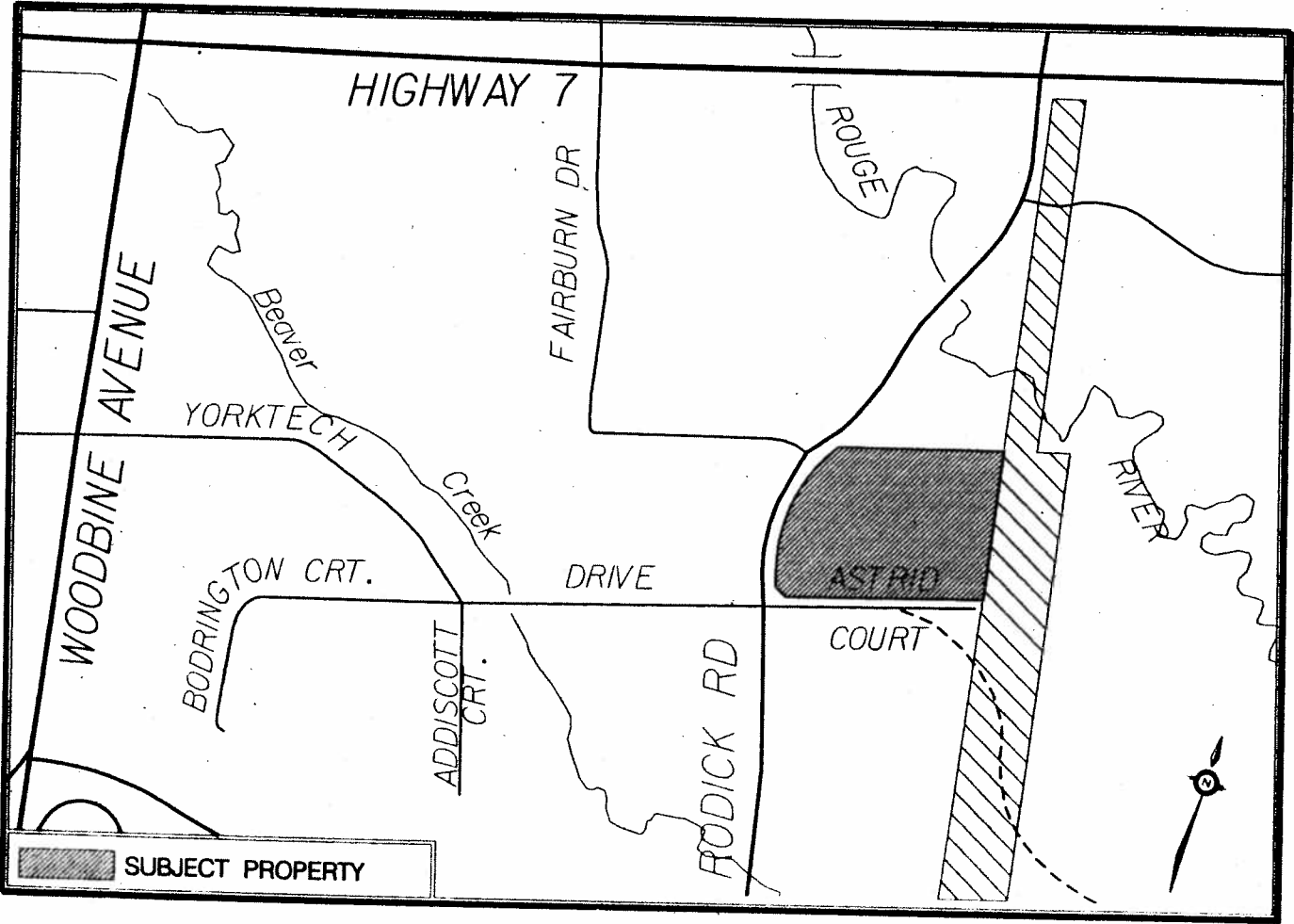


FIGURE 1



**MACAULAY SHIOMI HOWSON LTD.**  
**MUNICIPAL AND DEVELOPMENT PLANNING SERVICES**

January 16, 2009

Scott Heaslip, MCIP, RPP  
Senior Project Co-ordinator,  
Planning Department,  
Town of Markham,  
101 Town Centre Blvd  
Markham, Ont  
L3R 9W3

Dear Sir:

Re: Gemcross Developments (Con-Strada Aggregate Recycling Facility) 350 Yorktech Drive; Your file # **ZA-08-119862**

Lyn Townsend has forwarded your email to me in which you request the information that Council asked for on November 18, 2008. While we are endeavouring to provide as much to you as is possible, I am sorry to say that we will not have the complete package available until near the end of February.

With respect to the Development Services Committee's questions, I can provide the following answers:

**Status of Contamination on the lands and Assurance the Property will be Cleaned:**

I have attached a copy of a Barenco letter, dated December 23, 2008, which should answer the questions.

**Amount of Trucks Eliminated, Percentage of Materials used in Markham, and Truck Circulation Patterns:**

Poulos and Chung are preparing this documentation and expect to have it available at the end of February.

**Procedural Guarantee that no application will be filed for permanent aggregate use:**

We are unable to provide such a guarantee, although it is not our client's intent to file such an application at this time.

*Your Header Here*

**Status of the Sediment Control Facility:**

Approval from the Town of the plans has been received. The appropriate culverts were delivered to the site after the frost in late December. It has not been possible to install the culverts because of weather conditions. As soon as the weather changes, the system will be installed.

I believe this covers all of the matters requested of us on November 18, 2008. As soon as the transportation information is available, I will forward it to you.

If you wish to take a status report to the Development Services Committee in February, I would be pleased to attend to provide what information we have.

Yours truly,

Macaulay Shiomi Howson

A handwritten signature in black ink, appearing to read 'Peter Cheatley', written in a cursive style.

per: Peter Cheatley, RPP, MCIP

**BARENCO**Environmental Engineering  
& Site Remediation Services*20 years  
of Innovation*

December 23, 2008

TOWNSEND, ROGERS LLP  
Barristers and Solicitors  
2-1400 Cornwall Road  
Oakville, Ontario  
L6J 7W5**DRAFT FOR REVIEW**Attention: Ms. Lynda Townsend

Dear Ms. Townsend:

Re: Strada Aggregates Property Environmental Remediation  
Northeast Corner of Rodick and Yorktech Roads, Markham, Ontario

As requested, we have reviewed the information we have on file for the Strada Aggregates property located on the northeast corner of Rodick and Yorktech Roads in Markham, Ontario, and prepared a cost estimate if an environmental remediation of the site were undertaken to meet current Ministry of the Environment standards.

**Background**

The Strada Aggregates property is about one quarter of what was formerly a larger piece of land that pre-dated the construction of Rodick and Yorktech Roads. As the larger piece was being developed, the four quarters on each corner of the two roads were named as follows:

Roseport 1 (R1) - northwest corner  
Landport 1 (L1) - southwest cornerRoseport 2 (R2) - northeast corner  
Landport 2 (L2) - southeast corner

Figure 1 shows the layout of the four parts, including the Strada Aggregates property which is Roseport 2.

Since 1981 numerous environmental investigations, remediations and site specific risk assessments have been conducted on and around the Strada Aggregates property (herein referred to as R2) and properties surrounding the Rodick/Yorktech intersection. The reports we have reviewed are listed below:

..... 2



- Trow, Dames & Moore, *Phase I Decommissioning - Ryan Road Subdivision - Blocks 1 through 6, Markham, Ontario, March 15, 1989.*
- Trow, Dames & Moore, *Application for Section 23 and 24 Approval (OWRA) Roddick Road North and Yortech Drive - Kellett subdivision, Markham, Ontario, May 3, 1989*
- Trow, Dames & Moore, *Application for Section 45 (EPA) Approval, Rodick Road North of Yorktech Drive - Kellett Subdivision, Markham, Ontario, June 12, 1989*
- Trow, Dames & Moore, *Supplementary Report - Phase I Decommissioning, Ryan Road Subdivision - Blocks 1 through 6, Markham, Ontario, November 15, 1989*
- Eco Geochemical Consulting Limited, *Draft Factual Report, Ryan Road Storm Sewer Investigation, Markham, Ontario, March 30, 1992*
- Conestoga-Rovers and Associates, *Landfill Gas Investigation, Ryan Road Developments, Markham, Ontario, January 12, 1995*
- Proctor and Redfern Limited. *ESSROC Canada Inc. 801 Rodick Road-Markham Yard, Town of Markham, Phase I and II Environmental Assessment, August 1997*
- Proctor & Redfern, *Phase I and II Environmental Site Assessment 801 Rodick Road - Markham Yard, Town of Markham, August 1997*
- Beak Environmental Specialists, *Site Specific Risk Assessment Report, Part of Lot 9, Concession 4, EYS (Sabiston Lands), Markham, Ontario, October 1997*
- Trow Consulting Engineers Ltd., *Phase II Environmental Site Assessment Part of Lot 9, Concession 4, Markham, Ontario, December 1, 1999*
- Trow Consulting Engineers Ltd., *Phase II Environmental Site Assessment, East Part of Part 1, Lot 9, Concession 4, Markham, Ontario, June 14, 2000*
- XCG Consultants Ltd., *Site Specific Risk Assessment and Risk Management Plan Rodick Road and Yorktech Drive, Markham, Ontario, May 15, 2001*
- Barenco Inc., *Limited Subsurface Investigation, Landport L2 Property, Yorktech Drive and Rodick Road, Markham, Ontario, March, 2005.*
- Barenco Inc., *Limited Subsurface Investigation Landport L2 Property Yorktech Drive and Rodick Road, Markham, Ontario, March 2005*

- Barenco Inc., *Phase I Environmental Assessment Landport L2 Parcel, 801 Rodick Road, Markham, Ontario, March 05, 2008*

We reviewed these reports with respect to the data relevant to R2 and chemicals that could potentially exceed the currently applicable MOE Standards. The potential contaminants are identified as follow:

Soil	Metal	antimony, arsenic, beryllium, boron, cadmium, copper, lead, molybdenum, nickel, zinc
	Polyaromatic hydrocarbon (PAH)	benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene
	Petroleum hydrocarbon (PHC)	petroleum hydrocarbon fractions (PHC) F1 - F4
Ground water	Metal	arsenic, cadmium, copper, lead, silver
	Polyaromatic hydrocarbon (PAH)	benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene
	Volatile organic carbon (VOC)	xylene, vinyl chloride

### Scope and Costing

If remediation of the site were to be undertaken, the contaminated soil could be excavated and disposed at an Ministry of the Environment approved disposal or treatment facility. Since the contaminated ground water is entrained in the soil, removal of the soil should eliminate the ground water contamination.

During the relocation of soils from the west side of Rodick Road (Roseport 1 - R1) to R2, the grade level of R2 was raised by approximately two metres. Soils were also used to construct privacy berms two metres high and ten metres wide on the perimeter of R2.

A remedial excavation would cover the entire R2 property, approximately three hectares in area, bringing the whole property to grade level (with respect to adjacent roadways). The volume of soil that would be excavated and hauled to a landfill is estimated and presented in the following table.

	Dimensions	Volume
<b>R2 property</b>	Area: $200 \times 150 = 30,000 \text{ m}^2$ Height above grade: 2 m	$30,000 \times 2 = 60,000 \text{ m}^3$
<b>Privacy Berms</b>	Area: $(200 \times 150) - (180 \times 130) = 6,600 \text{ m}^2$ Height above R2 grade: 2	$6,600 \times 2 = 13,200 \text{ m}^3$
Total Volume		<b>73,200 m<sup>3</sup></b>

Based on the estimated soil volume and a soil bulk density of 2 tonnes per m<sup>3</sup>, the mass of soil that would be excavated and hauled to landfill is approximately 150,000 tonnes.

If remediation were undertaken, the cost would be approximately \$85 per tonne of soil. This cost is estimated based on past experience and current rates and it includes the cost of excavation, laboratory leachate and confirmatory testing, haulage and disposal at an MOE approved facility, backfill material, backfilling and compaction.

If the Strada Aggregates property is remediated by excavating and disposing 150,000 tonnes of soil, the cost is estimated to be \$12,750,000.

If there are any questions, please give me a call.

Yours very truly,  
BARENCO INC.

Jim Phimister, P.Eng., P.Geo.  
Hydrogeologist, Principal

attachment: Figure 1

