

CM/L386/95

10th July, 1995

To: All VOC Chairman

Dear Chairman,

Future development of Discovery Bay

HKR's plans for additional development in the Yi Pak area and a road link to North Lantau are now being scrutinised in detail by the relevant Government departments. At the start of the City Owners Committee meeting on 17 July we have arranged a presentation, with the aid of a model, and we propose to discuss future arrangements for water supply and sewage disposal, on which commitments must soon be made soon.

The model corresponds with the most recent Master Plan (MP6.0A) which was submitted to Government in May. However, it should not be assumed that MP6.0A will be approved in its present form. The model merely illustrates what the completed development may look like if MP6.0A is implemented.

The road link, partly via tunnel, to the service road running alongside the North Lantau Expressway is an integral part of HKR's proposals. Without it DB would remain isolated and cut off from the new airport and property values would decline because of the proximity of the Lantau Port. HKR is prepared to pay for the road link in anticipation of recovering the capital outlay through future sales. Recurrent costs will have to be recovered from vehicles making use of it. There will be external bus services, initially at least to Tung Chung, but the ferry service will remain the principal external transport mode. If at a later stage Government permits private cars in DB, they will be restricted to the new development in Yi Pak. The unique character of the existing DB will be preserved, so far as the changed environment created by the new port and airport allows.

The road link provides the opportunity for DB to connect up with the water and sewage treatment plants that Government is now building at Siu Ho Wan, 2 Km. from DB. Built to serve the new port and airport, both plants have ample capacity for DB. Because the Lantau Port will seriously affect the flushing capability of local waters, Government wants the sewage connection to be made as soon as possible. Government is prepared to supply DB with potable water. The implications are set out in the following paragraphs.

...../Pg. 2

The existing DB infrastructure has been provided by HKR and written off against HKR's profit and loss account. HKR will similarly write off the cost of any expansion of the infrastructure required for the increasing population. Once built, the infrastructure has to be operated and maintained out of management fees. The capital cost of any upgrading (as opposed to expansion) that is required as a result of stricter Government regulations is shared between the City Fund and HKR in proportion to the ratio of completed Management Units to uncompleted Management Units at the time (1 MU = 10 m<sup>2</sup> gross floor area).

### Water

Water Supplies Department (WSD) has no objections in principle to supply potable water for DB's planned population of 25,000 and the associated commercial and community demands, including water for firefighting. City Management (CM) would continue to supply unfiltered water for flushing and irrigation from the existing reservoir.

There is no absolute necessity for Government water because the DB reservoir was planned from the outset for a population of 25,000. However, to increase the yield of the reservoir in order to supply that number of people, it will be necessary to implement lowland flood pumping to catch the main run-off from the indirect catchments within DB's boundary and to substitute saltwater for flushing. The capital cost of this planned expansion of the infrastructure would be payable by HKR.

Flood pumping and saltwater flushing would add about \$2 m. to CM waterworks' annual overheads which are currently about \$8 million. Some 75% of total overheads are attributable to the water treatment works, which will become more expensive to operate as the plant ages and because of anticipated stricter Government requirements, for example with regard to chlorine storage. All CM waterworks recurrent costs are part of management expenses and are recovered through metered charges (for potable water) and through management fees (non-potable water).

If DB continues to rely solely on the present single source of supply, problems could arise in future if there is a succession of exceptionally dry years or if the WSD tunnel being built between Siu Ho Wan and Mui Wo lowers the local water table. Although some residents have expressed disquiet about the long-term impact of the golf course on the reservoir, stringent precautions are always taken by the golf-course management and periodic sampling and testing by overseas laboratories, WSD and Environmental Protection Department has revealed no traces of contamination to date.

The implications for residents of a Government potable water supply are :-

- \*HKR would bear the entire capital cost of the connection.
- \*CM water meters would be replaced by WSD water meters, probably at a charge of \$140 per meter including installation. Resident would also probably have to pay a \$250 deposit to WSD (as against \$50 deposit to CM at present) although these points have yet to be confirmed by WSD.
- \*based on current average consumption, 90% of housing units would pay lower metered charges than at present. WSD's charging system incorporates a free initial allowance and 3 tiers to discourage high consumption. WSD's metered charges are higher than CM's once consumption exceeds 74m<sup>3</sup> over a 4 month period. WSD's current charging rates are attached herewith.

- \*DB rate payers would lose their current 15% reduction in rates for no Government water, which would mean paying an extra \$0.10 per sq.ft. per month in rates on average.
- \*DB consumers would have to observe the Waterworks Ordinance and Regulations with regard to usage of potable water, etc. HKR would pay for any modification of the potable water distribution system outside housing units that may be required by WSD.
- \*residents would continue to pay through management fees for maintaining the dam, for unfiltered water used for flushing and irrigating common areas, for maintaining the potable and non-potable distribution systems and for maintaining the connection to Siu Ho Wan (estimated to total about \$5 m. a year). As explained previously annual savings of about \$6 m. will result from the closure of the DB water treatment plant.

### Sewage

Diversion of DB sewage to Siu Ho Wan is in accordance with Government's Outlying Islands Sewage Master Plan. Government further proposes to route Peng Chau sewage through DB and to take over the main trunk sewer, and the associated pumping stations, through which both Peng Chau and DB sewage will run.

Because the Lantau Port will create an embayment and drastically reduce the flushing effect of local waters, removal of all sewage discharges from local waters is the preferred option. Model testing by Government in 1993 showed that, but for the Port, water quality in this area would not deteriorate markedly even if 50,000 people lived in DB and all sewage continued merely to be screened and discharged via the existing submarine outfall into deep water between the marina and Peng Chau.

However, despite this model testing and although Government previously approved the existing arrangements for screening and discharging DB sewage, Government is now enforcing higher standards in local waters under the Water Pollution Control Ordinance. As an interim measure, pending diversion of sewage to Siu Ho Wan, starting from this month DB sewage will be disinfected prior to discharge. The capital cost (\$3.7 m.) is being shared equally between HKR and the City Fund, following discussion in the COC meeting on 1 Feb 1993, while the recurrent cost (estimated to be about \$2 m. a year) will be met out of management fees, approximately doubling the recurrent costs of the sewage disposal system.

If the proposal to divert DB sewage to Siu Ho Wan is dropped, Government will immediately demand a much higher treatment standard, probably at least secondary treatment. The capital cost of a secondary treatment plant (about \$80 m.) would have to be shared between HKR and individual owners. Recurrent costs (about \$4 m. a year) would have to be met out of management fees, offset by annual savings of about \$2 m. from closure of the disinfection plant which would no longer be needed.

The implications for residents of a Government sewage connection are :-

- \*HKR would bear the entire capital cost of the connection.
- \*DB domestic premises would be subject to Government sewage charges, currently \$1.20 per m<sup>3</sup> of potable water consumed, less the initial free allowance of 12m<sup>3</sup> over a 4 month period. Sewage charges would be billed together with WSD metered charges.

Pg. 4  
CM/L386/95

- \*the main trunk sewer and pumping stations would be taken over by Government but residents would continue to pay through management fees for the maintenance of the branch sewers and minor pumping stations.
- \*the submarine outfall and disinfection plant would be abandoned, saving about \$2.5 m. a year in recurrent costs.

#### Conclusion

When the road link is built, it is HKR's view that water and sewage connections should be incorporated so that the opportunity for integrating DB with the nearby Government infrastructure is not lost. DB would remain somewhat vulnerable if it continued to rely solely on its own infrastructure, due to the major Government developments all around and increasingly stringent Government requirements. Since HKR's responsibility is limited to providing the infrastructure, residents would have to pay for the bulk of any such upgrading and higher operating costs through management fees.

Government has the advantage of economies of scale. It is obliged by public opinion to keep its charges for essential public services like water and sewage to acceptable levels. It is unlikely that CM can provide comparable services at lower cost in the long run. Government has many diverse sources of revenue, while CM's options are very limited.

Before making any commitment, HKR would like to be sure that DB residents, as represented by the COC, understand the full implications and that they support HKR in principle in this matter. It will be appreciated that capital and recurrent cost estimates in this letter are approximations at this stage. Chairmen will be informed if there are any significant changes.

Yours sincerely,  
HONG KONG RESORT CO. LTD.



Jeremy Marriott  
Executive Director

Enc.

JCHM/aw

b.c.c. LH  
MWT/KLC  
PWSC  
AP  
BT  
CDM (Mr. Paul Chung)  
Mr. K.L. Wong, K.L. Wong & Associates