

Appendix 12

Risk Assessment Report

**(Risk of contamination to Water Gathering
Ground)**

Proposed amendment to the Approved Lam Tsuen Outline Zoning Plan (OZP) No. S/NE-LT/11 ("the OZP") to rezone the application site from "Agriculture" ("AGR") to "Government, Institution or Community (1)" ("G/IC(1)"), Multiple Lots in D.D.8 and adjoining government land, Lam Tsuen, Tai Po for a proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities (RCHD) and/or Residential Care Home for the Elderly (RCHE))

Risk Assessment Report

Departmental Comments	Response
<u>Email received on 10 Sep 2026 refers:</u> <u>WSD</u>	
1) Item 1: Based on the information available to us, I noted that EPD and DSD still had major comments on the Sewerage Impact Assessment (SIA) as at January 2026. Given that the risk assessment on the pollution effect to WGG relies upon the assumption that all foul water and effluent will be disposed of outside WGG through the proposed sewerage disposal scheme using pumps and pressurized rising mains, please provide EPD and DSD's further comments and acceptance of the SIA for consideration.	Noted. EPD and DSD's finalized comment will be provided in due course.
2) Item 2: There is insufficient information to demonstrate that the proposed tanker-away arrangement would be sufficient to prevent overflow in case of operational failure of the sewage pump. This comment is still valid.	Please refer to the additional information provided in 2.1.17 and Contingency Sewage Disposal Plan under Section 2.2.

Risk Assessment Report

(Risk of contamination to Water Gathering Ground)

Prepared by DeSPACE (International) Limited

9 October 2026

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FIGURES

Figure 1 Location Plan

Figure 2 Drainage Connection Plan (Stormwater)

Figure 3 Sewerage Connection Plan

1. INTRODUCTION

1.1 Project Background

- 1.1.1 This Risk Assessment is prepared to support two Proposed Developments located at multiple Lots in D.D.8 and adjoining Government land, Lam Tsuen, Tai Po, New Territories abutting Tai Po Shui Wo Road (hereafter referred to as the “Application Sites”). The Sites are currently zoned “Agriculture” (“AGR”) on the Approved Lam Tsuen Outline Zoning Plan (OZP) No. S/NE-LT/11. DeSPACE (International) Limited has been engaged to prepare Section 12A application(s) to the Town Planning Board (TPB) to rezone the Sites to “Government, Institution or Community (1)” (“G/IC(1)”) zone to facilitate development of ONE new residential care home for the Elderly (RCHE)/residential care home for Persons with Disabilities (RCHD) building on each of the two sites respectively (the Proposed Developments), i.e. Site to the Northeast of Tai Po Shui Wo Road and Site to the Southwest of Tai Po Shui Wo Road.
- 1.1.2 The Water Pollution Control Ordinance (WPCO, Cap 358) is applicable for the evaluation of water quality impacts arisen from this Project. Table 3 of Technical Memorandum of Standards for Effluent Discharge into Drainage and Sewerage Systems, Inland and Coastal Waters provides the standards for effluent discharged into Group A inland waters, which include the water gathering grounds (WGGs) and within the boundaries of country parks.
- 1.1.3 The Waterworks Ordinance (Cap 102) is relevant to this Project and prohibits polluting discharges in the WGGs.
- 1.1.4 The Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap 123I) reg. 47A stipulates that drains and sewers in Gathering Grounds shall be Watertight and provides the code of practice for the sanitary fitments, plumbing, drainage works and latrines to be placed within WGGs, which are controlled by the Water Supplies Department.

1.2 Structure of this Report

- 1.2.1 To evaluate the water quality impacts due to the operation of the Proposed Developments, the sources and natures of potential water pollution to be generated during operation phases have been identified. This report evaluates the potential water quality impacts and their significance. In addition, this report recommends appropriate mitigation measures to reduce any identified adverse impacts on water quality.

1.2.2 In brief, the main objectives of this study are as follows:

- To provide an overall context of the sites and the watercourses;
- To identify and evaluate the potential impact of the Proposed Developments at the operation phase and key risks associated with the WGG;
- To recommend appropriate mitigation measures for the operation phase;
- To identify and evaluate the potential impact of the Proposed Developments at the construction phase and key risks associated with the WGG;
- To recommend appropriate mitigation measures for the construction phase;

1.3 Description of the Subject Sites and Proposed Developments

1.3.1 The Application Sites is located to the northeast of Tai Po Shui Wo Road in Lam Tsuen, Tai Po and falls within the Upper Indirect WGG. It is currently a vacant land. The locational context of the Application Sites in respect of the WGG is set out at Figure 1.

1.3.2 Upper Lam Tsuen River is one of the main rivers and streams in Hong Kong situated in the Tolo Harbour Supplementary Water Control Zone under river water quality monitoring programme of the EPD with the nearest EPD Water Quality Monitoring Station (WQMS) to the Project sites being TR12C and TR12H. In 2024, Upper Lam Tsuen River achieved a 97% compliance rate in respect of water quality with reference to “River Water Quality in Hong Kong in 2024” by EPD. The Application Sites adjoins the natural stream leading to the upstream of Upper Lam Tsuen River and at about 2.8km upstream of the Tai Po Tau no.4 Raw Water Pumping Station.

1.3.3 The project sites will be developed into one residential care home for elderly (RCHE) building and one residential care home for Persons with Disabilities (RCHD) building. The development schedule of the Proposed Developments is shown in Table 1.1. The schematic drawings for both sites are provided in Appendix 3 of the respective submissions. It is anticipated that the Proposed Developments will be completed in 2030.

Table 1 Proposed Development Parameters		
	Site A - to the Southwest of Tai Po Shui Wo Road	Site to the Northeast of Tai Po Shui Wo Road
Total Site Area (about)	1,202.79 sq.m (including Government land of about 127 sq.m)	2,983 sq.m (including Government land of about 508 sq.m)
Plot Ratio	Not more than 4.0	Not more than 2.80
Total GFA (about)	Not more than 4,811 sqm	Not more than 8352 sqm
Proposed use	RCHE/D (RCHD for the current scheme)	RCHE/D (RCHE for the current scheme)
Site Coverage (about)	Not more than 80%	Not more than 40%
No. of Storeys	Not more than 9	Not more than 9
Building Height (in mPD / absolute BH)	92.55 mPD / 30.8 m	93.5 mPD / 30.8 m
No. of Beds	183 (or within a range of 150 to 210)	204 (or within a range of 150 to 210)

1.3.4 Potential sources of water pollution and water quality risks associated with of the Proposed Developments comprise:

Operation Phase:

- General Refuse from the operators and visitors
- Clinical Waste
- Surface runoff
- Horticulture
- Sewage produced by the operators and visitors
- Regular cleansing activities
- Vehicles and Oil Spillage

Construction Phase:

- Construction runoff and drainage

- General construction activities
- Oil Spillage
- Sewage effluent produced by the on-sites workers

2. RISKS ASSOCIATED WITH THE OPERATION PHASE OF THE PROPOSED DEVELOPMENTS

2.1 Evaluation of Risks (Operation Phase)

- 2.1.1 For the proposed RCHE and RCHD, the floor spaces are mainly designated for dormitory purpose situated at a height of below 24m above the ground floor. All kinds of necessary functions room will be provided with reference to the requirement of Schedule of Accommodation ("SoA") for RCHE/RCHD, including bedrooms, soil utility room, pantry, toilet, end-life care room, isolation room, nursing station with medical consultation room, dining/ multi-purpose room, dumb waiter, reception, small activity room, interview/ meeting/ family room and rehabilitation room & store, etc. Passive recreational activities will mainly be provided inside the RCHE/D buildings. During the operation phase of the Proposed Developments. There will be a total of about 550 occupants within the sites, including 450 residents and 100 staffs/ workers at one time. Only visitors with prior booking are allowed to enter the sites.
- 2.1.2 To reduce pollution risks to the Upper Lam Tsuen River near the Sites, a 5m set back from the watercourse is provided in the schematic design of the Proposed Developments which is not permitted for any building development.

General Refuse from the Operator and Visitors

- 2.1.3 Small clinical waste producers General refuse will be generated from the daily living of residents in the care homes, e.g., food waste, packaging of goods, used plastic and glass bottles, bedding and blankets, etc. Considering the number of residents is low, the quantity of general waste should not be significant. According to EPD's Waste Statistic for 2024, the disposal rate of Municipal Solid Waste (MSW) was 1.4 kg/person/day. With a total no. of occupants of 500 including residents and staffs in both developments, the quantity of waste disposed of is expected to be 0.7 tonnes per day.
- 2.1.4 The Proposed Developments will be provided with refuse storage rooms will be located close to the waste collection/loading point. The refuge storage rooms will be designed to be fully enclosed and concealed at the detailed design stage, with access controls by the management office of the facilities. Solid waste should be properly kept in covered containers inside the refuge storage rooms to avoid attracting of vermin or pests. With the

proposed 5-m setback buffer retained along the Upper Lam Tsuen River and regular collection of general refuse and the measures to encourage on-sites sustainable practice, no adverse waste impacts are anticipated during operation.

- 2.1.5 The recreational activities are intended to be carried out inside the building of RCHE and RCHD. Major activities involved are passive in nature which generally only generates a small amount of wastes as compared to other types of human activities.

Clinical Wastes

- 2.1.6 Regarded as small clinical waste producers, RCHE and RCHD in their operation will generate limited amount of clinical wastes such as needles and sharps. The disposal of clinical waste includes the process of packaging, labeling, storage, collection and transportation. Similar to general refuse, the storage and collection areas will be designed to be fully enclosed and concealed at the detailed design stage, with access control by the management office of the facilities. Controlled under Section 35 of the Waste Disposal Ordinance and Waste Disposal (Chemical Waste) (General) Regulation, the Operator of the care homes will be required to manage the clinical waste in accordance with the Code of Practice for the Management of Clinical Waste – Small Clinical Waste Producers and submit the “Clinical Waste Producer Premises Code Request Form” for clinical waste disposals.
- 2.1.7 For the proposed RCHE and RCHD, it is estimated that about 2-4 kg of clinical waste are produced per month with reference to practice of relevant licensed contractors in similar cases, which will be collected and disposed of monthly to specialist disposal facilities outside the WGG. With the majority of medical operations of elderly and PWD residents being served off site at medical institutions, the clinical activities within RCHE and RCHD are typically basic and essential, and hence generate limited amount of wastes as compared to other types of institutions.
- 2.1.8 According to the Code of Practice, clinical wastes should be segregated from other wastes and a range of safety procedures shall be complied with. For instance, used needles and sharps are classified as Group 1 clinical waste and should be stored safely in sharps box, before transferring to a disposal sites. Colour of the sharps box should be either in yellow or a combination of yellow and white and sealed with proprietary closure. A waste producer shall not remove any clinical waste from his premises to another place for storage, except to a collection point. Storage area for clinical waste should be designed to prevent unauthorized access and to maintain proper sanitary conditions free of pests and vermin. The care home operators shall engage the service of licensed collectors to collect and transport clinical waste to the Chemical Waste Treatment Centre for proper disposal. The care home operator must also keep all the records of the clinical waste consigned to a

licensed collector or delivered to a collection point or licensed disposal facility. A detailed Clinical Waste Disposal Plan is set out in Section 2.2 below.

Surface Runoff

- 2.1.9 The open area of the Proposed Developments will be mainly be used for landscaped area for passive recreational use of the residents and hard paved internal transport facilities. Apart from that, no other activities are expected to be carried out in the open area on a regular basis. Despite the passive recreational use, the actual usage by the residents is expected to be limited since the open space will not be permitted for free access that most residents are required to take turns and be accompanied for accessing any area outside the buildings of their care homes to ensure their safety. Thus, the risk of water contamination due to intended or unintended solid wastes and wind blown litters generated from recreational activities is considered small.
- 2.1.10 As compared to the current status, the increased green coverage in the open landscaped area of the Proposed Developments will effectively reduce the risk of surface runoff due to exposed soil surface.
- 2.1.11 Drainage will be provided for roads, paved areas, roofs of buildings and landscaped areas within the Sites to convey water/rainwater to the storm water drain via properly designed surface drainage collected in the proposed terminal manhole and discharged into the existing stormwater drainage system to the west of the Sites. With implementation of stormwater best management practices including provision of trapped gullies and catch-pits detailed in Section 2.2 below which is capable of screening off large substances such as fallen leaves, rubbish, suspended solid or other unwanted pollutants, risks to the water quality due to surface runoff is not anticipated.
- 2.1.12 As per the Drainage Connection Plan (Stormwater) in **Figure 2**, a drainage system has been proposed with 225-450mm U-Channels and catchpits according to the design manual to collect stormwater from the catchment area and both of the Proposed Development, which will be diverted to an existing 450 mm public U-Channel/ watercourse for discharge with sufficient traps and screening according to the stormwater best management practices as detailed in Section 2.2 “Surface Runoff” below. The proposed design is based on a 200 year return period. A Drainage Impact Assessment is conducted which justifies that the proposed U channel dimensions will have sufficient capacity to handle stormwater and will be subject to DSD’s approval. Comments of DSD will be sought on the drainage proposal at the planning, detailed design and implementation stages. Upon completion of the drainage and sewerage connection, an on-site technical audit will be carried out by

DSD. The project proponent is required submit the application for technical audit (Form HBPI), the approved sewerage drainage plan and the technical audit fee to DSD at least 2 weeks before the technical audit. Activities and facilities that will be surrounded by drainage in the Site include open-air internal transport facilities, passive open space and the RCHE/D building structures. Detailed mitigation and preventive measures in respect of surface runoff and oil spillage to the drainage system are detailed in Section below.

- 2.1.13 The design of sites drainage generated within the Proposed Developments shall follow ProPECC Note PN 1/23 which provides guidelines and practices for handling, treatment, and disposal of various effluent discharges to stormwater drains. Drainage plans submitted to the Building Authority will referred to the Environmental Protection Department (EPD) for comment. All discharges during the operation phase of the Proposed Developments are required to comply with the Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) issued under Section 21 of the Water Pollution Control Ordinance (WPCO). The TM-DSS defines acceptable discharge limits to different types of receiving waters. Under the TM-DSS, effluents discharged into the drainage and sewerage systems, inland and coastal waters of the Water Control Zones (WCZs) are subject to pollutant concentration standards for specified discharge volumes. These are defined by the Environmental Protection Department (EPD) and are specified in licence conditions for any new discharge within a WCZ. Therefore, no adverse water quality impact from sewage generation of the Proposed Developments is anticipated.

Sewage Disposal

- 2.1.14 Sewage from the residents as well as staff and visitors will be generated from bathing and showers, toilet flushing, pantry, toilet basins, etc. A nearby existing public sewer is available for the project area. Sewerage connection works are proposed to connect the subject Sites to the Trunk Sewerage System on Lam Kam Road for the sewerage discharge of the Proposed Developments, for which comments from DSD will be sought on the proposal at the planning, detailed design and implementation stages (see **Figure 3**). As such, there will be no discharge of effluent or foul water into adjoining land, storm water drain, channel, stream or river course. All foul water or effluent will be disposed of outside WGG. There will be no use of septic tank and soakaway pit system for the Proposed Developments. A Sewerage Impact Assessment (SIA) has been conducted which concludes that the technical feasibility of the sewerage disposal proposal is confirmed. The SIA will be subject to approval by DSD.
- 2.1.15 Activities and facilities in RCHE/D that will be connected and conveyed to the public sewer and/or the internal sewage system involve:
- Toileting & incontinence care which produces blackwater containing human excreta

discharged to the sewerage system via sanitary fittings such as toilets, urinals and bidets;

- Bathing & showering which generates greywater discharged to the sewerage system via shower basins, bathtubs, and hand washbasins;
- Cleaning of floors and surfaces within the RCHE/D produces effluent with disinfectants and detergent discharged to the sewerage system via designated mop sinks and soil utility rooms inside the buildings;
- Kitchen & dining operations which generates effluent with fats, oils and food solids discharged via sinks, dishwashers, and food waste disposals, which shall be managed with grease traps.
- Laundry services for soiled linen and clothing which generates greywater via washing machines.

2.1.16 A retention chamber and a depressurizing pipe is built in in the sewerage pumping system which work together to manage internal pressure before discharging to the public Trunk Sewerage System. The depressurizing pipe safely diverts excess fluid away from high-pressure zones to the retention chamber. The system effectively minimizes physical stress on the infrastructure preventing leakage and bursts.

2.1.17 Subject to detailed design, both development sites will be provided with a sewage pump room for discharging effluent to the existing public sewer and tanker-away would be deployed in case of operational failure of the sewage pump. With sufficient holding capacity buffer of the sewerage system and implementation of taking away services as outline in the Contingency Sewage Disposal Plan under Section 2.2, both calculated based on the sewerage generation in the SIA, the risk of overflowing in case of operational failure of the sewage pump is duly eliminated. Effective measures are set out in Section 2.2 below to prevent leakage and spillage of sewage during desludging, pumping, transferring and handling.

Horticulture

2.1.18 Echoing with the surrounding “AGR” zone while encouraging active aging by promoting participation in gardening and farming beneficial for physical and mental health, farming experience will be integrated in the Proposed Developments where elderly residents can grow their own crops and manage their own gardens.

2.1.19 Any cultivation activities in the Proposed Development will be chemical-free and controlled-environment agriculture and container farming/gardening. Since the main purpose of the small-scale agricultural use is not commercial but rehabilitation, fertilizers, pesticides, pest control, toxicants, flammable solvents, laticidal oil, rodenticide and

petroleum oil are not used. Farming, greenhouse and associated activities have been located away from any water courses as far as possible. In addition, the farming structures will be specifically designed suit the mobility of the elderly residents and in the form of greenhouses and within contained water-tight and properly maintained man-made structures, instead of directly growing from the ground soil. Direct contact with the soil ground and associated contamination to the WGG will be avoided. Signage for alerting not to pollute WGG should be displayed. Drainage of the farming structures will ensure seamless connection to the drainage system of the Proposed Developments equipped with sand traps.

- 2.1.20 Detailed waste disposal measures for horticulture are set out in Section 2.2 below to ensure that all wastes is completely contained and recycled within man-made structures without any discharge into the surrounding environment, maintaining a strict closed-loop system.

Vehicles and Oil Spillage

- 2.1.21 Oil leakage and spillage are not allowed within WGG. However, oil leakage or spillage may occasionally occur when a car has a worn engine gaskets or oil drain plugs. Within the Sites, the areas covered by grass/ lawn will be permeable to oil and grease while the hard paved internal road and parking area will be impermeable. Therefore, the proposed vehicle parking area shall be surrounded by kerbs and drains and all accidental spill of oil/ grease will be contained within the hard-paved area or properly drained with pollution preventive measures without going to the permeable surfaces. Licensed contractors will be employed for emptying these grease traps for disposal is outside the WGG. The Government has commissioned a Grease Trap Waste Treatment Facility (GTWTF) housed within the West Kowloon Transfer Station and has been receiving GTW since 2009. The risk to the WGG due to oil leakage and spillage from vehicles will be minimal.

Regular Cleaning of the Facilities

- 2.1.22 Regular cleaning and sweeping open paved area of the sites during operational phase. Solvents such as detergents and disinfectants are not uncommon for environmental sanitation and are expected to be used for various types of cleansing of the proposed RCHE and RCHDs. The spent solvents from cleaning activities (i.e. greywater) which poses risk of contamination to WGG shall be treated with care.
- 2.1.23 During the operation of the proposed RCHE and RCHD, all greywater generated from interior cleansing will be contained inside the building properly and dispose the wastewater through the internal sewerage system and conveyed to the public sewerage system, such that no greywater will be discharged to the storm water system and no

surface runoff will be resulted. Practice set out in Section 2.2 below can ensure that the risk of spillage of wastewater and chemicals arisen from the indoor cleaning and disinfecting activities to the outdoor environment and to WGG is minimized.

- 2.1.24 For any outdoor cleansing including the cleaning of the external walls and windows of the buildings, the cleansing agents used should be restricted to water only. With the proposed 5-m setback buffer retained along the Upper Lam Tsuen River and no chemical agents used outdoor, the risk of chemical spills to the soil and the stormwater system will be minimized.

2.2 Mitigation Measures (Operation Phase)

- 2.2.1 The Applicant/ the future land owner shall not permit any untreated sewage, waste water or effluent containing sand, cement, silt or any other suspended or dissolved material to flow from the Premises onto any adjoining land or allow any waste matter to be deposited anywhere within the Sites.
- 2.2.2 The Proposed Developments will necessitate a Land Exchange application with the Lands Department (LandsD) and building plan submissions at the post-planning approval stage, and upholding a set of management house rules for RCHE and RCHD, by which mitigation measures against the contamination to WGG can be incorporated and implemented through the conditions, relevant departmental comments and approvals as required can be sought.

General Refuse from the Operator and Visitors

- a) Locate refuse storage rooms close to the waste collection/loading point which shall be fully enclosed and concealed, with access controls by the management office of the facilities
- b) Arrange licensed contractors to properly dispose all general refuse outside WGG collected from the sites waste collection/loading point
- c) Provide fencing at the sites boundary to trap all wind blown litters within the sites
- d) Provide recycling containers at suitable locations in future building management to encourage the recycling of general refuses, thereby minimizing the risk of solid wastes
- e) Display signage for alerting not to pollute WGG at appropriate locations within the Proposed Developments.

Clinical Waste Disposal Plan

- a) The Clinical Waste Disposal Plan shall in all respect comply with the Code of Practice for the Management of Clinical Waste;
- b) Classify clinical waste types generated at the point of arising (e.g. sharps and pharmaceutical waste) including the waste sources within the care homes, (eg. nursing station and bedrooms), as well as the collection dates;
- c) The biological hazard symbol must be printed on bags used to collect infectious or other

hazardous wastes;

- d) Ensure clinical waste containers (eg. sharp boxes) are leak-proof, shatter-proof, puncture-resistant, impermeable, impervious to moisture, resistant to perforation, labeled clearly, and sealed off at all times before leaving the premises; Sharps containers shall be properly sealed by the proprietary closure/tape. Plastic bags shall be sealed by tying the neck securely to prevent spillage. If the clinical waste contains liquids, thermal sealing of the plastic bags shall be used to prevent spillage;
- e) Containers of clinical waste shall not be filled above the warning line indicating between 70% and 80% of their maximum volume before sealing; The packaging and sealing should be conducted with care to ensure that no clinical waste adheres to the external surface of the containers;
- f) The on-site collection point / storeroom for clinical waste shall be located in a designated, safe and secure area away from public access and environmentally sensitive area of Lam Tsuen River, for which the authorization from EPD shall be sought; The storeroom shall be designed to prevent unauthorized access that only waste handlers shall be allowed to enter;
- g) Use color-coded bins to segregate and store different types of waste;
- h) For transporting clinical waste inside the building, good quality carts/trolleys that would provide impermeability, be resistant to perforation, and also be easy to handle and clean shall be used. The carts must be labeled with the name of the area in which they are used; The clinical waste shall be transported through pre-established routes to the collection point for storage which include specific corridors and elevators;
- i) Training shall be provided to everyone involved in the waste management process on proper waste handling and disposal procedures emphasizing the importance of compliance with the Code of Practice and the potential hazards associated with improper disposal. Staffs shall take all necessary safety measures to prevent clinical waste from entering the disposal chain of municipal solid waste and/or the surrounding environment. Regimentation and fining shall be executed to implement proper procedures;
- j) The care home operators must consign collection of clinical waste to a licensed collector(s) to collect and transport clinical waste at regular intervals to the Chemical Waste Treatment Centre located in Tsing Yi outside the Water Gathering Ground for proper disposal. Such transfer operation is governed by the terms and conditions of the waste collection licence held by the collector(s). The care home operator shall keep all the records, including dates, types, and quantities of clinical waste disposed of;
- k) Dedicated and standardized transit skips provided by the Chemical Waste Treatment Centre shall be used by the licensed collector(s) to collect clinical waste. Licensed collector(s) shall check and ensure proper packaging, sealing and labelling of the waste containers before placing them into transit skips. Each skip shall bear a unique serial number for easy identification and recording purpose. The licensed collectors should

ensure the transit skips are securely closed and fastened and properly labelled and no clinical waste shall be transferred from one transit skip to another during waste collection.

- l) Use designated vehicles for transporting clinical waste, ensuring they are lined and secure to prevent spills. Clinical waste shall not be collected or disposed of together with municipal solid waste or other types of wastes;
- m) The frequency of collection shall be agreed between the operator and licensed collector(s) with due account of the nature and quantity of clinical waste generated. Prolonged storage of clinical waste shall be avoided;
- n) The operator shall adopt the latest Clinical Waste Electronic Consignment System managed by EPD
- o) Stay informed of all regulations and guidelines and regularly review and update the plan as needed to reflect any changes.

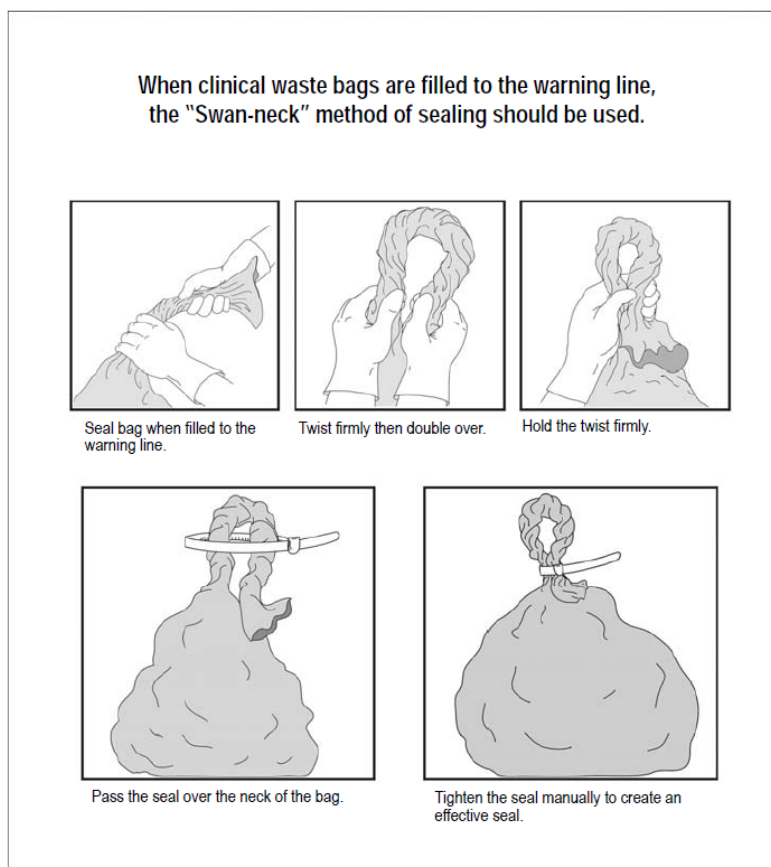


Figure 1: Sealing Method for Clinical Waste Bags.

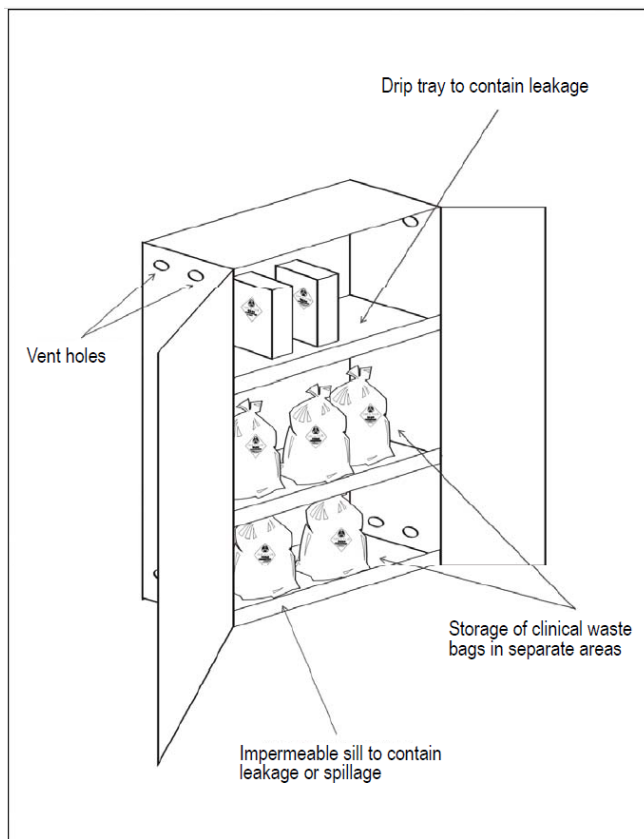


Figure 2: Schematic Drawing of a Clinical Waste Storage Cupboard.

Surface Runoff

- a) Maintain a good state of cleanliness, (eg. frequent sweeping) at the outdoor areas of the Proposed Developments by the management office;
- b) Provide a 5m set back from the watercourse in the schematic design of the Proposed Developments;
- c) Design and install on-sites drainage system with gullies, manholes, silt traps and oil interceptors with at appropriate spacing and at the inlet of public drainage system, and sufficient capacities, to completely capture and contain all substances from surface runoff within the Sites;
- d) Submit all sites formation plans and drainage plans to the Director of Water Supplies for approval at the detailed design stage prior to the commencement of the works.
- e) Ensure proper maintenance and sufficient capacity of the drainage traps
- f) Maintain proper maintenance and disposal records of the drainage traps.

Horticulture

- a) Strictly prohibit the use and storage of pesticides, herbicides, toxicants, chemical solvents, larvicidal oil, rodenticide, tar and petroleum oil;
- b) Strictly prohibit the use and storage of no chemicals including fertilizers and detergents;
- c) Farming, greenhouse and associated activities shall be located away from any water courses as far as possible;
- d) All farming structures shall be water-tight and properly maintained;

- e) Signage for alerting not to pollute WGG should be displayed.
- f) Categorize agricultural wastes into managed streams of plant-based organic waste (pruned leaves, culled plants, and crop residues) and (ii) solid wastes such as containers and growing media eg. pebbles. All agricultural wastes must be stored inside completely sealed, heavy-duty containers.
- g) Inspect daily all container bases and drip trays for any physical cracks or structural wear. The lids shall be strictly sealed.

Vehicles and Related Spillage

- a) Implement control measures including not allowing oil tanker to park inside the vehicle parking spaces to avoid leakage or spillage in WGG;
- b) Strictly forbid activities with motor vehicles other than vehicle parking such as on-sites vehicle inspection, maintenance, repairing and washing activities in the Proposed Developments;
- c) Surround internal transport facilities with kerbs and drains at the detailed design stage.
- d) Design and install drainage traps such as grease traps and petrol interceptors at each of the drainage outlets with sufficient capacity to ensure the proper interception and collection of fuel and lubricants in surface run-off for off-sites disposal.
- e) The design of sites drainage generated within the Proposed Developments shall follow ProPECC Note PN 1/23;
- f) Employ relevant contractors for emptying, disposal outside of the WGG, maintenance and replacement services for grease trap/petrol interceptors installed at the drainage outlets to ensure that they function properly with sufficient capacity at all time.
- g) Maintain proper maintenance and disposal records
- h) Visible worksites map that identifies the location of oil and fuel sources should be provided on sites.
- i) Spill control products and grease decontamination kit shall be well-stocked and maintained in known locations for easy access, which shall include absorbent/spill pads, rugs, booms, oil shammy towels, underflow dams, booms and barriers.
- j) Implement an Oil Clean Up Plan with staff training to react to oil spread and spillage. Staffs should be trained for high awareness and alertness with the ability to react promptly any possible oil leakage, including to clean and contain the spill immediately before it spreads and decontaminate the oil leakage. The following actions/steps shall be carried out when spill of oil/chemicals is experienced.
 1. Stopping the spill at source - Make sure the source of the spill is isolated by closing a valve, uprighting the container.
 2. Contain the spill – Prevent it from spreading and keeping it away from drains or waterways.
 3. Putting on the personal protective equipment - oil spill kits and gloves with good grips even in slippery conditions.

4. Use specialist spill absorbents - remove all the oil from the ground, including digging up the soil where oil has penetrated the surface.
 5. Disposal of waste absorbent and any contaminated soil – disposal off the sites using sealed plastic bags carefully, which shall be conveyed to a storage tank under protection of secondary containments, collected by a licensed contractor and transported to a registered waste disposal sites in accordance with the Waste Disposal Ordinance requirements.
 6. Report of Incidents – incidents shall be reported to the Shift-in-Charge and project proponent and sites inspections shall be arranged subsequently to check on the spill spot.
 7. Restocking – to make the spill kits, PPE and specialist absorbents available for use as soon as possible.
 8. Replacement of voids - the voids arising from removal of contaminated soil shall be replaced by suitable material to the satisfaction of the Water Authority.
- k) In case of sewage pump room failure, accidental leakage shall be prevented during desludging and tanker-away services. At the sewage connection point, the pipes and connections shall be laid within inside an enclosed containment tray lined with Stainless Steel for containing any accidental leakage of wastewater. Strict management and procedural measures regarding equipment inspection and contracting of specialist tanker-away services shall be uphold by the project proponent;
 - l) In case of tanker-away services, equipment inspection shall be conducted before any tanker-away job to check for any cracks, wear, and tear.
 - m) In case of tanker-away services, the tanker contractor to be employed shall be registered under DSD's tanker registration system and hold a valid disposal permission for disposal to designated sewage treatment facilities which are required to comply with strict EPD and DSD regulations. Under the requirements, the operators of the contractor must be explicitly trained with high awareness in continuous monitoring, emergency shut-off response, chemical spill containment and safe equipment operation during desludging, pumping, and handling; Tankers and vacuum suction equipment must be leak-proof, fully vacuum-sealed, and fitted with overfill protection to prevent spillage; Tanker operators must complete standard trip-tickets for each consignment, tracking the waste from the site of production all the way to a designated government treatment facility.
 - n) For Site B where desludging will be conducted outside of the building, design measures will be incorporated to prevent overflow during the tanker-away arrangement. The suction area to be connected to the sewerage collection truck will be accommodated within an enclosed structure. (Figure 3 refers) The sewerage collection truck will tail back to the structure where the desludging will be carried out in an area separated and isolated from the open ground. For Site A where the sewerage pumping facility is inside the building, the

desludging will be fully contained inside the building. Any accidental overflow will be contained inside the building and will be cleaned via the utility services inside the building with the specified measures.

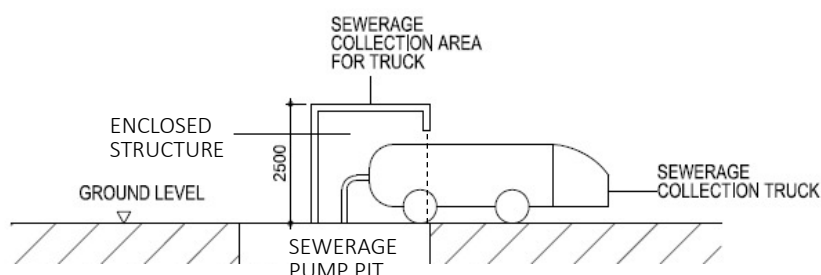


Figure 3: Design measures to prevent overflow during the tanker-away arrangement for Site B

Contingency Sewage Disposal Plan

- a) In case of sewage pump room failure, the operators shall notify E&M repair contractor with 2-hour time of arrival.

Sewerage Holding Design Capacity

Based on sewage discharge estimate in the submitted SIA, the baseline daily wastewater generation of the sites are:

Development Site	Total Estimated Dry Weather Flow (DWF)
Site A (RCHD):	79.22m ³ /day
Site B (RCHE):	115.93m ³ /day

For most common operational failures, 2 to 4 hours of repair time is usually required with swapping of components. To secure enough response time for a maintenance team to arrive and repair an on-site pump failure, a minimum 4-hour sewage retention time based on the average flow is standard practice in EIA projects. However, a 24-hour full-day capacity of holding tanks is provided on this project to ensure the risk of overflowing is eliminated in case of operational failure of the sewage pumps if parts or specialist contractors face delays.

Development Site	Recommended Resilient Buffer (24-Hour Storage)
Site A (RCHD):	≥ 79.22m ³
Site B (RCHE):	≥ 115.93m ³

- b) To further eliminate the risk of overflowing, operators will be required to maintain an active, 24/7 standing emergency agreement with the employed tanker contractor which is

registered under DSD's tanker registration system. The agreement must guarantee tankering fleet arrival on-site within 3 hours of notification; and establish round-the-clock rotations (3.5hr intervals for Site A / 2.5hr for Site B) to empty the holding tank until the sewerage pump has been repaired, tested, and returned to normal operation. The frequency of tankering away service is based upon the following calculations:

Assuming a standard commercial liquid waste tankering truck with an effective single-trip capacity of 12m³ is deployed, the required logistics frequency during a total pump shutdown scenario is outlined below:

Development Site	Daily Trips Required	Frequency:
Site A (79.22m ³ /day)	7 trips per day	1 truck every 3.5 hours over a 24-hour continuous operating window.
Site B (115.93m ³ /day)	10 trips per day	1 truck every 2.5 hours over a 24-hour continuous operating window.

Regular Cleaning of the Facilities

- a) Install thick thresholds at all doors, balconies, flat roofs and/or other engineering features around the buildings to prevent the overflow of cleansing water to the outdoor ground.
- b) Require relevant management staffs and workers to strictly follow special rules in regular cleaning of the RCHE and RCHD facilities, which shall cover, but not limited to, the followings:
 1. Use sweepers for any external building cleansing instead of water sprinkler/hose to minimize spillage of wastewater to the surrounding.
 2. Ensure a completely enclosed environment before conducting all indoor cleaning and disinfecting activities of all buildings.
 3. Conduct vaccum cleaning first to remove part of the dirt, followed by dry or damp mopping such that less wastewater would be exposed in the indoor environment.
 4. Carry a wrinker with themselves when carrying out the damp mopping
 5. Ensure all wastewater and chemicals produced are appropriately and carefully contained and discharged through the internal sewerage system.
 6. Store all chemical containers, cleaning equipment and agents properly inside a concealed store room accessible only by the management office of the facilities.

3. RISKS ASSOCIATED WITH THE CONSTRUCTION PHASE OF THE PROPOSED DEVELOPMENTS

3.1 Evaluation of Risks (Construction Phase)

- 3.1.1 The proposed construction works mainly involve excavation of soil, piling and building construction works. The proper sites practice and good sites management as specified in the “Conditions of Working within Gathering Grounds”, ProPECC PN 2/24, ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works” held by EPD and the non-statutory guidelines in the Recommendations by the Hong Kong Construction Association shall be complied with during the works stages to prevent water pollutants being caused to the adjacent water environment.

Construction runoff and drainage

- 3.1.2 Sites formation and construction works normally involve earth works, exposed soil surfaces, excavated materials, temporary stockpiles, cement materials, etc. If not adequately controlled, pollutants of soil particles, suspended solids and contaminants may be carried to the watercourse by surface runoff, rain wash, wash water from dust suppression sprays and wheel washing facilities from the construction sites. Any stormwater discharged to the Group A inland waters, including all waters in WGGs shall comply with the TM Standards.
- 3.1.3 A large part of the subject Sites is currently exposed soil surfaces. First and foremost, a drainage system shall be established to direct stormwater to sediment control / silt removal facilities, grease traps and petrol interceptors properly installed before the commencement of any sites works in accordance with ProPECC PN 2/24 “Construction Sites Drainage”, which stipulates that the construction contractor must obtain a Discharge License from EPD under WPCO prior to discharge the any construction wastewater into the drainage facility, which shall meet the requirements of the TM standards under the WPCO. Proper sites practice and good sites management as specified in the ProPECC PN 2/24 and ETWB TC (Works) No. 5/2005 shall be followed to control the release of wastewater and sites runoff with sediments into the adjacent water environment. Implementation of appropriate measures and practices can be ascertained and controlled by EPD and WSD via ProPECC PN 1/23 and “Protection of natural streams/rivers from adverse impacts arising from construction works”, which require drainage and sites formation plan for construction and operation phase to be submitted to EPD and WSD prior to commencement of works. With the implementation of mitigation measures to control runoff and drainage from the construction sites, the additional risk of unacceptable water quality impacts due to construction runoff would be minimal.

General construction activities

- 3.1.4 It is not uncommon for wastewater generation from construction activities such as wheel washing, dust suppression from excavation and piling works, concrete casting and utility installation. Solid wastes may also be produced from packaging, construction materials, debris, general refuse, felled trees, removed plant, discarded furniture, damaged scaffolding, bamboo, wood formwork, wastepaper and food debris. No canteen facilities will be provided on-sites.
- 3.1.5 The anticipated water quality impact related to general construction wastes are considered to be minimal provided that the sites boundaries are well fenced off, maintained and the waste handling and disposal practice of the construction sites are strictly controlled via project and contract management. Adoption of the guidelines and good sites practices for disposal of construction discharges as specified in below mitigation section would minimize the potential impacts. All the general refuse will be collected on-sites, separately from C&D materials by an appropriate waste collector employed by the contractor to the landfill. With the proposed 5-m setback buffer retained along the Upper Lam Tsuen River in the design schematic layout and the implementation of mitigation measures as set out in Section 3.2 below, it is anticipated that no unacceptable adverse water quality impacts would be arised from the construction works near the water bodies.

Oil Spillage

- 3.1.6 According to HKCA's Best Practice Guide for Environmental Protection on Construction Sites (2013), construction activities seldom introduce oil and grease in water. The main sources of O&G are accidental spillage of oil and fuel from storage and plant maintenance and food waste from canteens.
- 3.1.7 While Powered Mechanical Equipment such as excavator, generator and dump truck would be used during the construction phase, with respect to the scale of works, it is expected that no more than 4 numbers of small PME would be needed on sites during the construction phase of the Proposed Developments. The selection of PME will be subject to restrictions.
- 3.1.8 With the implementation of mitigation measures to control runoff and drainage from the construction sites as set out in ProPECC PN 2/24 and ETWB TC (Works) No. 5/2005 and an oil clean up plan set out in Section 3.2 below, risk of unacceptable water quality impacts due to oil spillage would be minimal.

Sewage effluent produced by the on-sites workers

- 3.1.9 Sewage effluent produced by human contains high levels of BOD5, Ammonia and E. coli counts. No public sewerage connection is available within the Proposed Developments project sites for the domestic sewage effluent. Sanitary facilities shall be available near the construction sites such that sewage effluents arising from the on-sites construction workforce will not be discharged directly into storm drains or inland waters adjacent to the construction sites. The Shui Wo Village Public Toilet is available with only a 150m walking distance from the Sites which are served by existing public sewerage system. With an accessible distance of public toilet, it is considered that on-sites temporary sanitary facilities (portable chemical toilets) are not needed to be provided to minimize on-sites contamination risk. Workers will be well informed and strictly instructed to access and utilize public toilets. Adequate temporary sanitary facilities will only be provided by the contractors for workers if the Shui Wo Village Public Toilet is closed for maintenance.
- 3.1.10 In case temporary sewage facilities such as portable chemical toilets are required to be installed on the construction sites, proper sewage tankering away services or other removal services by reputable specialist contractors will be arranged. A licensed, experienced contractor should be employed for the appropriate supply, desludging, disposal and maintenance of the facilities. No septic tank nor soakaway system will be used which may contaminate the WGG.
- 3.1.11 "Conditions for Working within WGG" shall be observed during formation of the site and Proposed Development. As there will be no discharge of untreated or treated sewage from the sites to the surrounding area, water quality impact due to sewage effluent produced by the on-sites workers is not anticipated.

3.2 Proposed Mitigation Measures (Construction Phase)

- 3.2.1 The Applicant/ the future land owner shall not permit any untreated sewage, waste water or effluent containing sand, cement, silt or any other suspended or dissolved material to flow from the Premises onto any adjoining land or allow any waste matter to be deposited anywhere within the Sites during the construction phase through project and contract management. A holistic list of good sites practice and mitigation measures is set out below, which will be documented in the future works contract binding the future contractors. Reputable and competent works contractors and consultancy teams shall be appointed to strictly implement these practice and measures.
- 3.2.2 The future works consultants and contractors shall as far as practicable comply strictly with practice, conditions and requirements where applicable to the Proposed Developments as set out in:

- ProPECC PN 2/24 “Construction Sites Drainage”
- “Conditions of Working within Gathering Grounds” maintained by EPD;
- “Recommended Pollution Control Clauses for Construction Contracts” as recommended by EPD
- ETWB TC (Works) No. 5/2005 “Protection of natural streams/rivers from adverse impacts arising from construction works”

Construction runoff and drainage

- a) Equip an internal drainage system to direct stormwater to sediment control / silt removal facilities, grease traps and petrol interceptors properly installed at each of the drainage outlets at the beginning of sites establishment before the commencement of any sites works;
- b) Inspect and clean regularly, and maintain adequately all drainage facilities, installed sediment control / silt removal facilities, grease traps and petrol interceptors to ensure they function properly at all time throughout the sites works;
- c) Provide earth bunds or waterfilled barriers with geotextile sheet along the sites boundaries to intercept surface runoff from outside the sites to trap surface runoff within the sites.
- d) Use bunds or sandbags within the sites to direct surface runoff into the silt removal facilities. Stagnant surface runoff should be pumped to the silt removal facilities before discharged into storm drains.
- e) Obtain a Discharge License from EPD under WPCO prior to discharge the any construction wastewater into the drainage facility, which shall meet the requirements of the TM standards under the WPCO;
- f) Submit sites formation plan including details of silt traps to the Water Authority for approval prior to commencement of works;
- g) Minimize excavations works during the wet season by careful programming of the works sequence;
- h) Forbid any open stockpiles of construction materials including earth, building materials, fuel, soil or toxic materials and other materials which may cause contamination to the gathering grounds;
- i) Locate any storage of construction materials away from Upper Lam Tsuen River and any water courses;
- j) Compact earthworks final surfaces and commence subsequent permanent works or surface protection right after the final surfaces are formed to prevent erosions by careful programming of the works sequence;
- k) Cover up any exposed top soils with tarpaulins or other means;
- l) Cover up any construction debris and spoil and/or disposed of off the gathering grounds as soon as possible;
- m) Check and remove deposited silt and grit regularly to prevent silting of the drainage

- system and flooding on sites before, during, and after rainstorms;
- n) Recycle wash-water and wastewater generated back for other on-sites purposes as far as practicable to minimize discharge into storm drains;
 - o) Cover and temporarily seal all manholes (including newly constructed ones) to prevent silt, construction materials or debris from getting into the drainage system;

General Construction Activities

- a) Maintained unobstructed all waterworks access roads at all times.
- b) Clean frequently any waterworks access roads and associated drainage works of mud and debris arising from the construction activities;
- c) No structure or temporary works shall be erected in the catchwaters without prior approval of the Water Authority;
- d) Shall not run any vehicles in any waterworks access roads unless with the prior approval of the Water Authority. Apply to the Water Authority for its approval with details of his vehicles for using the access. Unless otherwise approved, the gross weight of the vehicles imposed on the waterworks access shall be limited to 5 tonnes and the axle load to 3 tonnes;
- e) Erect temporary sites hoardings and boundary fence walls will be erected to trap all construction spoils, materials and wastes generated within the sites;
- f) Provide proper and adequate refuse collection points on sites, waste management trainings, procedures and instructions to workers on good sites practices to ensure that rubbish, litter, construction solid waste, debris and refuse generated from the sites to be collected, handled and disposed of properly outside the WGG. All chemical waste generated during the construction phase will be packaged, labeled, stored, transported and disposed of in accordance with the Waste Disposal Ordinance requirement;
- g) Formulate a Waste Management Plan (WMP) to detail the disposal approaches for the estimated types and quantities of wastes generated in the works and to raise staffs' awareness for careful management of wastes and maintaining sites cleanliness. The contract will adopt the typical hierarchy of waste management, i.e., avoid, minimize, recycle and disposal as the last resort;
- h) Clean the construction sites on a regular basis;
- i) Careful planning and procurement to minimizer generation of wastes on sites, including measures such as:
 - Prevent placing unnecessary orders.
 - Schedule the delivery of materials in line with the construction timeline.
 - Provide storage locations for materials which are secure and shielded from the elements;
 - Coordinate with suppliers to avoid excessive packaging and return packing materials.
- j) Clean properly all vehicles and plant in temporary washing bay at every sites exit before they leave a construction sites, the wash water from which shall be directed to silt removal

facilities before being discharged to the storm drain; The sites boundary between the wheel washing facility and the public road should be placed with sand bunds to prevent wheel wash overflow from entering public road drains;

- k) Provide NO canteen on sites during the construction phase;
- l) Post notices at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment;
- m) Provide regular environmental audit on the construction sites to control any malpractices and ensure a continual improvement of environmental performance on sites.

Oil Spillage

- a) Equip an internal drainage system to direct stormwater to sediment control / silt removal facilities, grease traps and petrol interceptors properly installed at each of the drainage outlets at the beginning of sites establishment before the commencement of any sites works;
- b) Inspect and clean regularly, and maintain adequately all drainage facilities, installed sediment control / silt removal facilities, grease traps and petrol interceptors to ensure they function properly at all time throughout the sites works;
- c) Minimize and limit the number of PME's to be operated during construction phase;
- d) Arrange for electricity supply from CLP to power the construction plants as far as practicable to minimize the use of fueled machinery on sites;
- e) Select equipment that is environmental friendly, e.g. quality PME's as recognized by EPD or higher performance standards with proper maintenance;
- f) Use less or smaller construction plants in specified areas close to Upper Lam Tsuen River and other water courses;
- g) Remove from the WGG immediately any construction plant which may cause pollution to the gathering grounds due to leakage of oil or fuel;
- h) Prohibit any on-site vehicle inspection, maintenance, repairing and washing activities within WGG;
- i) Use and store oils and fuels in designated areas only which have special pollution prevention facilities, including the incorporation of secondary containment to all chemical and oil containers. All fuel tanks and storage areas should be sealed and locked, with sufficient capacities and located well away from Upper Lam Tsuen River and any water courses as far as practicable;
- j) Prohibit the use and storage of pesticides, larvicidal oil, rodenticide, toxicants, flammable solvents, tar and petroleum oil in WGG;
- k) Provided on sites visible worksites map that identifies the location of oil and fuel sources;
- l) Spill control products and grease decontamination kit shall be well-stocked and maintained in known locations for easy access, which shall include absorbent/spill pads, rugs, booms, oil shammy towels, underflow dams, booms and barriers;
- m) Implement an Oil Clean Up Plan with staff training to react to oil spread and spillage:

- Staffs should be trained for high awareness and alertness with the ability to react promptly any possible fuel/oil leakage, including to clean and contain the spill immediately before it spreads and decontaminate the oil leakage. The following actions/steps shall be carried out when spill of oil/chemicals is experienced.
 1. Stopping the spill at source - Make sure the source of the spill is isolated by closing a valve, uprighting the container.
 2. Contain the spill – Prevent it from spreading and keeping it away from drains or waterways.
 3. Putting on the personal protective equipment - oil spill kits and gloves with good grips even in slippery conditions.
 4. Use specialist spill absorbents - remove all the oil from the ground, including digging up the soil where oil has penetrated the surface.
 5. Disposal of waste absorbent and any contaminated soil – disposal off the sites using sealed plastic bags carefully, which shall be conveyed to a storage tank under protection of secondary containments, collected by a licensed contractor and transported to a registered waste disposal sites in accordance with the Waste Disposal Ordinance requirements.
 6. Report of Incidents – incidents shall be reported to the Shift-in-Charge and project proponent and sites inspections shall be arranged subsequently to check on the spill spot.
 7. Restocking – to make the spill kits, PPE and specialist absorbents available for use as soon as possible.
 8. Replacement of voids - the voids arising from removal of contaminated soil shall be replaced by suitable material to the satisfaction of the Water Authority.

Sewage effluent produced by the on-sites workers

- a) Inform and instruct sites workers to utilize public toilets, such as the Shui Wo Village Public Toilet.
- b) Provide adequate temporary portable toilets of the dry, closed chemical type if the Shui Wo Village Public Toilet is closed for maintenance, subject to approval of the Water Authority;
- c) No septic tank nor soakaway system shall be used;
- d) Sites away on-sites temporary sanitary facilities from Upper Lam Tsuen River and other water course as far as practicable (at least 30m), should any be required;
- e) All portable toilets, should any be required, shall be kerbed on all sides;
- f) Properly maintain the portable toilets, should any be required, and associated facilities at all times. Any portable toilets so provided shall be cleaned with waste collected at least 3 time per week or more frequent as required by the Water Authority.
- g) Should any portable toilets be required, the sewage storage tanks should be stored in secondary containment, eg. designated chemical tanks within stainless steel or

non-corrosive tanks with leak detection devices as a precautionary measure against any leakage and damage of tanks;

- h) A split tray shall be provided for all portable toilets, should any be required, for holding any spillage of wastewater;
- i) Appropriate measures shall be taken to prevent damage to or overturning of the portable toilets, should any be required, leading to discharge of sewage into the gathering grounds.
- j) Should any portable toilets be required, a licensed, reputable and experienced contractor should be employed for the appropriate supply, desludging, disposal and maintenance of the facilities. Sludge and waste water including cleanup water from the toilet shall be conveyed outside the gathering grounds for proper disposal.
- k) Should any portable toilets be required, inform the Water Authority of any occurrence of serious malfunction or closure of the portable toilets and the proposed remedy;
- l) Should any portable toilets be required, and if, as a result of operation of the toilet that the water quality condition or the aesthetic condition of any nearby water course deteriorates or there appears foul seepage into the gathering grounds, the toilets shall be closed down immediately pending completion or remedial measures to the satisfaction of the Water Authority.

4. CONCLUSION

- 4.1 A Risk Assessment has been conducted to evaluate potential risk arising from the Proposed Development. To minimize the potential risk to the WGG, appropriate mitigation measures will be implemented, which will be governed by government's multi-level development control mechanisms to ensure their implementations, to ensure that the Proposed Development will not cause any contamination and leaching of contaminants to the WGG.

- 4.2 The Risk Assessment concludes that there is no material increase in pollution effect resulting from the Proposed Development. Therefore, no adverse impact on the WGG is anticipated.

Figures



Water Gathering Ground

Tai Po Tau no.4 Raw
Water Pumping Station

11 ha

Location of
Subject Site

8 ha

TAI PO TAI WU ROAD



DeSPACE (International) Limited

Title:

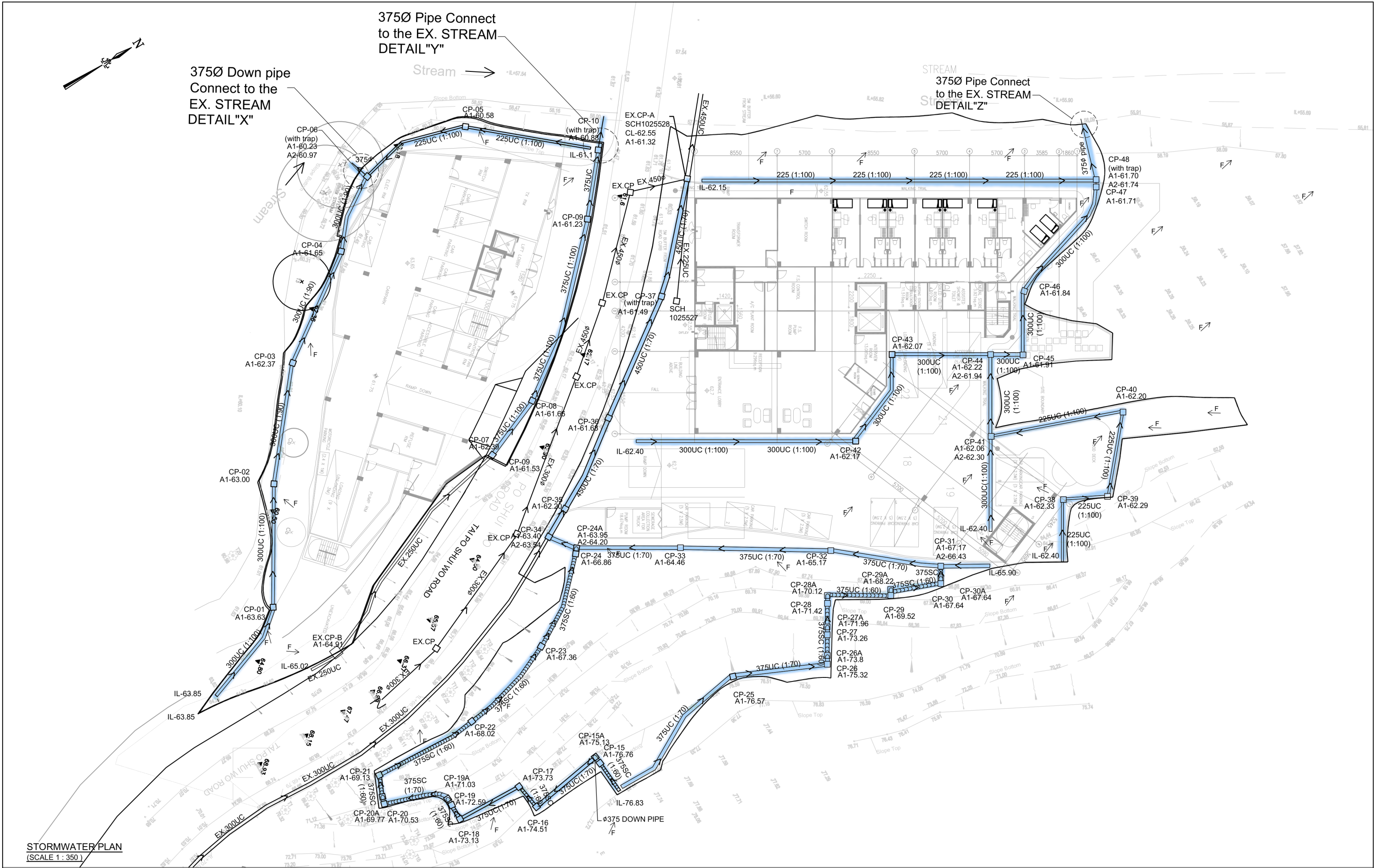
Water Gathering Ground in the area of Lam Tsuen, Tai Po
(extracted from Hong Kong Environmental Database (HKED))

Date

Oct 2025

Scale

1:16,000 n A4



APPLICATION SITE PROPOSED RESIDENTIAL CARE HOME FOR THE ELDERLY (RCHE) AND PERONS WITH DISABILITIES (RCHD) AT VARIOUS LOTS IN D.D.8 AND ADJOINING GOVERNMENT LAND , LAM TSUEN, TAI PO, N.T.	DRAWING TITLE STORMWATER DRAINAGE WORK	DRAWING DATE 8 Oct 2026	DRAWING NO. ST-1B	This drawings and all related information are property of Solar-Il Design Consulting Limited, any use must be approved by the company.	Solar-Il Design Consulting Limited 景佑設計工程顧問有限公司
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