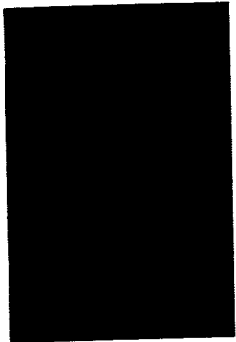

Project Description



2. PROJECT DESCRIPTION

2.1 SITE LOCATION AND HISTORY

2.1.1 Hebe Haven Yacht Club "The Club" has occupied its present site at Pak Sha Wan (Hebe Haven) near Sai Kung, of the New Territories since 1963. The Club is located on the western shore of Pak Sha Wan (Figure 2.1) and occupies a site area of approximately 8,830 m². It is bounded by a boatyard to the north, a public car park and boatyards to the south, by Hiram's Highway to the west and to the east by the natural harbour of Hebe Haven (Figure 2.2).

Transportation

- 2.1.2 Vehicular access to the Hebe Haven Yacht Club is direct from Hiram's Highway, via a private road which enters the Club towards its north-west corner. The Hiram's Highway is the main road connecting Kowloon with Sai Kung.
- 2.1.3 Hiram's Highway is moderately busy, in addition to the normal weekday peaks, it becomes especially busy on Sundays due to the volume of recreational visitors. Since it has only a single lane in both directions, tailbacks can occur as a result of vehicle breakdowns or other obstructions.
- 2.1.4 A road widening scheme is being implemented from Clearwater Bay to Marina Cove in order to alleviate the problem of overloading at Hiram's Highway. The proposed alignment is shown on the Outline Zoning Plan.
- 2.1.5 Local ferry services run from the pier at Pak Sha Wan to Trio Beach and Kiu Tsui Chau.

Utilities and Facilities

2.1.6 The Club caters for its members and also provides facilities for the students of Clearwater Bay School, Sea Scouts, Outward Bound, King George V and Police Sail Training Club. These facilities include fixed mooring buoys, pontoons, workshops, and hard standings. The Club has a social membership, but its intention is to give priority to boating members. This priority is reflected in the Club's recruitment policy, which intends to increase the proportion of members who own or keep a boat.

Membership Growth and the Demand for Marine Facilities

- 2.1.7 Besides the Club's recruitment, the number of members and the intensity of boating activity remains static, which is due to the lack of space currently available.
- 2.1.8 The Club carried out a business projection in 1995 indicating that there will be an increase in the demand for boat storage towards the year 2000. This is supported by the current waiting lists which are for members boats only, as follows:

- Waiting list for hardstanding - 14; and
- Waiting List for Moorings - 60.

It should be noted that only members are accepted on the waiting list, therefore the real demand for boat storage and moorings is likely to be significantly greater than the current waiting lists suggest.

2.2 CURRENT CONDITIONS

2.2.1 Currently, the Club operates under extremely cramped conditions, both marine facilities and vehicle parking spaces are increasingly in demand by members. Figure 2.3 shows the existing layout of the Club's facilities including:

- boat hard standings
- moorings
- launching slipway
- boat maintenance slipways
- working area for a mobile crane
- Club House with bar and restaurant
- garden / barbecue area
- children's playground
- floating pontoons for short - term boat maintenance and loading / unloading
- vehicle parking lot for 37 cars and 18 motorcycles

Widening of Hiram's Highway

2.2.2 Besides the existing cramped conditions, another issue that the Club is facing is the proposed widening of Hiram's Highway. The land has been reserved for the Hebe Haven Outline Zoning Plan (OZP), which was gazetted on 10th June 1994, cuts into the western boundary of the Club. The future road alignment is subject to finalisation of the ETS-3 study currently undertaken by the Transport Department.

2.3 DESIGN OF THE PROJECT

2.3.1 The Club has evaluated three options for reorganising its facilities within its existing site boundary as follows:

- "Fit corners where available" option, i.e. better utilisation of corner space by design;
- various combinations of space rationalisation which introduces a two-level boat stacking system; and
- add a second stacking structure.

- 2.3.2 The results of the evaluation confirmed that none of the options listed above could provide an overall improvement of the facilities. Thus, in order to meet the projected demand for boat storage additional land area is needed.
- 2.3.3 There are no adjoining sites available for Hebe Haven Yacht Club to expand into. The Club cannot consider moving to another site because it is strongly tied to its existing site. Therefore, in order to meet the demand, the only option is to extend by means of land reclamation and provision of additional pontoon moorings. Figure 2.4 illustrates the proposed reclamation.
- 2.3.4 Permission is sought for the reclamation of an area of 2,619m², together with pontoon moorings providing a total area of 4,392m² of foreshore beyond the existing eastern limit of the Club as illustrated in Figure 2.5. The reorganisation of the existing site is consistent with existing Town Planning Board approval obtained by the Club.
- 2.3.5 The existing clubhouse, garden and slipways will remain intact. The proposed reclamation is planned so as to increase the number of hard standings for boat maintenance and repair, and also to provide a more efficient overall layout.

2.4 PHASING AND PROGRAMME OF THE PROJECT

- 2.4.1 Phase 2 Development of the Club is a basic requirement for lease negotiations. At a minimum it secures replacement of Club land lost as a consequence of the widening of Hiram's Highway. The estimated development inventory is shown in Table 2.1.

Table 2.1 Estimated Phase 2 Inventory for Hebe Haven Yacht Club

	Numbers	Gains / Losses
Boat Hard standings	211	+46
Upright Storage	57	-
Pontoon Berths	69	+69
Free-swinging Moorings	215	-14
TOTAL BOATS	552	+101
Car Parking Spaces	29	+7

2.5 CONSTRUCTION REQUIREMENT

Construction Works

- 2.5.1 The major construction works for Phase 2 development of the Club include the following:
- reclamation of a land area of 2,619 m² for hard standing, boat storage and repair;

- provision of boat removal or transport facility such as boat hoist;
- provision of approximately 46 berths in pontoon marina facility; and
- associated dredging of pontoon area to increase the water depth for boat access.

Construction Programme

2.5.2 The preliminary construction sequence has been proposed and shown below:

- i. Dredge the seabed at tow of new seawalls, in the proposed pontoon area and the waterway adjacent to the Sea Scout Association north of the site;
- ii. Demolish the existing slipway west of the new reclamation;
- iii. Construct the new sloping and vertical seawalls as well as the junctions in between;
- iv. Start backfill reclamation from the centre of the existing eastern seawall and to work outwards towards the new seawalls;
- v. Pave the top of new reclamation with concrete slabs;
- vi. Provide surface drainage and oil interceptors; and
- vii. Piling works and placement of pontoon moorings

Construction Method

Seawall Construction & Reclamation

2.5.3 The proposed reclamation will be implemented by constructing seawalls on the three seaward faces of the reclamation area. The constructed seawalls are either reverted or vertical. The volume of the fill material is estimated to be 16,000 m³, which is based on an average depth of 6 metres of fill over the reclaimed area.

Dredging

2.5.4 For dredging of the pontoon area (Area A) the total area is over 100m x 90m. The existing seabed level is 0 to -2 mPD. In order to increase to the depth of -2.25m, dredging of up to 2 meters thickness of seabed is necessary. The estimated volume of dredged material is 15,000 m³.

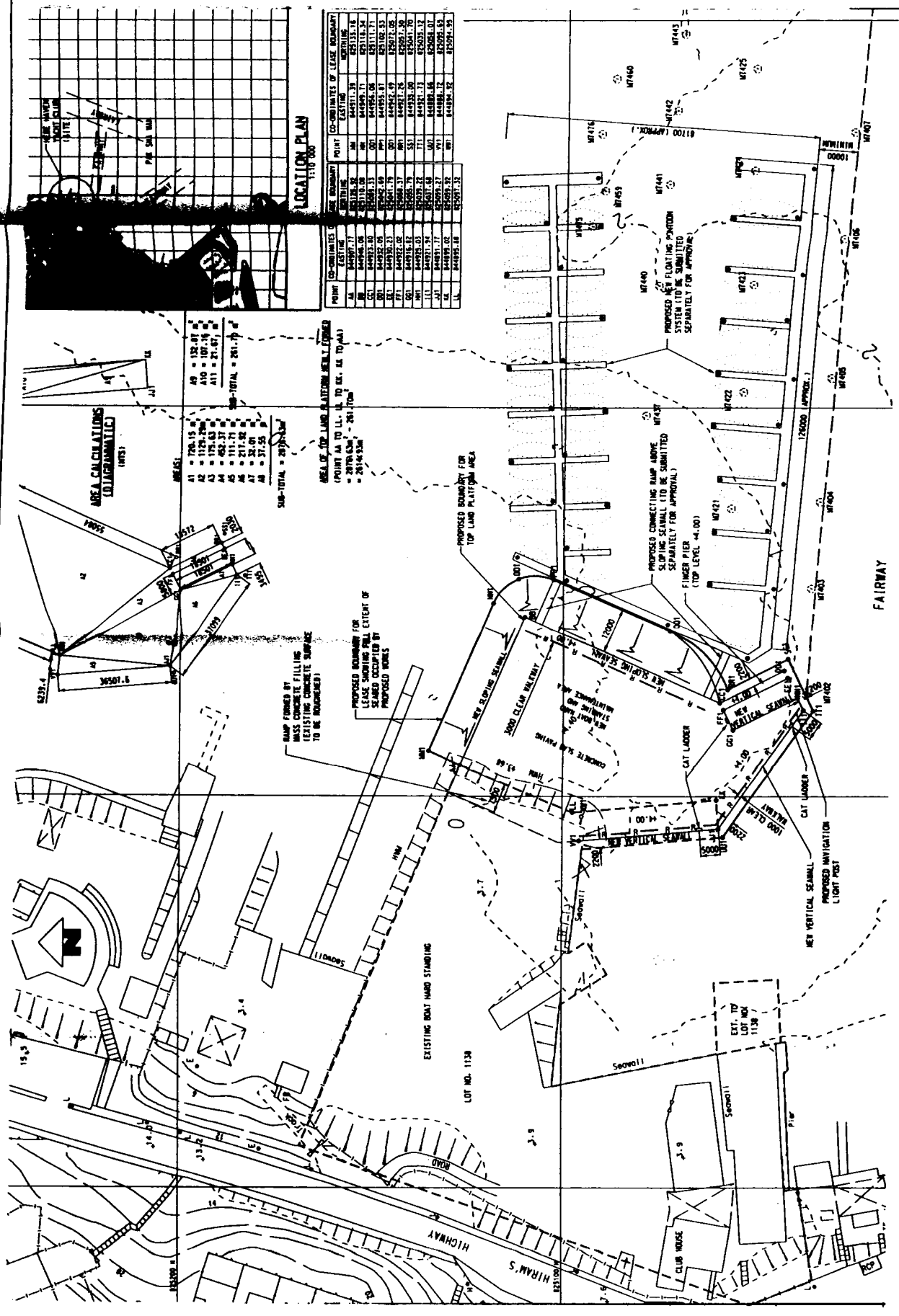
2.5.5 There is also a possibility that an additional 8,000 m³ of sediment will be dredged from the seabed near to the Sea Scout Association (Area B). Although the dredging works near the Sea Scout Association are outside the scope of the Study Brief, this EIA has included the potential effects of this additional dredging in case such works are undertaken. Thus the total estimated volume of dredged material for both areas will be 23,000 m³. Areas A and B are shown Figure 2.5. The time scale for the dredging works are dependent upon the size of the grab used for the dredger. As such details were unavailable at the time of writing, several bucket sizes were considered and, based on a 72 hour working week (12 hours per day for 6 days) works would take 5 weeks using a 1m³ grab and 2.5 weeks using a 3m³ grab. The assessment assumes that works will have been completed within a 3 month period and that 12 hour dredging cycles would be used.

2.5.6 The EPD Technical Circular (TC) No. 1-1-92 classifies dredged sediments according to their level of contamination by heavy metal contamination. Further to

the findings of the sediment quality report, the sediment sampled in Hebe Haven is classified as Class A, which is uncontaminated and therefore requires no special removal, transportation or disposal methods.

Piling for pontoon Moorings

- 2.5.7 Each pontoon mooring will be placed on piled foundations capable of taking lateral loads only. Only one piling rig will be utilised during the construction works.



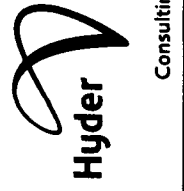
LOCATION PLAN
1:10,000

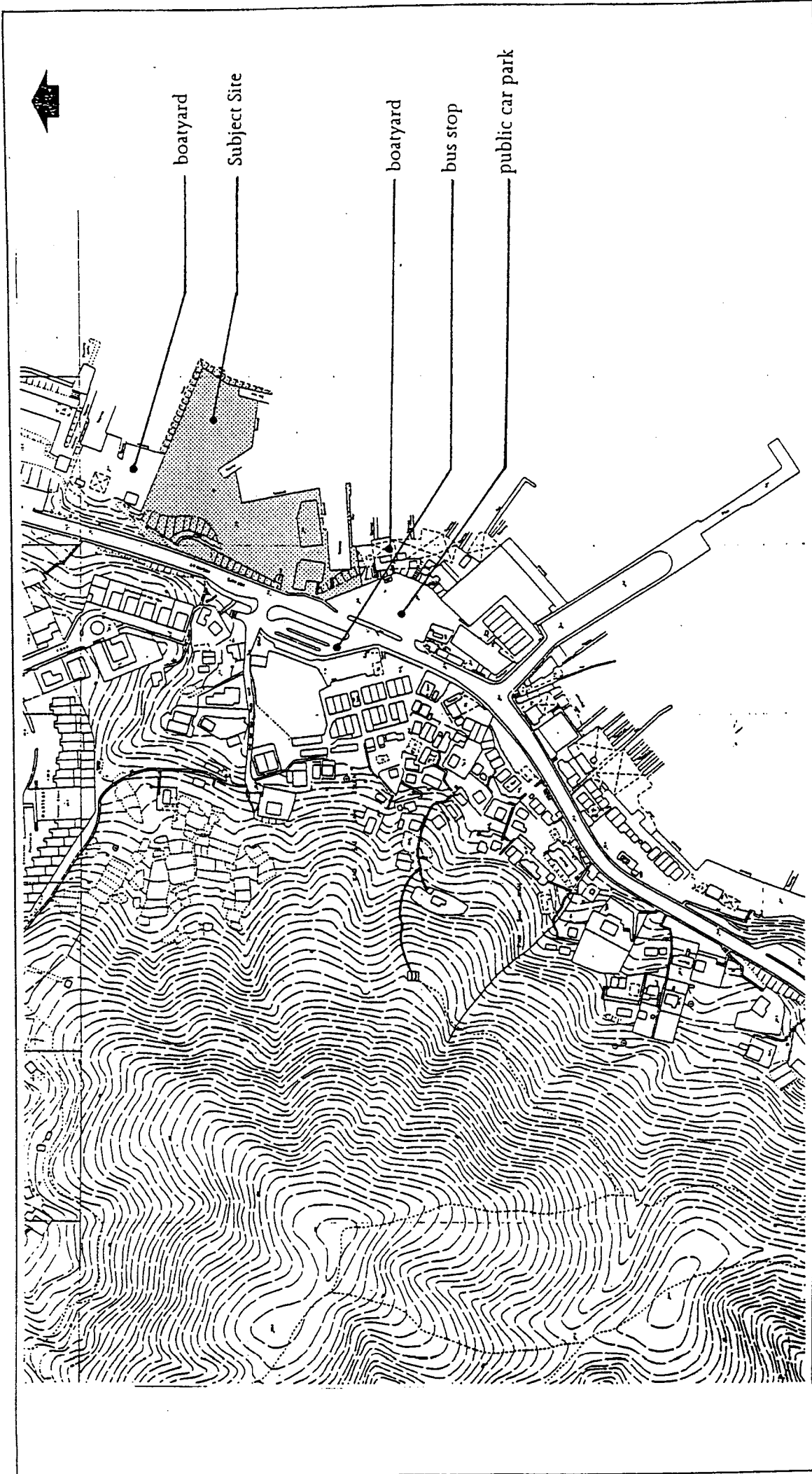
POINT	CO-ORDINATES OF LEASE BOUNDARY	POINT	CO-ORDINATES OF LEASE BOUNDARY
	EASTING		NORTHING
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3	844911.38	103	82302.53
4	844911.38	104	82302.53
5	844911.38	105	82302.53
6	844911.38	106	82302.53
7	844911.38	107	82302.53
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98	844911.38	198	82302.53
99	844911.38	199	82302.53
100	844911.38	200	82302.53

Hebe Haven Yacht Club Development - Phase 2 EIA

Figure 2.1 Proposed Site Location and Layout

Job No. EA00501





Hebe Haven Yacht Club Development - Phase 2 EIA

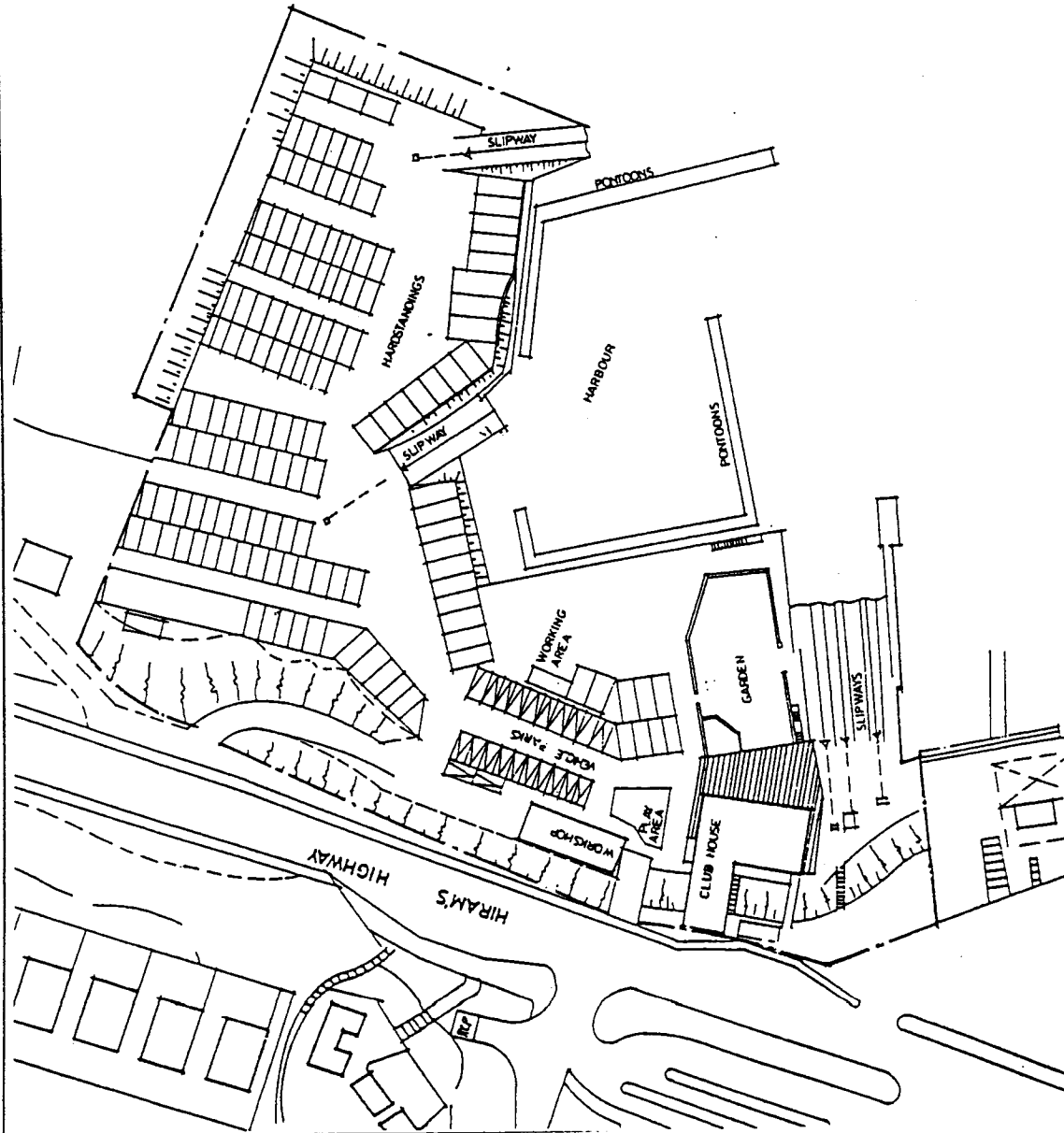
Figure 2.2 Surroundings of Subject Site

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Present Boundary
of the Club

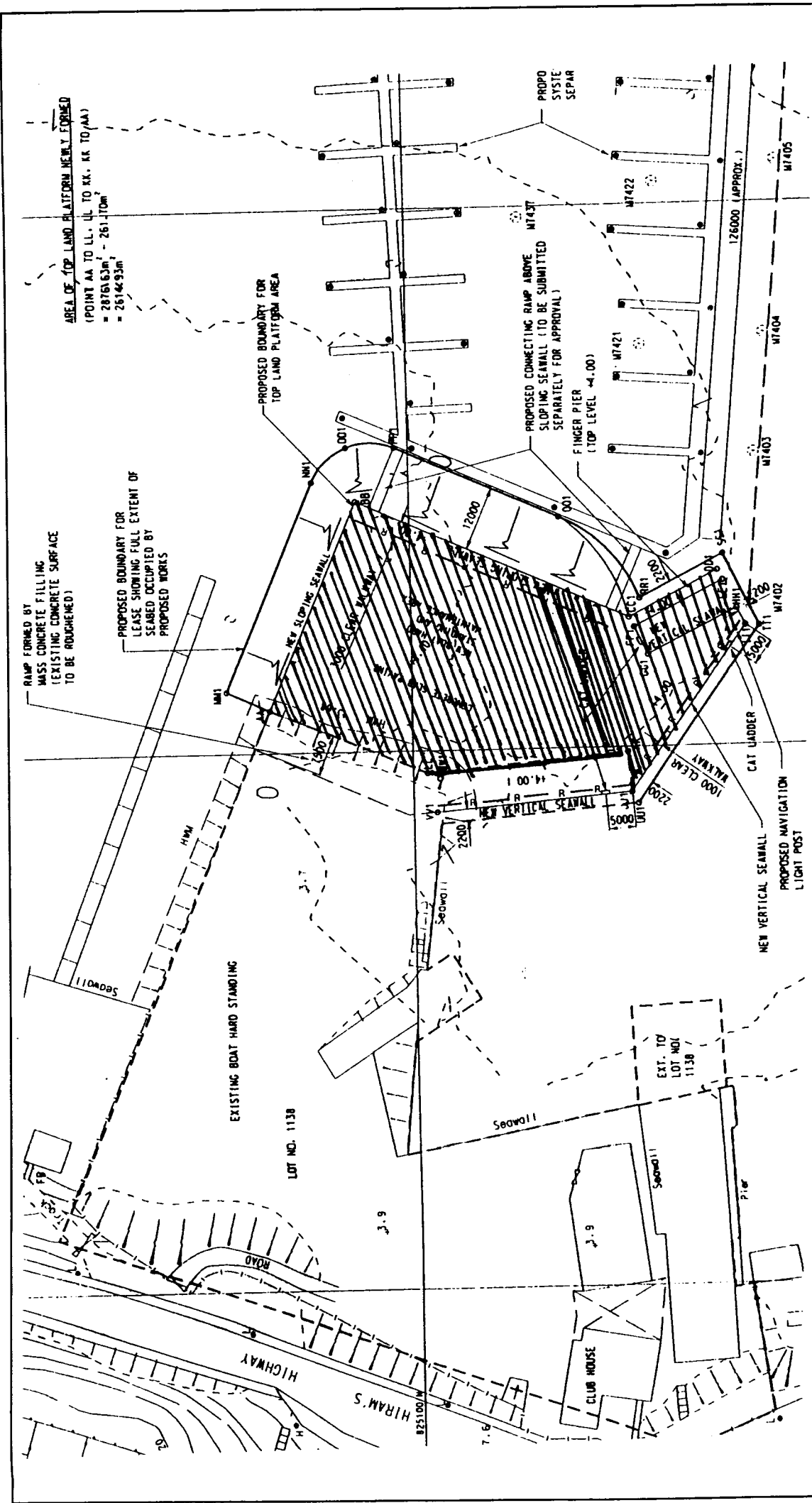


Hebe Haven Yacht Club Development - Phase 2 EIA

Figure 2.3 Layout of the Club's Facilities

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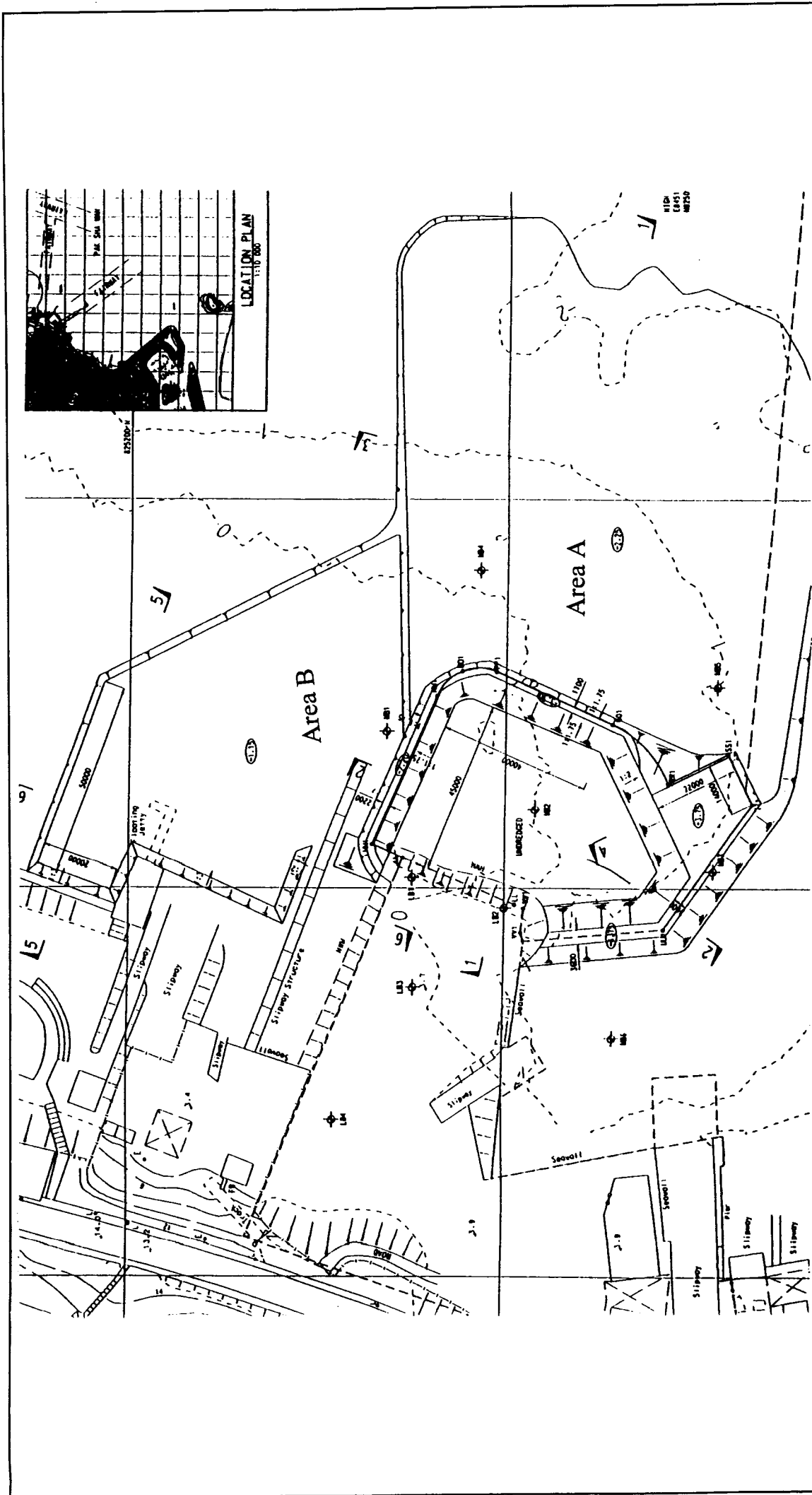


Hebe Haven Yacht Club Development - Phase 2 EIA

Figure 2.4 Proposed Reclamation

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Hebe Haven Yacht Club Development - Phase 2 EIA

Figure 2.5 Dredging Layout

Job No. EA00501

