



The Mining and Lands Commissioner  
In the matter of The CONSERVATION AUTHORITIES Act

IN THE MATTER OF

An appeal against the refusal to issue permission to place fill and erect a dwelling on part of Block A, Plan 6037 and parts of Lots 64 and 65, Plan 5316, being part of Lot 20 in Concession V in the Town of Markham in the Regional Municipality of York.

B E T W E E N :

RUEBEN PARNES

Appellant

- and -

THE METROPOLITAN TORONTO AND REGION  
CONSERVATION AUTHORITY

Respondent

Rueben Parnes, in person.  
Roderick R. MacDougall, for the respondent.

The appellant appealed to the Minister of Natural Resources from the refusal of the respondent to issue permission under O.Reg. 735/73 to place fill on part of the appellant's property in the Town of Markham. By O.Reg. 397/79 the power and duty of the Minister to hear and determine the appeal was assigned to the Mining and Lands Commissioner. The appeal was heard in Toronto on September 18, 1979.

The appellant owns a parcel of land containing 2.595 acres. It is abutted on the north by York Region Road No. 25, on the west by the widening of York Region Road No. 65 and on the southwest by Cachet Parkway. The Rouge River flows in a southeasterly direction through the centre of the parcel. A modest two storey brick dwelling and garage are situate on the southerly part of the subject lands and have a driveway outletting onto York Region Road No. 65.

The appellant wishes to sever the parcel and dispose of the

northerly part thereof. This northerly part consists of part of the north side of the ravine and notwithstanding the erection of signs the area has attracted indiscriminate dumping of garbage by trespassers. The application for consent to sever has been either deferred or refused pending the decision of the respondent. It also appears from a report of the Town of Markham to the Land Division Committee that the proposed severance would not be in accordance with the "new Official Plan". The evidence indicated that some appeal has been taken to the Ontario Municipal Board but the issue of compliance with municipal by-laws and zoning controls should be outside the scope of the present inquiry.

The lands that are the subject of the application consist of approximately one-fifth or one-sixth of the northerly part of the parcel owned by the appellant. This northerly part is referred to as Part 1 on the plan of survey by R. G. McKibbin Ltd., O.L.S. which was filed as Exhibit 2 and, with contrasting colours added, as Exhibit 6. Part 1 extends northerly from the pond which has been created by damming the river and which has an elevation of 663.8 feet. The elevation of the part slopes upward to the northeast with contour lines crossing the part in a southeasterly direction. At present there is no suitable site on the part for the erection of a residence, outbuildings and septic tile bed, if necessary. It is proposed to create a level area at the northeast corner of the part by removing the vegetation, with the exception of large trees, and grading the higher areas toward the pond creating a berm in a southeasterly direction, the south limit of which would be approximately 120 feet from the pond. It is proposed to erect a residence measuring approximately 45 feet along the south wall and 40 feet along the west wall. The south wall would be located approximately 150 feet from the south limit of Part 1. This south wall would be approximately 85 feet from the north limit of the part. The elevation at the south limit of the proposed residence is approximately 695 feet. The proposal is to create a residence with a walkout basement, the floor level of which would be at this natural elevation at the southerly edge. A triangular volume of earth would be excavated leaving the top of the northerly wall at an elevation of

approximately 700 feet which is fairly close to the natural elevation in this location. It is proposed to create a driveway from the residence to the northeasterly corner of Part 1 where the elevation is 710 feet. Exhibits 6 and 2 indicate that the area to the west of the extension northerly of the westerly wall of the building is lower than 700 feet and to create a level area, fill will have to be added to this area. The end result of the proposal is that there would be created in the northeasterly corner of Part 1 a triangular level area measuring approximately 185 feet along York Region Road No. 25 and extending approximately 85 feet southerly from that road. Fill will be removed from the basement of the residence and the driveway and placed on the lower areas so that a lawn with an elevation of approximately 700 feet will extend from the dwelling to the northerly boundary of the part. The fill will be bermed from the southerly corners of the residence in a northeasterly and northwesterly direction. On the easterly side the fill will be bermed in a manner that will continue an existing channel at the edge of fill placed on the land to the east during the construction of a residence on that property. The toe of the berm running in a northwesterly direction will follow the 690 contour from the southwest corner of the residence to the north limit of the property at the distance of approximately 185 feet from the northeast corner.

It is not intended to make any changes in the slopes to the south of the berms which have a drop of approximately 30 feet in a distance varying from 120 to 160 feet.

The evidence on behalf of the appellant was given by Orazio Baggio. The witness obtained a degree in civil engineering from Queensland University and came to Canada in 1970. In the early part of his career he was involved in the construction of large buildings. His post graduate activities involve architecture, appraisal, real estate and arbitration studies and he described his present occupation as that of a developer. The witness outlined the proposal. Although he had made calculations of the fill he failed to bring them with him but indicated that in his opinion it would not be necessary to bring additional fill onto the property and that the excavations from the

basement and the driveway would be adequate to level the site. On cross-examination on this subject he indicated that the greatest depth of excavation would be five feet although an examination of the plan would indicate that if the area is to be level and not sloped toward the residence ten feet would have to be removed from the driveway.

There was a conflict in the evidence as to the amount of fill involved. Baggio made a quick estimate of 200 cubic yards while he was on the stand. Ajit Sahabandu, a professional engineer called by the respondent and who has had experience in the problems related to the placing of fill, estimated the quantity of fill in the vicinity of 1,300 cubic yards. This calculation was based on one cross-section of the berm and may be entirely inaccurate. Having regard to the dimensions of the proposed residence and keeping in mind that there would be a triangular excavation into the bank with a depth of at least five feet at the rear and perhaps ten feet, the amount of fill to be removed for the basement is in the vicinity of 200 cubic yards and as Baggio did not have his figures with him, I cannot conclude that his estimate is accurate and that the amount of fill to be replaced on the land is of such insignificant quantity as to be permitted without any consideration of the principles applicable to the placing of fill on sloped areas which in the scientific world is the science of geotechnics. The evidence for the appellant was to the effect that the berms would be graded to a thirty degree slope and sodded which was said to be the slope required by the respondent and that other buildings on the ravine had been built with the use of fill and have not experienced problems. Further the grade and the amount of fill would be less than those added to the ravine by the reconstruction of York Region Road No. 65. A sample of soil from the site of the proposed dwelling and of the location of the fill were presented. The only comment thereon of Baggio was that they were similar but he gave no evidence on the scientific consideration of the relevant issues and this evidence does not assist this tribunal.

The objections of the respondent were that the proposed site would not be adequate for a dwelling, septic tank system and a well. It may well be that a septic tank system can be installed which

would obviate the need of a tile bed. Sahabandu's evidence was to the effect that there are many problems in connection with the placing of fill for residential purposes on ravine lots resulting in remedial work programs at public expense. On cross-examination this witness indicated that with proper geotechnical engineering placed before the authority the issue of permission could be justified.

John Maletich, the Development Co-ordinator, Planning and Policy, of the respondent gave evidence outlining examples of existing problems from placing the fill. However this evidence indicated that the problems referred to occurred where the fill had been placed above the dwelling which does not appear to be the consideration in this case.

Maletich indicated that the concerns of the respondent included the changing of nature by the removal of vegetation, which could create erosion, and the placing of fill on sloped areas which could affect the stability of the slopes. On cross-examination he indicated that he knew of no problems of erosion or land slippage on other properties in the subdivision. On the other hand the evidence of Sahabandu was that risks are local and problems may exist on one parcel that are not present on neighbouring parcels. He also listed the issues that should be considered, such as an analysis of the existing soils and moisture sources, an examination of the proposed fill as to its composition, a consideration of the method and depth of the fill including the degree of compaction and methods of erosion prevention.

From a legal point of view the concern of the respondent falls within its legislative jurisdiction. There is no doubt that matters of erosion and slope stability fall within the meaning of the phrase "conservation of land". This area of jurisdiction was given to conservation authorities following a tragedy in East York resulting from the erection of houses on fill placed on the slopes of a ravine and slope stability was surely one of the matters contemplated by the Legislature in subsequently enlarging the jurisdiction of conservation authorities to matters respecting the "conservation of land".

There are two relevant considerations in respect of the erection of buildings on ravine lots. The first question is whether



the particular slopes are capable of supporting with or without precautions, the additional stresses of the proposed buildings and fill. The second question is the determination of the precautions that are necessary where such stresses could be added to the slopes with precautions. Both matters are the subject of scientific study and opinions can be obtained from geotechnical engineers thereon.

In the present case there is no such expert evidence before the tribunal. The witness Baggio, while he studied civil engineering and has enlarged his undergraduate education, does not appear to have specialized in this area. Further he did not give evidence to establish that he had made tests and applied principles of the relevant science to those tests. Without some proper evidence, this tribunal cannot assess whether there is a problem and if so, the steps that could be taken to control it.

Looking at the matter from the point of view that assuming a problem exists, the amount of additional stress to be applied to the slopes is so insignificant as to not warrant consideration, it may well be that cases could arise where such an approach should be taken and some general standards such as thirty degree slopes and soddings would be adequate precautions without an assessment of the risk. However this tribunal is left in doubt as to the actual amount of fill that is involved. There will be the additional stress from the building and contents and there is a possibility that the application of the stress from the excavated fill in a more concentrated area may be a relevant consideration. None of the engineers present before the tribunal had considered the relevant issues and principles and this tribunal in the absence of some relevant expert evidence cannot conclude that the proposed changes in the location of the soil on the parcel and the additional stress of the proposed building would be so negligible that they may be ignored.

In the absence of proper expert evidence on which a conclusion can be made that no risk exists or if a controllable risk exists, the precautionary procedures to control the risk on which the permission could be granted with suitable standards and specifications, this tribunal has no alternative but to dismiss the appeal, subject of

course to the right of the appellant in a subsequent application to place such evidence before the respondent.

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

IT IS FURTHER ORDERED that no costs shall be payable by either of the parties to this matter.

DATED this 25th day of September, 1979.

Original signed by G.H. Ferguson

MINING AND LANDS COMMISSIONER.