

Typical Quieter Construction Methods / Equipment

Processes	Conventional Practices	Alternative Quieter Construction Methods / Equipment	Applicable to the Project (Y/N)
Tunneling (large scale)	- Cut and cover method using excavator-mounted breaker	- Use of tunnel boring machine	Y
Site formation & Tunneling (concrete or rock breaking)	- Drill and break method using excavator-mounted breaker; - Blasting with explosives	- Use of hydraulic splitter, hydraulic crusher/ quieter type saw (e.g diamond wire saw, noise reducing diamond blade saw) - Non-explosive chemical expansion agent (soundless chemical demolition agent) - Pulse plasma rock fragmentation technology - Use of tunnel boring machine	Y
Piling (sheet pile / H-beam pile)	- Percussive piling (e.g. percussive hammer, vibration hammer)	- Use of silent piling such as hydraulic press-in method	Y
Piling for foundation works	- Percussive piling	- Large diameter bored piling	Y
Building / structure demolition (Large scale)	- Excavator-mounted breaker	- Use of hydraulic crusher - Non-explosive chemical expansion agent (soundless chemical demolition agent) - Use of quieter type saw (e.g diamond wire saw, noise reducing diamond blade saw)	Y
Building / structure modification works	- Excavator-mounted breaker	- Use of quieter type saw (e.g diamond wire saw, diamond blade saw) - Robot-type hydraulic crusher or handheld concrete crusher	Y

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Road works (Concrete compacting)	- Vibratory Poker	- Self-compacting Concrete or Rubber Head Poker Vibrator	Y
Building works (Superstructure)	- In-situ construction - Vibratory Poker	- Use of pre-casting and prefabrication technology - Self-compacting Concrete or Rubber Head Poker Vibrator	Y
Formwork Installation	- Timber formwork by hammer and drilling	- Modular lightweight formwork	Y
Rescheduling, Restricting hours of operation of noisy tasks	- 24 hrs working	-	Y