Rept. Bk. 54/49
G.S. 2264
D.M. 2093/59
Hyd. 1263

RB 54/49

DEPARTMENT OF MINES
SOUTH AUSTRALIA

REPORT ON DRAINAGE PROSPECTS

PT. SEC. 521, HD. NOARLUNGA

- Town Planner - re Olson, Mattiazzo, & Agostinetto -

This proposed subdivision was inspected on 28/2/62.

LOCATION:

Situated about a mile east-south-east from Happy Valley, and adjoining the south side of Chandler's Hill road, the estate occupies part of the crest and upper flanks of a frontal spur from the hill mass to the south east, maximum elevation being about 900 feet above sea level.

GENERAL:

The underlying rocks, which belong to the Torrensian (Adelaide System) Series, are rather dense slates which occur at shallow depth over the whole area. They are exposed in numerous places in the roadside drains, and are covered with a mantle of derived clayey material varying from one to three feet in thickness, with a thin skin of more sandy soil above.

The whole sequence can only be regarded as offering poor prospects for the subsurface disposal of effluent, and winter waterlogging can be expected to occur. How bad this will be will of course depend on the volume of fluids to be disposed of, but even limited volumes of effluent will, in my opinion, have to be got rid of by evaporation and transpiration within individual blocks unless there is vacant land downslope onto which it can be passed.

In the proposed subdivision, the single lines of allotments, such as those north of Seaview drive, and west and south of Romney Road will probably be all right because they will not be receiving effluent from blocks upslope, from which they are separated by a road which will act as an interceptor.

Where blocks on the slopes are not separated by a road, the lower ones can be expected to receive soakage from those above, which will create a nuisance.

In two areas where the slopes are not steep, such conditions may not be serious and for this reason no objection is being taken to some parts of the subdivision although it is not regarded as ideal, and future trouble may arise if water is laid on to the area.

In several instances blocks can be expected to be seriously affected by soakage from upslope, and I believe this will be the case in allotments 33, 35, 54, 55 and probably 56. Allotment 21 will also be in trouble unless adequate steps are taken to divert drainage from Allotment 20 upslope, and run it out on to the road.

Water from View Court road pavement is being drained through a pipe onto Allotments 21 and 22, and a drainage easement downslope between these two allotments will be needed, with a properly constructed discharge pipe or lined channel.

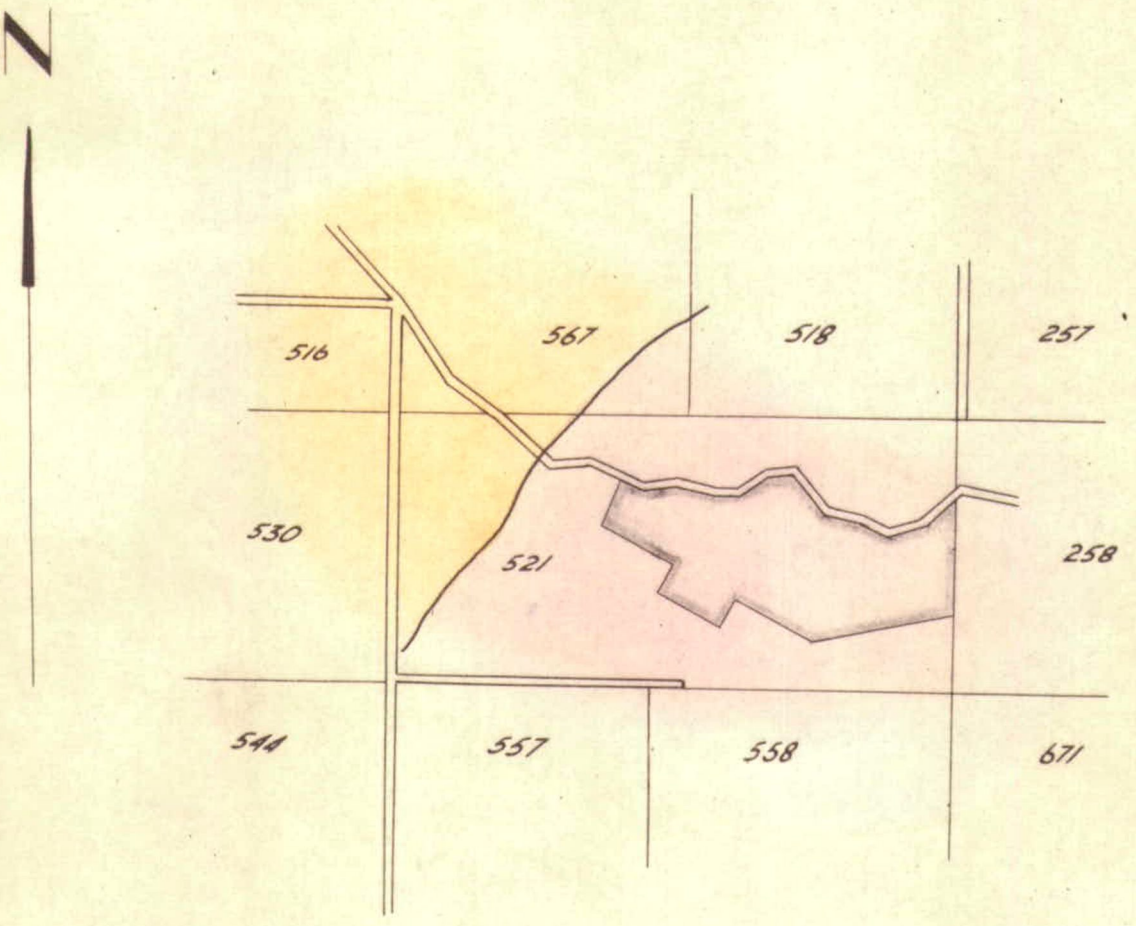
CONCLUSIONS & RECOMMENDATIONS:

Subsurface drainage is poor. Trouble may occur in two areas, being Allotments 30-38 and 54-59, and it is suggested that Allotments 33, 35, 54, 55 and probably 56 should be deleted. Conditions in the other parts of these areas may not be bad enough to warrant such a recommendation.

A drainage channel between Allotments 21 and 22 is also needed.

G. O'Driscoll
SENIOR GEOLOGIST
HYDROLOGY

EPO'D:CERF
5/3/62



TERTIARY

Clays and sands

PROTEROZOIC

slates and sandy slates

To accompany report by E.P. O'Driscoll.

S.A. DEPARTMENT OF MINES

Approved	Passed	Drn.	UNDERGROUND WATER SURVEY	D.M.	Scale 40 Chns. to 1"
		Tcd. B.G.	Hd. NOARLUNGA Pt. SEC. 521	Req.	S 3050
		Ckd. R.R.	HAPPY VALLEY SUBDIVISION		Ha 2
Director		Exd.	FOR TOWN PLANNER.		Date 1-3-62

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