

Schematic method and sequence of work to construct the intertidal habitat and outfall

- The aim is to dig the intertidal habitat outfall area in the dry and then connect it to the tidal channel
- The outfall and associated intertidal area is due to be excavated terrestrially on dry land prior to breaching the existing riverbank allowing the mean high water line to migrate effectively in-land.
- This means greater control over material movement and a significantly reduced risk of water borne and water related silt pollution.
- There is to be no channel excavation in the current marine environment below current mean high water springs line when viewed in plan and the levels of the associated drainage has been designed to reflect this

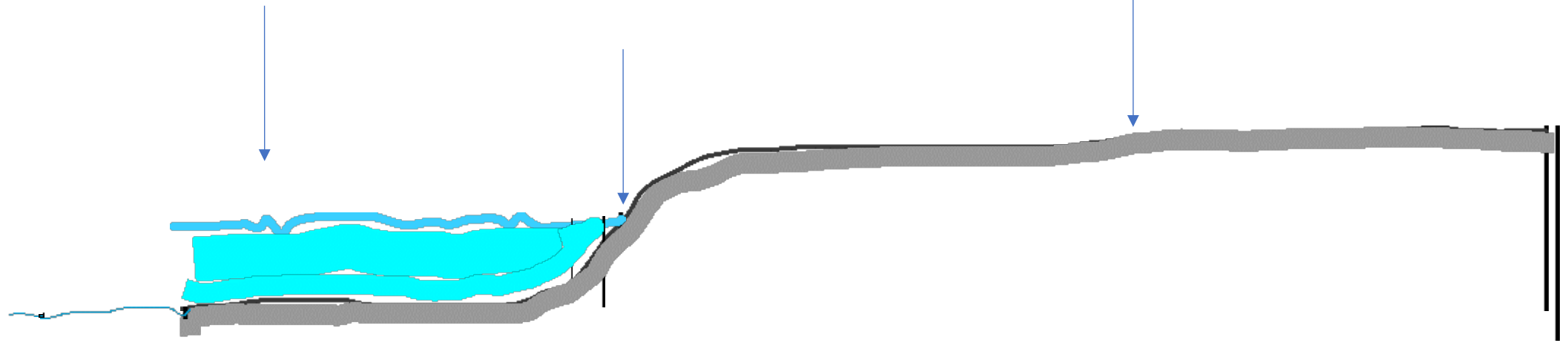
Current situation

Mean Low Water
Neap - Indicative

River Tees

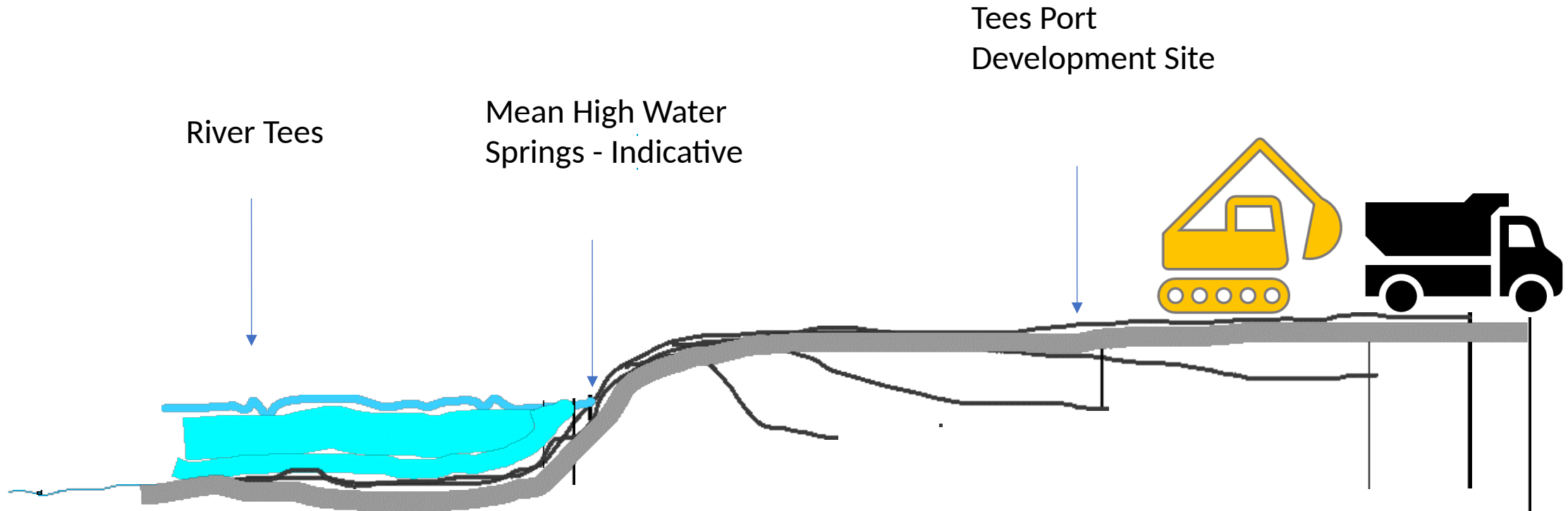
Mean High Water
Springs - Indicative

Tees Port
Development Site



Indicative cross section
through proposed
intertidal outfall area

Stage one



Excavation commences at most "inland" location with material being transported off site and progresses towards the channel

Stage two

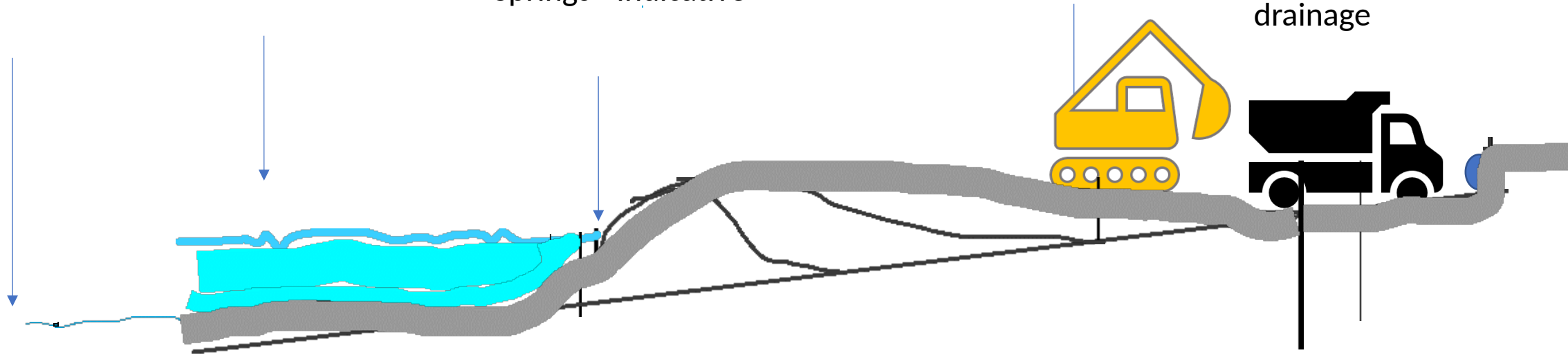
Mean Low Water Neap - Indicative

River Tees

Mean High Water Springs - Indicative

Tees Port Development Site

Culvert headwall and associated flow dissipating structures - not connected to surface water drainage



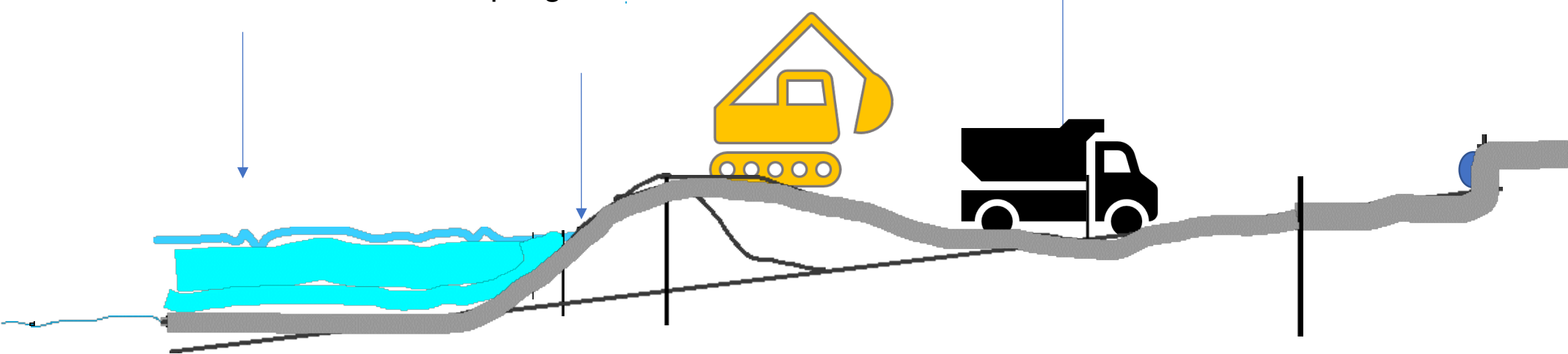
Excavation to the final grade progresses towards the channel

Stage three

River Tees

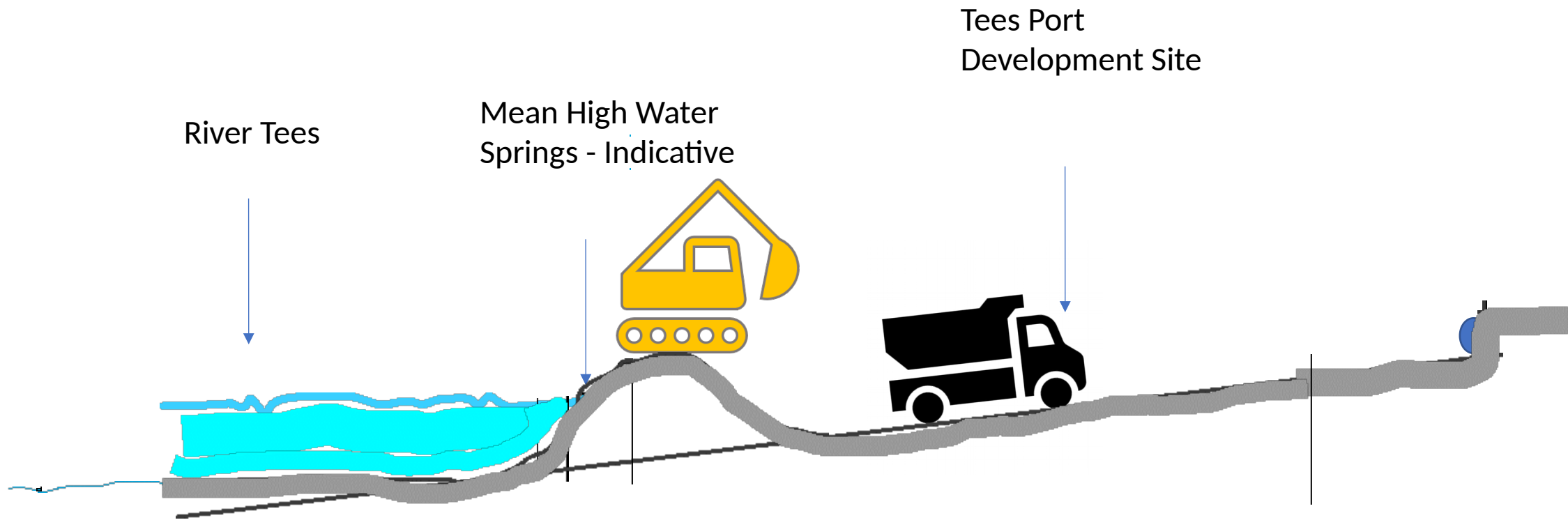
Mean High Water
Springs - Indicative

Tees Port
Development Site



Excavation to the final
grade progresses
towards the channel

Stage four



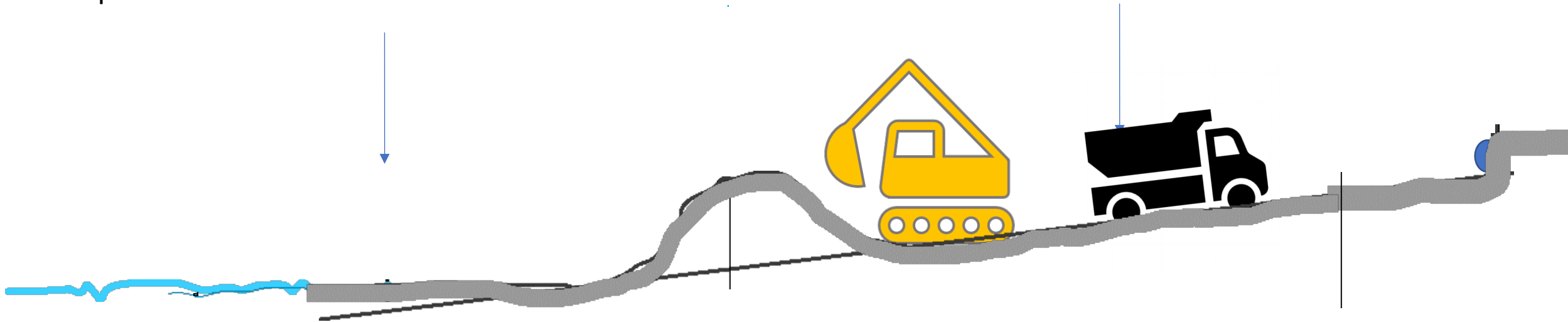
Excavation to the final grade progresses towards the channel at all stages of the tide until only a barrier bund remains

Stage five

Mean Low Water
Neap - Indicative

River Tees

Tees Port
Development Site



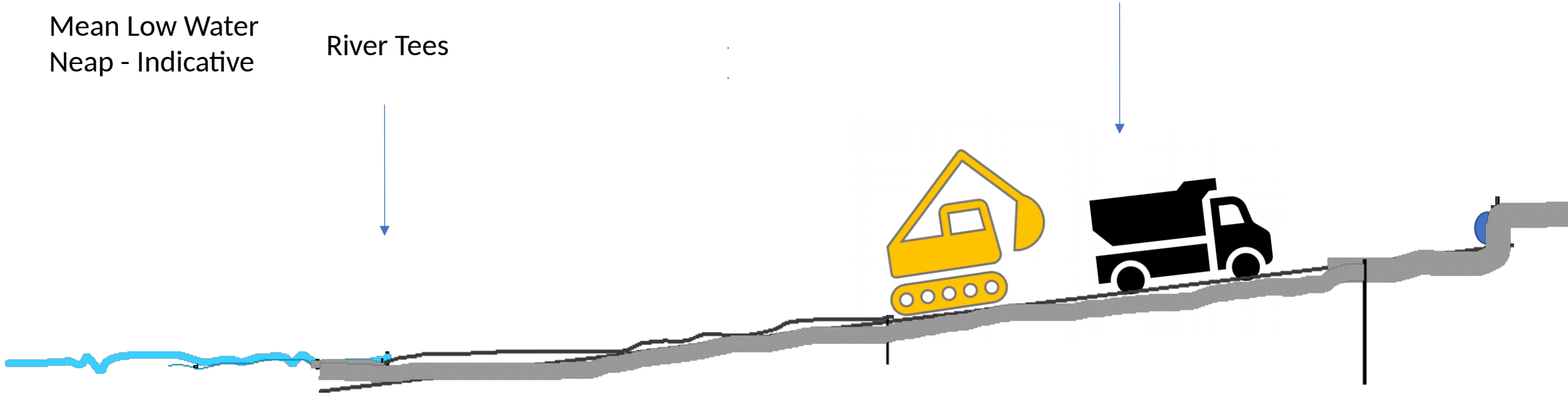
Barrier bund removed
on an outgoing tide and
operation complete
before tide returns

Stage six

Mean Low Water Neap - Indicative

River Tees

Tees Port Development Site



All excavation complete to final grades and plant demobilised from work area in advance of tidal innundation

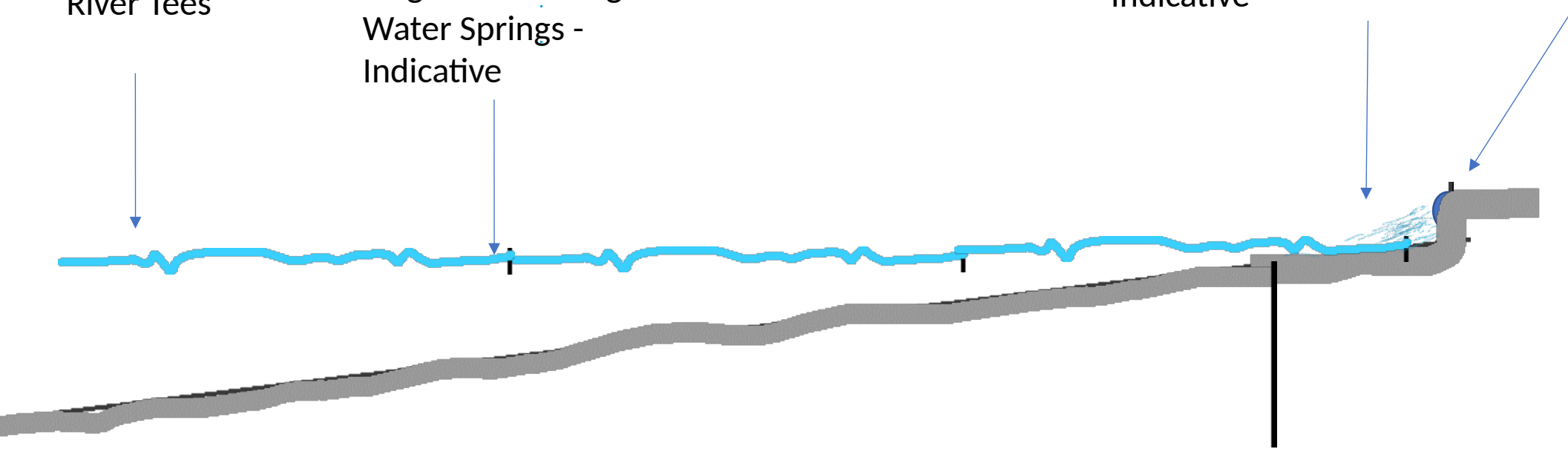
completion

River Tees

Original Mean High
Water Springs -
Indicative

“New” Mean High
Water Springs -
Indicative

Culvert headwall and
associated flow dissipating
structures - connected to
surface water drainage



Tidal inundation will
bring the MHWS line
further “inland”