

#### City of Toronto

Department of the City Clerk City Hall Toronto, Ontario Canada M5H 2N2 Telephone: (416) 392-7020 Fax: (416) 392-6990 M TDD: (416) 392-7354

Barbara G. Caplan City Clerk Sydney K. Baxter Deputy City Clerk

Reply to: Merle C. MacDonald, **392-7033** Please refer to: 91NB9-32:155

July 18, 1991

To: All Interested Persons

At its meeting held on July 8 and 9, 1991, City Council had before it a report (July 4, 1991) from the Commissioner of Planning and Development regarding Development Review Application 391049 for 185 Cherry Street to construct a temporary 1-storey soil remediation test facility.

Council took the following action:

- Approved, subject to the issuance by the Ontario Ministry of the Environment of the necessary Certificate of Approval pursuant to Section 8 of the Environmental Protection Act, the plans and drawings submitted with the application, namely Nos. 18964, 18965 and 18966, date stamped as received May 22, 1991, prepared by the Toronto Harbour Commissioners, all as on file with the Commissioner of Planning and Development, and that as a condition of such approval, require the owner to enter into a Section 40 agreement requiring that:
  - a) the proposed development shall be undertaken and maintained substantially in accordance with the drawings referred to above;
  - b) at least 2 parking spaces shall be located on the asphalt surface adjacent to the west end of the reception trailer and shall be clearly designated for the exclusive use by disabled persons by means of the International Symbol of Accessibility for the Handicapped;
  - c) the reception trailer be relocated to the east of its position shown on the drawings referred to above in order to accommodate two parking spaces for the exclusive use of disabled persons;
  - d) signage displaying the International Symbol of Accessibility for the

Handicapped be installed to direct vehicles entering the site to the parking spaces for disabled persons;

- e) an access ramp having a maximum slope of 1:12 be provided to the reception trailer for use by disabled persons;
- f) light standards be provided and maintained to illuminate the gravelled parking area to a minimum of 10 lux; and
- g) a revised landscaping plan, showing the location of all existing City-owned trees, the location and planting details for 12 green ash trees of 75 mm or greater within the road allowance, and the planting details for on-site berm stabilization, be submitted to the satisfaction of the Commissioner of Parks and Recreation.
- 2. authorized the City Solicitor to prepare a collateral agreement between the City and the owner to give effect to the following:
  - a(i) that the owner agree to pay for improvements to the public boulevard satisfactory to the Commissioner of Parks and Recreation and the Commissioner of Public Works and the Environment;
  - (ii) that the owner agree to submit an application for such improvements to the Commissioner of Public Works and the Environment and carry out the improvements within a reasonable period of time or make a cash contribution to the City equal to the value of the improvements for the Commissioner of Public Works and the Environment to undertake the improvements as part of an overall project;
  - b) that the owner retain and protect existing City-owned trees in their present locations and in accordance with the "Specifications for Construction Near City Trees" prepared by the Commissioner of Parks and Recreation;
  - c) that the owner implement dust control measures, as specified by the Medical Officer of Health;
  - d) that the owner agree to consult with the Ministry of Labour concerning guidelines and regulations on indoor workplace air quality and indoor noise levels and implement such indoor monitoring programs as may be required by the Ministry;
  - e) that the owner agree to conduct ambient air monitoring programs during the soil excavation operations and the plant operations, to the satisfaction

of the Ministry of the Environment and the Medical Officer of Health; and air monitoring to cover at least dust emissions and emissions of VOC's (Volatile Organic Compounds) as well as other compounds to be determined by the Ministry of the Environment and the Medical Officer of Health;

f)

g)

that the owner demonstrate and implement, to the satisfaction of the Ministry of the Environment and the Medical Officer of Health, a method to minimize the loss of volatile organic compounds (VOCs) to the atmosphere during excavation and handling of contaminated soil;

that the owner, as soon as possible after completion of the demonstration project, submit an evaluation report to the Medical Officer of Health, any community group or individual that requests it, and the City Councillors for Wards 7 and 8, addressing, but not limited to, the criteria and issues set out in correspondence dated June 25, 1991 from the Acting Program Manager, Environmental Protection Office, Public Health Department, and reproduced in Appendix B to this report. This report will also be provided to the three major dailies in the City and to the local community papers, Cabbagetown Riverdale News, and Leslieville News, as well as one Greek language and one Chinese language paper;

- h) that the owner shall submit a report, prior to the issuance of a building permit, on a Material Recovery and Waste Reduction plan satisfactory to the Commissioner of Public Works and the Environment. The plan will address strategies for material recovery and waste reduction within the development;
- i) that the owner provide, maintain and operate the material recovery and waste reduction facilities and strategies stipulated in the report approved by the Commissioner of Public Works and the Environment;
- that the owner submit, prior to the issuance of a building permit, additional details on the treatment and handling of all waste water, including discharges to the City sewer, for the review and approval of the Commissioner of Public Works and the Environment;
- k) that the owner submit a report, prior to the issuance of a building permit, on a Water Conservation Plan, addressing strategies to conserve water within the development, satisfactory to the Commissioner of Public Works and the Environment;
- 1) that the owner have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public

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Works and the Environment that the development has been designed and constructed in accordance with the Water Conservation Plan approved by the Commissioner of Public Works and the Environment;

m) that the owner submit a report, prior to the issuance of a building permit, on an Energy Efficiency and Conservation Plan (EECP), addressing strategies for energy efficiency and conservation within the development, satisfactory to the Commissioner of Public Works and the Environment;

- n) that the owner have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public Works and the Environment that the development has been designed and constructed in accordance with the EECP approved by the Commissioner of Public Works and the Environment; and
- o) that the owner maintain and operate the water conservation and energy efficiency and conservation measures and facilities stipulated in the reports approved by the Commissioner of Public Works and the Environment.
- p) that the owner agree to conduct noise monitoring programs during soil excavation operations and the plant operations, to the satisfaction of the Medical Officer of Health and the Commissioner of Public Works and the Environment, and to implement such measures as deemed necessary by these officials to deal with the noise problems that may arise;
- q) that the owner agree to provide a plan for stabilization of the final cleaned soil satisfactory to the Medical Officer of Health and that the stabilization be carried out as agreed;
- r) that the owner agree to provide and adhere to a plan for disposal of the toxic residue satisfactory to the Medical Officer of Health and the Commissioner of Public Works and the Environment;
- s) that the owner agrees that no further soil cleaning will take place at this facility after March 1992 without a full and open public consultation and the granting of further permission by Toronto City Council;
- t) that the owner, at the owner's expense, will provide the text of all the agreements reached in the course of meeting the terms of this collateral agreement, to the parties identified in the amended Clause 2(g);

u) that the owner have a qualified consulting engineer certify, in writing, that the conditions set out in this collateral agreement have been met by the owner; and

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- v) that the results of the noise and air monitoring be assembled and published on a monthly basis in the local community newspapers, including the Greek and Chinese papers, as well as being provided to interested individuals and the Councillors for Wards 7 and 8. The results should be presented in a format that contrasts the findings with applicable Provincial and Municipal guidelines;
- 3. Requested the owner to continue the existing program of full public information and consultation on this project will also include the Councillors in Wards 7 and 8 and the existing environmental and health groups in Wards 8 and 9.
- 4. Requested that the owner be advised of the comments of the Medical Officer of Health regarding compliance with all applicable regulations and guidelines administered by the Ministry of Labour including Occupational Health and Safety regulations and Workplace Hazardous Materials Information System (WHMIS) guidelines to limit worker risk and exposure to contaminated soils and hazardous materials used in the soil remediation process.
- 5. Requested that the owner be advised that all operations must be conducted in compliance with the City Noise By-law.
- 6. Requested that the owner be advised that the issuance of any construction permit by the Commissioner of Buildings and Inspections will be conditional upon full compliance with all relevant provisions of the Ontario Building Code.
- 7. Requested that the owner be advised that the site is within the area subject to the Province's Declaration of Interest, and that Provincial approval will be required prior to the issuance of a building permit.
- 8. Requested that the owner consider the provision of access ramps for disabled persons leading to the other two on-site trailers, with such ramps having a maximum slope of 1:12.
- 9. Requested that the Medical Officer of Health inspect the excavation and processing sites on a weekly basis to check for odours and report to the local. Councillors on their findings.

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10. Requested that the owner be requested to send a representative to the South Riverdale Environmental Liaison Committee meetings for the period when the soil cleaning is occurring.

Yours truly,

M. G. Gader JCity Clerk

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cc:

Toronto Harbour Commissioners Councillor Hall Councillor Tabuns Commissioner of Planning and Development City Solicitor Commissioner of Parks and Recreation Commissioner of Public Works and the Environment Medical Officer of Health Commissioner of Buildings and Inspections

# CITY OF TORONTO CIPLANNING AND DEVELOPMENT DEPARTMENT

520/391049 JUL 5 2 21 m 191 CC&W July 4, 1991 (2/3 Present - Uninimine Concernt Required) Peter Langdon 392-7617

To: City Council

- Subject: Development Review Application 391049, 185 Cherry Street, to construct a temporary 1-storey soil remediation test facility (Ward 7).
- Origin: Application by Toronto Harbour Commissioners, 60 Harbour Street, Toronto, Ontario, M5J 1B7 (c7lcncl91094:163)

Recommendations:

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- 1. That City Council approve, subject to the issuance by the Ontario Ministry of the Environment of the necessary Certificate of Approval pursuant to Section 8 of the Environmental Protection Act, the plans and drawings submitted with the application, namely Nos. 18964, 18965 and 18966, date stamped as received May 22, 1991, prepared by the Toronto Harbour Commissioners, all as on file with the Commissioner of Planning and Development, and that as a condition of such approval, require the owner to enter into a Section 40 agreement requiring that:
  - a) the proposed development shall be undertaken and maintained substantially in accordance with the drawings referred to above;
  - b) at least 2 parking spaces shall be located on the asphalt surface adjacent to the west end of the reception trailer and shall be clearly designated for the exclusive use by disabled persons by means of the International Symbol of Accessibility for the Handicapped;
  - c) the reception trailer be relocated to the east of its position shown on the drawings referred to above in order to accommodate two parking spaces for the exclusive use of disabled persons;
  - d) signage displaying the International Symbol of Accessibility for the Handicapped be installed to direcvehicles entering the site to the parking spaces for disabled persons;
  - an access ramp having a maximum slope of 1:12 be provided to the reception trailer for use by disabled persons;

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- f) light standards be provided and maintained to illuminate the gravelled parking area to a minimum of 10 lux; and
- g) a revised landscaping plan, showing the location of all existing City-owned trees, the location and planting details for 12 green ash trees of 75 mm or greater within the road allowance, and the planting details for on-site berm stabilization be submitted to the satisfaction of the Commissioner of Parks and Recreation.
- 2. That the City Solicitor be authorized to prepare a collateral agreement between the City and the owner to give effect to the following:
  - a(i) that the owner agree to pay for improvements to the public boulevard satisfactory to the Commissioner of Parks and Recreation and the Commissioner of Public Works and the Environment;
  - (ii) that the owner agree to submit an application for such improvements to the Commissioner of Public Works and the Environment and carry out the improvements within a reasonable period of time or make a cash contribution to the City equal to the value of the improvements for the Commissioner of Public Works and the Environment to undertake the improvements as part of an overall project;
  - b) that the owner retain and protect existing City-owned trees in their present locations and in accordance with the "Specifications for Construction Near City Trees" prepared by the Commissioner of Parks and Recreation;
  - c) that the owner implement dust control measures, as specified by the Medical Officer of Health;
  - d) that the owner agree to consult with the Ministry of Labour concerning guidelines and regulations on indoor workplace air quality and indoor noise levels and implement such indoor monitoring programs as may be required by the Ministry;
  - e) that the owner agree to conduct ambient air monitoring programs during the soil excavation operations and the plant operations, to the satisfaction of the Ministry of the Environment and the Medical Officer of Health;
  - f) that the owner demonstrate and implement, to the satisfaction of the Ministry of the Environment and the Medical Officer of Health, a method to minimize the loss

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of volatile organic compounds (VOCs) to the atmosphere during excavation and handling of contaminated soil;

- g) that the owner, as soon as possible after completion of the demonstration project, submit an evaluation report to the Medical Officer of Health, addressing, but not limited to, the criteria and issues set out in correspondence dated June 25, 1991 from the Acting Program Manager, Environmental Protection Office, Public Health Department, and reproduced in Appendix B to this report;
- h) that the owner shall submit a report, prior to the issuance of a building permit, on a Material Recovery and Waste Reduction plan satisfactory to the Commissioner of Public Works and the Environment. The plan will address strategies for material recovery and waste reduction within the development;
- that the owner provide, maintain and operate the material recovery and waste reduction facilities and strategies stipulated in the report approved by the Commissioner of Public Works and the Environment;
- j) that the owner submit, prior to the issuance of a building permit, additional details on the treatment and handling of all waste water, including discharges to the City sewer, for the review and approval of the Commissioner of Public Works and the Environment;
- k) that the owner submit a report, prior to the issuance of a building permit, on a Water Conservation Plan, addressing strategies to conserve water within the development, satisfactory to the Commissioner of Public Works and the Environment;
- 1) that the owner have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public Works and the Environment that the development has been designed and constructed in accordance with the Water Conservation Plan approved by the Commissioner of Public Works and the Environment;
- in) that the owner submit a report, prior to the issuance of a building permit, on an Energy Efficiency and Conservation Plan (EECP), addressing strategies for energy efficiency and conservation within the development, satisfactory to the Commissioner of Public Works and the Environment;

- n) that the owner have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public Works and the Environment that the development has been designed and constructed in accordance with the EECP approved by the Commissioner of Public Works and the Environment; and
- o) that the owner maintain and operate the water conservation and energy efficiency and conservation measures and facilities stipulated in the reports approved by the Commissioner of Public Works and the Environment.
- 3. That the owner be requested to continue the existing program of full public information and consultation on this project.
- 4. That the owner be advised of the comments of the Medical Officer of Health regarding compliance with all applicable regulations and guidelines administered by the Ministry of Labour including Occupational Health and Safety regulations and Workplace Hazardous Materials Information System (WHMIS) guidelines to limit worker risk and exposure to contaminated soils and hazardous materials used in the soil remediation process.
- 5. That the owner be advised that all operations must be conducted in compliance with the City Noise By-law.
- 6. That the owner be advised that the issuance of any construction permit by the Commissioner of Buildings and Inspections will be conditional upon full compliance with all relevant provisions of the Ontario Building Code.
- 7. That the owner be advised that the site is within the area subject to the Province's Declaration of Interest, and that Provincial approval will be required prior to the issuance of a building permit.
- 9. That the owner be requested to consider the provision of access ramps for disabled persons leading to the other two onsite trailers, with such ramps having a maximum slope of 1:12.

Comments:

## 1. Project

To build a temporary (approximately 6 months) test facility for soil remediation, including: three 1-storey buildings to house the processing equipment and the contaminated and the cleaned soil piles; 3 trailers to house a reception area, an office/change room for workers, and a mobile testing laboratory; and 2 retention ponds for surface drainage and processing water. All facilities, including paving and new fencing, are proposed to be removed upon completion of the testing. (See Appendix A to this report for a more detailed explanation by the applicant).

#### 2. Location

The north-east corner of Cherry Street and the Ship Channel in the Port Industrial District.

3. Site

The 3.4 ha (8.3 acre) property is part of a former petroleum storage tank farm, with the tanks now removed. There are existing berms which formerly surrounded the tanks, and an existing gravel driveway across the southern end of the site. The Toronto Harbour Commissioners (THC) have begun site preparation work with the construction of a new berm across the north side of the processing facility, and have begun the paving operation for the site.

- 4. <u>Requirements of Civic Officials</u> (See Appendix B for complete reports)
- a) The Commissioner of Buildings and Inspections indicates that the proposal complies with the Zoning By-law, that the issuance of construction permits will be conditional upon the proposal's compliance with the Ontario Building Code, and advises that because the site is within the area declared to be of Provincial Interest, Provincial approval will be required prior to the issuance of a building permit.
- b) The Medical Officer of Health recommends that: the proponent continue a full public information and consultation program, through Land Use Committee and public meetings as appropriate; the proposal comply with all applicable Occupational Health and Safety regulations and Workplace Hazardous Materials Information System (WHMIS) guidelines to limit worker risk and exposure to contaminated soils and hazardous materials used in the soil remediation process; an agreement between the THC and the City address dust control measures and require submission of an evaluation report at the end of the project;

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the THC satisfy the Ministry of the Environment (MOE) and the Medical Officer of Health (MOH) regarding minimizing the loss of volatile organic compounds (VOCs) to the atmosphere during excavation and handling of contaminated soil; the proponent consult with the Ministry of Labour concerning guidelines and regulations on indoor workplace air quality and implement an indoor air monitoring program if required by the Ministry; the THC conduct ambient air monitoring programs during the excavation and processing operations, to the satisfaction of MOE and the MOH; and all operations be conducted in compliance with the City Noise By-law.

- c) The Commissioner of Parks and Recreation advised that there are 16 City-owned trees involved in this project, to be retained and protected in their existing locations. He requested submission of a revised site plan identifying the location of all existing City-owned trees and providing for the installation of 12 new trees on the Cherry Street road allowance. Further comments will be provided upon receipt of the revised site plan.
- d) The Commissioner of Public Works and the Environment has requested conditions requiring: submission and implementation of a Material Recovery and Waste Reduction plan; submission of additional information on treatment and handling of all waste water; submission and implementation of a Water Conservation Plan; and submission and implementation of an Energy Efficiency and Conservation Plan, all to the satisfaction of the Commissioner of Public Works and the Environment.

## 5. Planning Considerations

The subject lands are owned by the Toronto Harbour Commissioners (THC) and are under lease to Imperial Oil Ltd. The THC has made arrangements with Imperial Oil to construct, operate, and then remove this "Soil Recycling Demonstration Plant".

The site forms part of the lands recommended in "Watershed", the second Interim Report (August 1990) of the Royal Commission on the Future of the Toronto Waterfront, to be transferred to the Provincial Waterfront Regeneration Land Trust. City Council adopted the "Watershed" report in November, 1990.

Issues do arise concerning whether approval of this project is consistent with the "Watershed" recommendations to transfer ownership of the subject lands from the THC and to restrict the mandate of the THC to the operation of port. While these are debatable issues which Council members may wish to consider, they are not matters germaine to the site plan approval process set out

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in The Planning Act. As far as the proposed land use is concerned, there is no inconsistency with the "Watershed" recommendations.

I have notified the Royal Commission, the Special Advisor to the Premier on Waterfront Development, and the Ministry of Municipal Affairs that this application is under consideration. I have also circulated the Metro Toronto and Region Conservation Authority (MTRCA) for comments and have been advised by MTRCA that the site is not within the Don River floodplain and they have no objections to the project. I have also circulated the application to the Ministry of the Environment but have received no response.

The THC have hired a consultant to carry out a "community outreach program" to inform, and to hear and respond to the concerns of neighbours, residents, industry and government representatives, and the general public.

The THC has made an application to the Ministry of the Environment (MOE) for a Certificate of Approval for the air emissions aspect of the proposal, pursuant to Section 8 of the Environmental Protection Act and which is apparently the only MOE approval required. The THC anticipates receiving this approval in mid-July. Because construction of the project should not occur unless the MOE approval is forthcoming, I have recommended that City Council's approval of the Development Review application be conditional upon issuance by MOE of the necessary Certificate of Approval. THC staff indicated no concerns with such a condition.

The Environmental Protection Office (EPO) of the Public Health Department has made several recommendations (see Appendix B). I have included most of these recommendations as provisions of the collateral agreement, and the remainder as requests to the owner by Council or as advisory recommendations. The first EPO recommendation urges a continuing public participation and information process by the THC. Because the THC has been carrying out such a program and has indicated its intent to continue to dc so, and because there are no legislative requirements for public meetings, I have addressed this issue in my recommendations as a request to the THC.

The EPO recommendations 2 and 7 require compliance with applicable law, according to my discussions with EPO staff, and therefore are addressed as advisory recommendations in this report rather than as provisions of an agreement.

EPO recommendations 3 to 6 inclusive are included as recommended provisions of the collateral agreement. With respect to EPO recommendation 5, EPO staff verbally suggested that indoor noise levels should also be addressed in the THC's consultations with

the Ministry of Labour, in addition to indoor air quality, and I have added the appropriate wording. EPO's supplementary recommendation regarding submission by the THC of an evaluation report at the end of the project has been addressed as a provision of the collateral agreement.

the THC is anxious to have Council consider this Because application as soon as possible, and preferably at its July 8 and 9, 1991 meeting, there was insufficient time to receive and review revised site plans prior to finalizing this report. Consequently, there was insufficient time to obtain final comments from the regarding on-site Recreation of Parks and Commissioner landscaping; protection of existing trees; and provision of new trees on the City-owned road allowance. On-site landscaping should include appropriate berm stabilization to minimize erosion and dust problems. My recommendations provide that on-site landscaping be addressed to the satisfaction of the Commissioner of Parks and Recreation, and that the provision of new trees in the public road allowance be dealt with to the satisfaction of the Commissioners of Parks and Recreation and Public Works and the Environment.

Because the recommended tree planting would occur on the Cityowned road allowance, an application to the Commissioner of Public Works and the Environment for the improvements will also be required, and has been addressed through a recommended provision of the collateral agreement.

I have discussed with THC staff the issues of provision of parking spaces for disabled persons and the provision of access ramps to the trailers. While the THC staff was very willing to accommodate the former as I have recommended, they were less inclined to accommodate the latter, given the expense and the temporary nature of the facility. However, given that the THC is a public agency and will be arranging tours of the facility for the public, I am of the opinion that, as a minimum requirement, an access ramp should be provided to the reception trailer. It is desirable to locate signed parking spaces for disabled persons on the asphalt surface adjacent to the reception trailer. My recommendations require relocation of the trailer slightly to the east of the position shown on the submitted plans in order to accommodate two parking spaces for disabled persons.

Access ramps for disabled persons to the other two trailers are desirable in terms of accommodating employees, but in light of the temporary nature of the facilities, I have recommended that the THC give consideration to this matter, rather than making it a requirement.

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There is no lighting proposed for the 30 parking spaces. Given that the soil recycling plant will be operating during winter months when night comes early, that public tours will be arranged, and that the plant may at times operate 24 hours per day, I am of the opinion that appropriate lighting should be provided for safety reasons in the parking area. This is addressed as a provision of the development agreement.

The proposed facility could yield a great deal of useful information concerning soil and groundwater remediation technology as applied to local conditions. It is a temporary facility which complies with the Central Waterfront Plan and the Zoning By-law. For these reasons, I support the approval of this application, subject to the conditions as recommended.

Robert E. Millward Commissioner

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## Appendix A

Letter dated May 22, 1991 from The Toronto Harbour Commissioners.

Attached is an Application for Development Review of site plans and drawings, submitted by The Toronto Harbour Commissioners with respect to their proposed soil recycling demonstration project.

Of special interest are the following factors:

- . The project is an experimental operation to test the effectiveness of four technologies for the cleaning of contaminants from contaminated soils. The demonstration will operate for about six months, from August 1991 to about February 1992.
- . Facilities constructed or erected to accommodate this technology demonstration are all temporary. The site is currently vacant land, owned by the Toronto Harbour Commissioners and leased to Imperial Oil Ltd. (McColl Frontenac).
- The demonstration programme site will be fenced and paved throughout. Buildings erected to house the on-site cleaning technologies, a contaminated soil storage pile and a cleaned soil storage pile, will all be removed when the test is Fences and asphalt surfacing and any other completed. improvements constructed to facilitate the test will also be The main reason all the facilities are temporary is removed. that some of the underlying soils are believed to be contaminated, and it is Imperial Oil Ltd.'s responsibility to clean up the site as it now exists. The THC has made an arrangement with Imperial Oil for the temporary use of the site to conduct its soil recycling demonstration project and the site will be returned to Imperial Oil in the same condition in which it was taken over, that is, in the same condition as it now exists.

The buildings to be erected are temporary structures, and will be anchored and erected in accordance with manufacturers' specifications. Details of these temporary buildings are enclosed.

Other temporary facilities that will be required on-site are a temporary office for workers at the demonstration facility, a temporary mobile laboratory for routine quality control and quality assurance testing of soil and water at various points throughout the cleaning process, and a temporary reception trailer to accommodate the numerous tours we propose to -11-

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provide to interested person as part of our community involvement and public information programme related to this project. We are anxious to obtain a building permit and to proceed with our site development as quickly as possible. We have already received tenders for the site work and expect to award a contract very shortly. The reason for the urgency is that we want to asphalt pavement on the site to cure for a few weeks before we start any soil cleaning activity, so that the air emissions from the new pavement will not foul our air monitoring programme for the soil cleaning activities. We want to start the soil cleaning in early August, and are committed to the rent of a soil washing demonstration plant that will arrive in mid-July.

Our thanks to you and your staff who have been helping us prepare and process this application. This is a very exciting project and we're hoping it will provide a solution to an increasingly serious problem, that is, how to clean up contaminated sites in an environmentally responsible and cost effective manner.

If any of these matters require a more detailed explanation, please contact me at 863-2047 at your convenience and I will respond immediately.

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#### APPENDIX B

## 1. MEDICAL OFFICER OF HEALTH

(a) Letter dated May 30, 1991.

Thank you for the opportunity to comment on the Toronto Harbour Commissioners (THC) proposed soil recycling demonstration plant at 185 Cherry Street.

The initial material examined by my staff included:

a site plan, 1" = 40', of the area and facilities for the soil recycling plant;

a summary entitled "Site Plan and Operations" by Mr. Dennis Lang, Director of Engineering.

Two meetings attended by my staff are also relevant to my comments:

- a meeting of April 5, 1991, with representatives from relevant City departments, which considered the soil recycling proposal in terms of land use, City approvals, Ministry of the Environment (MOE) approvals, and Provincial interest;
  - a meeting of April 22, 1991, with relevant City department representatives, THC personnel, and the THC consultants on the project, SNC. The agenda included environmental health concerns, MOE approvals, building issues and regulations, and City process in advising the THC. My staff presented an extensive list of questions based on an environmental health perspective.

At the first meeting on April 5, 1991, my staff indicated that points to be considered included public consultation, the technical aspects as outlined in the feasibility studies for the pilot plant, an assurance that the technology used can deal with the waste products, the outside storage of raw materials for the process, verification testing of the cleaned soils, dust control and air quality studies, and provisions for supervision by an environmental consultant.

At the second meeting on April 22, 1991, my staff provided the following points to be considered, mainly related to the actual soil remediation process:

#### Soil washing process

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- the initial concentrations of contaminants in the soils to be cleaned;
- number of cycles in the Dutch process, its efficiency, any materials added, any residues of such additions or the original contaminants;
- post-washing analysis.
- Heavy metal extraction
  - additions, reagents, acid leaches, storage facilities;
  - risk minimization plans;
  - fate of the heavy metals extracted.
- Bioremediation
  - efficiency of the process, length of time required, continuous or interrupted process, type of bacteria;
  - dewatering of the treatment product, treatment of the discharge, sludge.

THC personnel discussed the proposal and summarized the following items, among others:

- acquisition of three bulk samples from different sites in the Port Industrial Area;
- the use of a soil washing plant in Europe and the establishment of an American washing system onsite at Cherry Street;
- European system adds no chemicals, strictly water pressure;
- American system (Bergman USA) is a scrubbing system, uses surfactants and solvents;
- heavy metal chelation, includes acid washes, different chelating agents, and is fully contained. Disposal and/or recycling of the metal product is not yet decided;
- system of bioreactors, chemical mix process reactor for PAHs, filtering of air emissions;

enclosure of the three plant processes in a tent structure to control air emissions.

SNC personnel provided a more detailed document on the soil treatment processes submitted as an application to the Ministry of the Environment under Section 8 of the Environmental Protection Act.

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#### Present Review

My staff are now reviewing three reports related to the THC project:

- the SNC document presented at the April 22, 1991, meeting;
- Feasibility Study Construction of a Fixed-Treatment
  Facility for Soil Recycling in the Toronto Port
  Industrial District, dated December 1990;
- April 8, 1991, SNC application #4278 to MOE under Section 8, EPA, and accompanying documentation and report.

In view of discussions between my staff and staff of the Department of Planning and Development to address environmental health concerns in the City processing of the THC application, I will be forwarding further comments to you as soon as possible.

(b) Letter dated June 19, 1991 from the Acting Program Manager, Environmental Protection Office.

Thank you for the opportunity to review this application for development review pertaining to the Toronto Harbour Commission (THC) Soil Remediation Pilot Project for the Port Industrial District (PID).

Information received by my staff for this file included:

- Development Review Application 391049;
- THC drawing no. 18958;
- THC correspondence dated May 22, 1991, to accompany the application;
- Central Property Register data sheets;
- Site Plan, THC drawing no. 18964;
- Building 'A' Plan and Elevations, THC drawing no. 18965;

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Building 'B' and 'C' Plan, Elevations, and Details, THC drawing no. 18966;

Atco and Rubb Building brochures.

Comments:

#### Previous Work

At its meeting of October 3, 1989, the Toronto Harbour Commissioners adopted a recommendation to retain a qualified consultant to investigate the feasibility of the decommissioning of Port Industrial District soils and, if practical, to prepare a master plan for such an operation. At its meeting of September 11, 1989, the Intergovernmental Waterfront Committee had requested the Toronto Harbour Commissioners to involve the City in any planning efforts to clean up industrial sites.

In response to a request from Councillor Layton, I provided comments on October 10, 1990 regarding the Toronto Harbour report of September 28, 1990, entitled Commissioners "Soil Cleaning Programme, Port Industrial District". The stated objective of the THC report was "to implement a facility to clean contaminated soil and groundwater in the Port Industrial District (P.I.D.) so that all lands can be redeveloped in accordance with MOE environmental guidelines and the City of Toronto EPO requirements". The THC recommended as Stage I a feasibility study to determine the economic and environmental feasibility of implementing such a facility, to be carried out by SNC Consultants. Stage II included the soil cleaning demonstration facility and Stage III the full scale plant. In my comments to Councillor Layton I indicated my support of the THC's efforts to regarding the the consultants' time line and public participation/information component of the regulatory approvals process for Stages I to III.

On May 30, 1991, I provided comments on a summary "Site Plan and Operations" and a site plan map of the proposed facility circulated by your Department. The land use issues and soil cleaning technology issues discussed had also previously been raised at City interdepartmental meetings of April 5 and April 22, 1991, respectively. I indicated in these comments that staff were reviewing additional reports requested from the THC by the Environmental Protection Office, specifically the Feasibility Study and the Certificate of Air Approval Application to the MOE. At a meeting on May 31, 1991 requested by THC staff SNC presented a more detailed description of the proposed technology.

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## <u>Criteria for the Identification of Environmental and Health</u> Concerns for Soil Remediation Technologies

Criteria to enable the identification of such concerns have been established in two relevant Department of Public Health reports.

In a report of October 20, 1989, to the Board of Health, the Medical Officer of Heath detailed the identification and assessment of PCB cleanup technologies with particular reference to the former General Electric Davenport site. This study included an assessment of onsite soil washing and biodegradation techniques. The cleanup criteria or factors used in the technology assessment included three groups:

risks to public and occupational health/safety:

transportation of hazardous materials onto or off the site;

transportation of heavy equipment onto or off the site;

fire/explosion hazards;

potential for skin and inhalation exposure;

air emissions;

other construction risks, particularly in terms of excavation;

potential environmental impacts;

PCB wastes produced;

permanency of the cleanup;

completeness of level of the cleanup;

reduction of increase of PCB waste volume;

reduction of PCB waste toxicity;

reduction of PCB waste mobility.

other

in the technology proven on a commercial scale?

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- duration of cleanup process and its resultant community impact;
- nuisance (adverse effects) factors, including visual, noise, odours, and dust and their resultant community disturbance and potential health impacts;
- monitoring requirements to measure technology effectiveness and reliability.

A draft report by the Environmental Protection Office on the identification of environment and health concerns associated with soil remediation technologies lists fifteen evaluation criteria:

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- efficiency of destruction of soil contaminants;
- efficiency of removal of soil contaminants;
- length of time required for complete remediation;
  - process emissions, including wastewater, air and particulate pollution;
  - residue mobility, the tendency of remaining contaminants to move in the environment;
  - fire/explosion hazards;
  - transportation of heavy equipment in terms of community disruption, vehicular accidents and risks to onsite workers;
- transportation of hazardous materials;
  - worker/community exposure to air, water and solid emissions, and particularly to volatile organic compounds during excavation;
  - community disturbance, including noise, odour, dust and visual impact;
  - stage of development of the technology, including four categories - conceptual, bench-scale, pilot-scale, commercial-scale;
  - cost;
    - independent technology evaluations/case histories to aid in validating vendor claims;

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waste applicability, in terms of the types of contaminants the technology can effectively remove or destroy.

#### Issues Specific to the THC Pilot Project

Using the criteria put forward in the previous subsection, I would identify the following issues relevant to the technology and routine operation of the proposed pilot facility:

- escape of volatile organic compounds during excavation and subsequent soil handling;
- provisions for dust control during all phases of the operation;
- air quality outside and inside the tent facility enclosing the soil washing, heavy metal extraction and bioremediation processes;
- requirements for ambient air monitoring during excavation and soil treatment.

Excavation of the contaminated soil samples will result in the release of VOCs to the atmosphere. While this is undesirable from an environmental and human health point of view, it will also affect the accuracy of the efficiency rating for the pilot plant ability to remove these contaminants through bioremediation. A very careful enclosed excavation method and a high quality ambient air monitoring program will be required to determine the amount of VOCs released not only during excavation but also during The importance of such data becomes subsequent soil handling. more relevant in consideration of the effects of extensive excavation to supply a full-scale facility as envisioned by the THC. SNC has advised that their principal method to reduce VOC escape will be soil wetting.

Provisions for dust control during all phases of excavation, transport and pilot plant construction, operation, and removal are essential. The THC samples to be processed by the facility show lead values from 600 to 17,800 ppm. Dust control is one of the main concerns relevant to public acceptance and community health considerations. The Environmental Protection Office has a list of practical measures to control dust and prevent "adverse effects" as defined in the Environmental Protection Act, Section 1, 13, and in Regulation 308, Section 6.

The THC has made an application to the Ministry of the Environment (MOE) for a Certificate of Air Approval for the entire pilot project. It is again essential that a high quality ambient air

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monitoring program to determine the pilot plant operations impact on local air quality. It is my understanding that this requirement and that of stack monitoring will be addressed by the MOE in its reply to the application. "Indoor air quality" however, inside the process building, should be monitored and be maintained in compliance with all relevant Occupational Health and Safety guidelines and regulations. I am not aware if the Ministry of Labour has been contacted in this regard. Conversations between my staff and officials of the MOE Approvals Branch and Toronto District Office have indicated that our departments share similar concerns which should be addressed in the implementation of this project. It is my recommendation that dust control measures be addressed in a Development Agreement or in specific collateral agreement, as may be required.

Finally, as most soil washing facilities are noisy operations, I would recommend that the THC consult with the Noise Control Group of the Department of Public Works and the Environment with respect to the Noise By-law.

## Evaluation of the Pilot Plant Technology

My staff have conducted a review of the technology to be used in the pilot plant. It is also my understanding that the MOE Hazardous Contaminants Branch has appraised the same information for Approvals Branch. Bearing in mind that this application is submitted as a research and development project of limited size and duration, I have not objections at present to the pilot operation as proposed, provided any agreements as required in the previous section can be completed.

Using the criteria established by the two earlier Board of Health reports I would like to evaluate the project as it proceeds. Depending on the results of the pilot project, the clean up technologies tested may or may not be suitable for use in a fullscale soil remediation facility for the Port Industrial Area.

#### Recommendations:

- 1. That the proponent continue the process of full public information and consultation, both through Land Use Committee and additional public meetings, as may be appropriate;
- That the proponent comply with all applicable Occupational Health and Safety regulations and WHMIS guidelines to limit worker risk and exposure to contaminated soils and hazardous materials used in the soil remediation process;

- 3. That provisions for dust control measures satisfactory to the Medical Officer of Health be included in an agreement between the City and the Toronto Harbour Commission;
- 4. That the proponent demonstrate to the satisfaction of the Medical Officer of Health and the Ministry of the Environment a method to minimize the loss of VOCs to the atmosphere during excavation and handling of contaminated soil;
- 5. That the proponent consult with the Ministry of Labour concerning guidelines and regulations on indoor workplace air quality and implement an indoor air monitoring program if required by the Ministry;
- 6. That the proponent conduct ambient air monitoring programs during the excavation operations and the operation of the pilot plant, to the satisfaction of the Ministry of the Environment and the Medical Officer of Health;
- 7. That all operations be conducted in compliance with the City Noise By-law, to the satisfaction of the Commissioner of Public Works and the Environment.
- (C) Letter dated June 25, 1991 from the Acting Program Manager, Environmental Protection Office.

#### Comments:

Further to my comments of June 19, 1991, I indicated at that time that I would like to evaluate the Toronto Harbour Commission (THC) project as it proceeds, using the criteria established in two previous Board of Health reports concerning soil remediation technologies.

#### Evaluation Report:

Subsequent discussions amongst staff at the Environmental Protection Office and with staff of the Planning and Development Department have determined the need for an evaluation report to be completed by the proponent at the end of the Stage II pilot project. Considering the nature of the Stage II pilot project and the ultimate objective of subsequent Stage III which may be a full scale facility, it is reasonable to assume that the THC will produce a report in any event.

Recommendations:

1. That the proponent submit an evaluation report on the soil remediation pilot project to include but not be limited to the following criteria:

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risks to occupational health and safety, in particular:

- worker exposure to dust and volatile organic compounds (VOCs) during excavation, soil handling, and plan operations;
- air quality inside the enclosed plant facilities as determined in compliance with Ministry of Labour Occupational Health and Safety regulations and any required indoor workplace air monitoring programs;
- worker exposure to process chemicals in all phases of the project operations;
- worker exposure to ambient air conditions in the immediate vicinity of the operations;
- potential environmental impacts, including:
  - wastes produced in all phases of the project operations;
  - . results of ambient air monitoring data;
  - permanency and completeness/level of cleanup;
  - . results of verification testing of treated soils;
- community disturbance and potential health impacts, including:
  - disturbance due to heavy equipment transport, noise, odour, dust, visual impact;
  - community exposure to air, water, and solid emissions, particulary VOCs during excavation;
- other relevant criteria as selected by the Toronto Harbour Commission to be included in this report.
- 2. That provisions for the evaluation report satisfactory to the Medical Officer of Health be included in an agreement between the City of Toronto and the Toronto Harbour Commission.

Please feel free to forward a copy of this letter to the proponent. If you have any questions, please do not hesitate to call Steve McKenna at 392-6788.

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## 2. COMMISSIONER OF BUILDINGS AND INSPECTIONS

(a) Report dated June 5, 1991.

Comments:

Zoning

Proposal: Erect 3 buildings to be used by the Toronto Harbour Commissioners for soil remediation purposes

Designation: Current - I3 D2\*; Previous - C4 V2

Map No.: 51G 313

Applicable By-laws: 438-86, as amended

Plans prepared by The Toronto Harbour Commissioners and date stamped by the Commissioner of Planning and Development on May 22, 1991.

Submitted data and information indicate the proposal complies with the Zoning By-law.

Rental Housing Protection Act

The proposal is not subject to the provisions of the Rental Housing Protection Act.

## Planning Act, Section 41

This proposal does not require conveyance of land or payment in lieu thereof in accordance with By-law 717-89.

#### Ontario Heritage Act

This proposal does not require approval of the Toronto Historical Board.

### Building Code

The issuance of construction permit/s will be conditional upon the proposal's full compliance with all relevant provisions of the Ontario Building Code.

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City Council

Note:

This proposal is in the area subject to the Province's Declaration of Interest. Provincial approval will be required prior to the issuance of a building permit. Please contact the following:

> Diana Jardine Province of Ontario Ministry of Municipal Affairs 777 Bay Street 14th Floor Toronto, Ontario M5G 2E5 (tel. 585-6025; fax. 585-4006)

AND

David Carter Attention: G. Garland Royal Commission on the Future of the Toronto Waterfront 207 Queens Quay West 5th Floor P.O. Box 4111, Station A Toronto, Ontario M5W 2V4 (tel. 973-7489; fax 973-7103)

## 3. COMMISSIONER OF PARKS AND RECREATION

(a) Letter dated June 21, 1991.

I provide the following comments in response to your letter dated May 27, 1991, regarding the proposal to erect three temporary structures for a proposed soil recycling operation at this location.

I advise that there are 16 City-owned trees involved in this project. The trees are to be retained in their present location and protected according to the attached specifications for construction near City trees.

I request the submission of a revised site plan identifying the location of all existing City-owned trees and providing for the installation of twelve 75 mm green ash trees within the Cherry Street road allowance. The street trees must be planted in accordance with the City of Toronto Department of Parks and Recreation Standard Planting Detail. This notation should be included on the plan.

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I will provide further comments upon receipt of the revised site plan.

4. COMMISSIONER OF PUBLIC WORKS AND THE ENVIRONMENT

(a) Report dated June 26, 1991.

Recommendations:

- 1. That the owner be required, as a condition of approval of the plans and drawings for the project, to:
  - (a) Submit a report, prior to the issuance of a building permit, on a Material Recovery and Waste Reduction plan satisfactory to the Commissioner of Public Works and the Environment. The plan will address strategies for material recovery and waste reduction within the development;
  - (b) Provide, maintain and operate the material recovery and waste reduction facilities and strategies stipulated in the report approved by the Commissioner of Public Works and the Environment;
  - (c) Submit, prior to the issuance of a building permit, additional details on the treatment and handling of all waste water, including discharges to the City sewer, for the review and approval of the Commissioner of Public Works and the Environment;
- 2. That the owner be requested to:
  - (a) Submit a report, prior to the issuance of a building permit, on a Water Conservation Plan, addressing strategies to conserve water within the development, satisfactory to the Commissioner of Public Works and the Environment;
  - (b) Have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public Works and the Environment that the development has been designed and constructed in accordance with the Water Conservation Plan approved by the Commissioner of Public Works and the Environment;
  - (c) Submit a report, prior to the issuance of a building permit, on an Energy Efficiency and Conservation Plan (EECP), addressing strategies for energy efficiency and conservation within the development, satisfactory to the Commissioner of Public Works and the Environment;

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- (d) Have a qualified Consulting Engineer/Architect or professional designer certify, in writing, to the Commissioner of Public Works and the Environment that the development has been designed and constructed in accordance with the EECP approved by the Commissioner of Public Works and the Environment; and
- (e) Maintain and operate the water conservation and energy efficiency and conservation measures and facilities stipulated in the reports approved by the Commissioner of Public Works and the Environment.

#### Comments:

#### Location

South end of Cherry Street, on the east side adjacent to the north side of the Ship Channel.

#### Proposal

Establishment of a 12-month demonstration project for a contaminated soils treatment plant. A building area totalling 2 341 square metres for storage areas and the cleaning plant is proposed, but will be removed upon completion of the demonstration project.

### Parking

The provision of 30 parking spaces satisfies my estimated parking demand. The Zoning By-law does not impose a parking requirement on this project.

## Refuse Collection

Refuse generated by the site will be classified as "Manufacturers' and Trade Waste" and as such must be collected by a private collection firm.

# Material Recovery and Waste Reduction

The report required of the owner will include:

 (a) A description of the waste composition which shall be generated by the development and the expected quantity of each category of waste material;

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- (b) A description of the policies, programmes, processes and equipment which will be put in place to carry out material recovery and waste reduction;
- (c) The provision of space required to store and/or process recovered materials;
- (d) The provision of loading and unloading area(s) for material vehicles, including adequate vertical, horizontal and longitudinal clearance for manoeuvring of the vehicles;
- (e) Access routes for recycling vehicles; and
- (f) Separate accommodation for the recovery, safe storage and disposal of hazardous waste, if any.

#### Water Conservation

In accordance with the policies and procedures adopted by Council, the owner is requested to submit a Water Conservation Plan in connection with this project for my review and approval, which sets out measures and strategies to be taken in the design, construction and operation of the project to reduce water use. The plan will include:

- (a) An inventory of all water and sewage related piping, equipment, fixtures, and appliances;
- (b) A description of the policies, programmes, processes, and equipment which will be put in place to conserve water and reduce the discharge of waste water; and
- (c) A Water Audit, including consumption rates and expected volume of water consumption and waste water generated by all equipment, fixtures, and appliances.

### Waste Water Handling

Given the unique nature of this project, additional information should be provided on how the project's waste water will be handled including the amount and type of discharge to the City sewer system. Any discharge from the site to the City's storm and sanitary sewer systems must be in compliance with the City's Sewer By-law No. 78091.

# Energy Efficiency and Conservation

The owner is also requested to submit an Energy Efficiency and Conservation Plan, identifying measures, design features, and

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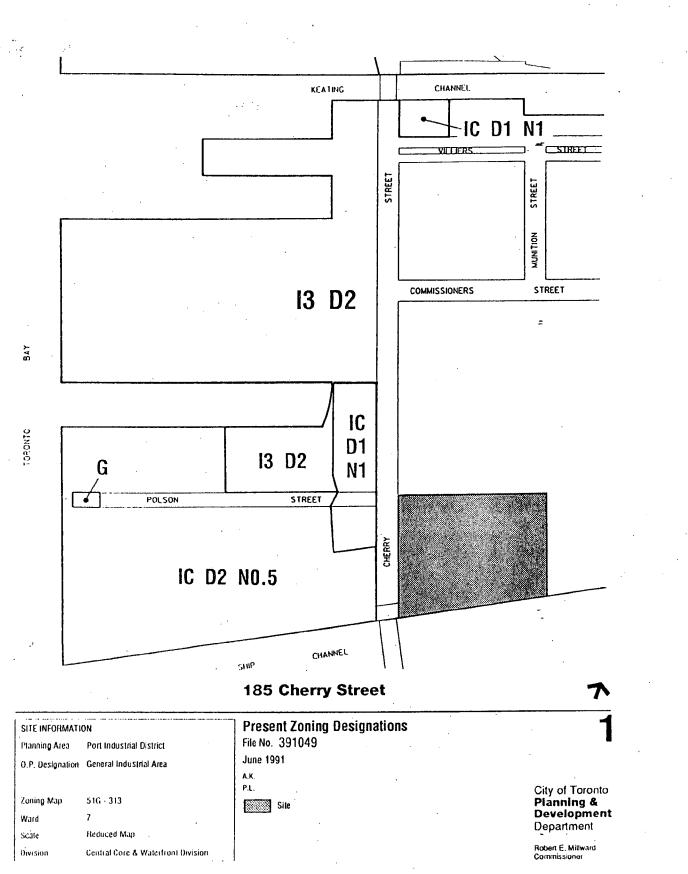
strategies that will reduce energy use and consumption of resources in connection with this project for my review and approval. The plan will include:

- (a) A description of the measures to be incorporated in the design for the effective use of daylighting to offset the need for electric lighting;
- (b) A description of the electric lighting features and proposed measures to maximize the efficiency of the building component and to optimize overall energy consumption in conjunction with space heating and cooling;
- (c) A description of the proposed building envelope (walls, fenestration, roof) and their annual performance criteria based on a cumulative combined heating and cooling energy flux;
- (d) A description of the various components and their performance criteria of the Heating Ventilation Air-Conditioning (HVAC) systems and the approach of overall energy efficiency including a life cycle cost analysis;
- (e) A description of other proposed electrical motors, equipment and systems, and their performance criteria including a life cycle cost analysis;
- (f) An assessment of the total system performance; and
- (g) A description of the proposed energy management including a plan for operator training, where appropriate.

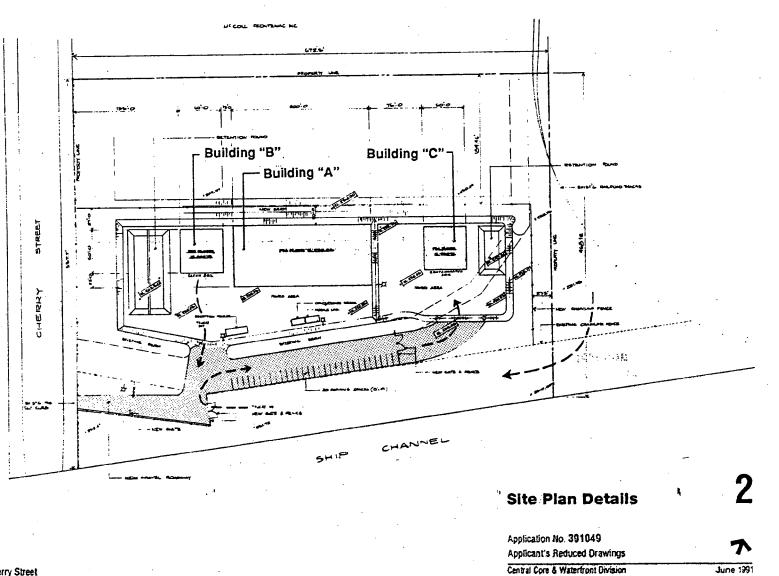
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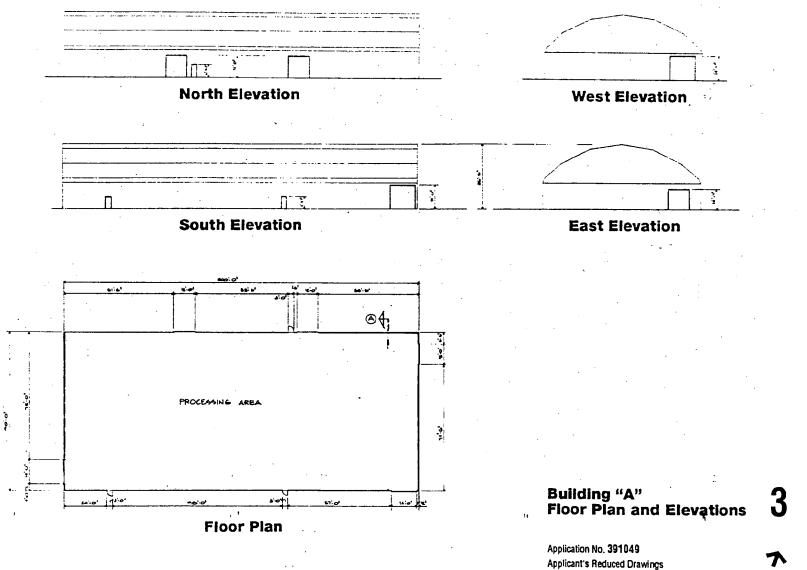
APPLICATION Development Revi		391049:43
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Development Revi	· · ·	· · · · · · · · · · · · · · · · · · ·
Rezoning: O.P.A.:	lew: X	Application Number: 391049 Date of Application: May 22, 1991 Date of Revision:
Confirmed Munici Nearest Intersec	pal Address: 185 tion: east	Cherry St. side south of Commissioners St.
Project To Description: cl	build temporary ean contaminants	buildings for experimental process to from soil (not monitored)
Applicant Toronto Harbour 60 Harbour St. 863-2000	Age Commission sam	nt Architect e as applicant same as applicant
PLANNING CONTROL Official Plan De Zoning District: Height Limit: Site Specific Pr Historical Statu Site Plan Contro	esignation: Gene I3D2 rovision: IS:	on refer to Chief Building Official) ral Industrial Area
PROJECT INFORMAT Site Area: Frontage: Depth:		Height: Storeys: 1 Metres:
Non-Residential Ground Floor: Fotal GFA:	GFA: 2341.1 m2 2341.1 m2 2341.1 m2	
DWELLING UNITS		FLOOR AREA BREAKDOWN Land Use Above Grade Below Grade Warehouse: 668.8 m2 Industrial: 1672.3 m2 Parking & Loading at:
DENSITY Residential Dens	sity:	Total Density: 0.07
COMMENTS		



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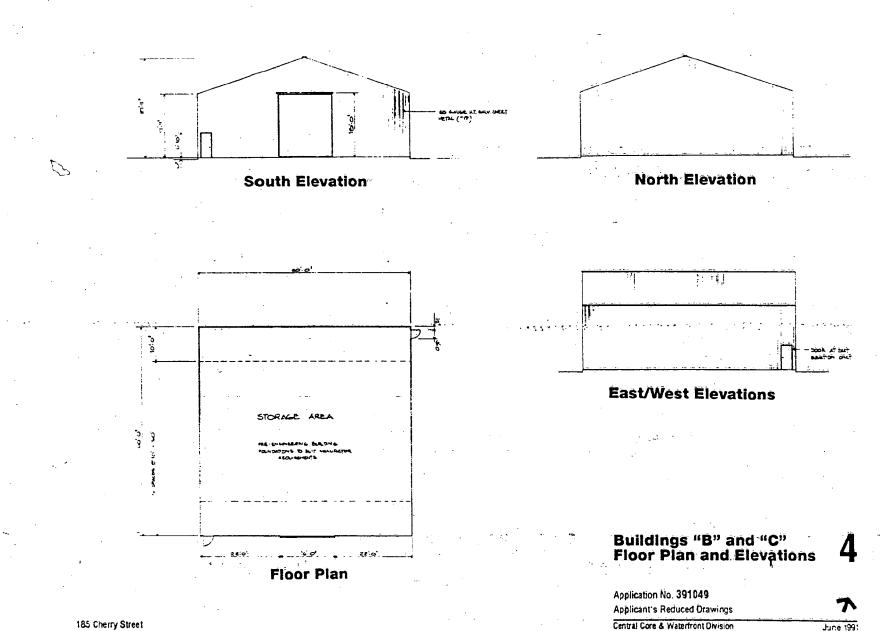


185 Cherry Street





Applicant's Reduced Drawings Central Core & Waterfront Division June 1991



185 Cherry Street

Junë 1991

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