

Appeal No. CC.1357

L. Kamerman)
Mining and Lands Commissioner)

Friday, the 19th day
of November, 1993.

THE CONSERVATION AUTHORITIES ACT

IN THE MATTER OF

An appeal to the Minister under subsection 28(5) of the **Conservation Authorities Act** against the refusal to issue permission to construct a building, install a septic system and place or remove fill on Part of Lot 6, Concession IX, Township of North Monaghan, in the County of Peterborough.

BETWEEN :

Amended
November 5, 1992 **DONALD BYE**

Appellant

- and -

OTONABEE REGION CONSERVATION AUTHORITY

Respondent

- and -

Amended
November 5, 1992 **CORPORATION OF THE CITY OF PETERBOROUGH**

Third Party

ORDER

UPON hearing the appeal dated October 29, 1990 and upon reading the exhibits filed:

1. THIS TRIBUNAL ORDERS that the appeal be and is hereby allowed and the appellant be and is hereby granted the permission requested in his application in accordance with the balanced cut and fill proposal recommended by his engineering witnesses, Murray Davenport and Joseph Burke, and

- (a) subject to having first restored the breach in the abandoned railway line along the northwest side of the site; and
- (b) subject to the planting of vegetation appropriate to a wetland within the cut area, including groundcover, shrubs and trees.

2. THIS TRIBUNAL FURTHER ORDERS that no costs shall be payable by any party to the appeal.

Reasons for this order are attached.

DATED this 19th day of November, 1993.

Original signed by L. Kamerman

L. Kamerman
MINING AND LANDS COMMISSIONER.

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REASONS

The matter was heard in the Commissioner's Court Room, 24th Floor, 700

Bay Street, Toronto, Ontario, on November 5 and 6, 1992 and on January 18, 19 and 20, 1993 and, in the Peterborough City Council Chambers, City Hall, 500 George Street North, in the City of Peterborough, Ontario on February 4 and 5, 1993.

Appearances:

Mr. Peter Millard	Counsel for Donald Bye
Mr. George Coros	Counsel for the Otonabee Region Conservation Authority
Mr. Richard Taylor	Counsel for the City of Peterborough

Preamble

The land which is the subject matter of this appeal (the "site") is part of a larger tract of lands referred to at the hearing as the triangle, which is delineated by Mervin Line Road to the south, Airport Road to the east and an abandoned railway line running diagonally from the southwest corner of the triangle to the northeast corner. Acquired from the City of Peterborough by Donald Bye and Darragh Moroney in 1988, ownership was subsequently transferred to Mr. Bye on June 30, 1992 (Ex. 1).

Application was made by Bye and Moroney and received by ORCA on September 6, 1990 (Ex. 43). Notice of Decision dated September 25, 1990 (Ex. 44) was sent to the applicants setting out the following reasons for refusal:

1. The area is a significant swamp or Class 3 wetland associated with Cavan Creek and the filling of that wetland would degrade the reservoir function.
2. The placement of fill and the construction of buildings will affect the control of flooding by creating a precedent for the filling of Class 3 wetlands.
3. The placement of fill and the construction of buildings will affect the conservation of land.

The Decision was appealed to the Minister of Natural Resources on October 29, 1990 by virtue of subsection 28(5) of the **Conservation Authorities Act**, R.S.O. 1980, c. 85 (the "**Act**"), and assigned to the Mining and Lands Commissioner pursuant to Ontario Regulation 364/82, pursuant to the **Ministry of Natural Resources Act**, R.S.O. 1980, c. 285.

Background

The site is located due north of the Peterborough Municipal Airport and south of Highway 28/115 in the Township of North Monaghan. Cavan Creek flows from the west of the airport in a southeasterly direction south of the airport before it drains into the Otonabee, southeast of County Road 11.

The Cavan Creek Floodplain Map (Ex. 5) (the "Floodplain Map") shows the floodline elevation marked in a solid line and the fill line marked in broken lines. According to the map, the floodline elevation ends south of the site without overtopping Mervin Line Road. The fill line encompasses all of the triangle. There is a spillway located to the north of the paved runway of the airport. The runway runs almost east to west, inclining slightly to the northeast and southwest. The floodline elevation on the Floodplain Map was not drawn on the basis of water which would flow over the spillway in a regional storm. The impact of the spillway on the floodline elevation was considered at the hearing.

The extent of flooding in the Cavan Creek watershed is determined through the use of the Timmins Storm, being the recorded rainfall levels over time which occurred during the actual event in 1961, applied to conditions found in the Cavan Creek Watershed. Rainfall was converted to flows plotted onto the base map, whose spot elevations and contours are determined through rigid criteria. The Cavan Creek calculations gives the criteria for risk assessment in the event of a regional storm, although the frequency cannot be predicted.

Ontario Regulation 60/89, entitled, "Fill, Construction and Alteration to Waterway Regulation" (Ex. 8)("O.Reg. 60/89) defines the regional storm according to rainfall in a drainage area, with Cavan Creek being listed in Schedule 6 as a watershed to which the regulation applies. The regulation came into effect in February, 1989 prior to which ORCA did not have authority in the Cavan Creek watershed to require its permission for construction of a building within a swamp or in an area susceptible to a regional storm, or for the placing of fill in an area within its jurisdiction as defined.

The Decision of the Otonabee Region Conservation Authority ("ORCA") to refuse permission is based upon its calculation of the flood elevation at the site as 190.42 metres, below which any construction would be subject to flooding. Mr. Bye's witnesses produced evidence from which they invited the tribunal to draw the conclusion that the floodline elevation at the site is 190.04 metres. The Floodplain Map shows a floodline elevation of 190 metres on lands near the site immediately south of Mervin Line Road.

Considerable evidence addressed the issue of the applicable floodline elevation. In particular, the tribunal was asked to determine whether the floodline elevation of 190 metres shown on the Floodplain Map was correct, or whether water flowing over the spillway impacted of the backwater effect of the Otonabee River downstream of the Cavan Creek, would increase floodline elevation at the site.

The Official Plan Consolidation, Schedule A, Township of North Monaghan (Ex. 12)("Official Plan Consolidation") is a depiction of By-law 1980-12, entitled the Airport Industrial Zoning By-law (Ex. 13). This by-law was passed in 1980, and subsequently appealed by ORCA to the Ontario Municipal Board. ORCA's objections to the by-law were subsequently withdrawn; a 400 foot wildlife corridor was requested as evidenced by ORCA's letter to the Ministry of Municipal Affairs and Housing, dated February 17, 1982 (Ex. 15). At the time of the passing of the by-law, the tract of land immediately to the west of the site, referred to at the hearing as the "rectangle" was owned by Donald Bye. The Official Plan Consolidation shows the site to be zoned as airport industrial, the rectangle as service industrial and all lands immediately south of Mervin Road adjacent to the airport as service industrial, with the exception of a small irregular portion along Airport Road and to the north of the runway, which is zoned environmental protection. Events surrounding the designation on the Official Plan Consolidation in 1980 through 1982 and subsequent to the purchase of the site by Moroney and Bye are the basis of the issues of estoppel and detrimental reliance.

Issues

1. What is the floodline elevation of the site?
2. If allowed, would the balanced cut and fill performed in association with the application create a precedent for other similar applications; would it contribute to cumulative impact on the storage capacity of the watershed?

. . . . 5

3. Is the site a swamp which performs a reservoir function; if it is, would permission affect the susceptibility to flooding, pollution or conservation of land performed by the swamp within the watershed?
4. Is the site a wetland within the meaning of the Wetlands Provincial Policy Statement?
5. Is the tribunal required to have regard to provincial policy statements concerning wetlands and floodplains?
6. Was there detrimental reliance on statements made by ORCA; should the principle of estoppel apply; and was there discrimination any one of which would justify an order of costs to the appellant on a solicitor and client basis?

Witnesses

The tribunal heard evidence from thirteen witnesses during the seven days of hearing. Their names and brief summary of the evidence of each is set out below. Relevant evidence is presented within these reasons according to topical headings with reference to the particular witness.

On Behalf of Donald Bye:

Donald Bye, a developer with experience in industrial development and ultimately the sole owner of the property, gave evidence of the historical background of his acquisition of the triangular tract of land on which the site is located, his prior ownership of the adjacent rectangular shaped property to the west and events surrounding the designation of both properties on the Official Plan Consolidation. Having described in detail the type of construction proposed by the application, Mr. Bye outlined the chronology of events surrounding what led him and his former partner, Darragh Moroney to apply for permission from ORCA and the process which ensued prior to the refusal. Testimony concerning other developments in the vicinity of the subject property which were permitted or did not require permission of ORCA was also given. Originally, the development of the site was part of a larger subdivision to develop 30 lots on both the subject lands and those immediately to the west. The plan of subdivision was rejected by the Township of North Monaghan, so that Mr. Bye was proceeding with an application to

construct only one building. The elevation of the structure was to be 20 feet 2 inches from grade and was not in the flight pattern of the airport.

Murray John Davenport, P.Eng., was retained by Mr. Bye and Mr. Moroney to conduct all storm water management studies in respect of the original application to ORCA, and to provide opinions on site elevations, drainage, direction of flow, level of flooding, the impact of the spillway adjacent to the paved runway, the impact of culverts and the applicability of cut and fill techniques on the site.

New evidence concerning the installation of a water quality pond, a new requirement of the Ministry of Natural Resources on plans of subdivision, which had not been a requirement at the time of the filing of the application was presented along with detailed evidence concerning construction within the immediate vicinity of the airport since 1980, including extensions to existing buildings, which were either partially or entirely contained within the floodplain (c.f., Ex. 22 "Davenport Modified Drawing - Floodplain Mapping with Mylar Overlay") without water quality ponds required.

Joseph Lee Burk, P.Eng., an associate with M.J. Davenport and Associates, gave evidence concerning the techniques used and relative accuracy of aerial photographic and geodetic mapping and gave his opinion on the accuracy of cross-sections on the Floodplain Map and Davenport Modified Drawing (Ex. 22) and of the impact of the backwater effect on flood elevation of the subject lands and other land in the vicinity, relying on benchmarks other than those used by ORCA. Mr. Burk referred to two applications and permits which had been granted by ORCA in the vicinity, (See Ex. 25(A) and (B)) which are conditional upon "[n]o fill placement or construction below 190.0 metres (623.36 feet) geodetic." Four photographs taken April 23, 1991 by Mr. Burk (Ex. 24(A) through (D)) show flooding of Cavan Creek in the vicinity of the bridge at the south side of the airport and the absence of flooding on the building envelope of the site. Mr. Burk gave evidence concerning his observation of standing water on the subject lands, those to the west and within the ditches, discussing possible causes for the anomalies presented.

Ivan Lorant, P. Eng., a principal and Chief Water Resources Engineer with M.M. Dillon Limited, summarized for the tribunal the design criteria for floodplain mapping in the area. Evidence was presented concerning the impact of flood flows on the spillway located beside the airport runway on the flood levels of the subject lands, which are not within the floodplain so that any potential flooding could be alleviated by using

cut and fill techniques. This would not create a precedent for development as no storage capacity would be lost. Mr. Lorant considered the impact of the spillway, advocating use of the HEC2 model for calculations, the undefined flow from the northwest of the subject lands and the backwater effect in giving his opinion concerning the height of flooding on the subject lands of 190.04 metres. Also discussed was the rationale for use of a water quality pond and other means of providing the same function.

Mel O'Brien, manager of the Peterborough Municipal Airport, discussed the construction shown on the Floodplain Map with overlay (Ex. 7), discussed new construction, additions and refurbishing of buildings within the immediate vicinity of the airport, noting that the construction of many of the buildings was on floating slabs, the same as had been proposed by Mr. Bye. Mr. O'Brien discussed drainage for the airport, identifying culverts and stating that there are 36 manholes surrounding the runways. Spring flooding on the road entering the airport, the site and land immediately south of the airport was described as lasting for two to three weeks, with the rest of the year being dry. Mr. O'Brien also described the placing of fill on several sites in the area. Maintenance of ditches along Mervin Line Road were also discussed.

Donald Thomas Doughty, a resident of Lakefield having been born in the Peterborough area, presented a video tape made by him of lands in the vicinity of and including the subject lands, on February 21 and April 17, 1991. Mr. Doughty has been on the subject lands many times in all seasons and presented his observations. Viewing photographs taken January 5, 1993 (subsequently identified and labelled as Ex. 69 A to H) Mr. Doughty described the water seen on the subject lands as snow melt. Viewing photographs taken August 3, 1990 and July 23, 1992 (subsequently identified and labelled as Ex. 67 A to D and Ex. 68 A and B respectively) Mr. Doughty identified what he believed to be water along the ditch.

George David Crossman, a lawyer with Beard Winter, had been initially retained by Mr. Bye in connection with the development of the property and related negotiations. Circumstances concerning the construction of the Gateway Industrial Park to the northwest of the intersection between highway 115 and Airport Road and potential sources of water on that land were presented. A copy of Permit LN-020/91, involving the Gateway property along with 21 pages of related documents (Ex. 37), pursuant to the **Lakes and Rivers Improvement Act**, was presented. Mr. Crossman also gave evidence on the same pictures discussed by Mr. Doughty, concurring that he had never seen wildlife on the subject lands and that no fishing was possible.

Darragh Moroney, former partner of Donald Bye and original joint applicant of the matter under appeal, stated that the 22 acre parcel had been purchased from the City of Peterborough on July 5, 1989 and was zoned service industrial. He discussed his April, 1989 meeting with John Merriam and his belief that the proposed industrial subdivision could proceed. Mr. Moroney also gave evidence concerning the classification of the land as a class 3 wetland and described photographs taken June 27, 1990 and July 18, 1990 (Ex. 40 A and B).

On behalf of ORCA:

John William Merriam, Water Resource Manager for ORCA, expert in hydro geomorphology, gave testimony on the applicable sections of the **Conservation Authorities Act** and O.Reg. 60/89, the relevance of the opinion of ORCA in establishing flood and fill lines with regard to section 2 and 3(b) of the regulation, with regard to the Floodplain Map the relevance of the fill line and the non-mandatory basis upon which the flood line is described and the inclusion of the Cavan Creek watershed in schedule 6 of the regulation. Mr. Merriam gave his opinion on the effect of the spillway to the north of the airport runway and the applicable flood elevation on the subject lands. Spot elevations on the Canada Transport Terminal Drawing (Ex. 21) were presented and compared with potential flood levels. Precedent and cumulative effect was discussed. Throughout, reference was made to ORCA Water Management Policies (Ex. 10). The Provincial Policy Statement on Wetlands (Ex. 11), including questions of retroactivity, were also discussed.

Mr. Merriam testified that prior to the filing of the regulation in February, 1989, ORCA had no authority over the development on the subject lands. The chronology of events surrounding construction, notice of violation, Bye's application (Ex. 43) and the resulting refusal (Ex. 44) were outlined. Mr. Merriam recounted his recollection of discussions with Mr. Moroney in August of 1989 and of ORCA's evidence concerning on the extent of the northern access road to the subject lands. Describing the recent rainfall, Mr. Merriam described photographs taken by him on November 13, 1992 (Ex. 45 A through F). Mr. Merriam presented the chronology and related correspondence outlining ORCA's involvement in the 1980 Airport Industrial By-law and the proposed Plan of Subdivision involving the subject lands.

Mr. Merriam gave evidence in connection with the construction which took place in the vicinity of the subject lands which received ORCA approval, for which no

approval had been required or for which necessary approval had not been obtained but had taken place more than six months before ORCA was made aware.

Mr. Merriam gave the history of the wetlands classification of the subject lands, the adjacent lands to the west owned by Mr. Bye, describing the importance of the hydrologic function in relation to ORCA's objects. He discussed the general non-applicability of cut and fill techniques within wetlands. His personal knowledge of the subject lands and of types of wetlands and features of environmentally sensitive areas was explored.

Leslie J. Benson, P. Eng. is the Water Resources Engineer for four conservation authorities. Ms. Benson is in agreement with evidence of Mr. Merriam on the relevant flood lines, fill lines and elevation of flooding in relation to the subject lands. Ms. Benson gave reasons for the difference in flood levels determined by ORCA from those of witnesses on behalf of Mr. Bye, stating that the impact of the spillway was critical to calculations. Ms. Benson gave evidence of the sources of water which would enter onto the subject lands, using the Manning Equation and reasons for its use in preference to the HEC2 model. Ms. Benson also gave her opinion on the impact on the reservoir function if the fill anticipated by the application were to be placed. Ms. Benson discussed the Report on a Floodline Mapping Study, The Village of Lakefield and Township of North Monaghan (Ex. 29) (the "Floodline Mapping Study"). In particular, the effect of the spillway was not used for purposes of the Floodplain Mapping resulting from the study, so that its impact would still have to be considered.

Laurie Mennamen, Water Resource Planner for ORCA, introduced six photographs taken by her on August 3, 1990 (Ex. 66 A through F), and gave evidence of her observations, noting standing water between the foundation and the access road to the north, along the sides of the access road and the grading of fill along the north wall of the foundation. She stated that she observed water flowing and in her opinion, the water on the site was not due to the site being under construction.

Beverly Gail Booth, Water Resource Technician with ORCA, introduced three groups of photographs taken by her on June 23, 1992 (Ex. 67 A through D), November 25, 1992 (Ex. 68 A and B, originally marked as C and D to an unidentified exhibit) and either by Ms. Booth or Chris Rogers January 5, 1993 (Ex. 69 A through M), each of which was described. Exhibit 67 C shows a sign of the proposed subdivision with

ten full lots on triangle on which the site is located, two lots partially within the subject lands and the remaining eighteen lots in the adjacent rectangular lands to the west. The remaining June 23, 1990 photographs show the access road including its branch to the foundation and growth of what was described as bulrushes and cattails along either side of the main access road. The November 25, 1992 photographs, taken from Airport Road facing west, show water along the side of the access road "as far as the eye can see". The January 5, 1993 photographs taken from the ground show the extent of water north of Mervin Road and east of the Airport Road at the perimeter of the subject lands with a broad expanse of water from near the roads to and encroaching in the shrubs and trees; the extent of water along, overtop and beyond the ditches of the access road is also shown. The remainder of the January 5, 1993 photographs are taken from the air and show standing water alongside the access road branching south alongside the foundation, to the south of the foundation, in the trees both east and west of the foundation. It was acknowledged that during the latter half of December, 1992 a number of severe snowstorms had been experienced followed by an unseasonably warm period coupled with heavy rain.

Barry Snider, District Biologist with Ontario Ministry of Natural Resources with expertise in wetlands biology, outlined the history of evaluation and classification of lands in the immediate area, including the subject lands. The result of a 1987 investigation was a class 3 wetland (see Ex. 72); the records were revised in March, 1991 to correct an error without additional field work performed to a class 4 wetland (see Ex. 73); a third reclassification in July, 1992, resulted in a class 1 wetland (see Ex. 74); a fourth reclassification in September, 1992, involving field evaluation resulted in a class 1 wetland (see Ex. 75).

An Evaluation System for Wetlands of Ontario-South of the Precambrian Shield, Second Edition, (Ex. 77 with last page removed, due to objections of Mr. Taylor) (the "Wetlands Evaluation Manual, 2nd Edition") was used for the 1987 and 1991 evaluations. Both 1992 evaluations used Exhibit 77 and a draft report entitled "System for Evaluating Wetlands in Southern Ontario, Ontario Ministry of Natural Resources, Provincial Wetlands Working Group, August, 1992" (Ex. 82) (the "Wetlands Evaluation Manual, Draft 3rd Edition"). Mr. Snider testified on the differences between a marsh, swamp, bog and fen; he was unable to comment on ice contact ridges which were found to exist in the October, 1992 Evaluation. The four components of evaluation for purposes of wetlands evaluation, namely biological, hydrological, social and special features were explained and details highlighted, although the document which provided the classification,

namely the total score corresponding to the classification, was not admitted into evidence, as it was not part of the Wetlands Evaluation Manual, 2nd Edition.

Mr. Snider gave evidence on the rationale for the determination that the Bye lands were part of a much larger wetland complex in the October, 1992 Evaluation. The Provincial Policy Statement on Wetlands and the evaluation mechanism for classification were discussed.

On behalf of the City of Peterborough:

Donald M. Frazer is a Senior Biologist with Gartner Lee Limited. He is an expert witness on bird ecology. Mr. Frazer testified that three birds were listed in the October, 1992 Evaluation, with corresponding scores of between 10 and 100. Used as intended, the scoring for presence of birds species through use of the Wetlands Evaluation System, 2nd Edition would require determinations on breeding and feeding habits, with reference to consultations or other resource texts, to determine the significance at the local level. Referring to the **Atlas of Breeding Birds in Ontario**, University of Waterloo Press, 1987 (Ex. 81), Mr. Frazer indicated that 45 to 50 species were given status according to feeding and breeding habitat, each accompanied by a series of maps representing 10 square kilometres of the province to determine local rarity. The Wetlands Evaluation System, Draft 3rd Edition which has lists of rare species specific to site regions, draws on information from the Atlas. None of the three species listed in the October, 1992 Evaluation is found on or near the Bye lands.

The Tribunal, pursuant to subsection 119(1) and section 20 of the **Mining Act** introduced two documents, "Transport Canada - Aviation - Air Navigation System Directorate - Land Use in the Vicinity of Airports", Seventh Edition, March 1989 and Transport Canada - Land Use in the Vicinity of Airports", Seventh Edition Amendment No. 2, April 30, 1992. The tribunal referred to Part III, entitled "Bird Hazards" and in particular to pages 3-2 to 3.3, Commercial Activities not recommended for areas 3.2 km or less from the airport reference point, (c) Managed and/or Supplemented Natural Habitats (refuges, Sanctuaries) Migratory Waterfowl Refuges/Feeding Stations/Crops, and at the bottom of page 3.3, Other Activities which are attractants and remediated, including, under lagoons, stormwater retention ponds.

Preliminary Matters

A motion was brought at the commencement of the hearing on behalf of the City of Peterborough (the "City") to be added as a party. Initially, Mr. Taylor was seeking an adjournment; however he indicated that he was willing to proceed with the hearing as scheduled.

The City took no position on the merits of the appeal. The reasons for its request was in relation to the wetlands classification, in particular the numerous reclassifications which had occurred.

Mr. Millard stated that the appellant did not oppose the addition of the City as a party. Mr. Coros submitted that there is nothing in the **Act** which gives the City the right to be added as a party. The appeal is limited to the site and is between the appellant and the respondent, questioning the benefits to the City if it does not have a position on the merits. Mr. Coros questioned what the future limits of third party status would be.

Mr. Taylor admitted that the City is not a party under the **Act**. However, he submitted that section 5 of the **Statutory Powers Procedure Act** applies to the matter of adding the City as a party, not through specification under which the proceedings arise, but as "persons entitled by law to be parties to the proceedings". He submitted that this wording is a codification of the common law. By analogy, he submitted that Rule 13.01 of the Rules of Civil Procedure provide criteria which, while not binding on the tribunal, support the granting of the motion:

13.01(1) A person who is not a party to a proceeding may move for leave to intervene as an added party if the person claims,

- (a) an interest in the subject matter of the proceeding;
- (b) that the person may be adversely affected by a judgement in the proceeding; or
- (c) that there exists between the person and one or more of the parties to the proceeding a question of law or fact in common with one or more of the questions in issue in the proceeding.

(2) On the motion, the court shall consider whether the intervention will unduly delay or prejudice determination of the rights of the parties to the proceeding and the court may add the person as a party to the proceeding and may make such order as is just.

While it was admitted that the City does not have an interest in the subject matter of the proceeding, it does have an interest in the issues raised. Issues of law and fact will be determined which involve the City. Mr. Taylor relied on a photocopy of an excerpt from an article at page 129 of **The Advocates Quarterly**, Volume 6, Number 2, 1985 entitled, "Intervention as Added Party: Rule 13 of the Ontario Rules of Civil Procedure" written by Paul Muldoon and David Scriven.

The City is interested in the impact of the Provincial Wetlands Policy Statement (Ex. 11)(the "Wetlands Policy Statement") issued pursuant to section 3 of the **Planning Act, 1983**, which became effective June 27, 1992 through Order in Council No. 1946/88. Firstly, the Wetlands Policy Statement was based upon the authority of the government to issue policies on planning matters, and the tribunal must determine whether conservation authority appeals are, in fact, planning matters, and therefore binding on the tribunal. Secondly, Mr. Taylor stated that the municipal airport to the south of the site is under federal jurisdiction operated by the City. The question of the applicability of the Wetlands Policy Statement as it would pertain to an airport operated under the aeronautics provision of the **Constitution Act** is at issue. Thirdly, there is a question of whether the tribunal is a resource management body and, as such, is required to have regard to the policy.

Mr. Taylor cited several cases in support of the motion: **Re Matter of Ontario Energy Board Act** (unreported) June 28, 1985, File 26/85; **Thorson v. Attorney General of Canada (No. 2)**, 42 D.L.R.(3d) 1, 1 N.R. 225, **Nova Scotia Board of Censors v. McNeil** [1976] 2 S.C.R. 265, 32 C.R.N.S. 376, 12 N.S.R. (2d) 85, 55 D.L.R. (3d) 632, 5 N.R. 43 and **Minister of Justice of Canada v. Borowski** [1982] 1 W.W.R. 97, 24 C.P.C. 62, 24 C.P. (2d) 97, 130 D.L.R. (3d) 588, 39 N.R. 331, 12 Sask R. 420.

Referring to **Re Cloverdale Shopping Centre Ltd. et al. and Township of Etobicoke et al.** [1966] O.R. (vol 2) 439, Mr. Taylor submitted that an analogy could be

drawn to the position taken by the Ministry of Natural Resources in seeking to apply the Wetlands Policy Statement in that it has the authority to use the policy to override the interests of the parties and to favour broader public interest in an application such as the one initially before ORCA and now before the tribunal.

Also referred to was **Re Temple and Liquor Licence Board of Ontario et al.** (1983) 41 O.R. (2d) 214, where the court characterized the decision of the tribunal as administrative, but concluded that a member of the public was entitled to make representations and receive a copy of the decision and reasons, notwithstanding that the decision was administrative and one in which public policy concerns could be applied.

In conclusion, Mr. Taylor submitted that the identification of issues in the course of the hearing would require that the Rules of Natural Justice be followed and that the City be heard on those issues. Finally, of importance to the City is having the right to have access to an appeal or to state a case at some later date.

Mr. Coros submitted that it is not known what "fundamental legal issues which might arise" means in the context of this hearing. Any concerns on the applicability of the Wetlands Policy Statement can be dealt with in the **lis** between the parties. If the City is concerned about the decision, its concerns could be dealt with on another application to the respondent involving the City's lands. Referring to the federal jurisdiction which might come into play, Mr. Coros submitted that the City is seeking to bring in additional facts and issues which are properly the subject matter of a hearing before another tribunal. Referring to the **Temple** decision, Mr. Coros submitted that the **Conservation Authorities Act** makes provision for naming the parties, namely the applicant/appellant and the conservation authority, whereas the Liquor Licence Board is entitled to hear from all interested persons. The issues which are of interest to the City properly should be the subject matter of another application to ORCA and the City should not be allowed to use the current hearing as an umbrella for its interests on an application in which it has no direct interest. Referring to Rule 13, Mr. Coros admitted that it was a codification of the common law. However, he submitted that the **Statutory Powers Procedures Act**, and not the Rules of Civil Procedure, applies to these hearings.

The tribunal found that it agreed with the submission that Rule 13 of the Rules of Civil Procedure is a codification of the common law and as such, cases decided under the Rule would apply to the words, "persons entitled by law to be parties to the proceeding" in section 5 of the **SPPA**.

The tribunal is satisfied that the test to determine whether a person should be given status to intervene is dependent on having a vital or legitimate interest in the appeal. The Supreme Court of Canada in **Minister of Finance of Canada v. Findlay** [1986] 2 S.C.R. 607, 23 Admin L.R. 197, 17 C.P.C. (2d) 289, [1987] 1 W.W.R. 608, 8 C.H.R.R. D/3789, 33 D.L.R. (4th) 321, 71 N.R. 388 determined that the principles outlined in **Thorson**, **McNeil** and **Borowski** could be broadened to encompass the addition of parties where the issue of exercise of judicial discretion of the courts to permit an applicant to bring a non-constitutional challenge to a government's administration of its legislation. The test outlined in **Findlay** is:

- (1) justiciability;
- (2) that a serious issue be raised;
- (3) that the applicant have a "genuine interest" in the issue; and
- (4) that there be no other reasonable and effective means to bring the issue before the court.

The tribunal finds that the applicability of the Wetlands Policy Statement to decisions of conservation authorities and upon appeal, of this tribunal, is a matter that is justiciable, that is, one that is appropriate for determination by the tribunal. There is also a serious issue raised, namely whether the policy is binding upon the conservation authorities and the tribunal. The tribunal finds that the City has a genuine interest in, not the subject matter of the appeal, but in the determination of the issue. Concerning other avenues of bringing the issue before the courts, the tribunal is satisfied that the issue which is one of concern to the City today and not at some future date. The absence of a determination of the issue in the broader context which the City wishes to introduce, raises the possibility of the matter being determined without having heard argument and submissions within a broader context. The tribunal is satisfied that the appellant should not be constrained in presenting his case on this issue in this broader context, which might unnecessarily change or compromise his position on issues which are the subject matter of the **lis**. Similarly, without having the opportunity to make representations at this time, the tribunal finds that prejudice to the City would result. While Mr. Coros has suggested that the issues would properly be the subject matter of another application of the City to ORCA, the tribunal finds that this would be unnecessarily limiting to the City. To rely on the future possibility of bringing an application on one land it owns in the area may unfairly restrict the City which is not in the property development business and may

leave it open to liability from those transferees who are. This would unnecessarily involve those third party/transferees who could be saved the inconvenience, time and expense of bringing the matter to just the place it sits today, with the City being unable yet again to make representations.

The decision of the tribunal may be taken as an opening of the floodgates of similar motions on other appeals. This is a matter of serious concern for the tribunal. If third party status were allowed in connection with each appeal heard, hearings would be unnecessarily prolonged and force parties to incur additional expense. However, the issue of whether provincial planning statements authorized by section 3 of the **Planning Act** are binding on the conservation authorities and the tribunal is of sufficient importance to the future decisions of these bodies that a timely decision on this and related issues is of sufficient importance to allow the addition of the City as a party. This decision in no way should be interpreted as a general endorsement of the addition of all persons in the vicinity of lands which are the subject matter of appeals before the tribunal. The tribunal distinguishes such cases as involving interest in specific lands owned by the third parties and not of general public interest in the powers of the conservation authorities and the tribunal.

Evidence and Submissions

De Novo

Relying on the tribunal's preamble that appeals to the Minister are new hearings by virtue of Part VI of the **Mining Act**, Mr. Millard submitted that the principle in its decision in **Blake v. The Grand River Conservation Authority**, (unreported), dated March 20, 1992 should not be followed, where it states at pages 3 and 4:

It is not intended, on an appeal, to give someone in Toronto, unfamiliar with local circumstances, the obligation to second guess the authority. This applies if the authority has formed an opinion that, on the information before it, it is a reasonable one. It need not be the only opinion that could have been arrived at, merely a reasonable one.

However, again referring to **Blake**, Mr. Millard submitted that reasons for

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refusal must be given and this was not done in the Notice of Decision. The reasons for decision are not sufficiently expansive and do not give the facts upon which the determination was reached. This justifies the need for a new hearing before the tribunal.

Relevant Legislation

Relevant portions of the **Act** and O. Reg. 60/89 were read into the record. The following sections of the **Act** were referred to:

20. The objects of an authority are to establish and undertake, in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals.

21. For purposes of accomplishing its objects, an authority has power,

- (j) to control the flow of surface waters in order to prevent floods or pollution or to reduce the adverse effects thereof;

Power to prohibit, regulate or require the permission of the authority are set out in clauses 28(1)(b), (e) and (f) as follows:

28.-(1) Subject to the approval of the Lieutenant Governor in Council, an authority may make regulations applicable in the area under its jurisdiction,

- (b) prohibiting or regulating or requiring the permission of the authority for the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse;
- (e) prohibiting or regulating or requiring the permission of the authority for the construction

of any building or structure in or on a pond or swamp or in any area susceptible to flooding during a regional storm, and defining regional storms for the purposes of such regulations;

- (f) prohibiting or regulating or requiring the permission of the authority for the placing or dumping of fill of any kind in any defined part of the area over which the authority has jurisdiction in which in the opinion of the authority the control of flooding or pollution or the conservation of land may be affected by the placing or dumping of fill;

Section 4 of "O.Reg. 60/89 reads:

- 4. Subject to **The Ontario Water Resources Act** or to any private interest, the Authority may permit in writing the construction of a building or the placing or dumping of fill or the straightening, changing, diverting or interfering with the existing channel of a river, lake, creek, stream or watercourse if, in the opinion of the Authority, the construction or the placing or dumping of fill or the straightening, changing, diverting or interfering with the existing channel will not adversely affect the control of flooding or the pollution or the conservation of land.

Mr. Coros submitted that the **Act** gives substantial powers to prohibit construction or the placing of fill if, in the opinion of the conservation authority, the land is in an area susceptible to flooding or is a swamp or wetland. O.Reg. 60/89 contains twelve schedules which set out the watershed areas which, in ORCA's opinion pursuant to section 2, control of flooding, pollution or the conservation of land may be affected by the placing or dumping of fill. Similarly, section 3 sets out that no placing of fill, construction in an area susceptible to flooding or in a swamp or wetland or diversion of a watercourse can take place without the permission of the authority.

Floodline Elevation

Mr. Lorant gave evidence concerning the design criteria for the flood plain mapping of the Cavan Creek watershed, determined through the use of the Timmins Storm, being the recorded rainfall levels over time which occurred during the actual event in 1961, applied to conditions found in the Cavan Creek Watershed. The use of the Timmins Storm is based upon meteorological data in the Peterborough area. To perform the calculations, rainfall data was extrapolated, converted to flows and superimposed onto the base map. The spot elevations are based upon more stringent standards, whereas contours are accurate to within one foot, although Mr. Lorant did not challenge the accuracy of the map. The Cavan Creek calculations gives the criteria for risk assessment in the event of a regional storm, although the frequency cannot be predicted.

Illustrating the range of flows, with 5 year flows of 38.8 cubic metres per second (mps), 50 year flows of 78 mps, 100 year flows of 98.7 mps and Timmins Storm flows of 204 mps illustrates the magnitude of the storm.

The difference between the fill lines and flood lines on the Floodplain Map, according to Mr. Lorant, is to provide a margin for other hazards which might otherwise be missed, such as quicksand or steep banks. He suggested that there could be no development within the floodlines and development could be allowed within the fill lines if it could be proven that there was no hazard.

Mr. Lorant stated that the impact of the spillway was ignored in drawing the floodlines on the Floodplain Map, as its inclusion would have reduced the flows from the main channel and would therefore result in lower flood levels downstream.

At issue in the hearing was the extent to which flood levels plotted on the Floodplain Map could be relied upon. More specifically, evidence of Mr. Davenport, Mr. Burke, Mr. Lorant and Ms. Benson addressed factors which could potentially impact on and increase the flood levels shown at the site. Throughout the hearing, ORCA was of the position that the flood elevation at the site is 190.42 metres below which the site would be flooded which contrasts with Mr. Burk's elevation of 190.04 metres.

There was no argument that the floodlines shown on the Floodplain Map do not take into account the effect of the spillway or the backwater effect of the Otonabee River on the site, having been specifically stated in the Floodline Mapping Study.

However, Mr. Burke and Mr. Lorant on behalf of Mr. Bye and Ms. Benson on behalf of ORCA differed in their expert opinions concerning the extent of impact of these two elements on flood levels at the site and considerable time at the hearing was spent in the presentation of their evidence.

Relevant portions of the Floodline Mapping Study are reproduced. At page 12:

4.1 Starting Water Surface Elevations

The water surface elevation chosen to begin the calculation of the profile is important because it will affect the profile in the vicinity of the first cross-section and, depending on the slope of the streambed, may affect the profile calculations a considerable distance upstream.

In the stream reaches under consideration in this study, the channel slopes are fairly flat. Therefore, considerable attention to detail was given to the determination of the starting water levels.

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(continued on page 13)

4.2.2. Cavan Creek

The water levels in the creek are influenced to a great extent by the stage in the Otonabee River. The worst case of flooding would occur when the river and the creek are at flood stage. This case is considered possible because high water levels in both watercourses normally occur during the spring freshet.

For all the design flows, the starting water was set at the 100 year flood stage in the Otonabee River. It was assumed that the stage in the Otonabee may be high even when the flow in the creek is low.

The Timmins Regional Storm was a violent summer thunderstorm. The meteorological conditions that created the storm are typically found during the late summer, and are not normally found during the Spring. On this basis, it seems reasonable to start the water surface computations for the

Regional Storm flood assuming a low water level in the river. However, the record shows that high flows may occur in the river as late as mid-July. Therefore, it was decided to begin the calculations for the Timmins Regional Storm flood using the 100 year flood water level in the Otonabee River.

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(Continued on pages 16 and 17)

A spill of flow out of the channel is evident in Cavan Creek at the west tip of the Peterborough Runway.

During the Regional Storm the outflow was calculated to be approximately 13 [cubic metres/second], which constitutes approximately 7% of the total flow. The water level can be expected to be approximately 0.05 m lower because of the spill.

The volumes going out of the main channel will be smaller for the smaller storms than for the Regional storm, and also will constitute a smaller part of the total discharges. In view of the above, it is reasonable to neglect the effect of the spill on the downstream water levels.

The direction the spill will take is not entirely known but an overview indicates that the area north of the Airport runway will be flooded by the spill. The extent of the area flooded will depend on the volume of runoff entering that area.

5. ASSESSMENT OF FLOODPRONE AREAS

The areas subject to flood hazard under Regional Storm Conditions are defined by the floodlines shown on the mapping prepared for this study.

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(continued on pages 18 and 19)

5.2 Cavan Creek

.....

Downstream of the Peterborough Airport runway there is widespread

flooding which is caused mainly by the backwater from the Otonabee River. It should be pointed out that below North Monaghan 8th Line the terrain is flooded yearly during the spring freshet.

The area bounded by the Peterborough Airport, the County Road No. 11 and Highway No. 115 has been observed to be flooded, particularly in the spring and early summer. It appears that the flooding is caused mainly by poor drainage of snowmelt and rainfall falling directly over the area. The spill at the Peterborough Airport will cause flooding of this area, of undetermined magnitude and extension.

(continued at page 23)

[6. REMEDIAL MEASURES]

[6.2 Cavan Creek]

The flooding caused by the spill at the Peterborough Airport would be prevented by constructing a low berm at the highest and narrowest point. A preliminary examination of the spill indicates that it may extend over a substantial area; by constructing a berm flooding will be prevented and although storage volume is withdrawn from the flood plain, it will not significantly alter the flow rates downstream. A previously completed study for the City of Peterborough demonstrated that it is possible to raise the subject areas above the flood level of the Regional Storm without affecting water levels downstream or upstream.

Backwater Effect of the Otonabee River

Mr. Lorant gave evidence that the selection of the design criteria for determining the backwater effect of the Otonabee River on the Cavan Creek Watershed is excessive. Referring to Table B-2 of the Technical Guidelines for Flood Plain Planning (Ex. 63) (the "Technical Guidelines"), which were written in 1984, Mr. Lorant stated that the use of the 1:100 year storm on the Otonabee has statistically been observed as a spring occurrence, resulting from snow melt or snow melt coupled with rain. The starting level coupled with the regional storm, being the Timmins Storm, on the Cavan Creek

watershed, is associated with late summer storms. The likelihood of the two occurring simultaneously is so remote that it should not be considered. In designing the provincial criteria for backwater effects at the confluence of two watersheds, the design of the Technical Guidelines required looking at a high flood on one river and a medium flood on the other and then reversing it, with a medium flood on the larger river and a high flood on the smaller river. The occurrence upon which ORCA seeks to base its calculations is well in excess of this guideline, assuming high levels of flooding on both rivers, which in Mr. Lorant's opinion cannot happen. Not only do the calculations of the backwater flows impact on the volume of water calculated by ORCA to flow northward along the west side of Airport Road, but they also serve to increase both the volume of water calculated to go over the spillway and the elevation of waters reached at that level.

Changing the criteria of the backwater effect to be in line with those in the Technical Guidelines and lowering the starting levels on the Otonabee for purposes of calculations means that the elevation of water going over the spillway will decrease by 12 centimetres.

The criteria used by ORCA for surface elevations on the Otonabee results in flood levels of 190.61 metres at the extreme west of the spillway, which is excessive in Mr. Lorant's opinion. Illustrating his point, making that calculation using the 1:100 year storm for both the Cavan Creek and Otonabee watersheds, the equivalent of a 1:10,000 year storm, would result in an elevation of 190.28 metres, considerably less than ORCA's calculation. This lower elevation proposed by Mr. Lorant would impact both the flood elevation and volume of water which will flow over the spillway.

HEC2 Model and the Manning Equation

Ms. Benson favoured the use of the Manning Equation for purposes of calculating the volume of water which is likely to flow over the spillway. In her words it was a common formula for calculating open channel hydraulics. The equation is even incorporated into the HEC2.

The Manning Equation presupposes uniform flow. The calculations and rationale, as presented at the hearing, are contained in Ms. Benson's Spill Analysis Report (Ex. 62). The Manning Equation is:

$$Q = \frac{1.49AR^2/3S^{1/2}}{n}$$

where A is the cross-sectional area of flow, in square feet, R is the hydraulic radius in feet, S is the slope in feet over feet and n is the roughness coefficient. The calculations result in an area defined when plotted in a graph called the channel hydrograph. The flow rate, in cubic feet per second is plotted over time and the area within the graph denotes volume of flow.

Ms. Benson chose 0.035 as a roughness co-efficient, appropriate in her opinion to winding natural streams. The slope was chosen as a constant of 0.0012 ft/ft.

Ms. Benson compared the methodology used by her with that of Mr. Lorant. Both obtained the rating curve for the main channel near the spill area. The methods used differed, as discussed above. The determination of the hydrograph for the spill channel was based on spill occurring at an elevation of 190.2 metres, according to Ms. Benson and 190.35 metres, according to Mr. Lorant. Ms. Benson assumed the depression storage area north of the spillway to be partially filled at the commencement of the spill, due to backwater downstream, while Mr. Lorant assumed it would be minimal.

The following differences resulted from the two methods.

<u>Hydrograph Characteristic</u>	<u>Benson</u>	<u>Lorant</u>
duration of spill	17 hours	12 hours
peak flow in spill channel	4.5 m ³ /s	0.9 m ³ /s
volume of spill	131,806 m ³	16,800 m ³

In her discussion which follows the comparison, Ms. Benson states:

With respect to using Manning's equation versus the HEC2 program to determine the rating curve in the spill channel, there is no question that the Manning's equation is appropriate and is most commonly used in engineering practice. In Mr. Lorant's analysis, the HEC2 program commenced at (the default) critical depth, employed very

small flow rates (0.03 cms to 1.0 cms) and, consequently, appears to be unstable throughout the run. It is my opinion that using the HEC2 program to derive the spill channel rating curve, in this case, is not appropriate.

With respect to the spill channel hydrograph, Mr. Lorant has interpolated channel geometry where no information exists, including the minimum elevation at which spill begins. In order to clarify this issue, we conducted a field survey at the spill area. Due to difficult site conditions (ie. thick ice over water), we surveyed only the area at which Mr. Lorant testified that spill would begin (e.g. Sect. 0 on Exhibit 28C). Using the elevation of the runway as a benchmark in order to be consistent with the mapping, the following are my findings:

Runway elevation	190.7 m
Elevation at which spill occurs (ORCA)	190.2 m
Elevation at which spill occurs (Lorant)	190.35 m
Surveyed high point in spill channel	198.85 m

In actual fact, the field survey shows that spill will begin earlier and for a longer duration than initially determined with unsurveyed data, and, therefore the Authority's calculated flood elevation of 190.42 m is underestimated.

In Mr. Lorant's opinion the HEC2 model was appropriate for purposes of this calculation. Referring to the two excerpts taken from **Engineering Hydraulics** and **Applied Hydraulics in Engineering** (Ex. 64 and 65 respectively), he stated that the Manning equation is a simple model used under conditions of uniform flow. Mr. Lorant was concerned that the constants which the equation require do not exist, such as a parallel bed and surface levels, and a constant depth and slope in the channel. Also not constant was the wetted parameter. While the HEC2 uses the Manning equation for roughness, twenty other matters are dealt with in the HEC2 which are beyond the scope of the Manning equation. The spill channel has an adverse gradient, not addressed by Manning. Mr. Lorant and Ms. Benson disagreed on where critical depth would be found

in the channel, which was determinative of the point at which water would commence spilling and caused differences in calculations.

The roughness co-efficient, being the divisor, will greatly affect the calculated flow rate in the Manning Equation. Ms. Benson used 0.035 which was similar to the main channel of Cavan Creek, indicative of short grasses and some weeds. Mr. Lorant used a roughness coefficient of 0.08, which indicates a rougher channel, corresponding to more growth and more pools, channels and rocks.

Mr. Lorant disagreed with a number of Ms. Benson's choices for use in an irregular channel. In particular, is the use of a constant for hydraulic radius appropriate when it cannot be supported in the field; is the use of a constant slope moving from 190.2 to 189.1 supportable when compared with the contour map, where there is an adverse slope initially and then a slope from west to east; is the use of constant for the wetted parameter appropriate when it is not a constant in reality; and is the assumption of the extreme point of 3224 excessive for water levels. In his opinion, their inappropriate use created an unstable model and does not accurately describe what will occur.

The differences in approach advocated resulted in considerable discrepancy in calculations. Ms. Benson's analysis would result in water flowing over the spillway sooner and lasting longer than the calculations performed by Mr. Lorant. In her opinion, once the spillway is overtopped, the low lying areas south of Mervin Road would be filled and the road would then be overtopped.

Flooding Considerations

Mr. Davenport introduced Transport Terminal Drawing 671-CAN2 prepared by M.J. Davenport & Associates Ltd. (Ex. 21) and a modified Floodplain Map (Ex. 22). He gave evidence that the cut and fill proposal submitted on behalf of Mr. Bye would allow for five times greater cutting than would be replaced by the placement of fill at the same elevations. The elevation of Mervin Road runs from 190.8 metres to 190.15 metres. He stated that the floodplain elevation to the west of the abandoned railway lands is 190.35 and 190.05 immediately east of the railway. The reason for this difference is that the abandoned railway acts as an obstruction to the free flow of water in the southeasterly direction. Mr. Davenport gave his opinion concerning the lack of importance of the spillway, as evidenced by the fact that its impact was not included in the Floodplain Mapping. The distance of the spillway from the site was 1800 metres, being in excess of one mile.

Mr. Merriam gave evidence on spot elevations on the site which in his opinion were lower than either of the projected flood elevations. He stated that the application did not indicate flood elevations, but placement of fill would be required regardless of which elevation was found by the tribunal.

ORCA submitted that the area is susceptible to flooding. This is a result of water flowing over Mervin Line Road via the backwater effect from the Otonabee and the spillway, plus actual rain falling on the site as well as the undetermined flows from the watercourse to the northwest. The damming effect of the abandoned railway has been minimized with the extension of the access road off Airport Road to the north of the site beyond the berm created by the abandoned railway line. Ms. Benson's evidence was that the low point just west of the intersection of Airport Road and Mervin Road would be flooded to a level of 0.52 metres or just under two feet. The access road to the north of the construction site, having a current spot elevation of 189.643 metres, would be flooded by 0.78 metres, or in excess of 2 1/4 feet.

The Floodline Mapping Study, which resulted in the drawing of the floodline of 190.04 metres specifically indicates that calculations do not take into account water running over the spillway. With the volume of water running over the spillway, calculated with the Manning Equation, and the backwater effect of the Otonabee River on water running down the Cavan Creek causing water to flow north along the west side of Airport Road, water will accumulate immediately south of Mervin Road. There are low points in the road which are lower than 190.04. The result would be that the road would overtop and flow into the site.

Additional water would accumulate on the site from rainfall and drainage from the lands to the northeast. These waters would not be able to readily drain away, as the culvert in the road is not designed to address flooding in excess of a 1:5 year storm, which would be considerably exceeded by the volume of flooding in a regional storm.

Mr. Lorant testified that there is a berm located southwest of the runway and spillway which appears to be similar to that which had been recommended by the Floodline Mapping Study, although its origins could not be determined. The berm was not observed by Ms. Benson even though she had taken elevations of the spillway after Mr. Lorant gave his initial evidence. Mr. Millard submitted that the existence of the berm is very significant, making all other evidence concerning the flood elevations irrelevant. The berm should be regarded as exactly the flood proofing measure contemplated by the

Floodline Mapping Study. He suggested that it would take a very severe storm to remove its protective effect.

Mr. Millard submitted that one factor which should be determinative of the finding of a flood elevation of 190.04 is that this is what is shown on the Flood Plain Map. The Rule of Law states that the author of a text bears the responsibility for its content, pointing out that all development on the airport land was required to be flood proofed to a level of 190 metres, indicating that ORCA had accepted the flood lines drawn on their mapping. He submitted that the tribunal should accept the evidence of Mr. Lorant and Mr. Burke that the impact of water flowing over the spillway and excessive calculations of the backwater effect of the Otonabee River and find that the flood elevation level at the site is 190.04 metres.

Mr. Coros submitted that the **Act** is permissive, in that ORCA may, if there is no adverse effect to flooding, pollution or the conservation of land, give permission to place fill or construct a building. The evidence at the hearing showed that the water table is near the surface, through Mr. Doughty's video and John Merriam's photographs. The abandoned railway, which had previously acted as an artificial dam, had been removed. Therefore, the sources of water coming into the property are supported by the evidence and opinion of ORCA's expert. Mr. Coros submitted that ORCA's opinion is determinative and in its opinion the site is susceptible to flooding.

ORCA had two concerns. The first was the precedent that would be set in granting such an application. With nothing to distinguish them from the present application, future applications could not be denied by ORCA. Second, while the impact of this application in terms of the relative loss of storage in the floodplain may be small, the cumulative effect of dozens of applications would be substantial.

Use of Cut and Fill

Mr. Millard submitted that if the tribunal finds that flood elevation at the site is 190.04 metres, it should find that the evidence of Mr. Burk and Mr. Davenport that cut and fill would be an appropriate treatment of the site to permit the construction and placement of fill has not been disputed. Mr. Millard submitted that nothing in ORCA's evidence contradicted the proposed cut and fill technique.

Referring to the Canada Transport Terminal Drawing 671-CAN2 (Ex. 21) and visual evidence through pictures and the video tape, Mr. Millard stated that none of

the proposed cutting had been done nor had the access road and ditches been completed. The site had the appearance of a construction site, which is exactly what it was. The proposed cut and fill techniques would maintain the stage storage characteristics at 0.30 metres vertical intervals, thereby being within policies set by ORCA.

Mr. Merriam gave evidence regarding the opinion of ORCA, the susceptibility of flooding of the subject lands, their reservoir function as a significant wetland, the likely impact of 30 lots for development on the subject or adjacent lands and the resulting precedent and cumulative effect of such fill and construction.

Mr. Coros submitted that the doctrine of cumulative effect is applicable to the current situation. The proposed construction and placement of fill will cost valuable flood storage which the site provides and will be a precedent for commencement of a cumulative impact on the flood storage provided by the site. Also, as the site performs a reservoir function, being a wetland, the use of cut and fill should not be considered.

Wetlands

The issue of whether the site is a swamp or a wetland took on greater importance through the course of the hearing, with considerable additional materials filed, including those documents referred to "Witnesses **Barry Snider**" above.

Witnesses on behalf of Mr. Bye gave evidence that the site is not part of a wetland, in addition to not being flooded or part of a watercourse. It was the position of a number of these witnesses that water evident on a number of pictures filed as exhibits and on the video taken by Donald Doughty was either due to recent rainfall or snow melt, and could be observed in improperly drained ditches or on the site which was not in its original state, but was a construction site. The evidence of Darragh Moroney was that, without the topsoil having been cleared for the construction, there would have been no water on the site. The property was described as having been used for agricultural purposes and was in the early stages of successional regeneration and reforestation, having shrubs and young trees.

John Merriam gave evidence concerning the contents of the Wetlands Policy Statement (Ex. 11). Pages 4 and 5 of the policy are reproduced:

AUTHORITY

This document is prepared under the authority of Section 3 of the **Planning Act** and is the Province of Ontario's Policy Statement on planning for the protection of **Wetlands** as a matter of Provincial Interest.

This Provincial Policy Statement:

- . is issued jointly by the Minister of Municipal Affairs and the Minister of Natural Resources; and
- . gives direction to municipalities, planning boards, public agencies, the private sector and others for the protection of **Wetlands**.

GOALS

- . To ensure that **Wetlands** are identified and adequately protected through the land use planning process.
- . To achieve no loss of **Provincially Significant Wetlands**.

OBJECTIVES

The objective of the Province of Ontario with regard to **Wetlands** is three-fold:

Through a variety of programs, of which this policy is one:

1. To ensure no loss of **Wetland Function** or **Wetland Area** of **Provincially Significant Wetlands** in the **Great Lakes - St. Lawrence Region**;
2. to ensure no loss of **Wetland Function** of **Provincially Significant Wetlands** in the **Boreal Region**; and

3. to encourage the conservation of other **Wetlands** (e.g. Classes 4 to 7) throughout Ontario.

APPLICATION

This Policy Statement is to be applied to **Provincially Significant Wetlands** and lands adjacent to them, throughout Ontario.

INTERPRETATION

This provincial Policy Statement:

- . replaces the "Guidelines for Wetland Management in Ontario" introduced by the Minister of Natural Resources in the Legislature in April of 1984.
- . takes effect on the date of publication in **The Ontario Gazette** and applies to all planning applications under the **Planning Act**.
- . does not supersede or take priority over other policy statements issued under Section 3 of the **Planning Act**, or any other policy approved by the Lieutenant Governor in Council.

Mr. Merriam was of the opinion that ORCA, along with other conservation authorities, was bound by the Wetlands Policy Statement. Of the benefits listed on page five, those relating to hydrology were of primary concern to all conservation authorities. These are, "the control and storage of surface water and the recharge and discharge of ground water", maintenance and improvement of "water quality, gain in flood control" immobilization of "contaminants and nutrients", and reduction "of other contaminants to less damaging compounds". Although no specific agency is charged with the protection of wetlands, they may be influenced by activities permitted by conservation authorities. The General Policy of the Wetlands Policy Statement, at page 6, is reproduced:

POLICY

It is the policy of the Province of Ontario that:

1. General

- 1.1 All planning jurisdictions including municipalities, planning board and resource management bodies within the Province shall protect **Provincially Significant Wetlands**.
- 1.2 Where **Provincially Significant Wetlands** have been identified, all planning jurisdictions, including municipalities and planning boards, shall incorporate policies and protect **Provincially Significant Wetlands** in official plans, zoning by-laws and other development decisions under the **Planning Act**.
- 1.3 All planning jurisdictions, including municipalities and planning boards are encouraged to protect other **Wetlands** that are not provincially significant.

At page 12, under "**Implementation**", the last paragraph reads:

Application by Conservation Authorities of Fill, Construction and Alteration of Waterway Regulations under the **Conservation Authorities Act**, will assist in the implementation of this Policy Statement, where **Provincially Significant Wetlands** are contained within such regulated areas.

Referring to the history of the wetlands classification performed by the Ministry of Natural Resources, Mr. Merriam stated that the site was not identified as an area of natural or scientific interest ("ANSI") in 1980, although the adjacent Bye property to the west of the railway was studied and identified. In 1987 through to 1992, the site was classified as a class 3, class 4, class 3 and finally class 1 wetland. The most recent re-classification, having been done on October 9, 1992, was not done at the request of ORCA.

The cut and fill proposals in wetlands are unacceptable to ORCA, as it would involve destroying a portion of the wetland. He stated that the cut and fill would remove the function of the wetland by destroying the reservoir and filtering functions it provided. This opinion was echoed by Ms. Benson.

Barry Snider gave evidence on behalf of ORCA. He stated that the Ministry of Natural Resources (M.N.R.) has the leading role in the classification of wetlands. In July, 1987, two separate wetlands were identified, having been the airport wetlands and the east airport wetlands. Todd Morgan and Steve O'Donnell did the first evaluation at Snider's request. In 1987, pursuant to the **Conservation Land Act**, S.O. 1968, c. 41, M.N.R. sought to evaluate land which would be subject to a program where lands designated as provincially significant wetlands could receive an abatement of taxes to encourage private stewardship of such wetlands.

Mr. Snider discussed the circumstances surrounding each successive re-evaluation. The 1987 evaluation (Ex. 72) resulted in a class 3 wetland of the site, and much of the other land northwest of the airport runways, including a portion to the north of Highway 115. Certain lands south of the runway were also part of the classification. The wetland was characterized as a complex, being comprised of the two separate wetlands, having a size of 198 and 90 hectares respectively. Soils were 100 percent clays, loams or silts (mineral). The wetland proper was comprised of 100 percent swamp, having no bog, fen or marsh. The site involved 95 percent palustrine (permanent or intermittent outflow) and 5 percent riverine.

Due to a mathematical error pointed out in 1990, the site was reclassified as a class 4 wetland in March, 1991 (Ex. 73). No evaluation or field study was performed.

In 1992, the Township of North Monaghan expressed concern about the area. Mr. Snider stated that he was of the opinion that some important areas may have been excluded or that the original lands might be part of a larger wetland complex. The air photos of the area suggested to him that there might be a larger wetland complex separated by agricultural lands and the airport. In July, 1992, a further evaluation was performed, (Ex. 74), resulting in a wetland complex of 620 hectares, comprised of five smaller wetlands, including the site, all lands in the 1987 complex, lands to the east of Airport Road and a small pocket of land to the east of the Otonabee River.

In September, 1992, additional field work was performed and used in conjunction with information from the earlier evaluations (Ex. 72 and 74) to arrive at the October, 1992 Evaluation of a class 1 wetland (Ex. 75). Portions of the Wetlands Evaluation Manual, Draft 3rd Edition, were applied, as were portions of the Wetlands Evaluation Manual, 2nd Edition. Vegetative communities and methods of delineating boundaries were used from the 3rd Edition.

Mr. Snider explained that wetlands were of concern, with municipalities being directed to take them into consideration in their planning process. Up to 75 percent of wetlands in southern Ontario have been lost from the time of settlement. Their hydrologic function was to hold back waters during storms and flooding, and release cold waters during dry periods. They also perform a nutrient uptake function, thereby having a mitigating effect on pollution. He stated that they also provide habitat for hunting, fishing and trapping and provide distinctiveness to the landscape. While it would be simple to look at one function, the wetlands evaluation systems look at the whole picture.

Mr. Snider stated that a marsh is an area permanently covered with shallow water with emergent herbaceous growth. A swamp is characterized by woody vegetation and no, or only seasonal standing water. A bog is characterised by acidic waters, having specific growth, for example, of black spruce, cedar, sphagnum moss or pitcher plants. Fens are similar to bogs, although there are differences in the oxygen levels in the water. Also, they are characterized by a different type of vegetation, such as mosses other than sphagnum, sedges and tamarack. In his opinion the lands surrounding the airport, including the site, are largely swamp, with the water source being palustrine or headwaters.

Under cross-examination, Mr. Snider stated that his training in wetlands evaluation involved two days, with one day spent studying the Wetlands Evaluation Manual, 2nd Edition and one day doing field work. The field team hired to perform the initial evaluation has similar training. The property owners, and specifically Mr. Bye, had not been approached when the evaluation had been performed.

Mr. Taylor cross-examined on a number of specifics concerning the evaluation, focusing on the length of time spent, factors which were given larger scores such as the number of types of wetlands in a complex, whether lands east of the Otonabee were properly part of the complex involving lands to the west, the predominance of one type of vegetation such as poplar, the direction of drainage of the wetlands, that similar habitat and species would result in the characterization of a wetland complex, the inclusion of bird species which are not included in the Wetlands Evaluation Manual, Draft 3rd Edition. It was suggested that the last page of the Wetlands Evaluation Manual, 2nd Edition, being the correspondence of scores to classifications, would be required to understand the evaluation system.

Donald M. Frazer testified on the points given to the three birds listed in the October 1992 Wetland Evaluation (Ex. 75). The northern harrier, given 100 points,

appears in the 1984 Manual of Wetland Evaluation, 2nd Edition, as having regional significance. In his opinion a sighting of the bird is not enough to justify the award of 100 points. It should be determined whether the habitat is used for breeding, where time of year would be important, or whether the habitat is primarily for feeding purposes only, where the behaviour of the bird must be observed and evaluated. Similarly, using the 1984 criteria, the green winged teal was considered regionally significant, uncommon in Peterborough County. The green backed heron is not a rare bird. The habitat of the wetland does provide a good environment.

The 1987 **Atlas of Breeding Birds of Ontario**: University of Waterloo Press (Ex. 81) was the result of five years of extensive research, with maps of 100 square kilometres accompanying each species showing breeding areas. The result of the **Atlas** was a list entitled "Ontario Rare Breeding" which lists 45 to 50 species. The 1992 Wetlands Evaluation Manual, Draft 3rd Edition relied on the "Ontario Rare Breeding". The northern harrier, green winged teal and green backed heron are not listed in either document. The northern harrier is a marsh hawk, not considered rare by Mr. Frazer and other experts to his knowledge, and is not typically associated with swamps. Rather, it is found in wet open meadows, generally described as open country, with weedy grasses. The 1992 list breaks the province down into bioregions, listing type of growth, climate and topography in its regional classifications. Each region has a list of rare birds based upon its ecological habitat. In Mr. Frazer's opinion, the Wetlands Evaluation Manual, Draft 3rd Edition is comprised of newer and better knowledge, allowing for a better understanding of the status and habits of breeding birds.

In his submissions, Mr. Millard questioned the evaluation process used to determine that the site is a wetland, let alone one of local, regional or provincial significance. In particular, he questioned the use of students for two days, submitting that minimal on site evaluation was used in reaching a classification. With respect to the Provincial Wetlands Policy, Mr. Millard referred to page 30, where it states that the policy is not intended to be applied retroactively. He submitted that the policy is intended to be a planning document, so that it cannot be invoked unless it is part of the planning process. Where there is an existing designation on an official plan, it cannot be changed without proper consideration of the facts and representations of the landowner.

In his submissions, Mr. Taylor questioned whether in the pursuit of the objective of conservation of wetlands, the objectives could justify the means. He submitted that the ends and means in the case of the evaluations presented in evidence have been intermingled. The process followed in performing the evaluations do not

adhere to the Rules of Natural Justice. A landowner's property was subject to classification which would affect his ability to deal with his land. Mr. Bye was not informed that the evaluation would be taking place, nor was he asked for information in connection with the evaluations. This amounts to a bureaucratic fiat on the part of M.N.R.

Mr. Taylor suggested that the tribunal could easily dispose of this matter on the issue of flood evaluation and cut and fill, he submitted that there were other issues which should be addressed and invited the tribunal to address the issue of evaluation of the site as a wetland, having regard to fairness of procedures.

In support of his position, Mr. Taylor questioned whether the documentation of the classification system was complete. The documents filed disclose no classification system. He submitted that the classification system must be opened up to be participatory with those affected receiving proper notice.

The evaluation process itself was flawed. The landowner's valuable knowledge should be utilized in the process. The landowner and municipalities should be invited to participate. Those affected by the decision should be involved.

Concerning the classification itself, evidence shows the system is evolving, and the more up-to-date factors have not been properly offset by those factors which no longer are significant. Whether or not the tribunal determines that it will have regard to the Wetlands Policy Statement, it should be noted that the points given for endangered species in the evaluation are no longer considered as such in the Wetlands Evaluation Manual, Draft 3rd Edition. Without the high scores associated with the northern harrier, the green winged teal and the green backed heron, the classification of the site would not be as high, and possibly not a provincially significant wetland, although the corresponding classification to score remains absent from the documentation.

Finally, in 1980, the site was not identified as an area of natural or scientific interest. Mr. Taylor submitted that the best evidence points to the conclusion that the site is affected by seasonal flooding.

Mr. Coros submitted that the classification of the site as a site 3, 4 and 1 wetland was performed by M.N.R. In keeping with the **de novo** aspect of the hearing, the question of fairness of the various classifications of wetlands does not arise. Mr. Coros submitted that, notwithstanding the various types of wetlands which are listed under the

Wetlands Policy Statement and Wetland Evaluation Manual, there is no question that the site is a swamp. Therefore, ORCA was in a position to consider whether an application involved a significant wetland. At page 8 of its Water Management Policies (Ex. 10), paragraph 1.5 of the general policy states:

1.0 GENERAL POLICY

The introduction of fill into the floodplain will be approved if:

- 1.5 the area is an insignificant swamp or wetland not associated with a watercourse and therefore does not provide a reservoir function.

ORCA is allowed, by virtue of O. Reg. 60/89, to determine whether an application to place fill is in a swamp. The fact that M.N.R. has classified the site as a wetland, regardless of degree of significance, is complementary to the position of ORCA that it is a swamp. Even if the site were found by M.N.R. to be a class 4 wetland, it would be irrelevant to a determination by ORCA that it is a significant swamp. What is relevant to the determination made is whether the removal of the swamp would contribute to flooding, which the evidence of Mr. Merriam and Ms. Benson says that it will and whether there would be loss of the storage function provided through a reduction of overall reservoir capacity and degradation of the area.

Pollution

Although not part of the original application, a water quality pond was proposed at the hearing to address any concerns with pollution which might arise as a result of the proposed construction of a terminal. Trucks would be coming onto the property. Parking is also associated with the building.

Mr. Millard submitted that the pollution which would come from one building should not be regarded as a major factor to the decision. With the inclusion of a water quality pond, which is not typical for one building, most of the concerns of ORCA should be met. While any pollution control measures are not perfect, those of the appellant exceed provincial standards.

Mr. Coros submitted that pollution would result from the proposed

construction by way of salt, petroleum and pollution associated with parking lots and their attendant oil leaks. It was Ms. Benson's expert evidence that a water quality pond could address organic contaminants, but would not be effective for inorganic contaminants. Also, the residence time of the water in the pond was a factor in its effectiveness. During a severe storm, water would flush through more quickly, not allowing contaminants to fully settle out.

Conservation of Land

Hinder v. Metro Toronto and Region Conservation Authority, 16 O.M.B.R. 401, a decision of this tribunal, was referred to by Mr. Millard in support of his position that "conservation of land" does not mean retention in its natural state, being beyond the mandate of the conservation authority. He submitted that legislative powers of the conservation authorities must be strictly interpreted in a situation which could deprive a landowner of his proprietary rights. The tribunal states at page 433:

While it is relevant to apply a broad interpretation to the administrative powers of a conservation authority, as was done in the **Rosenberg** case, this tribunal is of the opinion that where the act of a conservation authority is a legislative one and one that affects the rights of landowners generally, it may be more appropriate to apply the exception to the broad interpretation rule outlined on p. 258 of **Maxwell on the Interpretation of Statutes** 12th ed. (1969), where it is noted,

Where a statute confers a power, and particularly one which may be used to deprive the subject of proprietary rights, the courts will confine those exercising the power to the strict letter of the statute.

While an exception appears in respect of planning notices ... the general principle would appear to be applicable to matters depriving a landowner of proprietary rights and it is essential at a minimum not to extend the meaning of the phrase under consideration but to limit it to its common and

ordinary meaning, the normal test for interpreting statutes and which test was endorsed by all counsel.

The Commissioner goes on to discuss the concept of "preservation" as used in the **Wilderness Areas Act**, R.S.O. 1980, c. 533, finding at the bottom of page 434,

It is clear that the Legislature distinguishes between conservation and preservation and reading the **Conservation Authorities Act** in the context of related statutes, it can only be concluded that the word "conservation" must have a narrower meaning than [sic] the word "preservation".

Regarding the **Conservation Authorities Act** in its own context, it may be noted that while the objects and programmes of an authority relate to the conservation of natural resources, the legislative powers extend to conservation of land. The distinction between "natural resources" in the former and "land", which is only part of the natural resources, indicate that a narrower interpretation must be placed on the legislative powers as contrasted with the objects and programmes of a conservation authority.

In the opinion of the tribunal the legislative jurisdiction does not extend to matters of "preservation" or to matters of "natural resources". The difference in wording is not consistent with a parallel meaning being given to both areas.

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In the opinion of the tribunal the proper meaning to be attributed to the word "conservation" is the concept of wise use as contrasted with retention in its existing state, where as in the case under the Ontario Statutes there is a distinction between that word and "preservation".

Mr. Coros submitted that Arnup, J. in **Rosenberg v. Grand River Conservation Authority**, 1976 12 O.R. (2d) 496 recognized conservation to be an evolving concept, not defined in the **Act** and not a term of art. He also submitted that the findings of the tribunal in **Hinder** could be extended to recognize, rather than the dichotomy between "wise use" and "retention of use", the concept of "proper use" being understood as one aspect of "wise use". Proper use would include the concept of managing certain lands under the jurisdiction of the conservation authority to protect adjacent lands from hazard.

Mr. Coros submitted that the lands surrounding the site are of the same type, if assessment were based on visual observation. If the application were permitted, the decision would affect the wise use of the surrounding lands and the purpose of conservation would have been defeated.

Detrimental Reliance, Estoppel and Discrimination

There was no disagreement that ORCA had objected to the designation of the lands to the west of the site owned by Mr. Bye as service industrial on the Official Plan Consolidation in 1980. However, the parties did not agree on the reasons for withdrawal of its objections prior to a hearing before the Ontario Municipal Board, having been on the proviso a development control by-law be instituted and that a 400 foot wildlife corridor along Highway 115 not be designated. This was supported by the letter from ORCA to Mr. Millard dated February 17, 1982 (Ex. 14) and the letter from ORCA to the Ministry of Municipal Affairs and Housing dated February 17, 1982 (Ex. 15).

Mr. Millard submitted that, through the evidence given by Mr. Bye and Darragh Moroney, ORCA and in particular John Merriam's position with respect to the site did not change as of April 12, 1989, as set out in the letter from ORCA to Mr. Moroney (Ex. 16). The meaning of the words in Exhibit 16, that "the comments of February 17, 1982 still apply to this property" was in issue between the parties. Mr. Moroney stated that he had been approached by Mr. Bye concerning purchase of the site from the City and development of an industrial subdivision. He had been shown the ORCA letters of February 17, 1982 which led him to believe that the land could be developed. Moroney and Bye purchased the property in July, 1988. In 1989, Mr. Moroney wanted to ensure that the letter of February 17, 1982 was still applicable. He went to see John Merriam and asked whether the letter still applied and was told that it did. The next day, Mr. Merriam confirmed this in writing (Ex. 16). It was Moroney's evidence that

Mr. Merriam was aware that there were two properties involved, the site and the lands to the west owned by Bye in 1982. The letter refers to an attached survey, which was not filed in evidence. However, Mr. Moroney stated that it would have shown the proposed industrial subdivision with 30 lots shown on the site and lands to the west. Having a contract with Transport Canada for a terminal and believing no further approvals were required, they began with construction, at which time they received a violation notice and became aware that there was a problem.

Mr. Merriam recalled the conversation with Mr. Moroney. He agreed that the comments of ORCA of February 17, 1982 still applied, but stated that the comments had been made concerning the land then owned by Mr. Bye, being the lands to the west, and not the site. Mr. Merriam stated that he was not aware that the site had been purchased by Mr. Bye and Mr. Moroney. Mr. Merriam explained that in 1980 ORCA did not have the authority to refuse permission for the placing of fill on the site or the lands to the west as there was no regulation in place. Without floodplain mapping, ORCA did not have a strong case for objections to the designation in an appeal to the Ontario Municipal Board, which was the reason for the compromise and withdrawal of objections.

O.Reg. 60/89 came into effect in February of 1989, so that anyone subsequently wishing to develop the land would require permission from ORCA. At the time ORCA was objecting to the designation of the site and lands to the west, meeting had been held between the City of Peterborough and the ORCA executive, which Mr. Merriam attended. ORCA made it clear that they felt the lands were susceptible to flooding. The City provided an undertaking not to develop the lands without meeting ORCA requirements on flood proofing. Mention was made by an attempt to have De Havilland develop the site, which did not come about, prior to the purchase by Moroney and Bye.

Mr. Millard submitted that preferential treatment was given to the potential development of the site by De Havilland which was not afforded to Mr. Bye. When approached by Mr. Moroney, Mr. Merriam did not advise that O. Reg. 60/89 was now in place and would govern any decision concerning permission to build or place fill on the site. Referring to Mr. Merriam's April 12, 1989 letter, Mr. Millard pointed out that the subject matter refers to "Lot 6, Concession 9", whereas the February 17, 1982 letter deals with part of lots 5 and 6, Concession 9. He suggested that, notwithstanding Mr. Merriam's evidence that his comments were limited to the land to the west, being part of Lots 5 and 6, the letter does not support his position.

Mr. Millard submitted that Mr. Merriam had a duty to tell Mr. Moroney about the applicability of O. Reg. 60/89. With the facts that Mr. Moroney obtained through his conversation with and letter from Mr. Merriam, he gave the information to Mr. Bye who relied on them to his detriment.

Mr. Coros submitted that ORCA had no authority to refuse permission to build or place fill prior to its regulation in February, 1989. The fact that ORCA refused permission after that time is not evidence of discrimination, but of its lack of authority at the time.

Evidence was introduced concerning other construction permitted in the vicinity of the site. In particular, new construction or additions to existing buildings was permitted at the airport as long as buildings were flood proofed to a level of 190 metres. Referring to the ORCA Water Management Policies (Ex. 10) at page 7, 8.0 Exceptions, where it states,

8.0 EXCEPTIONS

The Authority may permit the construction of structures without adherence to Policy 1.0 through 6.0 if:

- (a) there will be little if any flood damage to the structure, i.e. garages, maintenance buildings.

Mr. Millard submitted that many exceptions were allowed to the policy, but no such exception was allowed for Bye.

Evidence was also heard on development by the City of the Gateway Industrial Park, being located north east of the site, north of Highway 115. Mr. Crossman gave evidence concerning whether a watercourse ran through that property. His evidence was that the District Office of M.N.R. believed that the **Lakes and Rivers Improvement Act** was applicable, while ORCA was of the opinion that water flowing over the property was a municipal roadside ditch. Under cross-examination by Mr. Taylor, the question was put as to whether the water on the Gateway property was agricultural drainage and whether it was subject to the Byersville Creek Masterplan, West End Drainage.

Mr. Millard submitted that the tribunal should find that Mr. Crossman's evidence

supported the position that the City received different treatment with respect to development of the Gateway property from that afforded Mr. Bye on the site.

Mr. Millard submitted that the policies of ORCA were in excess of provincial guidelines with respect to flood plains and wetlands, in that the use of the backwater calculations using the 100 year storm on the Otonabee and the Timmins Storm on the Cavan Creek was excessive, as was the determination by ORCA that a significant wetland for its purposes was not the same as a provincially or regionally significant wetland for purposes of the Wetlands Policy Statement.

Mr. Millard submitted that the airport is not going away, being crucial to the service and development of the City. The proposed development by Mr. Bye will not interfere with the operation of the airport.

Mr. Millard submitted that the official plan and by-law are in place with respect to the site. The City sought to develop the site, which was zoned airport industrial, pursuant to a deal between it and ORCA. The deal was not recorded on title, and therefore, Mr. Bye was not accorded the same opportunity.

Mr. Millard referred to **Bell et al. v. City of Sarnia** (1987) 59 O.R. (2d) 123 in support of the position that ORCA was liable for negligent misrepresentation. The case, which involved the zoning department of the municipality telling the plaintiff that certain accessory uses were permissible and council having later disagreed and disallowed the use, set out principles for a finding of liability for negligent misrepresentation:

1. There must be a duty of care which arises when someone having a special skill is asked to apply that skill for the assistance of another who relies upon the skill. **Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd.**, [1964] A.C. 465, where at page 485 Lord Reid states:

A reasonable man, knowing that he was being trusted or that his skill and judgement were being relied on, would, I think, have three courses open to him. He could keep silent or decline to give the information or advice sought; or he could give an answer with a clear qualification that he accepted no responsibility for it or

that it was given without that reflection or inquiry which a careful answer would require: or he could simply answer without such qualification. If he chooses to adopt the last course he must, I think, be held to have accepted some responsibility for his answer being given carefully, or to have accepted a relationship with the inquirer which requires him to exercise such care as the circumstances require.

2. There must be a negligent misrepresentation. In **393980 Ontario Ltd. v. City of Welland et al.** (1985), 45 O.R. (2d) 165, 6 D.L.R. (4th) 151, 24 M.P.L.R. 171, Mr. Justice Southy stated that for a statement to create liability it must be either untrue or subject to incorrect interpretation.
3. There must be detrimental reliance on the misrepresentation. Quoting Mr. Justice Trainor in **Grand Restaurants of Canada Ltd. v. City of Toronto et al.** (1981), 32 O.R. (2d) 757, 123 D.L.R. (3d) 349, at page 772:

The principles of **Hedley Byrne, supra**, will come into play when one person gives information to another person, knowing full well that the other is relying on such information and in particular its accuracy; and such other person does in fact rely on it. However, such reliance must also be "reasonable" as measured by an objective standard... and it must be such as to **cause** the plaintiff to do some act to his detriment.

4. There must be some loss resulting from the reliance.

Mr. Millard asked that permission be granted without conditions.

Costs

Mr. Millard submitted that if the arguments concerning detrimental reliance

and estoppel succeed, that costs be awarded to Mr. Bye on a solicitor and client basis.

Findings of Fact

De Novo

An appeal to the Minister under subsection 28(5) of the **Conservation Authorities Act** from a refusal to grant permission allows the tribunal, which has been assigned the powers of the Minister, to determine whether the appeal should be dismissed or the permission granted. The wording of the subsection does not suggest that the role of the Minister is to review the decision of a conservation authority. Rather, the purpose of the hearing is to allow the tribunal to weigh the request of the private individual against the public interest as set out in section 20.

Part VI of the **Mining Act**, R.S.O. 1990, c. M14 applies to these appeals. While much of Part VI is procedural in nature, certain provisions are substantive. When examined as a whole, Part VI contains many provisions which point to the conclusion that such appeals are appeals **de novo**. Section 113 contemplates new hearings as set out in clause (a). Clause (b) only provides for a hearing. However, it is interesting to note that, within the context of the **Mining Act**, the hearing for items listed in clause (b) will be the first hearing, so that the words, "a new hearing" are redundant. Other provisions which speak clearly to the finding of the tribunal that conservation authority appeals require a new hearing include the requirement for the proceedings to be recorded (see s.125), the ability of the tribunal to conduct a view of the property or require and receive such additional evidence as is considered proper (see s. 119) and the requirement that decisions be on "the real merits and substantial justice of the case" (see s. 121).

Based on the foregoing analysis, the tribunal finds that hearings pursuant to subsection 28(5) are hearings **de novo**.

Flood Elevation

The flood elevation on the Floodplain Mapping is 190 metres immediately south of Mervin Line Road, being immediately south of the site. This would appear to

be in keeping with recent construction or additions allowed on lands immediately adjacent to the airport, where a number of applications were approved in 1988 and 1989, conditional upon no placement of fill or construction below 190.0 metres (c.f., Exhibit 25 A and B).

For water to overtop Mervin Line Road and enter into the site, it would have to flow in one of two routes. The spillway channel is a strip of narrow low lying land along the north side of the runway. There is also a narrow channel of low lying land between the east side of the airport and Airport Road. Any water flowing over the spillway must fill a considerable portion of floodplain south of Mervin Line Road, including several ponds alongside the airport lands, before the road can be overtopped.

To the northwest of the site is what appears to be another watercourse, which commences an undefined flow pattern north of Highway 115. This undefined flow pattern appears to drain in a southeasterly direction through much of the lands northwest of the airport, draining into the Otonabee or the Cavan Creek, although which is unclear from the maps and was not addressed in evidence at the hearing. If this is in fact a subwatershed of the Cavan Creek and drains into the creek, the highpoint of land, or divide between the main and sub watershed appears to be coincidental with Mervin Line Road.

In performing the original floodline elevation calculations, several factors which impact upon the decision of the tribunal were considered. The starting surface elevation level on the Otonabee River was determined to be the 1:100 year storm for purposes of calculating levels on the Cavan Creek in a regional storm. Mr. Lorant challenged these criteria, preferring that a lower level should be used on the larger river. While the Technical Guidelines for Floodplain Planning discuss both in the text at pages B - 8 and 9, it is clear that there is a choice. Where the levels on both bodies of water are seen to be resulting from the same flood event, use of high levels on both is recommended for purposes of calculation. This will result on higher flood elevations on the Cavan Creek watershed floodline mapping.

As stated in the Floodline Mapping Study, for purposes of calculating the floodline elevation in the main channel of Cavan Creek, the effect of the spillway was ignored, with the Floodline Mapping Study having been the basis upon which the Floodline Mapping was done. The Floodline Mapping Study indicates that an estimated $13 \text{ m}^3/\text{s}$

of floodwater will go over the spillway, being 7 percent of the total flow of the Cavan Creek in a regional storm. If the spillway were used in the calculations, the Floodline Mapping Study indicates that floodline elevations downstream would increase by a mere 0.05 percent. Should the calculation of volume flowing over the spillway be incorrect and in fact be greater than the amount used in the floodplain study, the resultant downstream flood levels would decrease even further than the estimated 0.05 percent.

Without the placing of the fill for its construction, much of the airport proper would have been in the floodplain of Cavan Creek. The existence of this man-made intrusion into the floodplain severely impacts on how flood waters at this location could have been expected to flow. The result of the airport construction, which is at a minimum level of 190 metres and up to spot elevations of 191.2, but largely under 190.7 metres, is that water which would normally have filled the floodplain south of Mervin Line Road must go elsewhere. North of Cavan Creek there are the two opportunities for the water to flow, being through the spillway or along the west side of Airport Road east of the airport. Water may also be forced south of Cavan Creek, which is comprised of comparatively lower land than that found on the north side near the airport. The south side of the creek has substantial opportunity for floodwater, being obstructed by three high points of land which are divided by wide valleys. Much of this area is flooded during spring freshet and times of heavy rain, as observed in a number of exhibits, including the video tape of Mr. Doughty (Ex. 31).

It has been the position of ORCA that the original Floodline Mapping resulting in the Cavan Creek Flood Plain Map did not take into account what its expert engineer, Ms. Benson believes will be a substantial volume of water. The model for calculating water flowing over the spillway off of the main channel of Cavan Creek results in a higher percentage of the water going through the channel, although no calculations of the exact percentage were provided at the hearing. The extreme volume of water flowing over the spillway and along the west side of Airport Road would, in her opinion, fill all of the low lying land south of Mervin Line Road, at which time it would overtop the road and flood the site. It was noted that Ms. Benson believed that the backwater effect to the Otonabee would affect the water which would flow north along the west side of Airport Road. However, that same backwater effect would not be a factor in calculations for waters flowing over the spillway. It is also noted that the site is over one and a half kilometres from the spillway and even further from the main channel. Mr. Lorant subscribes to use of another model in this situation, with the result that not enough water would flow into the lands south of Mervin Line Road to flood the site.

It became obvious in the course of the hearing that ORCA is in the process of re-evaluating and re-thinking flood line elevations on the Floodline Mapping used in this appeal. This re-evaluation is part of ORCA's mandate and undoubtedly is being used elsewhere on watersheds within its jurisdiction.

In the Technical Guidelines for the Flood Plain Policy Statement, being the complete document from which the excerpt entitled, "Table B-2 - Summary of Regulatory Levels" (Ex. 63) is taken, addresses the issue of changing parameters for purposes of flood line mapping. In the Deputy Minister's Foreword prior to the first tab, the then Deputy Minister of Natural Resources, Mary Mogford states:

Guidelines contained in this document are not intended to be rigid procedures. It is expected that administrative and technical staff will continue to apply innovative approaches which best suit specific flood plain management problems. Advances in technology will continue to improve the methods and techniques which are currently employed during flood plain mapping; and the accuracy and reliability of information displayed on maps will also continue to improve, as more data becomes available.

With this Foreword in mind, the tribunal finds that there is nothing improper or questionable in ORCA re-evaluating the basis of the floodline on its Floodline Mapping. The fact that Mr. Bye's application was in the latter half of September, 1990, and the applications having received permission were processed in 1988 and 1989 is indicative of this re-evaluation and reassessment of the drawing of the floodline. The question which must be determined is whether the reassessment of the drawing of the floodline is defensible in regard to the site.

An evaluation of the potential flooding is an exercise in risk assessment performed by qualified experts. Sometimes called mandated science or applied science, it is a means of utilizing scientific theory on practical issues. While commonly thought of as being purely objective, with the only requirement being that the correct means must be determined, it must be recognized that theoretical inquiry cannot be purely objective, and not a question of pure fact. Being theoretical, and not designed for application in any one situation, selection of certain unknown or impossible to determine parameters must be assumed. Neither the Manning Equation nor the HEC2 model was specifically designed

to calculate the flood flows going over the spillway located along the north side of the Peterborough Municipal Airport runway. Problems exist with both models. The Manning Equation is ideally suited to a uniform channel, which the spillway in question is not, as evidenced by the spot elevations and the evidence of Mr. Lorant. Also, the selection of the roughness coefficient of 0.035 in preference to 0.08 will greatly affect the outcome. It is clear that the irregular profile of the spillway will also affect the reliability of choosing a constant wetted parameter. The HEC2 model has similar problems, being a model used to calculate flow rates. The water at the spillway is delayed by an uphill slope, so that it must build to a crest over the highest point in the spillway without actually flowing before flows beyond the spillway can commence. As stated by Ms. Benson, until the water crests over the highest point in the spillway, there is no flow, but rather a filling of a vessel.

Not addressed at the hearing, but of concern to the tribunal, is the degree of certainty with which an expert can predict that water will build up behind a high point of land in a spillway in preference to other directions of flow, such as in this case substantial wide opportunities south of Cavan Creek and south of the Airport exist before narrowing alongside Airport Road. If the backwater effect is not a factor at this location, then the selection of 3224 may be overly conservative.

With the limits of the degree of accuracy which can be expected of risk assessment when the variety of factors for which assumptions must be made is great, the tribunal finds that the expert opinions of engineers on either side of the issue cannot be 100 percent accurate. Ms. Benson's responsibility in assessing risk of flooding is properly highly conservative. This is as it should be. Conservation authorities are responsible for risk assessment beyond any one tract of land. Failure to plan for a worst case scenario will have impacts for others within the watershed. Mr. Lorant's responsibility is to determine whether development can take place on a tract of land, favouring development wherever possible. It must be recognized that, depending on the position of the expert, the degree of risk may be understated or overstated depending on their how they view potential risk.

The tribunal finds both Ms. Benson and Mr. Lorant to be highly competent and professional experts in their field. The degree of doubts raised only addresses the uncertainties associated with quantification of flooding in a very unusual situation.

The tribunal finds that the parameters used by ORCA in choosing the

surface elevation on the Otonabee of the 1:100 year storm for the impact at the confluence of the two watercourses of the larger watercourse on the smaller one are supportable and within provincial technical guidelines for a major storm event. The result is that the floodlines in the immediate area of the main channel of Cavan Creek are more conservative than they would have been if the approach advocated by Mr. Lorant was taken. This conservative approach is well within ORCA's jurisdiction to make regulations concerning areas which are susceptible to flooding in ORCA's opinion and is in keeping with their objects.

As the area for which susceptibility of flooding is to be assessed becomes increasingly remote from a watercourse which has water flowing through it for most or all of the year, the impact of conservative calculations, or overstating the risk, creates difficulty in borderline cases.

In the current appeal, it is noted that the likelihood of the starting elevation on the Otonabee being at the 1:100 year level may be questionable. The flood levels on the Otonabee are determined by the water levels on Rice Lake, a considerable distance south of Peterborough. It is accepted that larger bodies will reach full flood conditions much more slowly than intermediate or smaller bodies. The strong impact of Rice Lake on the Otonabee is one instance of very conservative parameters taken into consideration. This affects the impact of determining that the Otonabee River will be at 1:100 year storm levels, and makes that determination very conservative. While acceptable for determination of flooding in the immediate vicinity of the Cavan Creek channel, the impact on areas more remote to the main channel become increasingly questionable by virtue of a compounding of overstated, conservative determinations.

As flood waters are forced to move further from the main channel of Cavan Creek, the opportunities for directing of flood flows must be recognized. As stated elsewhere, there are several opportunities which present themselves; namely, directing flow over the spillway, alongside of Airport Road or along one of three wide open valleys to the south of the creek. While there are three high points of land to the south, evidenced by the contour lines on Exhibit 27A, the major portion of land south of Cavan Creek is open and lower than that to the north of the spillway.

Any water which flows over the spillway enters a wide flat area of land south of Mervin Line Road and west of the airport. The Floodline Mapping Study (Ex. 29) addresses this at page 16, noting that the area north of the Airport runway will be flooded.

In that study, the issue of overtopping of Mervin Line Road is not addressed. Rather, it is stated that the extent of flooding is unknown. The tribunal finds that, based upon volume of water expected to go over the spillway in that study, flooding beyond the south side of Mervin Line Road was neither anticipated nor foreseen by the study, as being too remote.

The tribunal notes that some of the lands of the airport itself are just above the 190 metre contour, with similar elevations as those on the western portion of the site. Should flooding reach this level as a result of water flowing over the spillway and along Airport Road, it is puzzling that water would overtop Mervin Line Road at the site in preference to overtopping onto the airport lands when similar elevations are involved. It is noted that there is one low point on Mervin Line Road which is 189.9 metres. The videotape made by Mr. Doughty does not indicate a substantial portion of Mervin Line Road being lower than the lands to the south. While the runway itself is higher, being in the neighbourhood of 190.7 to 190.9 metres, much of the land is at the same elevation or lower than the site. The tribunal finds it difficult to conceive of overtopping of Mervin Line Road in preference to the same or similar elevations closer to the source of flooding, Cavan Creek to the south.

Based upon the preceding reasons, the tribunal finds that for purposes of calculating floodline elevations at a site of in excess of 1.5 kilometres from the watercourse, it prefers the evidence of the appellant in determining the appropriate parameters, being less conservative than those of the conservation authority. The tribunal finds that it prefers the opinion of Mr. Lorant that the HEC2 model is the most appropriate means of calculating the flows over the spillway. The HEC2 model, while not ideally suited to this situation, does have the ability to examine and calculate a more complex and variable set of parameters. Ms. Benson suggested that the model went into default, because of low flows. However, the tribunal finds that these low flows are exactly what will be determinative of the overall impact of the spillway.

Based upon its preference of the opinion of Mr. Lorant, the tribunal finds that the floodline elevation at the site is 190.04 metres on the basis that the volume of water going over the spillway will not impact on the site. Floodline calculations south of the airport and on the Otonabee River, having been conservatively determined, will impact on the probability of similarly conservative estimates the further away from the main channel which the backwater effect is calculated and based on a number of other and more accessible opportunities existing over which floodwaters are likely to flow in preference to the spillway.

The determination of this less rigorous floodline elevation calculation is not intended to put in doubt the conservative parameters used in floodline elevation calculations of this or any other conservation authority in the immediate vicinity of the main channel of a watercourse. The tribunal is satisfied that it would accept and apply the more conservative calculations as being a proper standard for purposes of risk assessment in areas adjacent to the main channel of a watercourse. Nor should this finding be construed as diminishing the crucial role of a conservation authority's opinion in determining which lands are susceptible to flooding in areas which are not permanently linked to a watercourse, that is, not having flows year round. Finally, the circumstances in this appeal are recognized as unique. The impact on the spillway of backwater effect from a larger body downstream must be assessed where there are a considerable number of other opportunities for the backwater to flow and accumulate in preference to the site. The remoteness of the site in relation to these other opportunities and the extent of the obstruction created by the airport lands has been crucial to the findings in this appeal.

The Impact of Policy Statements

Both the Wetlands Policy Statement and Flood Plain Planning Policy Statement are planning documents passed pursuant to subsection 3(5) of the **Planning Act**. Subsections 3(1) and (5) state:

3. - (1) The Minister, or the Minister together with any other minister of the Crown, may from time to time issue policy statements that have been approved by the Lieutenant Governor In Council on matters relating to municipal planning that in the opinion of the Minister are of provincial interest.

(5) In exercising any authority that affects any planning matter, the council of every municipality, every local board, every minister of the Crown and every ministry, board, commission or agency of the government, including the Municipal Board and Ontario Hydro, shall have regard to policy statements issued under subsection (1)

One issue in connection with whether the conservation authorities or the tribunal must "have regard to" these policy statements is whether their jurisdiction over an

application made pursuant to section 28 of the **Conservation Authorities Act** is a "planning matter." Can the distinction between the roles of a local planning body and of an authority be distinguished by calling the authority as having jurisdiction to deal with resource planning matters, and thereby required to have regard to the policy.

There has been considerable discussion elsewhere on whether "have regard to" can mean that a body is bound to follow the policies. It is quite clear that the former means that consideration must be given, while the latter is the equivalent of being contained in statute or regulation.

The conservation authorities are not bound by the **Planning Act**, or section 3 provincial policy statements, in making their determinations under section 28 of the **Conservation Authorities Act**. However, the dual role of the authorities cannot be ignored; that of making representations and recommendations to planning authorities on official plans, plans of subdivision, consents, zoning by-laws, minor variances and the like and that of considering applications for permission for the diverting of a watercourse, construction in a pond swamp or area susceptible to a regional storm or placing of fill in an area which may affect the control of flooding, pollution or the conservation of land.

Nowhere in the **Conservation Authorities Act** are conservation authorities given authority to balance competing interests in reaching their determinations. However, in the Principles of the Floodplain Planning Policy (Ex. 10), at paragraph two of page six, those bodies which must have regard to the policy are required to consider local conditions in connection with applying the policy. This includes physical, environmental, economic and social conditions. While a planning body may weigh competing uses in order to arrive at the highest and best use of a tract of land, conservation authorities do not consider, nor do they have the power to consider, the relative merits of competing uses. Their mandate is to determine the impact of a proposal on the very limited capacity of land within their jurisdiction and based upon the degree of severity to allow or refuse permission. There is no power in conservation authorities to weigh or consider the relative merits of economic and social implications with those of susceptibility to flooding, risk to loss of property or life, pollution of the surface waters or soils, and general ecosystem concerns within the watershed. The conservation authorities are specifically charged with determining the merits of a proposed encroachment based on risk not only to the applicant, but to affected persons both upstream and downstream of the proposal. In other words, in considering the right of a property owner to use his or her land, a conservation authority will weigh the individual's rights against the public interest, in so

far as it concerns flooding, pollution or conservation of land. Once the capacity of a watershed to cope with encroachment, pollution or the associated ecosystem health is depleted, there is nothing more for the authorities to consider.

The tribunal finds that conservation authorities are not resource planning bodies for purposes of section 28 applications, nor is the Mining and Lands Commissioner a resource planning body for purposes of considering appeals from decisions of authorities.

However, in their role of making representations to local planning bodies on official plans, by-laws, zoning and the like, conservation authorities will formulate representations on the basis of the provincial policy statements, as the local planning authorities must have regard to them. Both the Wetlands Planning Policy and the Flood Plain Planning Policy, along with implementation guidelines, evaluation manuals and technical guidelines represent considerable time, effort and expertise by individuals within M.N.R. on issues of provincial interest. The application of provincial policy statements only to the advisory role of conservation authorities would introduce confusion and uncertainty to the two processes.

It must be recognized that some conservation authorities may prefer to establish their own policies in preference to those of the province which may be more rigorous than the provincial policy statements. Where this is the case, an area which receives zoning favourable to development in keeping with balancing provisions within the policy statements may not receive permission in a section 28 application. It must be accepted that the mandate of planning bodies is quite different from that of the conservation authorities. Therefore, notwithstanding that the economic or social impact of development within a community may be so desirable as to outweigh application of a policy statement, a conservation authority must examine and determine the innate ability of the land to withstand adverse impact of the development. At no time can a decision as to zoning be seen to override the decision of a conservation authority.

With respect to the definition of "have regard to", it should be noted that these words do not require a tribunal to be bound by them. In **Ottawa-Carleton Official Plan Amendment 8 (Re)**, 26 O.M.B.R. 131, the phrase was held by the Ontario Municipal Board at page 181 to mean:

... The board is not bound by them; however, the board is required to have regard to them, in other words, to consider

them carefully in relation to the circumstances at hand, their objectives and the statements as a whole, and what they seek to protect. The Board is then to determine whether and how the matter before it is affected by and complies with, such objectives and policies, with a sense of responsible consistency in principle.

ORCA has established its own Water Management Policy (Ex. 10), raising the question of whether the tribunal is bound to consider ORCA's policy in reaching its determination. In **Capital Cities Communications Inc. v. Canada (Canadian Radio-television & Telecommunications Commission)** [1978] 2 S.C.R. 141 the Supreme Court of Canada considered the validity of a decision based upon a policy statement and not upon a statute or regulation, with the late Chief Justice Laskin stating at page 171:

In my opinion, having regard to the embracing objects committed to the Commission under s. 15 of the Act, objects which extend to the supervision of "all aspects of the Canadian broadcasting system with a view to implementing the broadcasting policy enunciated in section 3 of the Act", it was eminently proper that it lay down guidelines from time to time as it did in respect of cable television. The guidelines on this matter were arrived at after extensive hearings at which interested parties were present and made submissions. An overall policy is demanded in the interests of prospective licensees and of the public under such a regulatory regime as is set up by the **Broadcasting Act**. Although one could mature as a result of a succession of applications, there is merit in having it known in advance.

While there was no evidence introduced at the hearing concerning whether ORCA had consulted with potential parties in the preparation of its guideline, the role of the policy is not defeated in connection with a section 28 application. Clearly, any application under section 28 involves highly technical considerations. It is preferable that ORCA provide a means of disclosing in advance the various policies which will be considered in reaching a determination. Natural justice requires that an applicant know

the issues in advance, including which policies it will have to meet or address. While the provincial policy statements, implementation guidelines, technical guidelines and evaluation manuals are highly informative, they are not readily available throughout the province nor are they understandable to the layman. ORCA's guidelines, on the other hand, are readily available and written in plain language.

The tribunal finds that it will apply the technical provisions of the provincial policy statements in consideration of technical issues, notwithstanding that the date of the Order in Council for the Wetlands Policy Statement is after the date of the application. However, the issue of whether the tribunal will have regard to the policy must wait for an application which is made after that policy came into effect.

In the current appeal, where ORCA has issued its own policy on an issue, the tribunal will consider and weigh the guideline in light of the evidence and facts of the case. Where there is no clear persuasive case made against following the policies, the tribunal will apply such policies in reaching its determination.

In the current appeal, the tribunal has considered the Flood Plain Planning Policy Statement Implementation Guidelines as appropriate to determine the starting surface elevation on the Otonabee River. Similarly, the tribunal is prepared to consider and weigh evidence contained within a wetland evaluation, including the degree of skill and judgement exercised by the evaluator(s). However, there is no evidence with respect to classification and the tribunal finds that it cannot rely on the conclusions which denote degree of significance.

There is no principle in the Wetlands Planning Policy comparable to the Flood Plain Planning Policy principle that local conditions be considered. The Wetlands Planning Policy is a clear direction from both the Minister of Municipal Affairs and Cabinet to place provincially significant wetlands on a higher level than other concerns by local planning bodies. The role of conservation authorities, on the other hand, is primarily concerned with natural resources. They do not need to be encouraged in this regard. In fact, the standards they apply to section 28 applications may be far more rigorous than contemplated by the Provincial Wetlands Policy Statement, as is arguably the case in this appeal. However, the evaluation system may be useful for purposes of providing additional information to a conservation authority, particularly those which do not have a resident biologist to perform an independent evaluation.

It is noted that ORCA's policy is significantly different from the Wetlands Policy Statement. In the latter development, on adjacent lands requires an environmental impact study and cannot adversely impact on an adjacent wetland.

Wetlands and Conservation of Land

Mr. Taylor raised a number of concerns regarding the fairness of the evaluation process, not the least of which was notice afforded to the landowner who was to be affected. While compelling on the face of it, his arguments cannot succeed for purposes of conservation authority appeals. Before dealing with these, it may be useful to note that landowners are afforded due process in several other forums. Firstly, under the **Planning Act**, a landowner can appeal a decision of a local planning body to the Ontario Municipal Board, whose hearings are appeals de novo, much like those of this tribunal. During that process, the landowner will be afforded the opportunity to make representations as to the evaluation of the land. Under the **Conservation Land Act**, the purpose of which is to afford landowners who own provincially significant wetlands to obtain a reduction in property taxes for purposes of essentially becoming stewards of the wetlands, notice is given with the tax assessment with opportunity to appeal to this tribunal.

Concerning the due process in connection with a conservation authority application under section 28, appeals to this tribunal are appeals **de novo**. The denial of natural justice or denial of opportunity to be heard is cured by provision of the new hearing provided by the tribunal. (See **Re O'Byrne and Bazely**, [1971] 3 O.R. 309, 20 D.L.R. 269; **Hretchka v. A.G. (B.C.)** (1970), 16 D.L.R. (3d) 273, [1977] 1 W.W.R. 163; affirmed [1973] S.C.R. 1, 19 D.L.R. (3d) 1, [1972] 1 W.W.R. 561.).

Having found that there is no failure of natural justice in considering the wetlands evaluations done by the M.N.R., the merits of the evaluations themselves are considered.

Most significant is the classification process itself. The exclusion of the means of quantifying the classification from the Wetlands Evaluation Manual, 2nd Edition, makes the classifications attributed meaningless. There was no oral evidence at the hearing outlining the scoring of the evaluation and corresponding classification. Therefore, it is impossible on the earliest evaluation to determine what significance can be attributed to the site.

Considerable doubt was cast on the weight of the later evaluations. In particular, the combination of scoring from the 2nd Edition and the Draft 3rd Edition was, in all cases, used to maximize the scores attributed without the in-depth evaluation contemplated by changes between those editions. Specifically, scores for the birds having been sighted in the area was not weighed and evaluated on the basis of whether the area was used for breeding or feeding. The absence of reconsideration of their inclusion, based upon provisions of the Draft 3rd Edition, served to include high scores which would not be included if the evaluation were performed on the basis of the Draft 3rd Edition only. It is not acceptable to this tribunal to maximize scores on the basis of the two editions without a critical analysis and informed rationale for doing so. The tribunal finds that it is not satisfied that this was done. Similarly, considerable doubt was cast on the determination by Mr. Snider that the site is part of a larger wetlands complex. As was established under cross-examination, several of the smaller wetlands included in the complex are arguably attributable to the watershed of the Otonabee River, with one of those wetlands being on the opposite side of the Otonabee from the site.

The tribunal finds that the higher score on the last two evaluations, which has resulted in a class 1 provincially significant wetland, would not be not supportable on a critical examination, assuming the tribunal had evidence upon which to establish the classification. Considerable doubt as to the supportability of the evaluations performed has been raised. A wetlands evaluation must be performed on an objective basis by qualified individuals. While the evaluation itself is intended to be performed by technicians, clearly the ultimate scoring should be vetted by qualified individuals in the areas of hydrology, wildlife and ornithology, botany, geomorphology, etc. The absence of a critical and sceptical eye will result in sufficient doubt being cast upon the contents of the evaluation and its ultimate usefulness to tribunals who are asked to endorse and accept the results.

The tribunal finds that, based upon considerable doubt raised on the issue of the validity of the wetlands evaluations, little weight will be given to them for purposes of determining whether the site is a wetland.

Other evidence in support of the proposition that the site is not a wetland is considered. The tribunal notes that the site did not form part of the 1980 area of natural or scientific interest done in the vicinity, not having been considered as environmentally sensitive at that time. In considering the Floodplain Mapping, the tribunal notes that only

a small portion of the site, being lands to the west of the building envelope, are indicated as wetlands. On the opposite side of the abandoned railway line, as well as a considerable portion of the lands south of Mervin Line Road, the mapping indicates that wetlands have been observed.

Also determinative is the evidence of the witnesses. Those for ORCA, in particular Mr. Merriam, Ms. Booth and Mr. Mennamen, indicated that they had observed water and vegetation associated with wetlands in the ditches along Mervin Line Road, Airport Road and the uncompleted access road to the north of the building envelope. This is supported by the photographs which are exhibits to the hearing. However, the only evidence provided concerning the site outside of the ditches, is the photographic evidence of standing water on January 5, 1993, having been taken after a period of considerable snow fall, warm weather and rain. The tribunal is satisfied that this is not indicative of wetlands, as the ground was frozen at that time, and the ability of the land to absorb water will be limited if not absent. Similarly, the considerable pooling of water in the ditching may be indicative of frozen culverts which have failed to allow the water to move and not of permanent water on the surface of the land.

Ms. Benson's evidence was that the site is a wetland for purposes of hydrology, acting as a sponge during wet periods and releasing water during times of drought. The tribunal therefore finds that it accepts that any low lying land with elevations lower than the floodline may serve a reservoir function and be, for hydrological purposes, a wetland. However, having made the finding that the site is above the floodline, the site can no longer be characterized as sufficiently low as to provide this function, unlike the lands to the north, west and south.

The tribunal has heard evidence from Mr. Bye, Mr. Moroney, Mr. Doughty and Mr. Crossman, all of whom have testified that the interior of the site itself is dry and not marshy or swampy. The tribunal finds each of these gentlemen to have been credible and not attempting to mislead the tribunal. It is interesting to note that the application contemplates one building envelop in place of the original 30 which Mr. Bye and Mr. Moroney had initially intended to develop. In choosing the building envelop for the application, it would appear that Mr. Bye has chosen that portion of land which is highest and for which evidence of a wetland is the most suspect. In finding that it prefers the evidence of Mr. Bye and his other witnesses on the issue of wetlands on the site, the tribunal notes that the application appears to be for the only portion of land in the vicinity which is without argument not a wetland.

On the basis of this evidence, the tribunal finds that the site is not a wetland. By so finding, the building envelope within the site cannot be considered an insignificant swamp or wetland associated with a watercourse and providing a reservoir function. The provisions of the Wetlands Policy Statement concerning adjacent lands will not be considered for purposes of this appeal, as the application predates the policy. There is no similar provision in the ORCA Water Management Policy concerning development on land adjacent to a wetland. The tribunal finds that, based upon its finding that the site is not a wetland and that there were no policies at the time the application was made concerning use on lands adjacent to a wetland, that the application cannot be refused on this basis.

Cut and Fill

Based upon the findings that the site is not within the floodline, but within the fill line of the watershed, the tribunal finds that a balanced cut and fill would be appropriate to the site. This was not challenged by ORCA.

Cut and fill will be permitted, with stage-storage characteristics to be maintained at 0.03 metre intervals and the placement is as proposed on page two of the design submitted by Mr. Burke (Ex. 20). While the amount of fill anticipated is in excess of the seven cubic metres considered acceptable in paragraph 2.4 on page 8 of ORCA's Water Management Policies, this limit is recognized as being applicable only where no cut and fill is proposed.

Precedent and Cumulative Effect

The cumulative effect of the impact of encroachment within the floodplain of a watershed is a principle which the tribunal has long applied. The applicability of the principle to the site in part was dependent on the floodline elevation in the regional storm, which the tribunal has determined. The other concern raised was the potential for development of the other 29 lots.

The tribunal is satisfied that Mr. Bye has chosen the only location on the lands which is not a wetland. The size of the building envelope and parking area, the location of the access road and the evidence of Mr. Bye and Mr. Moroney that the plan

of subdivision for thirty building lots has been abandoned has satisfied the tribunal that future proposals for added development at this site are not likely to arise on any of the Bye lands.

More particularly, the findings of the tribunal that the site is higher and dry when compared to other vacant land in the vicinity, is indicative of extensive wetlands upon which development would not likely receive approval under the Wetlands Policy Statement. However, the tribunal is satisfied that its findings do not create a precedent for prospective cases, as new cases on lands which are adjacent to a wetland will be considered on the basis of the Wetlands Policy Statement.

Having found that the site is outside the floodline but within the fill line and that the proposed cut and fill is acceptable, the tribunal finds that the likely impact on control of flooding has been addressed by the proposal.

It is noted that the cut and fill proposed in the application will have an effect on the character of the cut lands, as the water table in this area is close to the surface. The tribunal accepts the evidence from Mr. Bye and his witnesses that the site was once agricultural land. This being the case, with the existence of wetlands in the immediate vicinity, it is likely that the cutting will encourage wetlands to regenerate on the cut area. As agricultural lands developed in a wetland area are effectively degraded wetlands, Mr. Bye will be required to introduce appropriate vegetative species for planting in the cut area to encourage regeneration of wetland.

At some point prior to the commencement of the hearing, it was suggested by the Acting Mining and Lands Commissioner that a water quality control pond should be part of the application and one was subsequently introduced into evidence (Ex. 21). With the greatest of respect to my predecessor, I cannot agree. Water quality control ponds may be appropriate in larger developments than is anticipated here. Ongoing maintenance becomes a costly problem. The potential introduction of a bird hazard in the vicinity of the airport should be discouraged.

The preferable manner to proceed, as stated above, would be to facilitate regeneration of the wetland on the cut areas of the site. A broad spectrum of vegetative growth, meaning groundcover, shrubs and trees, will provide a natural means of filtration of the water. It will also serve to retard any flooding caused by cutting. The selection of species would be appropriate for use adjacent to a parking lot, which is likely to impact on the plants introduced.

The tribunal has found that the site is not within the floodplain but is within the fill line, owing to the complex situation caused by a backwater effect and major obstructions in the one and a half kilometres from where the source of flooding is to gain access. The tribunal has also found that the site is not a wetland. Being within the fill lines of the watershed, the proposed cut and fill is well within ORCA's Water Management Policies. On the facts, the tribunal finds that there is no precedent created with respect to development on lands adjacent to the wetland, as it is not the policy of ORCA to protect such lands. Furthermore, the Wetland Policy Statement had not yet come into effect at the time the application was made. The very unusual circumstances in this application cannot be used in future as a precedent for development in the immediate vicinity.

Breach of the Abandoned Railway Line

The abandoned railway, being a strip of high land north west of the site, appears to serve some function as a berm, limiting the undefined flows from the north west. This is supported by the Flood Plain Mapping, which shows extensive wetlands west of the line and only a few small pockets east of the line. At the time the Floodline Mapping Study was done, there was no breach in the line for the access road to the site. It is unclear what the implications may be for flooding coming through the breach, but the possibility of flood waters coming from the north west was not addressed at the hearing.

The tribunal finds that approval of the application will be conditional upon restoring the abandoned railway line to similar height and type of soils as were found prior to the breach.

Detrimental Reliance, Estoppel and Discrimination

The tribunal finds that there had not been detrimental reliance resulting from the conversation between Mr. Merriam and Mr. Moroney in 1989. Mr. Moroney has established himself as a knowledgeable real estate broker and sometime developer. As such, he should have been aware of the requirement for an application to ORCA for purposes of placing fill and building on the site, which was clearly under its jurisdiction, based upon the events concerning the Official Plan Consolidation several years earlier. Further, any comment from ORCA staff is an indication of what may likely be brought forward at a hearing, but in no way can bind the Executive Committee of ORCA.

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The tribunal finds that, based upon the conversation in question, it is not reasonable to expect comments having been made in respect of one parcel of land years earlier to automatically have any connection with an adjacent parcel. There can be no negligent misrepresentation or detrimental reliance in this situation, as it was not reasonable to draw the conclusions that were drawn by Mr. Moroney from his conversation with Mr. Merriam.

Having found that there was no detrimental reliance, and that the staff of ORCA cannot bind the executive with respect to section 28 applications, the tribunal finds that the principle of estoppel does not apply.

On the issue of discrimination, the tribunal has noted elsewhere the evolution of the position of ORCA as it was at the time of the application. The Floodplain Planning Technical Guidelines clearly anticipate such evolution on the basis of new investigative techniques and more intensive study of an area. Notwithstanding that the position of ORCA was not upheld in this decision, the tribunal is satisfied that ORCA did not actively discriminate against Mr. Bye, when compared with the applications on the airport lands to the south in the two years prior to Mr. Bye's application.

The matter of the Gateway lands are completely unrelated to the situation at the site. The issue in the Bye application is whether flooding from Cavan Creek will inundate the site in a regional storm. The Gateway property involved agricultural drainage which may or may not be within the headwaters of a watercourse. There was no evidence of a threat of an existing known watercourse causing flooding on that site. Whether or not agricultural drainage is or should be another area in which the policy of ORCA is evolving is not within the scope of this hearing. However, based on the facts, the site was not the subject of flooding from agricultural drainage, but the issue to be determined was whether the creek, in overflowing its main channel in a regional storm, would cause flooding.

Costs

Based upon the findings set out above on the matters of detrimental reliance, estoppel and discrimination, the tribunal is satisfied that the adjudication of this appeal has not resulted from improper conduct or consideration on the part of ORCA. Therefore, there will be no costs ordered payable by any party to the appeal.

Conclusions

The application will be allowed on the basis of existing flood elevation on the site of 190.04 metres, not being within a significant wetland. The approval is made conditional upon restoration of the breach in the abandoned railway line to its pre-existing state, upon the balanced cut and fill proposal submitted by the appellant and upon the planting of vegetation, including groundcover, shrubs and trees associated with a wetland in the cut area.