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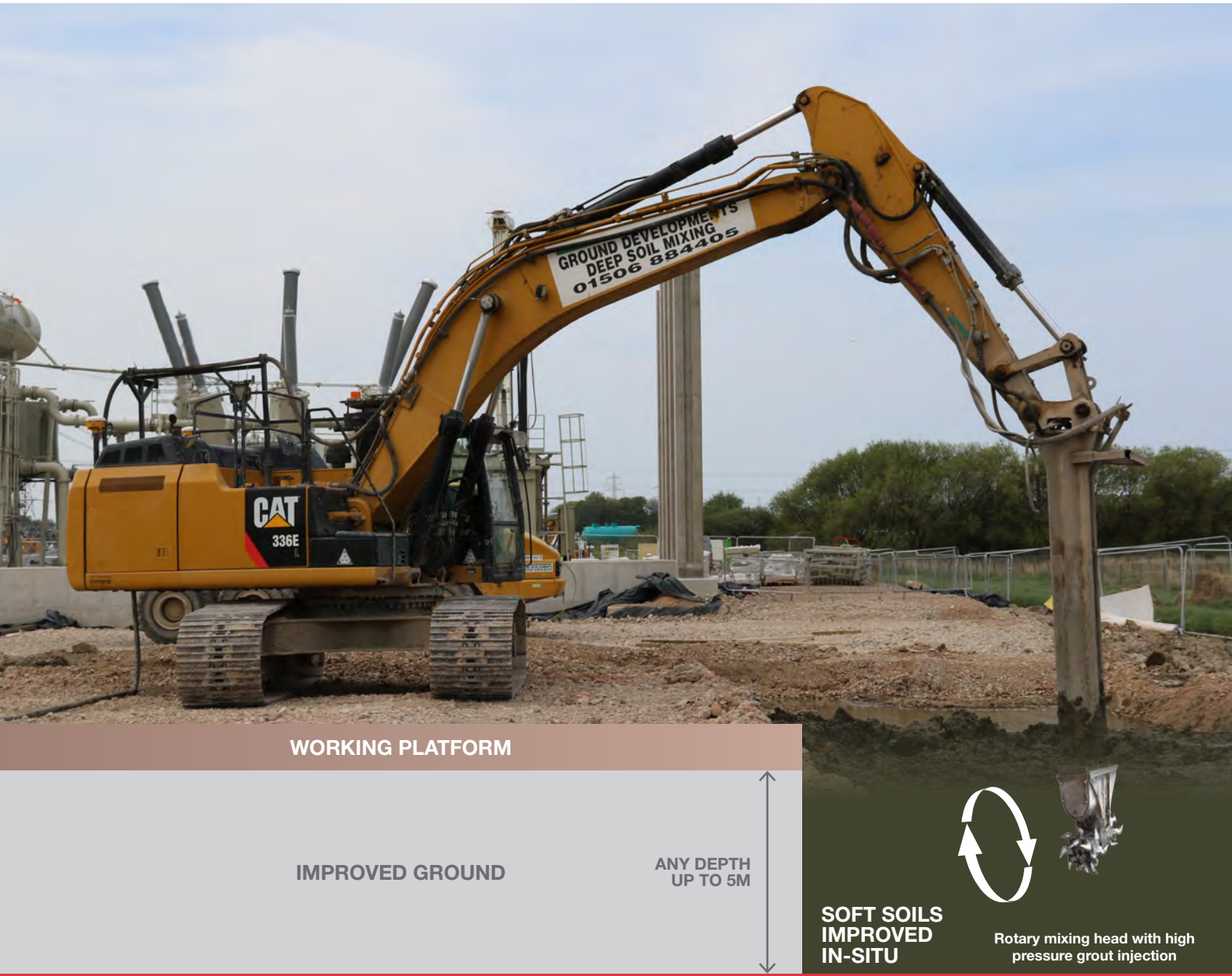
MASS STABILISATION / DSM

GDL
GROUND DEVELOPMENTS LTD



WORKING PLATFORM

IMPROVED GROUND

ANY DEPTH
UP TO 5M

SOFT SOILS
IMPROVED
IN-SITU

Rotary mixing head with high pressure grout injection

IN–SITU TREATMENT FOR SOFT SOILS

Peat • Running Sands • Very Soft Soils • Contaminated Soils

BENEFITS

Cost Effective • Safe • Fast • Sustainable • Adaptable

TECHNICAL DATA

Maximum treatable depth (m)	Up to 5m
Binder format	Dry (powder) / wet (grout injection)
Binder types	Cem I, Cem II, Cem III with PFA or GGBS (A)
Treatable soil strengths	Undrained shear strength 0-50kN/m^2 (cohesive) Loose to medium dense (granular)
Post-treatment (design) strength achievable	100-400kN/m^2 (B)
Post-treatment stiffness	50-200MN/m^2 (C)
Post-treatment permeability	10^{-7} to 10^{-9} m/sec

Notes:

A Type of binder / binder combination depends on soil type, aggressivity and level of contamination.

B Indicative only, higher strength can be achieved with higher binder contents.

C Stiffness is E50: the stiffness derived from the unconfined compressive strength test at a stress equal to 50% of the failure stress. Indicative only, higher stiffness can be achieved with higher binder contents.

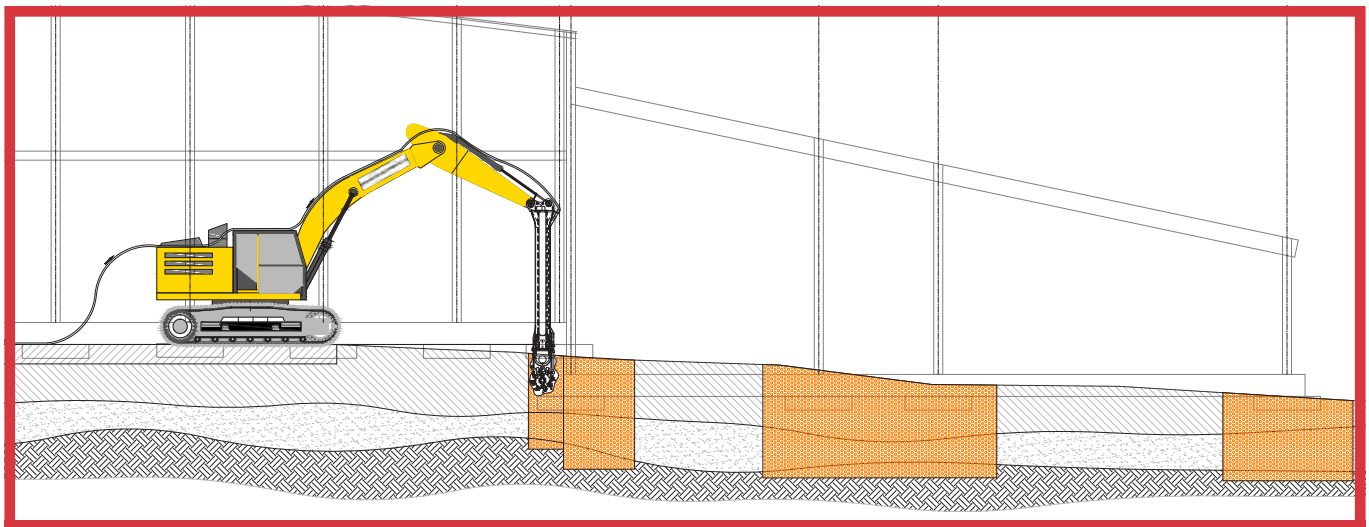
TABLE SHOWING RANGE OF WORKING PARAMETERS

Application limits for Mass and Deep Soil Mixing ground improvement techniques

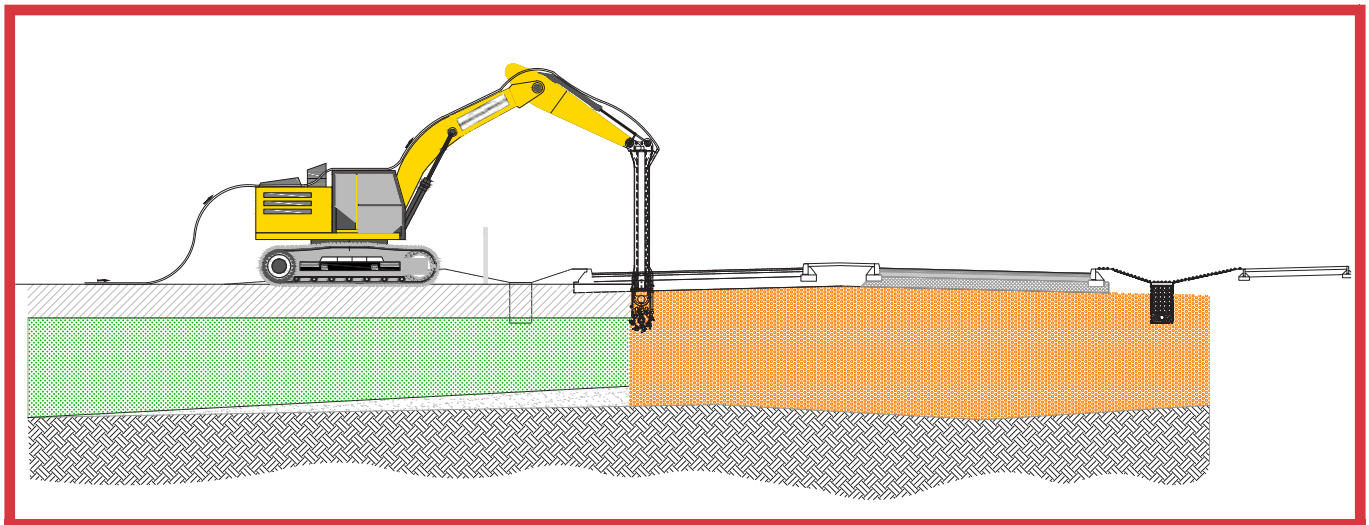
WET - Mass Deep Soil Mixing

DRY - Mass Deep Soil Mixing

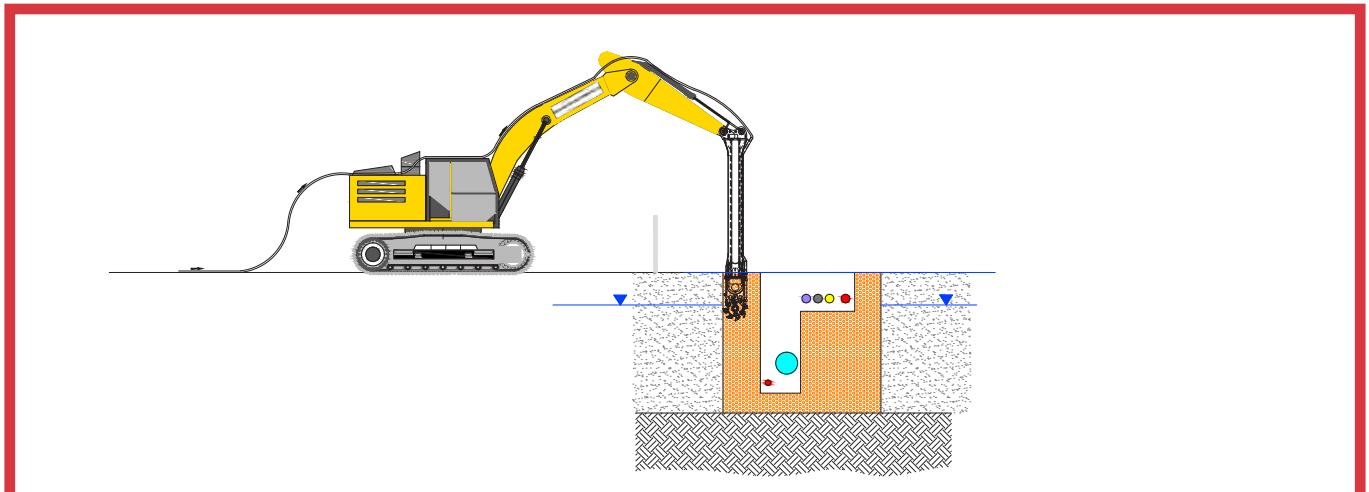
APPLICATIONS



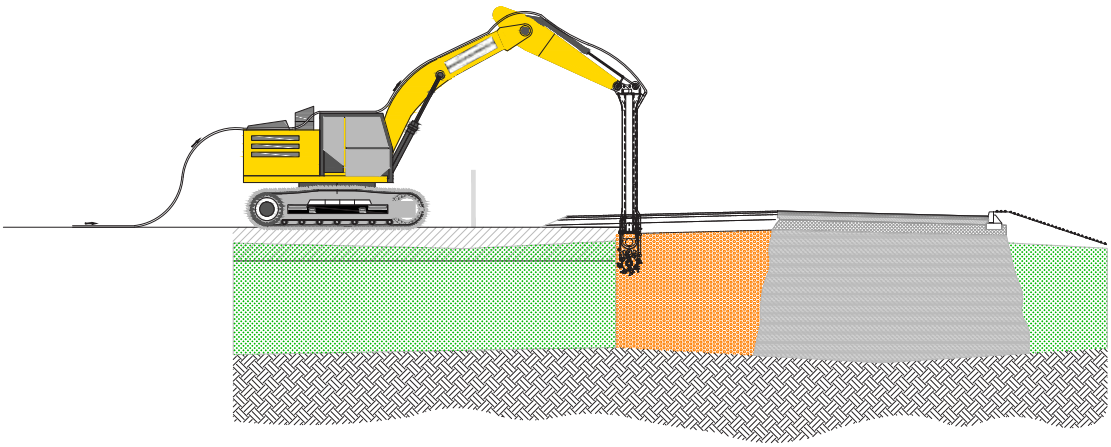
FOUNDATIONS



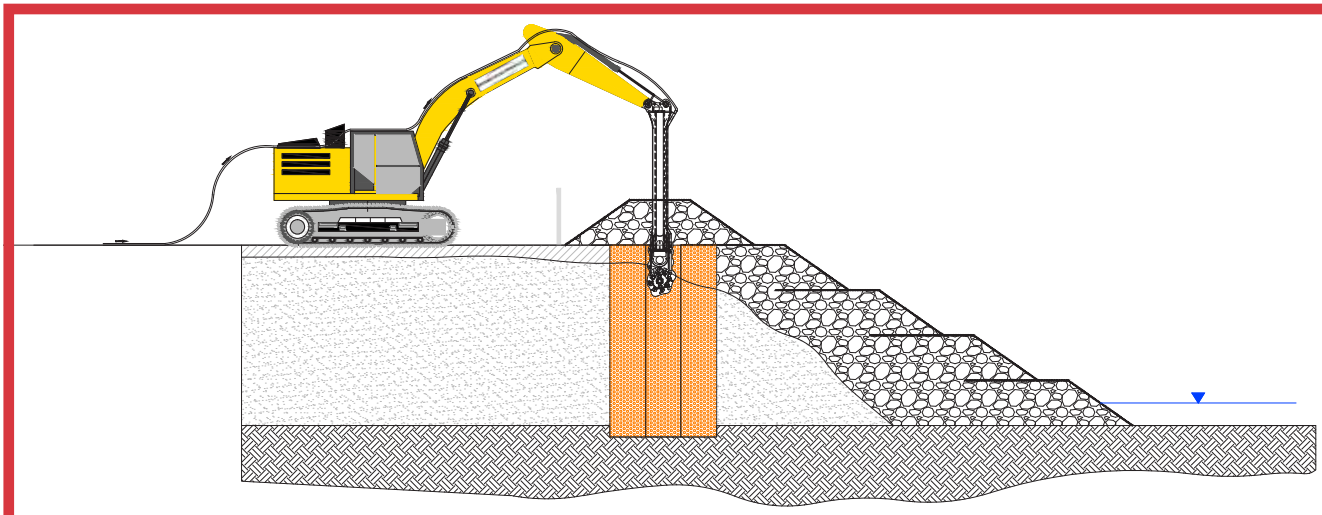
ROAD AND RAIL EMBANKMENTS



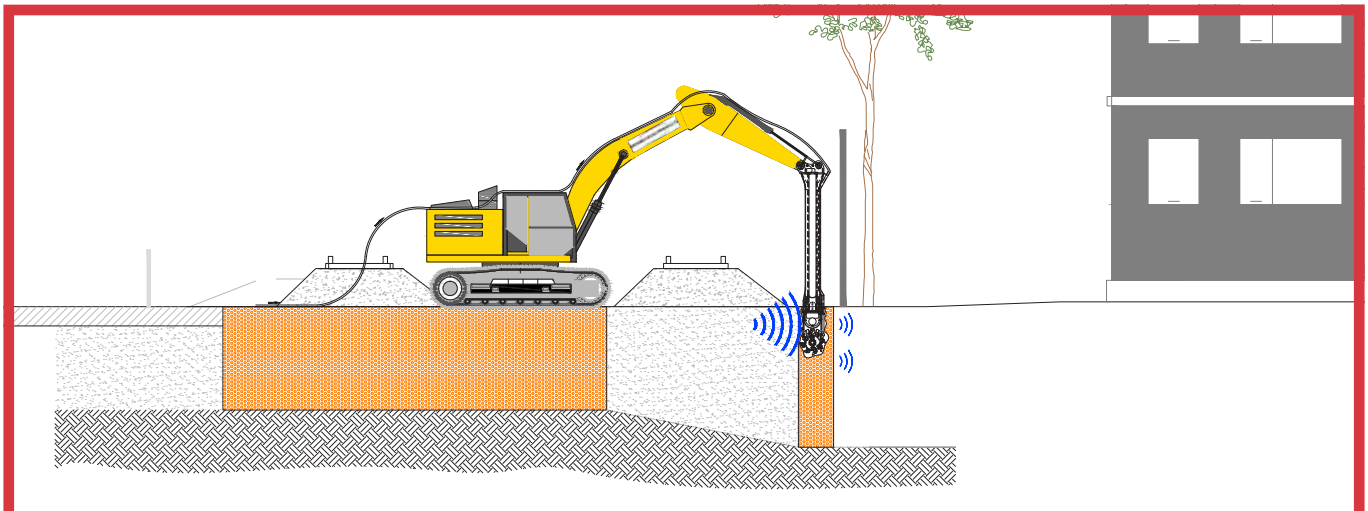
UTILITIES AND DRAINAGE



SLIP REPAIRS



LOW PERMEABILITY CUT OFF WALLS



VIBRATION REDUCTION / SEISMIC STRENGTHENING

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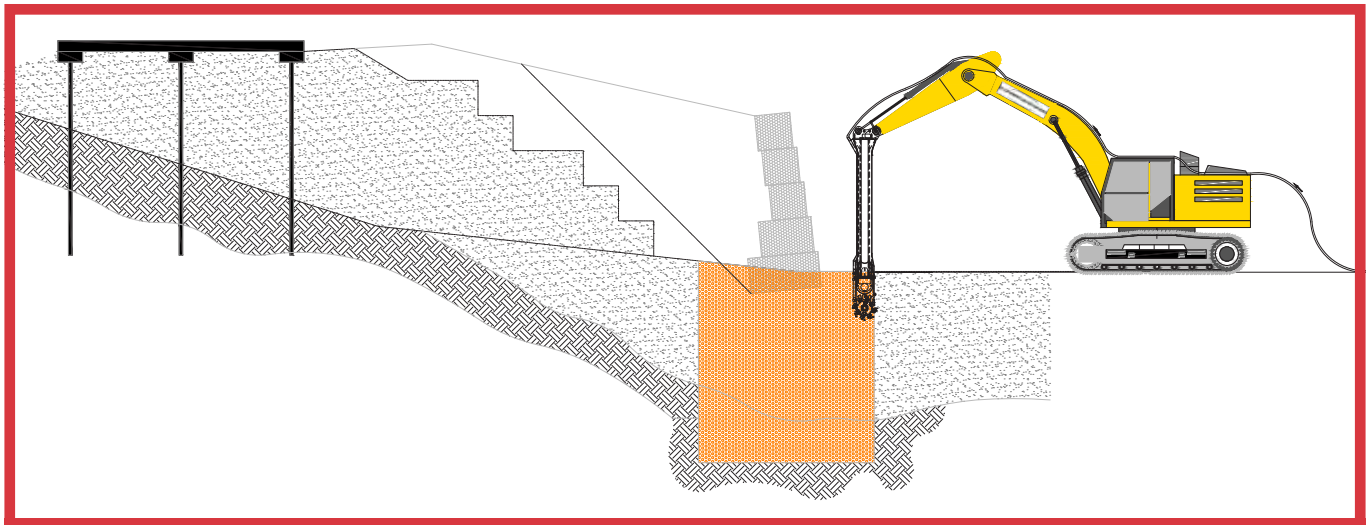
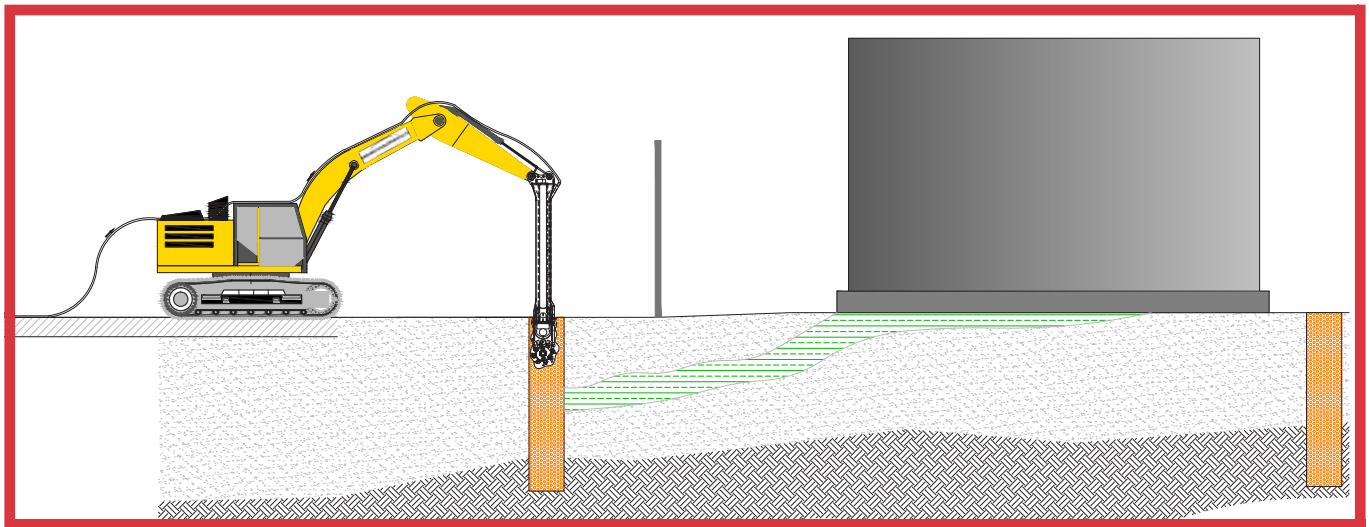
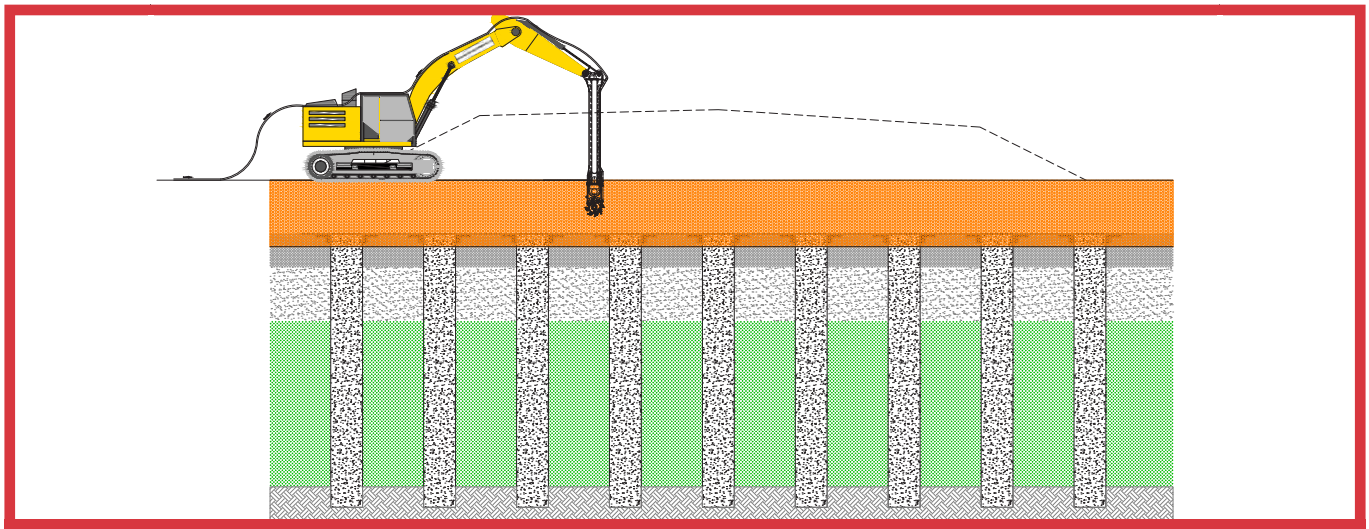


RETAINING WALL FOUNDATIONS



SOLIDIFICATION OF CONTAMINANTS



IN CONJUNCTION WITH OTHER GROUND IMPROVEMENT SYSTEMS FOR EXAMPLE DSM COLUMNS

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