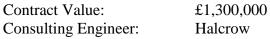
## Fraserburgh North Harbour Deepening, Scotland



Engineer's Representative:

Client: McLaughlin & Harvey Ltd Client's Representative: John Mariner (028 9034 2777)

Works completed: July 2015

Categories:- Marine Civil Engineering, Dredging, Coastal Defences

Ashleigh Contracts were awarded the rock dredging of the North Harbour Deepening works at Fraserburgh Harbour by main contractors McLaughlin & Harvey.

## Works Comprised:

- Dredging of approx. 11,000m3 of rock down to -4.7m CD within the North Harbour Basin and approach cannel.
- Construction of a rock armoured Revetment below a new suspended quay along the west side of the Harbour.

Rock dredging was undertaken using hydraulic hammers with all rock brought ashore and transported to a storage area approx. 3 miles from the Harbour.

Long reach machines (up to 95T) using underwater rockbreakers were utilised to break out the rock to facilitate dredge depth attainment and to allow for the construction of deepened quay wall strengthening works around the 450 linear m of perimeter quay wall. The rockbreaking was undertaken both working off a spudleg barge and from the quayside. Drilling and blasting was not permitted due to the state of repair of the existing quay walls and with significantly higher than anticipated rock strength encountered up to 160N/mm2, this added significantly to the degree of difficulty in the rock removal on this project.





## ASHLEIGH CONTRACTS