

DEPARTMENT OF THE NAVY										FY 1964 - MILITARY CONSTRUCTION PROGRAM - ITEM JUSTIFICATION DATA										DATE 23 AUGUST 1962									
Mare Island Naval Shipyard, Vallejo, Calif.										P-21										165-10									
Dredge to 32' Mare Island Strait																				\$350,000									
SECTION I. ITEM DESCRIPTION										SECTION II. COST ESTIMATES										SECTION III. BASIS OF REQUIREMENT									
ITEM NO. 15300										ITEM NO. 15300										ITEM NO. 15300									
DESCRIPTION										ESTIMATE TYPE										TOTAL FOR THIS PROJECT									
The deepening of the Mare Island Channel and Turning Basin from a project depth of 32 feet below MLW to a project depth of 35 feet below MLW as follows:										ORIGINAL DREDGING										CY 833,333 42 350									
1. Dredging from 32 feet to 35 feet depth a channel 400 feet wide extending from the Carquinez Strait to the vicinity of the Mare Island Naval Shipyard Finger Piers, a distance of 7800 feet.																													
2. Dredging from 32 feet to 35 feet depth a turning basin 600 feet wide extending from the Mare Island Naval Shipyard Finger Piers to Berth 7, a distance of 7500 feet.																													
A channel 35 feet deep																													
A channel 32 feet deep																													
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A channel 32 feet deep																													
--																													
3 feet additional dredging																													

SECTION I. ITEM DESCRIPTION

The deepening of the Mare Island Channel and Turning Basin from a project depth of 32 feet below MLW to a project depth of 35 feet below MLW as follows:

- Dredging from 32 feet to 35 feet depth a channel 400 feet wide extending from the Carquinez Strait to the vicinity of the Mare Island Naval Shipyard Finger Piers, a distance of 7800 feet.
- Dredging from 32 feet to 35 feet depth a turning basin 600 feet wide extending from the Mare Island Naval Shipyard Finger Piers to Berth 7, a distance of 7500 feet.

SECTION II. COST ESTIMATES

CY 833,333 42 350

SECTION III. BASIS OF REQUIREMENT

A channel 35 feet deep
A channel 32 feet deep
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A channel 32 feet deep
--
3 feet additional dredging

SECTION IV. BASIS OF REQUIREMENT

The Shipyard has nuclear power submarine construction and overhaul capabilities and is the principle Shipyard on the west coast for nuclear submarine construction. The project depth of the channel and turning basin is 32' below MLW. Average tides are 7'. Submarines drawing 32'-11 5/8" are now under construction. This draft plus 2' drag by the stern while under way equals 34'-11 5/8". Therefore channel depth requirements for operating submarines of this class is 35' below MLW. Operations at high tide only is not practical. Fog conditions at high tides may prohibit operations with resulting hours of waiting for another high. Maximum performance tests conducted at sea may cause failure and require an immediate return to the Shipyard. Other construction or overhaul schedules may be adversely affected, thereby delaying the performance of the ships and their Polarix weapons systems in the National Defense Mission. If not approved, some of the submarines constructed here or coming in for overhaul will ground while under way at low tides. This will result in possible structural damage and clog the cooling water intakes. Beginning with April 1963, SSBN's submarines will be operating intermittently.