Appendix 4

Whalsay Route North Voe and Symbister – Comparison of "Pros and Cons"

North Voe

Pros

- "Green field" site with little in the way of restrictions on the construction process – this ensures that construction is at lower risk of being hindered and therefore least risk to project cost or programme.
- No conflict with ferry or harbour operations in Symbister during construction – this ensures that the ferry service can operate as it does at the moment with no risk of disruption to travellers.
- The nature of the site provides sufficient overburden (softer material on the sea bed) to support driven piles without drilling and blasting – keeps costs down and construction process simpler (less risk).

Cons

- Site exposed to weather conditions until the breakwaters are in place
- Contractors working area limited marshalling area can be used when formed.
- Land access for construction of the breakwaters difficult breakwaters will probably have to be built from the sea.
- Breakwater material will have to be imported.

Symbister

Pros

- Existing services/facilities already in place.
- Fill material can be won from the dredging therefore less materials to be imported.

Cons

- Difficult logistic exercise to construct within working harbour.
- Marina has to be relocated during dredging of the marina area and probably during most/part of the construction period.
- Disruption/delays to construction likely due to other vessel movements.
- Disposal area for dredged material required until it can be incorporated in to the works. Probably on foreshore in marina area.
- Contractors working area limited marshalling area can be used when formed from dredged material.
- Pier has to be solid to protect the marina hence sheet piles will require toe trench formed by drilling and blasting the seabed.