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ACC Reference Number:	1701	W	000	CSC	760	000609

METHOD STATEMENT TITLE	Rev. 0

Widening of The Fast Lane of Shun Long Road – The Section between SHW Depot and North Lantau Highway

	Prepared by:	Checked by:	Reviewed by:				Approved by:
Signature:							
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Position:	Engineer	Construction Manager	SM/SO	QM/QE	~~EM~~/EO	Assistant Project Director	Project Director
Date:	31-May-2024	31-May-2024	31-May-2024	31-May-2024	31-May-2024	31-May-2024	31-May-2024

CONTENT

1. Objective (Overview of the work)

The objective of this work is to improve the traffic condition, provision of additional space in fast lane to afford the future traffic growth of the road section. Moreover, road safety will be strengthened via the fast lane widening task.

It is realized that road divider is currently consist of profile barrier and waterfilled barrier to separate fast lane and slow lane independently. The slow lane is temporarily closed under TTA scheme while fast lane is opened for all road users. We would like to mobilize road divider according to out work plan under manual operation and plant operation. The fast lane will become 4.6m width eventually if work is proceeded successfully.

2. Details of Sub-Contractor/Specialist Sub-Contractor

The works will be carried out by our direct labour and supervise by our front-line staff such as foreman and engineer. Since the work area is excluded from SHW Depot boundaries, there is not necessity to provide a full-time CP (Railway Safety Rules and Requirements). All workers do not enforce to obtain the qualification Railway Safety training (RSI). The rules and regulation as well as safety measures shall be in accordance with COP issued by HyD.

3. Responsibilities for Activities described within Method Statement

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:

Company	Name	Position
CSHK	Vincent Li	Construction Manager
	Nana Chung	Assistant Construction Manager
	Martin Wong	Assistant Construction Manager
	David Lam	Senior Engineer
	Sam Tsang	Engineer
	Man Kwun Yu	Engineer
	Kingsley Zhao	Assistant Engineer
	Li Man Hin	Graduate Engineer
	Cheung Siu Kei	Superintendent (WPIC)
	Benny Yeung	General Foreman
	Jacky To	Foreman
	Chan Man Hin	Foreman
	TBC	CP(T)

4. Programme and Working Hours (Start & finish date of operation/works)

The works target is planned to be commenced on June 2024 and spend 4 consecutive workdays to complete the task.

Programme & Working Hour

- Daywork (at least 4 consecutive workdays are required);
- Working hour: 08: 00 a.m.~ 07: 00 p.m. (TH) + 07: 00 p.m.~ 11: 00 p.m. with valid CNP;
- Target Completion Day: Begin at early June until the end of July 2024

Item	Works	TH/NPH/NTH
1	Unload new water filled barriers at designated area	TH
2	Set up new water filled barriers and fill up	TH
3	Relocate existing profile barrier toward slow lane	TH

	4	Empty existing water filled barriers and take them out	NTH

All items mentioned above shall be controlled to occur inside current TTA area under safety assessment.

5. Resource, Plant, Equipment & Material (Identify type, model and specification of MAJOR plant & equipment)

Plant and Equipment Condition

The major plants and equipment will be deployed to carry out the works are as follow:

Stage 1 – New Formation of Water filled barrier (Daywork)

Plant / Equipment	Quantity (unit)
Crane Lorry (45T)	1
Water Truck (Capacity: 3000L~5000L)	1
Telescoping Crawler Crane (6T)	1

Manpower	Quantity (nos.)
General Worker	6
Crane Operator	1
Lifting Supervisor	1
Rigger	2

Stage 2 - Relocation of Existing Profile Barrier (Daywork)

Plant / Equipment	Quantity (unit)
Telescoping Crawler Crane (6T)	1

Manpower	Quantity
General Labour	2
Traffic Controller	1
Operator	1

Stage 3 - For Removal of Existing Waterfilled Barrier (Nightwork)

Plant / Equipment	Quantity
Crane Lorry (45T)	1
Traffic control truck with Arrow board	1
Portable Light Tower	3

Manpower	Quantity
General Labour	8
Crane Operator	1

6. Traffic and Security Management

Worker Verification

- All workers will be picked up at designated area such as Tung Chung Station.
- During boarding the shuttle bus, hand-held facial recognition will be performed to verify the worker's qualification.
- The facial recognition system will check if the person has passed the RSI and possesses a green card.
- List of workers shall be submitted for MTR for registration before starting of works, the list shall be updated weekly and available for MTR as requested.

Uniform and Safety Equipment: All workers shall wear PPE and the standard uniform and safety helmet for easy recognition by security guards and YM.

Template of Label for Safety Helmet

Identify the color for the Safety Helmet

Reflective vest satisfied with HyD standard

7. Construction Methods / Construction Sequence Drawings

Preparation

- Prior to the commencement of the mobilization of road divider (waterfilled barrier), our survey team will provide numerous amount of graffiti marks on ground for our reference;
- All workers should possess the Code of Practice for the Lighting, Signing and Guarding of Road Works issued by HyD

Site Pictures

Inside TTA look forward to Tsing Yi Direction

Inside TTA look forward to Tung Ching Direction

General view of Profile Barrier

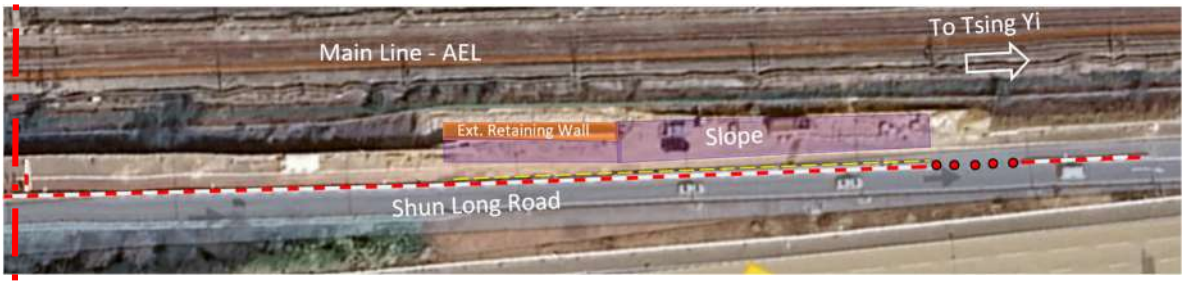
Existing Retaining Wall

Side View of Slope

Refer to the following general plan view concerning Shun Long Road condition and TTA scheme in site condition.

General Plan View – Part 1 (Aerial Picture)

Cutline A-A



General Plan View – Part 2 (Aerial Picture)

Legend

Water Filled Barrier

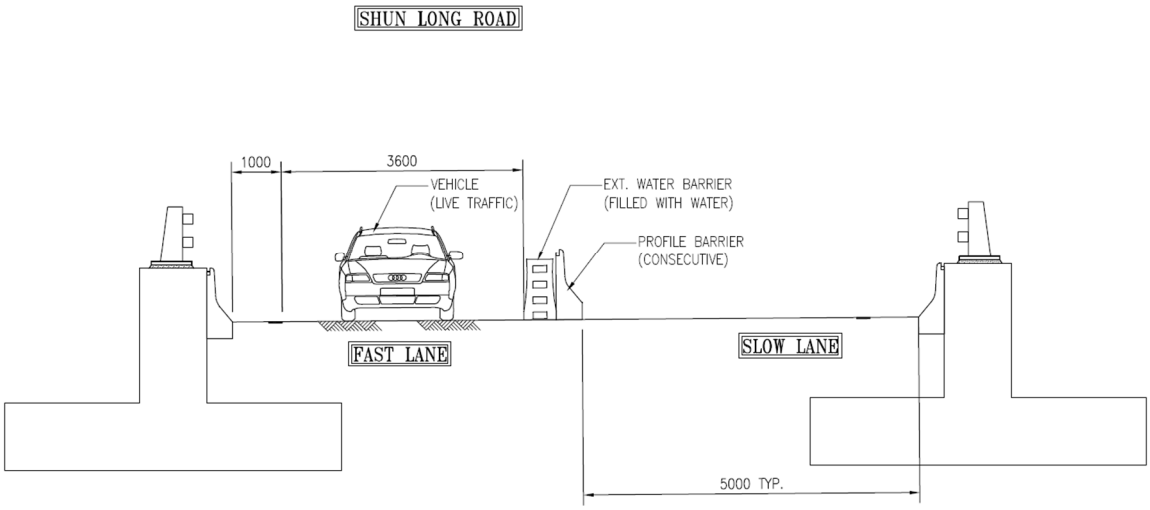
Profile Barrier

Traffic Clone

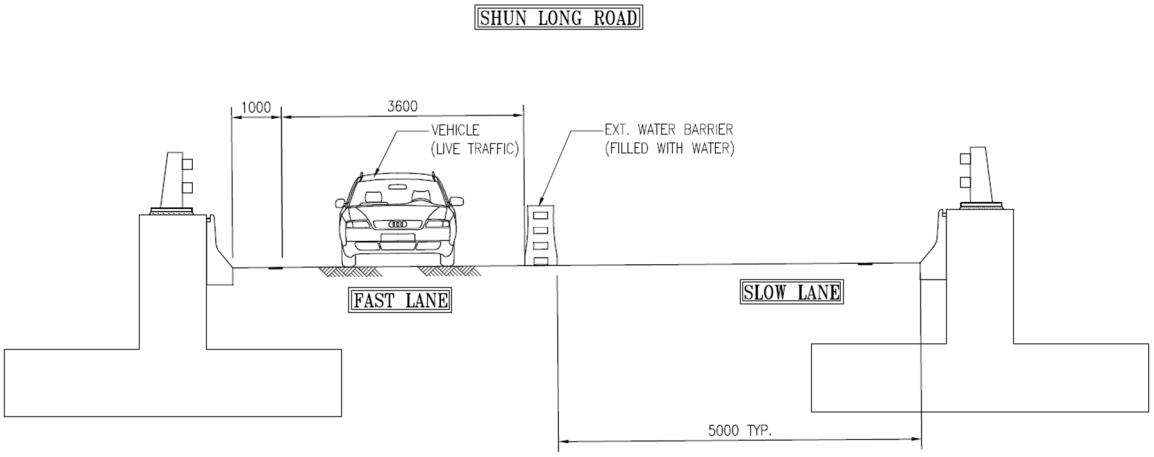
TTA	Qty (pcs)	Length (m)
Water Filled Barrier	218	327
Profile Barrier	56	56

The road width of Shun Long Road in fast lane became narrow (<4.6m min. required) gradually which is measured from continuous edge white line (road markings) along with profile barrier and metal parapet.

It is observed that consecutive profile barriers are installed at part of water filled barrier section as secondary protection wall when traffic accident or collision is happened. Therefore, we would like to guarantee that road width in fast lane after road widening work is accomplished shall be 4.6m in minimum.

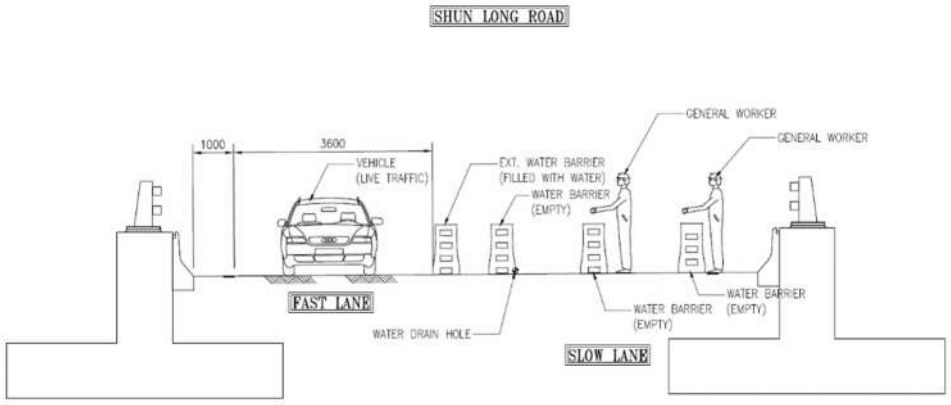
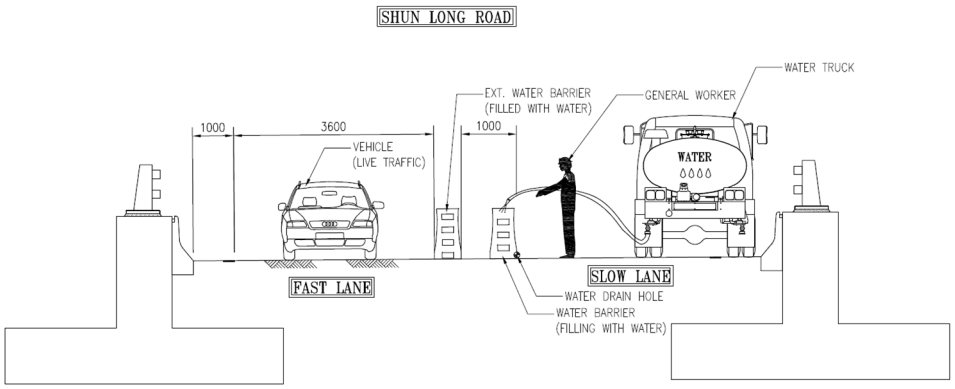
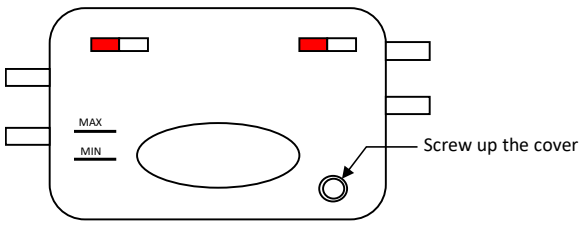
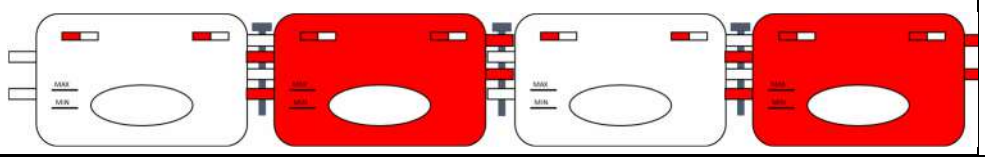


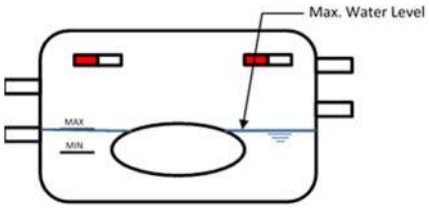
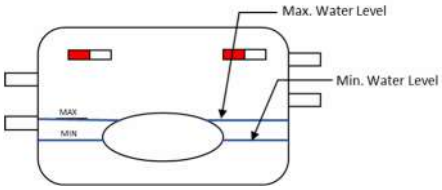
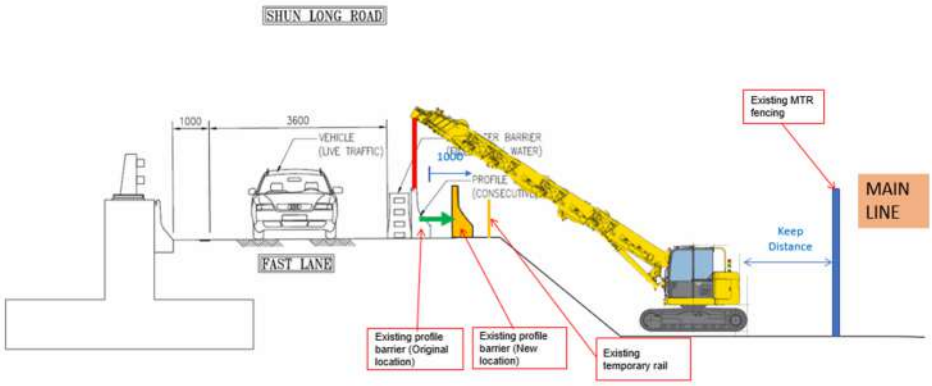
Typical Section of Shun Long Road at SHW Depot Section (Profile Barrier exist)

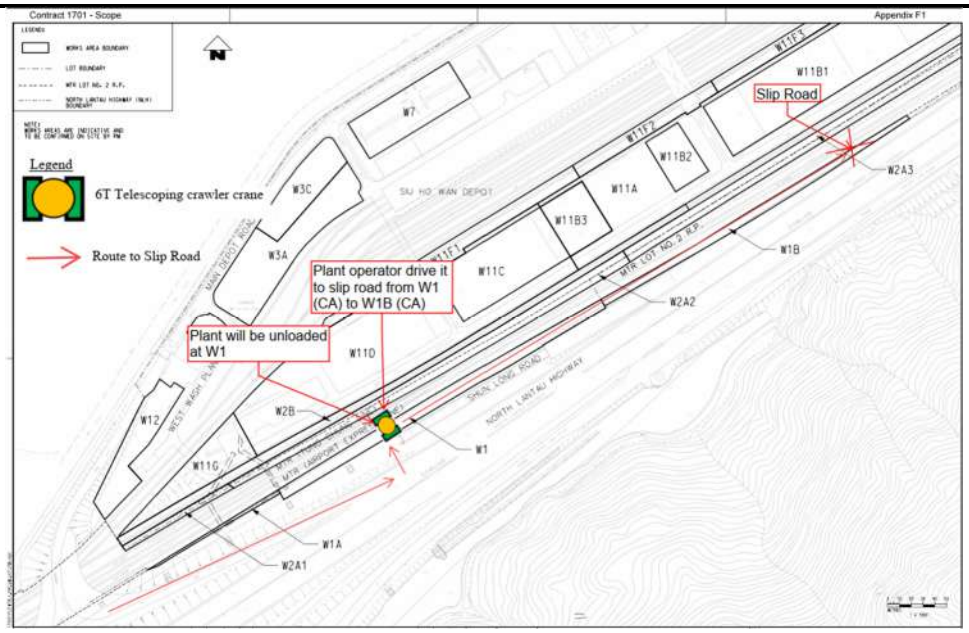


Typical Section of Shun Long Road at SHW Depot Section (Profile Barrier not exist)

Stage 1	Activity
Step 1 Daywork	New batch of empty water filled barriers are loaded on flatbed of carne lorry and transported to designated unloading point on Shun Long road slow lane surrounded by water Workers distribute and set up new set of water barriers with respect to survey marking provided on road. Make sure that water drain hole at the bottom position should be faced to SHW depot.

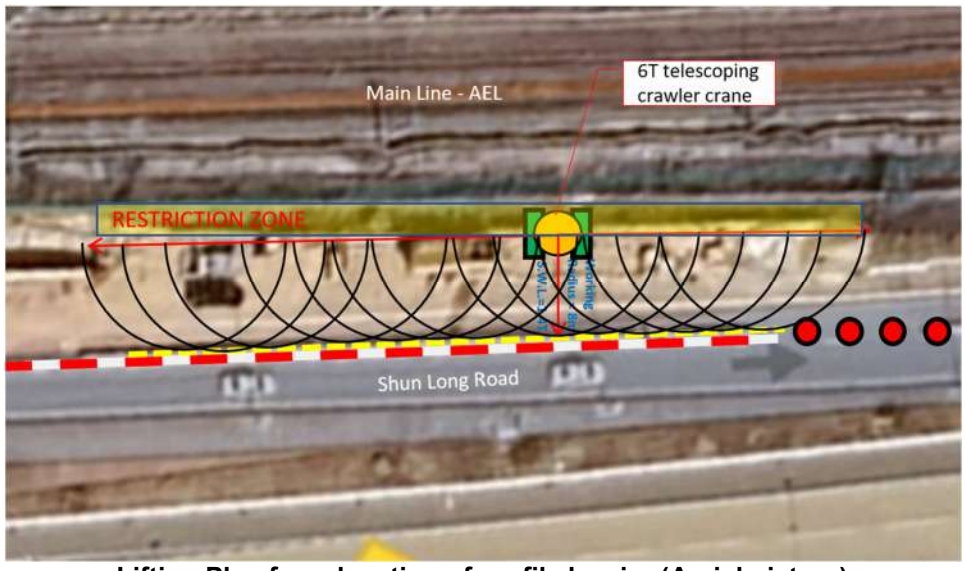
	
Step 2 Daywork	Fill up empty water barrier. Water supply is gained from water tanker truck. Workers use accessories (hose reel) equipped on water truck to inject water upon fill hole on top. During the process, workers should monitor the water filled barrier alignment without beyond tolerance. 
Step 3 Daywork	Check the quality of water filled barrier, screw up the cover to prevent the water leakage. 
Step 4 Daywork	The barrier shall be placed in alternate red and write colours and connect together such that they stand out the construction site behind them and are visible by day and night. 

Step 5 Daywork	Fill in the water to the maximum water level of every water filled barrier according to the operating instructions of the manufacturer. 
Step 6 Daywork	Check whether the water level is between the lowest water level and the highest water level daily. If there is no water after a day, it means that the cover is loose or the barrier is broken, so we should tighten the cover or replace it with a new water-filled barrier. 
Step 7 Daywork	6T telescoping crawler crane shall be used to relocate profile barrier at the bottom ground level near slope in order to create enough space for set-up new water filled barrier. The jib will extend and reach to ahead corresponding profile barrier. Workers shall attach proper lifting gears upon two rigging points of every profile barrier. Double taglines shall be used (5m long) at two sides of profile barrier. When the profile barrier is being lifted up, riggers should keep at least 3m clearance away from the lifting object and hold the tagline to guide the lifting object during work. The profile barrier will move toward middle part of slow lane in 1m distance.  Typical Section of Shun Long Road at SHW Depot Section (Profile Barrier exist)

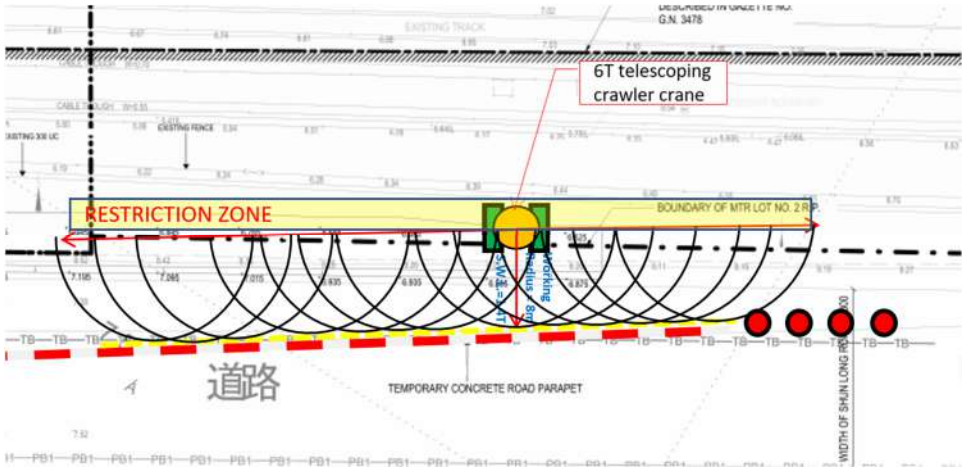


Transportation Plan for Crawler carne from W1 to slip road

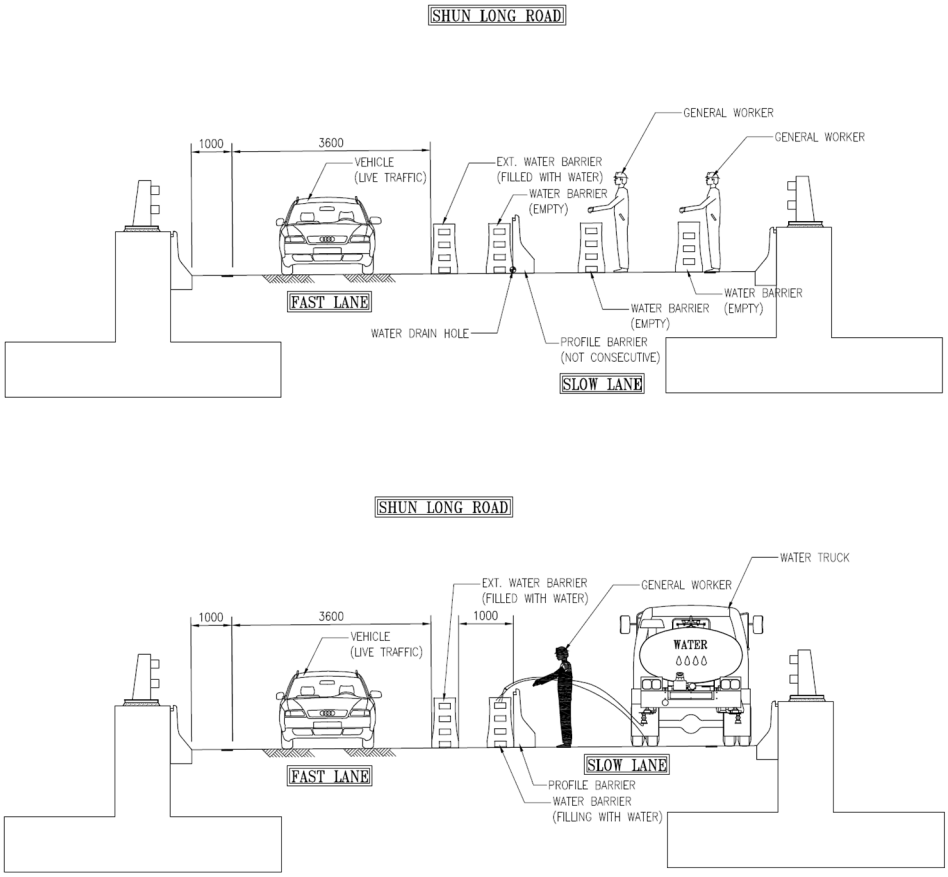
6T telescoping crawler crane will be delivered on site and unloaded at W1 (CA). Crane operator then drives it to slip road from W1(CA) to W1B(CA).

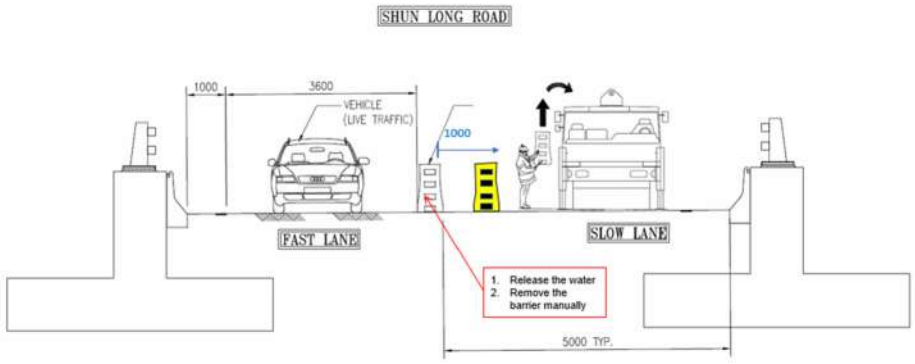


Lifting Plan for relocation of profile barrier (Aerial picture)

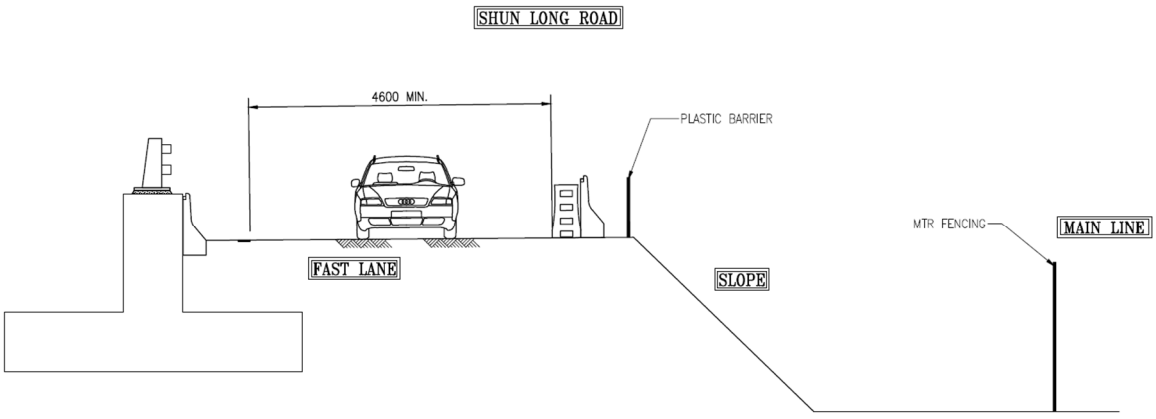


Lifting Plan for relocation of profile barrier (Working Drawing)

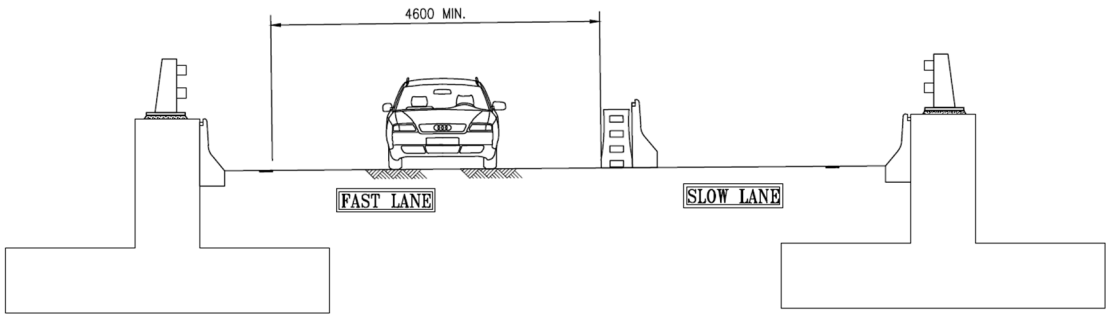
	Lifting Plan for Relocation of Profile Barrier MODEL: CC1485S-1 (MAEDA, JAPAN) BOOM LENGTH: 10.505m WORKING RADIUS: 8m @ S.W.L.=1.45T WEIGHT OF LIFTING OBJECT: 0.575T (Profile Barrier) WEIGHT OF LA/LG: 0.2T TOTAL WEIGHT: 0.2+0.575=0.775T LIFTING CAPACITY: 0.775T/1.45T=53.45% (<75%, LIFTING APPROVAL)
Step 8 Daywork	Repeat Step 1 to Step 7 until water filled barriers are full-loaded. 
Step 9 Nightwork	Release drain hole at the bottom position of existing water-filled barrier to discharge water from inside to outside. A few moment later, workers shall manually take away empty water filled barrier upon flatbed of crane lorry/flatbed truck. A traffic vehicle with LED arrow board is required to stay behind and keep proper distance with ahead crane lorry/flatbed truck to prevent any residual risk. Repeat above step for several time until both empty water filled barriers are being removed. This work will take place at midnight for secure reason. The numbers of vehicle on road will drop significantly therefore the opportunities to be hit is reduced.



Typical Section of Shun Long Road at SHW Depot Section



Typical Section of Road Widening of Shun Long Road Fast Lane at SHW Depot Section (at slope)



Typical Section of Road Widening of Shun Long Road Fast Lane at SHW Depot Section (at viaduct)

8.	**Safety** (Risk Assessments)
	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 Manager 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.
9.	**Environmental** (Environmental aspect & impact identification as well as mitigation measures)
	General works shall be carried out during normal hours form 08:00 am to 07:00 pm. No works will be carried out after 07:00 pm on Sunday or public holiday without approval construction noise permit. - ULSD diesel will be used in all PME. - Plant with QPME label will be employ, if available. - All chemicals will be placed on drip tray. - For site clearance, water spray will be carried out during the work to prevent dust generation. - Waste water treatment and discharge will be installed on site. The details shall refer to the separate Method statement which will be submitted separately. **Smoke Arrangement** - All workers can only smoke at designated area; - All workers are forbidden to throw cigarette butts on the ground;
10.	**Quality Control** (Inspection and Test Plan including hold points)
	- Quality check for the water filled barrier once it delivered to site - Checking the water-level of water filled barrier every day
11.	**Appendices** (Identify and include additional information in the submission package)
	Appendix A – Risk Assessment Appendix B – Catalogue for Equipment Appendix C – Inspection and Test Plan Appendix D – Emergency Contact List