

CONSTRUCTION OF LEVEES - SOUTH GOLDEN BEACH

Council resolved that levees be constructed at South Golden Beach and accordingly, consultants Ray Sargent and Associates have been engaged to examine the feasibility of the levee construction and their report is attached to the Development Application.

In their report they indicate that a levee could be constructed and would in fact flood proof the South Golden Beach area both east and west of the canal. However, certain localised flooding would occur for the catchment within the levee boundaries. This will cause some minor isolated flooding areas which Council can control by ensuring that water tables are kept clean and at lower levels than natural ground on properties and possibly also ensuring that public reserve areas within South Golden Beach are used for retention. The alternate to this would be the necessity to place some pumps within the basin area created by the levees to ensure that in excess of one and one hundred year flood proofing is effected to all houses. The placement of pumps however is not considered practical as Ocean Shores area was badly affected during the Mothers Day flood by loss of power and it is not recommended to Council that pumps be relied upon to ensure a flood free situation behind the levee.

As indicated to Council earlier in the year, there will be an adverse affect as a result of the placement of the levee and the table submitted in Appendix B indicates the extent of the adverse effect which ranges up to 25 millimetres on the one in twenty year flood event. During the course of preparation of the report by the consultant, several requests have been received from residents in the area which is adversely affected, indicating that they will be raising considerable objection to the proposed levee on the grounds that their properties will be adversely affected.

Having further considered the levees it is now proposed that:-

1. A levee around South Golden Beach to a level which will not cause adverse affect to any properties outside the leveed area, i.e., properties in South Ocean Shores, New Brighton in particular. The calculations for the height of this levee are attached to this report and indicate that the levee should allow water into South Golden BEach above a height of 2.68 metres A.H.D.
2. The method of achieving this reduced level is not to lower the levee on the banks of the canal but rather to place spillway areas in the levee. The first of these spillway areas will be in Redgate Road and this will allow water to quietly move into South Golden Beach once it achieves the level of 2.68 metres. The second spillway area would be in the vicinity of The Esplanade and Beach Avenue and again this will allow water to move quietly into South Golden Beach with the minimum of velocity.

3. The construction of the levee as proposed above will provide protection for South Golden Beach to levels corresponding to approximately one in forty year frequency floods. Higher protection will only be afforded when other mitigation measures such as the dredging of Marshall's Creek are carried out. Towards that end Council is proceeding as quickly as possible with the developer for North Ocean Shores to provide a site for the dredged material. It is impossible to give an exact date for dredging, however. The dredging proposal will be pursued independently of the Bond Corporation during 1989 and to that end have received and prepared details on the dredging option. This is being carried out by Webb McKeown and Associates. The completion of this study will provide much of the necessary detail for the dredging option and will in fact be used as a reference for this work. It is anticipated that this study will be finalised in February/March next year, and in fact draft copy will be available at about the end of January.

Council's endorsement to the construction of a levee as per the proposal indicated above is requested to allow work to commence in the very near future.