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METHOD STATEMENT TITLE	Rev. A
<p style="text-align: center;">Temporary Water Supply</p>	

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Date:	02-Apr-2024	02-Apr-2024	02-Apr-2024	02-Apr-2024
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Date:	02-Apr-2024	02-Apr-2024	02-Apr-2024	02-Apr-2024

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1.	Introduction (Overview of the operation/works)																																
	Water is essential for construction activities in various works area. Works like piling, grouting and curing required huge consumption of water. This method statement describes the general arrangement of temporary water supply by connecting water pipes to existing public main for each Works Area's use. And we would provide separate water tanks for isolated works area.																																
2.	Reference Documents (Identify relevant documents by name and reference number)																																
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3.	Details of Sub-Contractor/Specialist Sub-Contractor																																
	Direct resources or sublet																																
4.	Responsibilities for Activities described within Method Statement																																
	<p>CSHK is responsible to inspect and carry out the construction works. The following persons, as listed in the table below, will attend the specific tool-box talk and be responsible for the activities:</p> <table border="1"> <thead> <tr> <th>Company</th><th>Name</th><th>Position</th></tr> </thead> <tbody> <tr> <td rowspan="13">CSHK</td><td>Vincent Li</td><td>Construction Manager</td></tr> <tr> <td>Nana Chung</td><td>Assistant Construction Manager</td></tr> <tr> <td>Ng Chun Wah</td><td>Assistant Section Agent</td></tr> <tr> <td>David Lam</td><td>Senior Engineer</td></tr> <tr> <td>Johnson Chung</td><td>Senior Engineer</td></tr> <tr> <td>Sam Tsang</td><td>Engineer</td></tr> <tr> <td>Edmond Man</td><td>Engineer</td></tr> <tr> <td>Jacky Luo</td><td>Engineer</td></tr> <tr> <td>Kingsley Zhao</td><td>Assistant Engineer</td></tr> <tr> <td>Li Man Hin</td><td>Graduate Engineer</td></tr> <tr> <td>Cheung Siu Kei</td><td>Superintendent (WPIC)</td></tr> <tr> <td>Benny Yeung</td><td>General Foreman</td></tr> <tr> <td>Jacky To</td><td>Foreman</td></tr> <tr> <td>TBC</td><td>CP(T)</td></tr> </tbody> </table> <p>All workers carried out on the railway are supervised by a Contractor's safety supervisor who has been qualified as a Competent Person (Track) [CP(T)] or a Competent Person (Non-Track) [CP(NT)]. Works are arranged so that the works are supervised at a minimum ratio of 1 CP(T)/CP(NT) to no more than 20 numbers of workers. All works carried out will be supervised by CSHK's WPIC</p>	Company	Name	Position	CSHK	Vincent Li	Construction Manager	Nana Chung	Assistant Construction Manager	Ng Chun Wah	Assistant Section Agent	David Lam	Senior Engineer	Johnson Chung	Senior Engineer	Sam Tsang	Engineer	Edmond Man	Engineer	Jacky Luo	Engineer	Kingsley Zhao	Assistant Engineer	Li Man Hin	Graduate Engineer	Cheung Siu Kei	Superintendent (WPIC)	Benny Yeung	General Foreman	Jacky To	Foreman	TBC	CP(T)
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5.	Programme and Working Hours (Start & finish date of operation/works)																																
	<p>The temporary water supply installation is general located at the CAs, therefore no RSI training is required.</p> <p>For installation work at the west depot entry track, it shall be carried out during non-peak hours (NPH from 11:00am to 15:00pm or night time after the train services at non-traffic hour (NTH: from 2:00am to 4:00am).</p>																																

	<p>For test track, only 3 nos. of night time possessions are tentatively available on Fri^Sat, Sat^Sun, and one other night during the weekday.</p> <p>For Bifurcation area, installation work shall be carried out during NTH (2:00am to 4:00am) and 3 times a week as pre contract requirement.</p>								
6.	<p>Plant, Equipment & Material (Identify type, model and specification of MAJOR plant & equipment)</p> <p>All plants and equipment will be inspected prior to the mobilization on site to ensure that they are in good working condition and comply with the current regulations.</p> <p>The major plants and equipment will be deployed to carry out the works are as follow: -</p> <table border="1"> <thead> <tr> <th>Plant / Equipment</th><th>Quantity</th></tr> </thead> <tbody> <tr> <td>Water Tank</td><td>2</td></tr> <tr> <td>Water Trunk</td><td>2</td></tr> <tr> <td>Backhoe</td><td>1</td></tr> </tbody> </table> <p>Actual plants and equipment to be used will be subject to site condition.</p>	Plant / Equipment	Quantity	Water Tank	2	Water Trunk	2	Backhoe	1
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Backhoe	1								
7.	<p>Construction Methods / Construction Sequence Drawings</p> <p>1. Logistics Arrangement: Plant, Labour and Material</p> <p>1.1 Access to Works Area W2, W3, W7, W11 & W12 (W4,W6 at separated connection point) According to BUGN2023/21, once works areas declared as Construction Areas (CAs), RSI training and EDOC are not required, but for works less than 10m measuring from nearest rail, EDOC and CP(T) supervision is required.</p> <p>Initially, when the vehicular access bridge is not ready for delivery, we would temporarily utilize west gate via the west level crossing to deliver the plant and material. During delivery from West gate, escort vehicle with CPs would be deployed to escort the construction vehicles. CP(T) would be stationed at the West level crossing to check the vehicular height and direct the traffic and communicate with the yard master continuously. Apart from the construction vehicles, shuttle escorted by escort car will be arranged to directly carry worker from West Gate to the Container Village at W11 via the West level crossing.</p>								

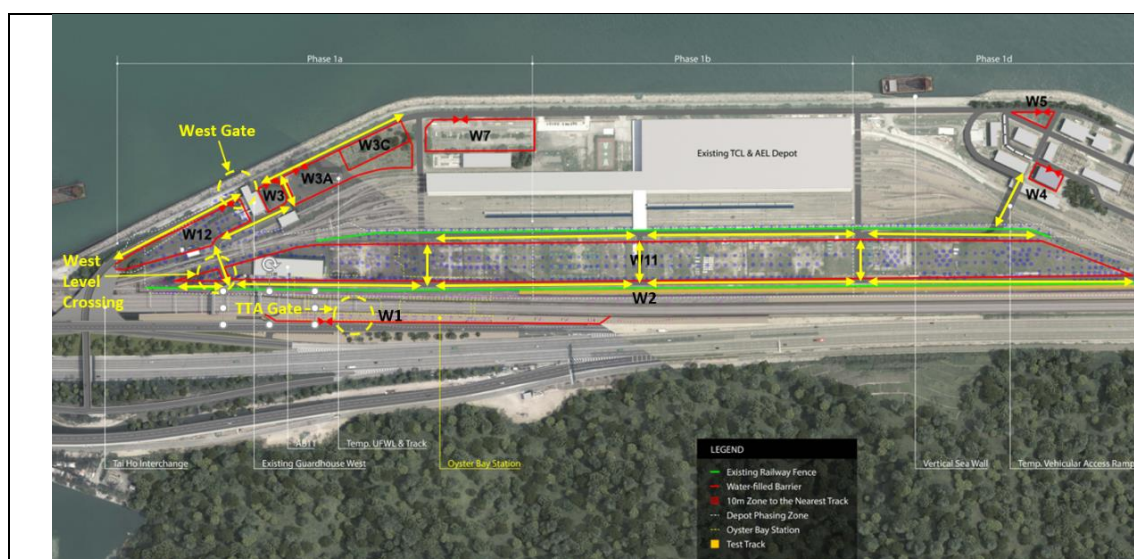


Figure 1.0 General layout for Access

Contractors would utilize the East gate once the vehicular access bridge is ready to use. Safety procedure similar to West Gate would be deployed. Details arrangement shall refer to security and traffic management under separate submission.

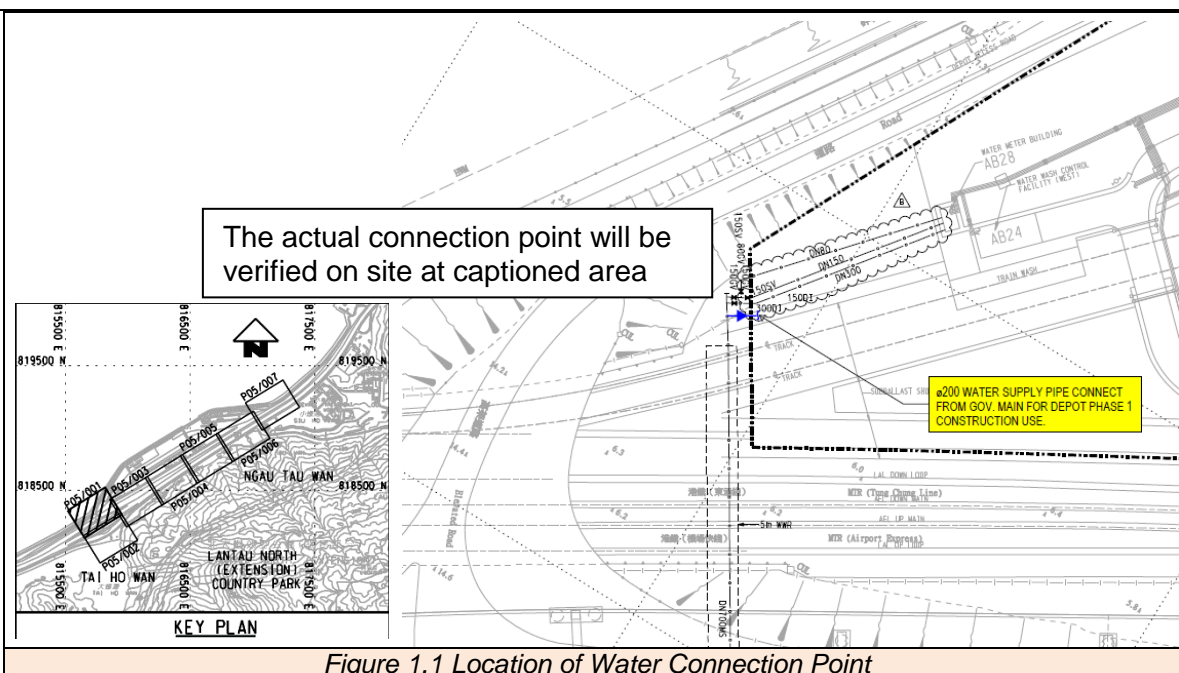
Nonetheless, we would hold regular workshops with RP/Yard master to go through current works within all CAs in order to identify and review any impact upon railway and/or depot operation. The rules and procedures for Railway Protection under the Railway Ordinance will be in accordance with Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP ADV-33 / APP-24). Details traffic and security arrangement shall refer to separate submission.

1.2 Access to Works Area W1

For the OYB-South bifurcation, both labour and plants would be delivered via temporary access Gate at slip road underneath Shun Long Road to W1. (Details refer to traffic and security management plan under separate submission). To avoid vehicle damage the existing RP Fence, waterfilled barrier will be installed approximately 1m away from the fence as crushing barrier.

2. Arrangement of Temporary Water Supply at Siu Ho Wan Depot

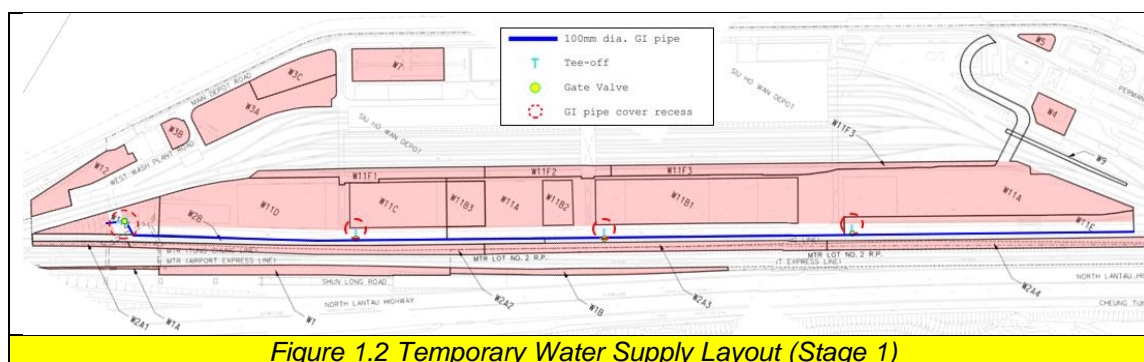
There is one 700mm dia. government fresh water main on the western side of the site (generally referring to Figure 1.1), and one 200mm dia. water connection will be provided for us to use for subsequent pipework of temporary water supply. Connection work and pipework for provision of temp. water supply arrangement would just be carried out after CA declarations. While for OAs, all workers should have qualification of RSI. Before commencement of any task, working hours and arrangement would be reported to Yard Master and should follow the work flow of ETMS. In addition, processes of the task should be supervised by CP(T) all the times.



To expose the 700mm dia. fresh water main for connection, excavation work at the captioned location is required and UU detection should be carried out to ensure the immediate underground area is clear for commencement of excavation work. Shoring system to be implemented if the excavation depth is over 1.5m.

2.1 Temporary Water Supply (Stage 1)

Before completion of the said pipework/watermain diversion for bifurcation, temporary water will be proposed to source from existing water main on the South Road at Siu Ho Wan Depot, and we shall apply for the approval from Depot Yard Master to connect tee joints and water meters to Area W11 and W2 (detail as below, EDOC is required) in the purpose of construction. Meanwhile, this issue would be further coordinated with MTR CWBU and Depot in due course.



2.2 Temporary Water Supply to Various Construction Works Area (Stage 2)

Discharging water from Tai Ho Interchange (THI) and installing tee joints are here considered as applicable measures to achieve temporary water supply on Stage 2. Firstly, Form WWO 542 with a plan showing the proposed location and size of the pipeworks at the boundary of the work site shall be submitted to WSD. Then, connection work will be

carried out by a licensed plumber after receiving approval by the Water Authority. After this, we will connect 100mm diameter pipe to the WSD water supply connection point to fit our follow-up work for extension of water pipe (sapphire dotted line) to each Works Area. Overall arrangement is shown in Figure 1.3. The detail of the tee joint can refer to Figure 1.4.



Figure 1.3 Overall Temporary Water Supply Plan



Figure 1.4 Tee Joint of Water Supply

Besides, water pipes shall be laid next to the edges of road kerbs to minimize the impact to traffic.

2.2.1 Area W12, W3 & W7

100mm dia. PE water pipe shall be used for provision in W12, and 50mm dia. PE water pipe will be used in W3 and W7. Temporary Water Supply Routing Layout (Stage 2) refers to Figure 1.6. In addition, to provide accessible road, approximate 200mm deep cover recess (red dotted circle illustrated in Figure 1.6) should be provided to hide water pipe when the pipe crosses the road transversely. Detail of recess is showing in Figure 1.5.

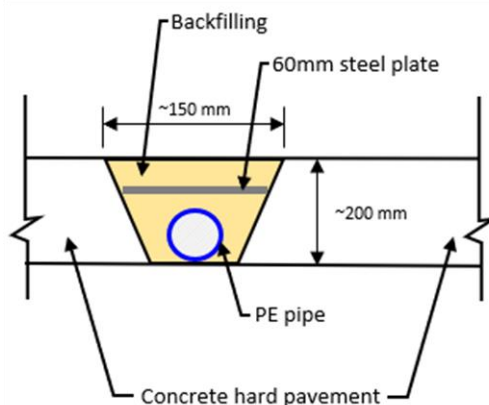


Figure 1.5 Detail of PE Pipe Cover Recess

Work for recess with pipe should be carried out as following steps:

- Using floor saw/hand held saw to cut through an approximate 150mm-wide area on the concrete hard pavement;
- Break up concrete hard pavement by backhoe and clear away concrete fragments;
- Lay water pipe onto the recess;
- Backfill subbase to the road level to cover the water pipe and place one piece of 60mm thk. steel plate.



Figure 1.5.1 Floor Saw (for simple reference only)

Considering to maintain vehicular access, captioned recess with pipework is just carried out to one lane of the road first, then turns to another lane.

Additionally, as the Tee off to PMO (site office), the swabbing & sampling will be carried out for W7 before the usage of portable water (under separate submission).

2.2.2 Area W11 & W2

After the main water supply point is ready for connection from THI, water pipe reaching test track is required to cross the railway track via the west level crossing to supply water for W11 and W2 (routing refers to Figure 1.6). 100mm dia. PE pipe shall be used.

For water pipe crossing the test tracks/level crossing, one 150mm PVC sleeve pipe is embedded in the ballast (parallel to the sleepers), and then the 100mm dia. PE pipe shall be laid inside the PVC pipe. Details of level-crossing pipe may refer to Figure 1.7. Install one water tee joint with one valve gate to the main 100mm dia. PE water pipe every 50

meters to 100 meters, and water is supplied via 3" pipes to the subdivision in area W11. While for area W2, water pipe connected from main pipeline is also required to cross south road from W11 with recess. **Detail of track crossing to be agreed with IMD.** Furthermore, the pipe would be installed during NTH/NPH to minimize the disturbance of daily depot operation.

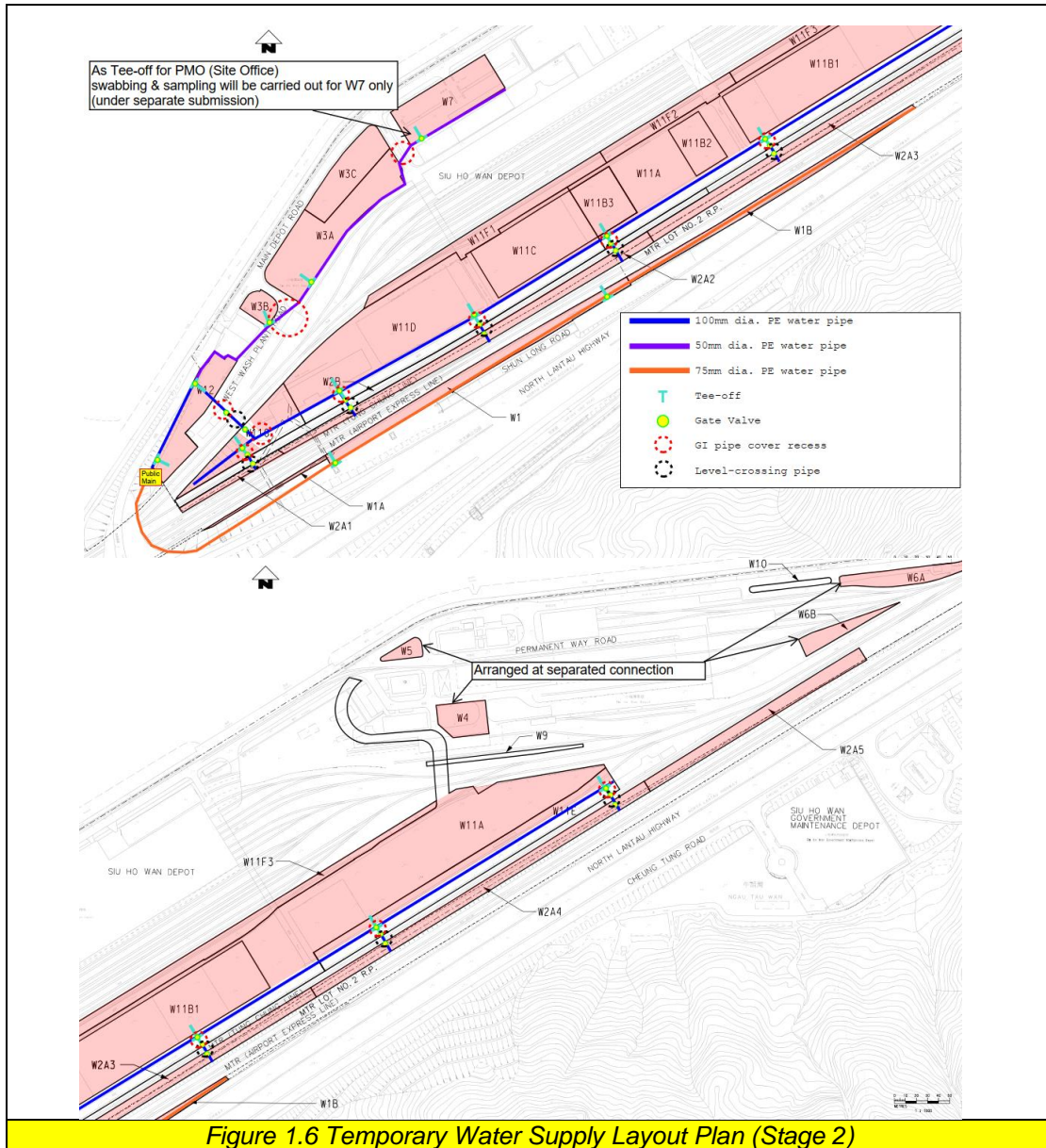


Figure 1.6 Temporary Water Supply Layout Plan (Stage 2)

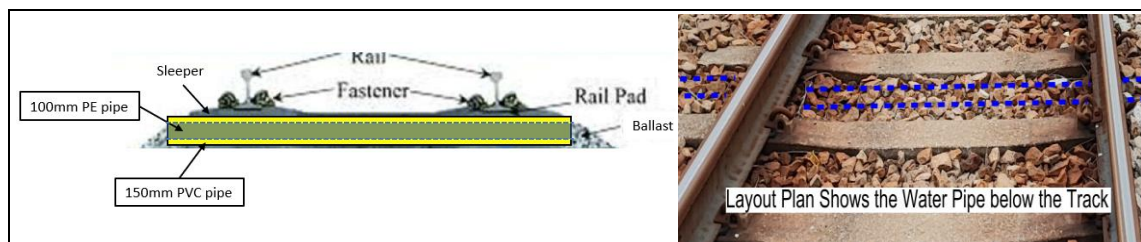


Figure 1.7 Details of Pipe across the Railway

	<p>2.2.3 Area W1</p> <p>For Works Area W1, the total area is approximately 700m². Water pipes would be connected from Tai Ho interchange via 75mm dia. PE pipe for upcoming pre-drilling works. The alignment of pipeline is proposed to be placed inside surface channel to W1. We will coordinate with C7 contractor for the temporary water pipe routing of THI.</p> <p>2.2.4 Area W4, W5 & W6A & W6B</p> <p>Temporary water will be given from nearby existing water mains at Siu Ho Wan Depot, and we shall apply for the approval from Depot Yard Master to connect tee joints to discharge water to Area W4, W5 & W6B. Further coordination will be carried out with Depot in due course. And method statement will be submitted separately.</p> <p>3. Hand over the water meter from other contractor to 1701</p> <p>Arrange a site inspection for the water meter hand over from 1732 to 1701 (first batch Layout plan attached in Appendix C). Record the current reading of the water meter in the form of a photograph. The meter readings will be submitted to MTRC every month.</p> <p>4. Installation a new water meter at W3B, AB16, South Road (Near Grid 68)</p> <ol style="list-style-type: none"> ① Determine which pipe is used for floor washing, ② Turn off the existing gate valve and remove the air valve, ③ Install the new gate valve and the suitable water meter, ④ Install the old air valve, step 2, 3 & 4 to be carried out by license plumber, ⑤ Record the current reading of the water meter in the form of a photograph, ⑥ The meter readings will be submitted to MTRC every month.
8.	<p>Safety (Risk Assessments)</p> <p>Risk Assessment attached in Appendix A has been prepared for all general activities. Specific safety procedures and precautions have been developed for all site operatives to follow. The Construction Team Leader together with the RSO, will supervise the implementation and make adjustment according to the actual site operations, in order to maintain a safe and amicable working environment.</p> <p>General Site Safety</p> <p>With reference to the Project Safety Plan, the following items need to be instituted through the course of the works described within this method statement.</p> <p>1. Site Specific Safety Induction Training Course</p> <p>All works will attend the Site Specific Safety Induction Training Course conducted by the Safety Officer. The Safety Officer will explain all necessary health and safety requirements and the use of PPE. Emphasis will be placed on site specific safety hazard and risk management.</p> <p>2. Pre-task Meeting and Pre-Work Risk Assessment</p> <p>A pre-task meeting will be arranged before commencement of the works among representatives of sub-contractors. Site Agent/Site Engineer will brief the nature of works, the safety aspects and the requirements laid down in the Project Safety Plan. The Site Agent in charge of the work shall explain the system of work to his supervisors and workers. Furthermore, the pre-work risk</p>

	<p>assessment will also be carried out before the commencement of work on a daily basis. This will primarily provide a daily check and monitor for any changes or deviation to the original assumption during the initial risk assessment analysis.</p> <p>3. Site Specific Safety Issues</p> <p>The construction works is considered to be executed at a distance away from the live traffic or pedestrian routes.</p> <p>3.1 Safety during the works</p> <p>The access to the works zone will be prohibited to unauthorized person and only trained workers will be allowed for access. Safety during the works</p> <p>3.2 Method Statement and Work Procedure Training</p> <p>Before the commencement of the works, the Site Agent/Engineer/Foreman in charge will provide specific method statement and work procedures training on the safe work method and safety precautions to be implemented to the supervisors and workers involved in the works.</p> <p>3.3 Risk Assessment</p> <p>All the potential hazards, consequences and mitigations are analysed in the risk assessment attached in the Appendix A.</p> <p><u>Plant & Equipment</u></p> <p>1. Inspection & Labels</p> <p>All plant shall have valid test certificates and equipped with all safety accessories. Critical parts inspection or special plant inspection shall be conducted by a competent person before commencement of works. Relevant statutory forms shall be kept available and updated at all times.</p> <p>2. Person Protective Equipment</p> <p>Construction Manager shall ensure that all workforces were issued with basic personal protective equipment (e.g. safety helmet, safety boots and reflective vest) and other personal protective equipment which is suitable to specific task. Sufficient stocks shall be kept available and record of issuing shall be maintained. All site staff and visitor must equip the mandatory personal equipment such as safety helmet, safety shoes and reflective vest.</p>
9.	Environmental (Environmental aspect & impact identification as well as mitigation measures)
	<p>General works shall be carried out during normal hours from 08:00 am to 07:00 pm. Works will be carried out after 07:00 pm on Monday to Sunday with approval construction noise permit. The works shall follow relevant mitigation measures as required under the Environmental Permit (EP) / EP submission and Contractor's Environmental Management Plan (EMP).</p> <ul style="list-style-type: none"> - ULSD Diesel will be used in all PME - Plant with QPME label will be employed if available - All chemicals will be placed on drip tray - Only regulated NRMM with approved NRMM label to be used on site
10.	Quality Control (Inspection and Test Plan including hold points)
	<p>Day to day routine inspections of the works will be carried out by the Construction Team Leader, Site Engineers and Foreman as appropriate, to ensure that all works are performed following the requirements of this method statement.</p>

	The Inspection & Test Plan for the works is not required for invitation of MTRC's inspection but the CSHK will follow the BS standard to ensure the works quality.
11.	Appendices (Identify and include additional information in the submission package)
	Appendix A - Risk Assessment Appendix B - Temporary Water Supply Layout Plan (Stage 2) Appendix C – Water Points 1732 Handover to 1701 Layout Plan Appendix D – Installation of the New Water Meter Layout Plan and Details Plan