

34. Proposed cemetery site, North West Bay

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At the request of the South Metropolitan Master Planning Authority their proposed No. 2 site for a cemetery was investigated. The site is located on Hazell's property on the north side of the Howden road 1.2 km from the junction of the Howden road and the Channel Highway (fig. 30).

This investigation was undertaken in conjunction with a search for an outlet to the sea for a buried valley known to be present 1.6 km to the north in the saddle between Parks Hill and Doctors Hill.

GEOPHYSICAL SURVEY

A constant separation resistivity traverse along the Howden road from the Channel Highway to the Coffee Creek bridge along an area without definite rock outcrops revealed two areas of anomaly. Similar anomalies in the Whitewater Creek area and in the saddle between Parks Hill and Doctors Hill were known to be the result of unconsolidated sands and other Tertiary sediments filling an old river valley of Tertiary age. As one of the areas of anomaly coincided approximately with the proposed site for the cemetery, a 180 m seismic spread was fired at this locality. Two layers were found to be present, a surface layer with a seismic velocity of 910 m/s underlain by a second layer with velocities of 1,800-2,400 m/s.

GEOLOGICAL INTERPRETATION

From seismic surveys and drilling undertaken in the Whitewater Creek area it would appear that the 900 m/s surface layer consists of unconsolidated sands of Tertiary age. The 1,800-2,400 m/s layer beneath represents the underlying Triassic sandstone. The depth of the unconsolidated sands to interface to the sandstone is calculated to be from 4.5-6 m. The grey sandy soil which covers the area is probably derived from the unconsolidated Tertiary sands. Triassic sandstone crops out near the site along the Howden road east of Coffee Creek bridge and forms the cliffs along the Howden fore-shore.

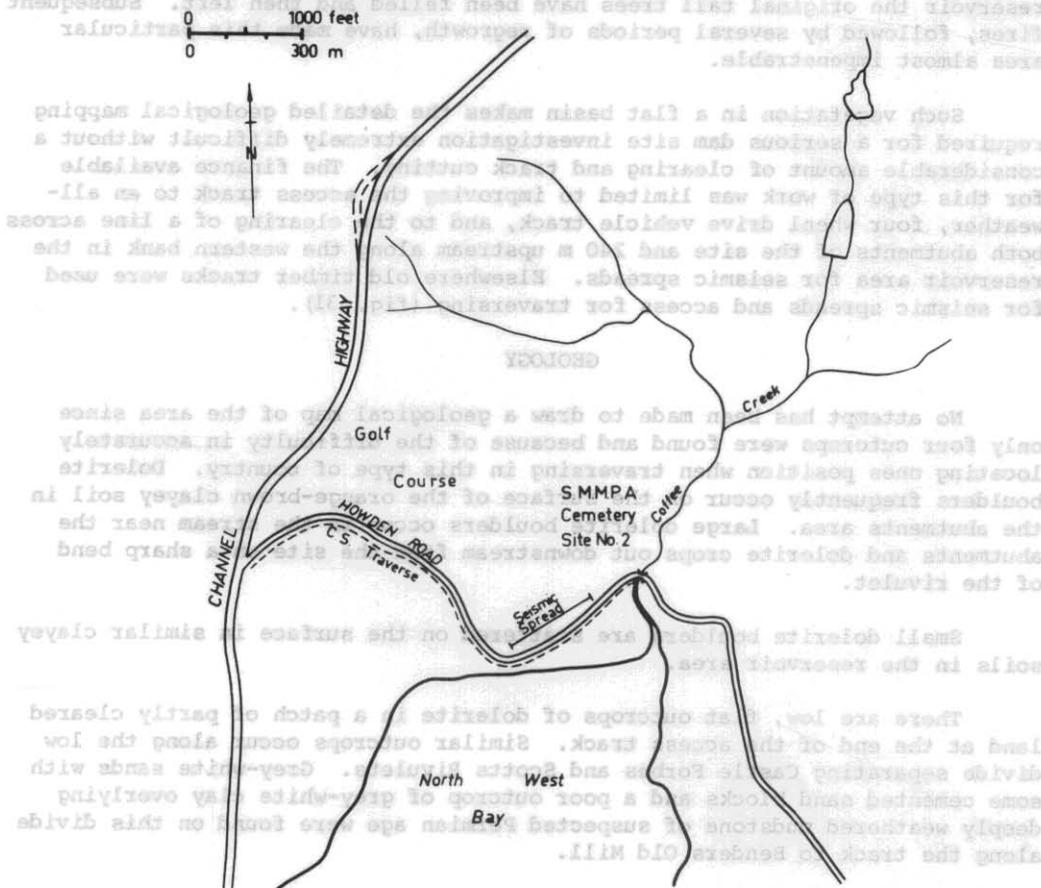
RECOMMENDATIONS

From the above evidence it would appear that the site would be satisfactory for a cemetery but to confirm the above interpretation a series of hand auger holes to 3-3.5 m in depth should be drilled. When the geophysical investigation was being carried out there appeared to be a lack of drainage of the surface water at this locality. In such a low-lying area the groundwater in a wet winter probably rises close to the ground surface, stopping any sub-surface drainage. The water table level should therefore be determined in some of the auger holes.

The auger holes should be spaced on a 30 m grid and some should be cased with perforated casing to allow the seasonal water table level to be measured.

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SEISMIC SURVEY LOCATION CEMETERY SITE No. 2 KINGSTON AREA



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Figure 30.

