



The Mining and Lands Commissioner

In the matter of The CONSERVATION AUTHORITIES Act

AND IN THE MATTER OF

An appeal against the refusal to issue permission to place and remove fill and construct a residence on part of Lots 8 and 9, Fortune Street in the Village of Richmond in the Township of Goulbourn in the Regional Municipality of Ottawa-Carleton.

B E T W E E N :

IAN E. ROSS

Appellant

- and -

THE RIDEAU VALLEY
CONSERVATION AUTHORITY

Respondent

K.A. Voll, for the appellant.
P.A. Webber, Q.C., for the respondent.

The appellant appealed to the Minister of Natural Resources from the refusal of the respondent to issue permission to place and remove fill and construct a residence on part of Lots 8 and 9 on Fortune Street, in the Village of Richmond in the Township of Goulbourn. Under Ontario Regulation 364/82 the power and duty of hearing and determining such appeals were assigned to the Mining and Lands Commissioner. The appeal was heard in Ottawa on the 6th day of November, 1984.

The issue in this case is the appropriateness of a proposed application of the stage storage principle. There was a second issue regarding the interpretation of the phrase "conservation of land". In view of the position the tribunal is taking on the first issue there will be no necessity of dealing with the second issue.

The subject lands are comprised of a parcel of land with a frontage of 258 feet on Fortune Street in the Village of Richmond and a depth of 211 feet. The Village of Richmond is situate on a part of the Jock River which flows in a northerly direction although basically the river flows in an easterly direction into

the Rideau River. The subject lands are traversed by a tributary of the Jock River known as the Van Gaal Drain which appears to be a natural watercourse with water in it at most times.

The regional flood elevations of the drain and of the river have both been calculated and both affect the subject lands. The drain enters the subject lands at the southwesterly corner through a culvert and flows in an easterly and a northeasterly direction exiting near the northeasterly corner of the subject lands. The regional flood elevation for the one in one hundred year storm on the drain is 93.9 metres and this flood plain constitutes more than half of the subject lands. In addition, the drain is subject to the regional flood elevation of the Jock River with backwater from the confluence of the drain and the river and the regional flood elevation of this influence is 93.95 metres. There are only two small portions of the subject lands above this elevation, one at the northwest and one at the southeast corners of the subject lands. The drain follows along the southerly boundary of the parcel, approximately half the length of the frontage before turning in a northeasterly direction. Fortune Street is above the regional flood elevation.

R.W. Connelly Associates Limited, Consulting Engineers, prepared a proposal which was said to be based on the stage storage principle, or as it is more recently known, the incremental balance principle. The proposal involved the placing of granular fill on a driveway commencing at the southwesterly corner of the subject lands and immediately to the west of the culvert through which the drain flows and leading to a location of a proposed house which would be situate midway between the front and the rear of the subject lands and approximately, measured by scale, thirty feet from the westerly boundary of the subject lands. The site of this fill is above the regional flood elevation for the drain and it was proposed to place the granular fill to an elevation of ninety-five feet along the driveway and underneath the proposed house. It was further proposed to slope the fill on a slope of one to three away from the house with the result that the natural elevation would be

reached at distances approximately fifteen to twenty feet from the edges of the house. The proposal compensated for the placing of this fill by removal of portions of the earth at the northwest and the southeast corners that are above the regional flood elevation with the end result that the entire lot except for the filled portion would be within the regional flood plain. The tribunal was not provided with figures on the volumes of fill involved but B.A. Reid, a Professional Engineer with experience in hydrology and hydraulic work and who is on staff with the respondent, accepted the application and recommended it to the respondent.

The respondent rejected the application on the grounds that were provided to the appellant in writing, namely, that the subject lands were almost entirely within the regional flood plain, they were known to have flooded in the past, precedential implications, safety factors involved with the surrounding of the proposed building on three sides by flood waters in a regional flood and the issue of conservation of land.

With reference to past experience the pictorial evidence indicated that the major part of the subject lands has in the past been flooded in conditions which are less than those of the regional storm. On the stand Reid indicated that he was still satisfied that the proposal constituted a valid application of the stage storage principle but he was concerned regarding the safety implications of the proposal and the depths of water surrounding the proposed residence in the event of a regional storm.

With reference to the depths of water surrounding the proposed house in the event of a regional storm Exhibit 5 outlines the proposed elevations. The ninety-four metre elevation is, by scale, approximately eight to ten feet from the foundations of the proposed house and this is the elevation to which the regional storm would rise and would form the edge of the flood in that event. From this elevation the lands continue to slope downwards with one-half metre of water being present five to ten feet from this elevation and below that elevation the depths of water would increase to approximately six or seven feet in depth. The end

result of the proposal is a residence which is situate in effect on an island or a peninsula and would, except for a filled driveway, be surrounded by flood water within a very close proximity of depths varying from zero to six feet. An examination of Exhibit 5 indicates not only that the building would be surrounded on three sides as pointed out by the respondent but also part of the fourth side would be surrounded with depths heretofore mentioned. The safety implications to the occupants and to public service personnel in the event of flood conditions and rescue is apparent to this tribunal.

Having regard to the proposal and whether it constitutes a valid application of the normally accepted stage storage principles, it may be noted that normally a stage storage project consists of the extension of what might be referred to as the mainland into the flood plain. The thrust of the exercise is the provision of an alternative flood plain at a relevant or a compensating elevation. The principle carries with it the requirements that there be no reduction of storage capacity at the key times in a flood and that there be no interference with the hydraulics of the flood plain, or in other words the flow of the flood waters. By way of illustration the added fill should not create a constriction of the flood plain.

The proposal differs in two aspects from the basic concepts of a stage storage project. Firstly, there is no building up of what might be referred to as the mainland, i.e. the area above the regional storm elevation. The proposal in the present case is to remove both existing portions of the parcel that are above the flood elevation and to cut back into the mainland where it exists on the subject lands.

Secondly, such proposals provide access over the filled area to the existing mainland. In the present case the access is provided to a highway which is probably constructed on fill and access to the residence is over such a highway and a driveway.

In the opinion of the tribunal the proposal is not within the accepted concepts of the stage storage principle and in effect creates a most undesirable approach to the control of flooding.

The end result is not an extension of the existing land that is not subject to flooding but is in effect a creation of a small island surrounded with the exception of the driveway by waters of significant depths which would create hazards to the occupants and to the public officials involved in rescue and other flood emergency situations.

In the opinion of this tribunal the proposal is not a valid application of the stage storage principle and the approach taken by the respondent in dealing with the appellant's application was proper. Reference was made to permissions given in respect of adjacent properties. Without dealing with each one in particular, the tribunal is satisfied that each was distinguishable and in no case was there the creation of the insular isolation in a dangerous situation that is inherent in the present application.

IT IS ORDERED that the appeal in this matter be and is hereby dismissed.

AND IT IS FURTHER ORDERED that no costs shall be payable by either party to the appeal.

DATED this 3rd day of December, 1984.

Original signed by G.H. Ferguson

MINING AND LANDS COMMISSIONER.