



SEEPAGE ESTIMATION:

1. BASIC PARAMETER

- 1.1 DISTANCE OF FLOW: 145m approx.
- 1.2 COEFFICIENT OF PERMEABILITY K :
10 m/sec for compacted sand
- 1.3 HYDRAULIC HEAD AVAILABLE : 3m approx.
- 1.4 HYDRAULIC GRADIENT i : $3m/145m = 0.02$

2. DARCY'S LAW

$$V = Ki \text{ (WHERE } V = \text{VELOCITY OF SEEPAGE FLOW IN m/sec)}$$

$$= 10 \times 0.02 \text{ m/sec}$$

$$= 2 \times 10^{-1} \text{ m/sec}$$

3. FOR FLOW PATH OF 145m

$$\text{TIME OF FLOW, } t = 145 / 2 \times 10^{-1} \text{ sec}$$

$$= 7.25 \times 10^4 \text{ sec}$$

$$= 23 \text{ year}$$

Figure 6-7-3 PERMEATED FLOW AND FLOW ESTIMATION

	The joint venture of Cinotech Consultants Ltd. and Maurice Lee & Associates Ltd.	Sub-Consultant 	Drafting by	RW	11/15	SCALE: 1:5000 @ A3 SIZE 	PROJECT: CONSULTANCY SERVICES TO CARRY OUT ENVIRONMENT IMPACT ASSESSMENT AND TRAFFIC IMPACT ASSESSMENT STUDIES (THE MULTI-PURPOSE SPORTS COMPLEX AT KAI TAK AREA)	
			Designed by	RW	11/15		DRAWING NO:	REV:
			Checked by	ML	11/15	HA921/Figure 6-7-3		-
			Approved by	ML	11/15			