## Table C2 Implementation Schedule of Recommended Mitigation Measures - Noise

EIA Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures			What requirements or standards for the measures to achieve?
				D	С	0	-
Construction P	hase (Non Designated Project Element)						
S.4.4.9	Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following mitigation measures should be followed during the construction phase: only well-maintained plants should be operated on-site and plants should be serviced regularly during the construction works; machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plants known to emit noise strongly in one direction should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures should be effectively.	Noise control during construction	Contractors, ER		٧		EIA, Contractual requirements



S.4.4.12	Use of quiet plant (PME): Generator Poker, vibratory, hand-held Vibratory Compactor Breaker, excavator mounted Excavator Crane, mobile mounted	Noise control during construction	Contractors		٧	EIA, Contractual requirements
S.4.4.13 - S.4.4.14	Noise barrier in the form of site hoarding shall be used for the following PMEs where practicable: -Backhoe (mini) -Breaker, hand-held, mass>10Kg and <20Kg -Generator -Poker, vibratory hand-held -Bar Bender and cutter (electric) -Vibratory compactor -Breaker, excavator mounted -Hydraulic Vibratory Driver for driving Sheet Piling -Pilling, earth auger, auger -Hoist (electric) -Excavator -Dumper -Submersible Pump -Rock Drill, hand-held (pneumatic) -Air Compressor -Bentonite Filtering Plant -Ventilation Fan -Welding Machine -Concrete Pump -Saw, circular, wood -Winch (electric) -Drill/grinder, hand-held -Grout Mixer -Grout Pump	Noise control during construction	Contractors			EIA, Contractual requirements
S.4.4.14	The barrier / enclosure material's surface mass shall be in excess of 7 kg/m <sup>2</sup> .	Noise control during construction	Contractors		<b>√</b>	EIA, Contractual requirements
S.4.4.18	Avoidance of undertaking different works types at the same time near the NSRs.	Noise control during construction	Contractors		√	EIA, Contractual requirements
S.4.4.20	Alternative construction method (Drill with chemical agent) shall be adopted for the breaking up of road surface of Works Type 1 (Construction of sewer (open cut method)) and Works Type 3 (Upgrading of existing sewer).	Noise control during construction	Contractors	V	<b>√</b>	EIA, Contractual requirements



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S.4.4.9*	The following mitigation measures should be followed during the construction phase: only well-maintained plants should be operated on-site and plants should be serviced regularly during the construction works; machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plants known to emit noise strongly in one direction should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures should be effectively	Noise control during construction	Contractors, ER		EIA, Contractual requirements
S.4.4.12*	Use of quiet plant (PME): Generator Poker, vibratory, hand-held Vibratory Compactor Breaker, excavator mounted Excavator Crane, mobile mounted	Noise control during construction	Contractors	٧	EIA, Contractual requirements



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S.4.4.13 - S.4.4.14*	Noise barrier in the form of site hoarding shall be used for the following PMEs where practicable: -Backhoe (mini) -Breaker, hand-held, mass>10Kg and <20Kg -Generator -Poker, vibratory hand-held -Bar Bender and cutter (electric) -Vibratory compactor -Breaker, excavator mounted -Hydraulic Vibratory Driver for driving Sheet Piling -Pilling, earth auger, auger -Hoist (electric) -Excavator -Dumper -Submersible Pump -Rock Drill, hand-held (pneumatic) -Air Compressor -Bentonite Filtering Plant -Ventilation Fan -Welding Machine -Concrete Pump -Saw, circular, wood -Winch (electric) -Drill/grinder, hand-held -Grout Mixer -Grout Pump	Noise control during construction	Contractors		<b>V</b>	EIA, Contractual requirements
S.4.4.14*	The barrier / enclosure material's surface mass shall be in excess of 7 kg/m <sup>2</sup> .	Noise control during construction	Contractors		1	EIA, Contractual requirements
S.4.4.18*	Avoidance of undertaking different works types at the same time near the NSRs.	Noise control during construction	Contractors		1	EIA, Contractual requirements
S.4.4.20*	Alternative construction method (Drill with chemical agent) shall be adopted for the breaking up of road surface of Works Type 1 (Construction of sewer (open cut method)) and Works Type 3 (Upgrading of existing sewer).	Noise control during construction	Contractors	V	V	EIA, Contractual requirements



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Operational Phase (Non Designated Project Element)								
S.4.5.7 – S.4.5.8	The equipments are designed to be installed inside the respective building structures and a reduction of 20 dB(A) can be achieved if the building enclosure is built using suitable material such as concrete with surface density of 25 kg/m². The provision of acoustic louver at ventilation fans can provide significant reduction in noise levels. It is recommended that acoustic louvers be provided at the discharge point of ventilation fans with a minimum noise reduction of 10 dB(A). A 10 dB(A) reduction has also been applied to noise sources which are blocked and do not have a direct line of sight to the NSR.		Operator of STW/SPS		$\checkmark$	Annex 5 of TMEIAP NCO; Good Practices on Ventilation Systems Noise Control; Good Practices on Pumping Systems Noise Control		

Legend:

D – Design, C – Construction, O - Operation

BD - Building Ordinance

ETWB TCW - Environmental and Transport Works Bureau Technical Circular

HKPSG - Hong Kong Planning Standards and Guidelines

EIAO-TM – Technical Memorandum on Environmental Impact Assessment Process

TPO - Town Planning Ordinance

WBTC - Works Bureau Technical Circulars

Remark: \* means the specified measures for the DP component

