agreed with AMO prior to operation commencement. The management team shall ensure the audit to be carried out by an experience building conservation expert in order to investigate the site practice and work methodologies of th work contractors, the tenants and any other stakeholders of the Site with respect of conservation works, site interpretation of cultural heritage, and any related works in the operation phase. To facilitate the future maintenance and management of the monuments, one set of the approved method statement/work methodology of the repair and conservation works to the historic features of the monuments (particular the CDEs) and contract details of the respective work contractors engaged in the repair and conservation works of the Project should be included in the Heritage Operation Manual for the reference of site management and maintenance agents. An updated copy of the Heritage Operation Manual and the associated guidelines should be submitted to AMO at least one week before the opening of the Site.	To check the compliance and effectiveness of the strategies and mitigation measures mentioned in the EIA report	ET & Project Proponent	Whole site	During operation	Strategies and Mitigation Measures stated in the EIA Report
S3.7.3	-	 The general mitigation measures to be used during the detailed design phase will include: Prior identification and recording of all the significant features, finishes, fittings, structures, and contents in the existing buildings, and the site ("historic features", and assessment of their heritage significance level for shortlist of the CDE of the monuments After assessing their existing condition and vulnerability during construction, a full inventory list of historic features together with a schedule of protection works for all these identified items ("protection schedule") shall be submitted to the AMO for approval prior to the construction stage. Preparation of a detailed precautionary and monitoring measures to preserve or secure items and finishes remaining in situ during construction. Preparation of a detailed proposal of protection measures to the exteriors and interiors of the buildings to be put in place before the enabling and investigation works during design stage or before the construction operations. Ensuring the responsible contractor understands the significance and vulnerabilities of the building structures, constructions, features and finishes prior to starting the work to avoid overloading or inappropriate storage or construction activities. 	To minimize impacts on the built structures	Design Team	Whole site	During detailed design	-
S3.7.3		General Construction Methods Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing), a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the	To minimize impacts from modification/refurbishment works on the existing historic buildings and structures	Project Team and Contractor(s)	Whole site	During construction	-

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		local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure.					
\$3.7.1 & 3.7.2	-	Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose: • one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and • an updated inventory list of the historic features together with the cross referenced location plans and photo records. One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.	To implement and update the CMP for long term caring of the heritage site(s) and sustainability of the adaptive reuses	Project Proponent and AP	Whole site	During detailed design, construction, post- construction and operation	
S3.7.3	-	Passageway under A Hall and B Hall A comprehensive study will be carried out for the Ground Improvement and Excavation and Lateral Support (ELS) systems to be adopted using results from ground investigation work and trial pits to prevent damage and adverse effect to structural integrity to existing historic buildings during the course of the passageway construction under A Hall and B Hall on site. ELS design, construction sequence, method statement and monitoring proposal of the proposed passageway will be submitted to the authorities (Buildings Department, Geotechnical Engineering Office and Antiquities and Monuments Office) for approval before commencement of work on site.	To protect the existing historic buildings and structures from damage due to the passageway construction under A Hall and B Hall	Design Team	Proposed Passageway under A Hall and B Hall	During detailed design stage	Antiquities and Monuments (AM) Ordinance (Cap. 53); Building Ordinance
2. Landsca S4.7.2	pe & Visual	Detailed Design Considerations	To reduce building footprint and	Design Team	Whole site	During detailed	
		Aesthetic treatment of the proposed visible structures, including their form, textures, finishes and colours, are to be compatible with/complement structures in the vicinity of the Project Site while fitting with the revitalized CPS philosophy. Sensitive landscape treatments are to be considered within the confines of the conservation of the CPS character. The building footprint is to be reduced to the minimal practical size.	visibility of structures	Design ream	Whole site	design	-
S4.7.27	-	In-situ Tree Protection - Cordon Zone (CZ) Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.	Protect the soil and roots from disturbance and shied the tree from undesirable construction incursions	Contractor(s)	Whole site	During construction	-
S4.7.2	-	In-situ Tree Protection - Advanced & Phased Root Pruning All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter >20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig	To reduce construction activity impact and shock on the tree	Trained Arborist or Horticulturist Contractor	Whole site	During construction	-

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		that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.					
S4.7.2	-	In-situ Tree Protection - Foliage cleansing system A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the means to wash the foliage of the accumulated	To reduce damage to trees from dust accumulating on the foliage that might impair respiration and photosynthesis	Landscape Contractor	Whole site	During construction	-
		dust when necessary, particularly in the dry season.					
S4.7.2	S4	In-situ Tree Protection - Monthly inspection Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected	To ensure the trees onsite are being sufficiently protected	Trained Arborist or Horticulturist Contractor	Whole site	During construction	-
		trees, must be reported to the authorized person or the tree expert within two days.					
S4.7.2	-	<u>Light Control</u>	To minimize glare impact to adjacent VSRs.	Contractor(s)	Whole site	During construction and	-
S4.7.2	S4	Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs. Compensatory Tree Planting	To compensate for loss of trees due to	Landscape Contractor	At identified	operation	
		A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth. The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation. Pursuant to the "Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation", the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (Table 4.3), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggest	the Project		compensatory tree planting location at the Parade Ground	During detailed design and construction	

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		summer often when the tree has little or no leaves.					
S4.7.2	-	Vertical Greening Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible. As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the exiting wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.	To reduce landscape and visual impact of proposed new structures and facilities	Landscape Contractor	Inner Southern Wall	During detailed design and construction	-
S4.7.2	-	New Custom Paving New, Porous, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	To enhance the landscape and visual appearance	CPS Ltd/ Site Management Company	Whole site	During detailed design and construction	-
S4.7.2	S4	<u>In-situ Tree Protection - Quarterly inspection</u> Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	To reduce the loss of and protect existing trees	Trained Arborist or Horticulturist contractor	Whole site	During post construction and operation	-
3. Noise				•			
S5.9	-	 The following site practices should be followed during the construction of the Project: Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase; Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase; Mobile plant, if any, will be sited as far away from NSRs as possible; Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum; Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m ⁻² and have no openings or gaps.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	A Practical Guide for the Reduction of Noise from Construction Works
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-

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S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	To ensure compliance with the noise criterions at the NSRs; ensure the recommended mitigation measures are properly implemented during the construction stage	ET (monitoring; ET, IEC and Contractor for site audits	Whole Site	During construction	Environmental Impact Assessment Ordinance
4. Air Qua	ality						
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings (Old Bailey Wing and Arbuthnot Wing) will be constructed.	activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Area for Demolition Work	During construction	-
S6.8.1	-	ULSD will be used for all construction plant on-site.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on- site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	To minimize adverse dust emission generated from various construction	Contractor(s)	Whole Site	During	-

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			activities of the works sites			construction	
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	To minimize adverse dust emission generated from various construction activities of the works sites; to ensure appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period	Environmental Team (ET) & Independent Environmental Checker (IEC), Contractor	Whole Site	During construction	Environmental Impact Assessment Ordinance
5. Water (Quality					1	
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in <i>Appendix A1</i> of <i>ProPECC PN 1/94</i> . All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	To control site runoff and drainage; prevent high sediment loading	Contractor(s)	Whole Site	During construction	ProPECC PN 1/94 TM standard under the WPCO
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	To control site runoff and drainage; prevent high sediment loading	Contractor(s)	Whole Site	During construction	-
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN 1/94</i> . Particular attention will be paid to the control of silty surface runoff during storm events.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	ProPECC PN 1/94
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	Waste Disposal Ordinance
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	Waste Disposal Ordinance or Waste Disposal (Chemical Waste) (General) Regulation requirements
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The stomwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	To minimize water quality impacts	ET, IEC and Contractor	Whole Site	During construction	-
6. Waste M	lanagement	,			•		
S8.5	S6.3.1 & Table 6.1	General The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	To ensure the contractor(s) is qualified in waste management in accordance with the various ordinances	Contractor(s)	Whole Site	During construction	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes WBTC No 5/99, Trip-ticket System for Disposal of Construction and Demolition Material
S8.5	-	Management of Waste Disposal The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid "chit" which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	DEVB TC(W) No. 6/2010
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated/recycled and disposed of will be established during the construction phase.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	-
S8.5	S6.3	Reduction of Construction Waste Generation C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	To reduce the quantity of construction wastes; to minimize impacts resulting from C&D material	Contractor(s)	Whole Site	During construction	-
S8.5	S6	Chemical Waste The contractor will register as a chemical waste producer with the EPD.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation
S8.5	S6	 Containers used for storage of chemical waste shall: Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule</i> 2 of the <i>Regulations</i>. 	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	Storage areas for chemical waste shall: • Be clearly labelled and used solely for the storage of chemical waste; • Be enclosed on at least 3 sides; • Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal; to ensure proper chemical waste	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		 the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; Have adequate ventilation; Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and Be arranged so that incompatible materials are appropriately separated. 	management				and Storage of Chemical Wastes
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	To ensure chemical waste are collected by a qualified contractor properly	Contractor(s)	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	6.1	General Refuse General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	To minimize impacts resulting from collection and transportation of general refuse for off-site disposal	Contractor(s)	Whole site	During construction	-
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	To facilitate recycling on site	Contractor(s)	Whole site	During construction and operation	-
S8.5	S6	Staff Training At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	To ensure waste management practices are carried out by the site staff properly		Whole site	Commence-ment of construction	-
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	To ensure wastes are being managed in accordance with the recommended good construction site practices	ET, IEC and Contactor	Whole site	During construction	-
Operation 1							
S3.7.4	l Heritage	Establishment of the Heritage Operational Strategy and Manual with plans and guidelines on maintenance, visitors control, future operators/users, further development or alternation and risk management. The CPS Ltd. Shall be assisted by the competent person(s) in the conservation management and the related field. The Heritage Operational Manual shall also include a chart showing the organisation and structure of the CPS Ltd as well as the role and responsibilities of each member in respect of conservation management. The Heritage Operation Strategy and Manual shall be submitted to AMO for Approval before the operation stage of the Project	To develop appropriate operational policies, an appropriate operational management team, appropriate guidelines and manuals for user, and provide adequate resources during the operational stage for the Site	Design Team and the CPS Ltd	Whole site	Prior operation	-
S3.7.5	-	Establishment of the Interpretation Strategies and Plan. A detailed interpretation plan shall be submitted to the AMO for approval prior to the construction of the facilities related to the site interpretation. (e.g. directional signs, display areas and visitor centre).	To outline initial interpretive strategies to communicate a sense of value to users and inspire them to become actively involved in the process	Design Team and the CPS Ltd	Whole site	Prior operation	-
3.9.2	S7.4	Regular audit during Project operation is recommended for checking the compliance and effectiveness of the mitigation measures recommended in Sections 3.7.4 and 3.7.5 of the EIA Report. The detailed proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged shall be agreed with AMO prior to operation commencement.	To check the compliance and effectiveness of the mitigation measures recommended before and during operation stage	The CPS Ltd	Whole site	Prior to and during operation	Sections 3.7.4 and 3.7.5 of the EIA Report

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
2. Landsca	pe & Visual		·	-	1		
S4.7.2	S8.2	In-situ Tree Protection - Quarterly inspection Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 - Tree Group Inspection Form and Form 2 - Tree Risk Assessment Form developed by Development Bureau (http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	To reduce the loss of and protect existing trees	Trained Arborist or Horticulturist contractor	Whole site	During post construction and operation	-
S4.7.2	S8.3	Soft Landscape Maintenance After completion of the Project, the preserved, newly planted trees and other vegetation onsite will be maintained on a long term basis by a professional horticultural contractor.	To minimize landscape and visual impact during operation stage	Landscaper Contractor	Whole site	During operation	-
S4.7.2	S8.3	Architectural Maintenance The retained buildings as well as the newly built structures and new paving should be maintained such as to preserve their visual amenity at a standard similar to that on Day 1 of Operation. Such hard landscape maintenance will be covered by the Conservation Management Plan and Operational Phase Manual of the Project.	To minimize landscape and visual impact during operation stage	The CPS Ltd	Whole site	During operation	-
S4.7.2	S8.3	Light Control Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs. Lighting at the two new buildings and the food and beverage/ retail users within the retained buildings will be turned to night-mode (ie dimmer) after 11pm. Only limited lighting will be on for safety/emergency purposes elsewhere in the Site.	To minimize light impact on adjacent VSRs	The CPS Ltd	Whole site	During operation	-
3. Noise							
S5.9	-	 The following site practices should be followed during the operation of the Project: Choose quieter equipment; Include noise levels specification when ordering new plant items; Locate fixed plant items or noise emission points away from the NSRs as far as practicable; Locate noisy machines in completely enclosed plant rooms or buildings with suitable and practicable noise remedies; Develop and implement a regularly scheduled plant maintenance programme so that plant items are properly operated and serviced. The programme shall be implemented by properly trained personnel. Good management practices shall be in place, including noise monitoring, setting up a complaint hotline, and distributing advance notice to nearby NSRs. Good management practices shall be implemented during both rehearsals and shows; In any event that an outdoor event is expected, the event organizer is required to undertake noise monitoring at least at one of the affected NSR. One set of Leq(30min) noise measurement before and during the event shall be taken; As a fallback option, should non-compliance of the relevant noise criteria at the NSRs be identified for the event, immediate mitigation measures (such as turning down/off of music volume) shall be implemented; and The requirements of not exceeding the total sound power level and noise monitoring for each independent event shall be specified in the event organisers' contract document. 	To minimize the fixed plant noise impact	Contractor(s) and Event Organizer(s)	Whole Site	During operation	-
4. Air Qua	lity		Im	T	1		
S6.8.2	-	The following measures will be implemented for kitchens to minimize the potential kitchen fumes or stack emissions: • Electric stoves will be used; • Electrostatic precipitators (ESP) will be installed to control the oily fume and cooking	To minimize the potential kitchen fumes or stack emissions during operation stage	The CPS Ltd	Kitchens on-site	During operation	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		odour; • Siting the kitchen exhausts away from the nearby air sensitive uses as far as practicable;; • Direct the kitchen exhausts vertically upwards; and • Provide sufficient separation distance from the nearby air sensitive uses.					
6. Waste N	1 anagement						
S8.5	S6	<u>Chemical Waste</u> The contractor will register as a chemical waste producer with the EPD.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation
S8.5	S6	 Containers used for storage of chemical waste shall: Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule 2</i> of the <i>Regulations</i>. 	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	 Storage areas for chemical waste shall: Be clearly labelled and used solely for the storage of chemical waste; Be enclosed on at least 3 sides; Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; Have adequate ventilation; Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and Be arranged so that incompatible materials are appropriately separated. 	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal; to ensure proper chemical waste management	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	To ensure chemical waste are collected by a qualified contractor properly	Contractor(s)	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	To facilitate recycling on site	Contractor(s)	Whole site	During construction and operation	-
S8.5	S6	Food and Beverage Waste Food and beverage waste will be stored in enclosed bins and disposed of at the tipping area on a daily basis to reduce odour, pest and litter impacts. Once the proposed Organic Waste Treatment Facility (OWTF) at Siu Ho Wan is available, the management office of the CPS should consider segregate the food waste from the café and restaurants and delivered to the OWTF for treatment.	To minimize impacts resulting from collection and transportation of food and beverage wastes for off-site disposal	Contractor(s)	Whole site	During operation	-