

63163 Outhead Sand Recharge Project, Marine Scotland Application. June 2023

Method Statement

There are 3 main elements to the proposals;

- Removal of sand from the donor area at Outhead in an area of accretion;
- Recharge at the receptor site to restore the dune face and beach level within this area to address erosion; and
- Planting of the dune face with dune grasses (Marram and Lyme) and stabilised with temporary chestnut pale fencing. Once the recharge is completed, there will be a period of annual monitoring through fixed point photography and topographic survey.

The proposed recharge design is a straightforward replication of the two previous recharges which have been undertaken successfully and without incident or criticism, the most recent providing dune restoration that lasted for 15 years. The third recharge, hauling sand and shaping, will take place over a pre-selected spring tide series over 10 days. The proposed working window would be during March with planting in April / May.

Sand will be removed from the same donor site used for the two previous Out Head recharges, 2001 and 2008, location is NGR NO 498202 (This is ideal because that area has been proved to replenish very quickly and is a known area of long-term accretion. Approximately 12,000-15,000m³ of sand will be transported to the receptor site on the south west interface with the Eden Estuary.

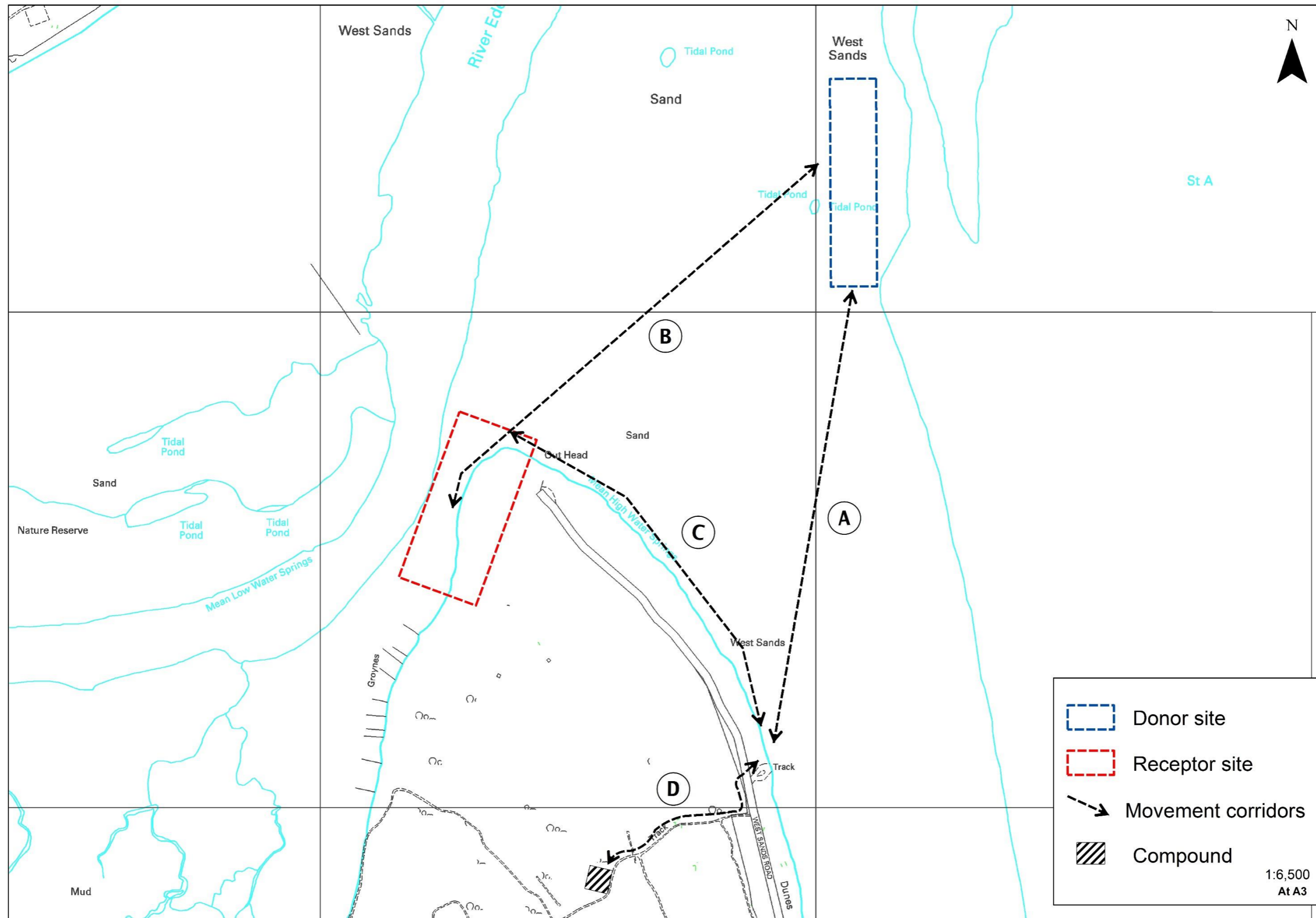
Working will take place over both low tides each day. Sand will be extracted to a maximum depth of 0.5m over an area of approximately 200x200m using a single 360-degree backhoe excavator loading three or four "Moxy" type dump trucks following agreed movement corridors per Figure overleaf (ECOS Countryside Services LLP).





Three machine movement corridors (A, B and C) will be used for gaining access to the donor site, hauling sand to the receptor site and return to a safe storage over high tide. Working will be limited to a low tide window of a few hours which will "roll" according to the times of low tide. All refuelling and maintenance will be completed at the remote site compound (D).

Work at the receptor site will involve tipping and bulldozing sand into place to create a new 200m long sand cliff, with a top platform approximately 10m wide. A slope will extend seawards to a depth of 25-30m, previous recharges extended to approximately 40m. The profile will reflect previous recharges, although it may be slightly steeper.

An upper bench, raised slightly higher than the existing eroded ridge, will be transplanted with cell grown marram plants of local provenance, or transplants taken from adjacent dunes, at a density of 5 plants per square metre.

Prior to marram planting, a series of chestnut pale fences will be installed across the face. After planting these fences will be closed at the toe with another public exclusion fence. Anti-erosion roll bags will be temporarily placed inside the toe fence to limit initial losses for 6-12 months.



	Donor site
	Receptor site
	Movement corridors
	Compound

1:6,500
At A3