

## Sea bed soil improvement for reclamation and sea walls completed !!

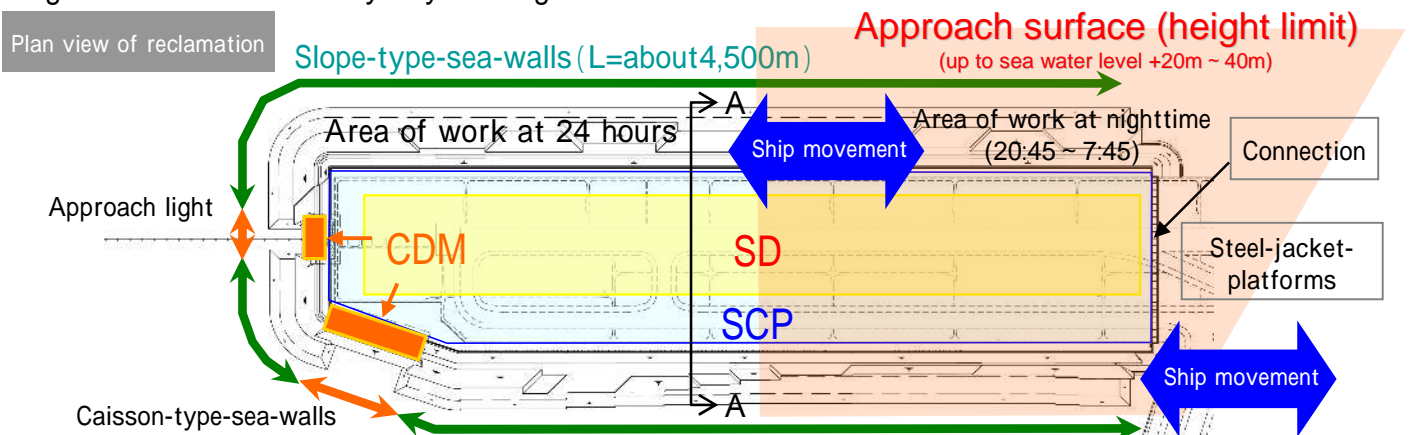
“Sand Compaction Pile (SCP) Method” is applied to sea bed soil improvement for “gently sloped rubble mound sea walls”.

Sand piles of 2.0m diameter and 3.0m × 3.5m arrangement (30% replacement) are constructed into sea bed soft clay down to sea bottom -26m at maximum.

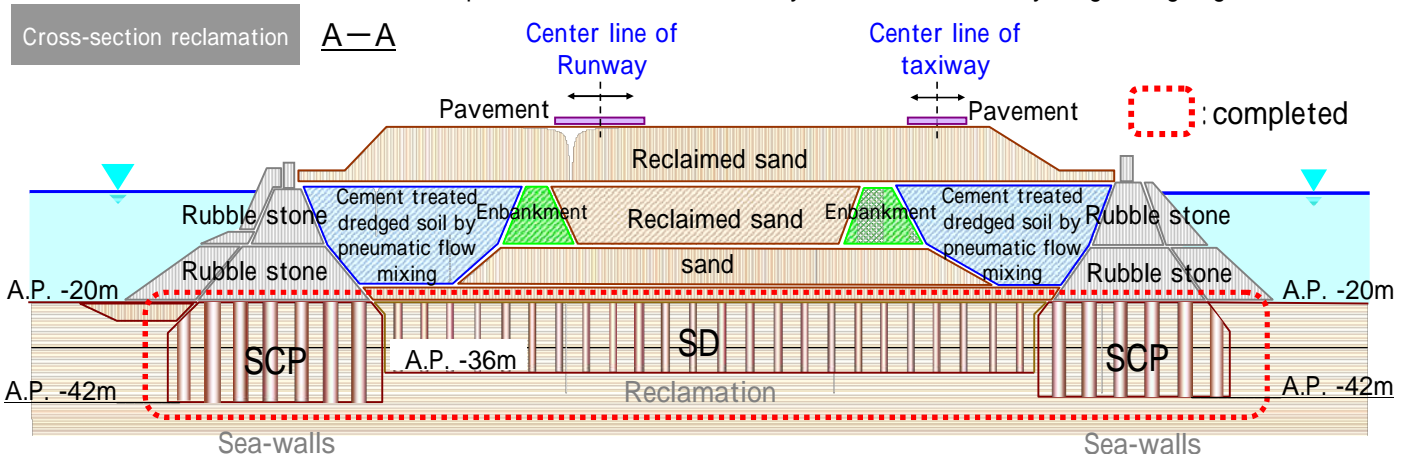
Sea bed soil improvement for reclamation, which is surrounded by sea walls, is done by “Sand Drain (SD) Method”.

Sand piles of 40cm diameter and 1.6m × 2.5m arrangement (3% replacement) as vertical drainage are constructed into sea bed soft clay down to sea bottom -22m.

Due to severe height limit by the approach surface, each working vessel was forced to do improvement work by hectic movement from/to night-only-working area (20:45-7:45) to/from no height limitation area every day and night.



A total GPS monitoring system of all vessels was introduced to this soil improvement work to avoid any accidents, and everything was going well.



### Sea bed soil improvement vessels

SCP : April 25,2007 ~ December 12,2007 (completed)

SD : November 11,2007 ~ March 26,2008 (completed)



-SCP working vessels-	-SD working vessels-
<b>Number of vessels</b>	
13 working vessels at maximum	4 working vessels at maximum
<b>Maximum height of working vessels</b>	
about 80m	about 70m
<b>Construction amount (amount of sand piles)</b>	
about 70,000 piles	about 180,000 piles
<b>Improvement specifications</b>	
3.0m × 3.5m, 2000 (30% replacement)	1.6m × 2.5m, 400 (3% replacement)