CONESTOGA-ROVERS
& ASSOCIATES

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PREPARED AT THE REQUEST OF COUNSEL

May 25, 2009 Reference No. 057172

Mr. Christopher Williams
Aird & Berlis LLP
Suite 1800, 181 Bay Street
Toronto, Ontario
M5J 2T9

Dear Mr. Williams:

Re: Peer Review of "Potential Remedial Costs Related to the Redevelopment of the Cooper Site Property"
Stratford, Ontario

Conestoga-Rovers & Associates (CRA) was retained by Aird & Berlis LLP to conduct a peer review of the following document:

> Potential Remedial Costs Related to the Redevelopment of the Cooper Site Property, Stratford, Ontario, prepared by R.J. Burnside & Associates Limited and dated May 2009 (May 2009 Burnside Report)

CRA understands that Aird & Berlis LLP acts for the City of Stratford who are considering the acquisition of the Cooper Site (Site) for redevelopment. R.J. Burnside & Associates Limited (Burnside) was retained by the City to provide an estimate of the remedial costs associated with the redevelopment of the Property.

In completing this peer review, CRA had several conversations with Mr. David Marks of Burnside. CRA assumed that all of the factual information presented in the May 2009 Burnside Report and information obtained orally was accurate. The time frame for preparation of this report did not allow CRA to review the previous environmental reports nor attend the Site to confirm any Site conditions.

According to the information provided to CRA, the Site was developed in the early 1900s for the manufacturing and repair of steam locomotives. This is a very intense industrial land use that has occurred at the Site over a long time frame. Typical environmental issues associated with this land use include: storage and spills of fuel, disposal of ash associated with building heating and locomotive servicing, storage and use of paints and solvents, solid and liquid waste disposal, presence of polychlorinated biphenyls at the Site, presence of asbestos in building materials, spills of chemicals and waste materials, etc. To remediate and redevelop sites of this

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nature it is imperative that soil and groundwater quality as well as building conditions be fully characterized.

GENERAL PEER REVIEW COMMENTS

Based on CRA's review of the May 2009 Burnside Report, we provide the following general comments:

1) Groundwater quality at the Site has not been investigated and therefore no reliable assessment of the need for groundwater remediation, or potential remedial costs or time frame can be made. CRA notes that the City obtains its drinking water from water wells.

2) The potential for off-Site impacts to soil and groundwater quality have not been investigated. The liability associated with any off-Site impacts can be very significant, and without more data can't be determined.

3) Soil quality data was not provided in the May 2009 Burnside Report. However, from the information provided, adequate soil sampling has not been completed to characterize the Site. The costs associated with the disposal of soil account for the most significant portion of the remedial cost. Full characterization of the Site soils for metals, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), petroleum hydrocarbons, and PCBs is necessary.

4) Details concerning the size and composition of the concrete structures on the Site are not available. Given the past heavy industrial use of the Site, it is expected (as Burnside points out) that these structures will be significant. The cost associated with managing these structures cannot be reliably estimated without further details concerning their size and composition.

5) A Designated Substances Survey has not been performed on the building structures. As such, the cost of dealing with asbestos, PCBs, mercury and other Designated Substances is unknown. It was reported that asbestos containing materials (ACM) were removed from the building by unqualified persons. As such, it is likely that some free asbestos fibres are present within the building that need to be remediated prior to building demolition. Also, given that part of the roof structure has been open for many years, it is likely that bird guano is present

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in the building and would need to be removed prior to demolition. The cost of asbestos fibre removal and guano removal could be significant.

6) Based on the known impacts to soil quality at the Site, and the Site's historical use (which suggests there will be significant groundwater issues), it is very likely that the Risk Assessment approach (with associated risk management measures) will be the only feasible method of redeveloping the Site. However, this approach has ongoing responsibilities which will impact the economics of any redevelopment such as groundwater monitoring, maintenance of a clean cover, off-Site disposal of any impacted soils that are excavated in the future, etc.

COMMENTS ON BURNSIDE COST ESTIMATES

As described in detail above, there are significant data gaps which make any assessment of remedial requirements and remedial costs difficult. Actual remedial costs could vary significantly, however, the following comments and opinions are based on the available data and CRA's experience on similar projects.

Burnside summarized costs under the following sections:

Section 1	Environmental Assessment, Site Characterization, and Risk Assessment
Section 2	On-Site Remediation
Section 3	Off-Site Impacts
Section 4	Project Finalization

For ease of reference, CRA has summarized our comments under the same general headings. The attached Tables 1 through 4 incorporate CRA's comments into a similar format as the estimates prepared by Burnside.

1) Environmental Assessment, Site Characterization, and Risk Assessment: The costs presented by Burnside for further Site characterization and assessment of remedial options are reasonable. The costs for the Risk Assessment ($300,000) are likely on the high side. CRA estimates this cost at $150,000.

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2) On-Site Remediation

2.1 Tendering: Estimated cost seems appropriate.

2.2 Above Grade Structures: Based on discussions with demolition contractors and the current market for scrap steel, this cost may be low. CRA estimates this cost to be in the range of $510,000 to $714,000.

2.3 Subgrade Structures: This cost is very difficult to assess with the available data. The estimated volume of 36,000 cubic metres seems conservative. The unit cost of $45 per cubic metre for excavation and crushing also seems conservative. CRA would estimate a volume in the range of 24,000 cubic metres to 36,000 cubic metres and a unit cost of $35 for excavation and crushing.

The asbestos abatement cost is also hard to quantify with no data. However, given the age and size of the building, the estimated cost of $15,000 seems very low. As discussed previously, there may be free asbestos fibres that have to be remediated within the building structure along with bird guano. CRA recommends an allowance of $250,000 to abate asbestos and potentially guano within the building.

A cost of $720,000 has been included to address waste materials. It is unclear what this cost pertains to. Most waste materials will be removed as part of the building demolition cost. An allowance of $100,000 to $200,000 should be included for miscellaneous waste disposal.

2.4 Impacted Fill and Soil: Based on available information, any estimate of the volume of impacted soil requiring off-Site disposal is a guestimate. The fill volume at the Site has been estimated at 69,000 cubic metres, and it was assumed that the underlying fine grained till would be clean. This is a reasonable assumption based on the available data. Burnside estimated that between 12.5% to 50% of this fill would have to be removed and disposed of off-Site. This estimate has the most significant impact on cost. For the residential land use scenario with cleanup to generic standards, the 50% estimate seems low and could be up to 100%. Under the Risk Assessment scenarios, the volume of soil requiring

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removal would be significantly less and would depend on the size of the building constructed on Site (i.e., you would only remove soils from the footprint of the buildings). Assuming a building coverage of 50%, then 50% of the fill volume may have to be removed. These volume guestimates are included on CRA's revised cost estimates (Tables 1 through 4).

The unit cost for excavation and off-Site disposal of impacted fill is estimated at $200 per cubic metre. This cost is somewhat high based on current rates. A unit rate of $150 per cubic metre would be appropriate.

2.5 Wastewater and Groundwater Control: Without groundwater data and hydrogeologic information this cost is very difficult to estimate. It is reasonable to assume that perched shallow groundwater will be encountered in the excavation. An allowance of $500,000 to manage and treat/dispose of groundwater should be included under the excavation scenarios. For the risk assessment scenarios, an allowance of $250,000 should be included.

2.6 Backfilling: Backfilling volumes mirror the excavation volumes discussed above. The unit cost for backfilling of $25 per cubic metre is likely low. A unit rate of $30 per cubic metre should be used.

2.7 Engineering and Environmental Monitoring: Estimated cost seems reasonable.

2.8 Regulatory Approvals and Permits: Estimated cost seems reasonable.

2.9 Miscellaneous: Estimated cost seems reasonable.

3.0 Off-Site Impacts

As discussed previously, there is no data with which to assess the potential for off-Site impacts or the magnitude of such impacts. For each scenario, Burnside has included a cost of $1,650,000. CRA recommends a range up to $2,000,000 be included as an allowance.

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4.0 Project Finalization: Estimated cost seems reasonable.

Cost estimates that incorporate CRA's comments are provided on Tables 1 to 4. In summary, the remedial cost estimates vary significantly based on the volume of soil that has to be removed for off Site disposal. As stated herein, the cost for groundwater remediation and remediation of any off-Site impact will also significantly impact the cost.

A comparison of the Burnside and CRA cost estimates is as follows:

Cleanup to Residential Land Use - Generic Standards

Burnside Estimate: $15.5 M
CRA Estimate: $15.4 to 20.3 M

Cleanup to Residential Land Use - Risk Based Standards

Burnside Estimate: $9.5 M
CRA Estimate: $8.5 to 13.4 M

Cleanup to Industrial/Commercial Land Use - Generic Standards

Burnside Estimate: $9.1 M
CRA Estimate: $11.6 to 16.2 M

Cleanup to Industrial/Commercial Land Use - Risk Based Standards

Burnside Estimate: $6.3 M
CRA Estimate: $8.3 to 12.1 M

For the Residential land use scenarios, the Burnside estimates are within the range estimated by CRA. For the Industrial/Commercial land use scenarios CRA's estimates are higher than Burnside's. The difference in the cost estimates for the Industrial/Commercial scenarios is primarily related to the assumption of how much soil needs to be excavated and disposed off site. Burnside estimated less soil removal, which certainly is a valid assumption if there are going to be smaller buildings on the Site, or if the Site is used more for parking or storage type uses. CRA assumed a higher volume of soil would be excavated and removed for disposal on

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the basis that there would be larger buildings on Site and therefore more soil would have to be removed and disposed of off-site.

Overall, we can conclude that based on the available information (which is incomplete) the estimates prepared by Burnside are appropriate.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Gregory R. Brooks, P. Eng.

GRB/ev/1
Encl.

TABLE 1

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - GENERIC STANDARDS

Item	Activity	Quantity	Unit	Rate	Budget
1.0	**Environmental Assessment and Site Characterization**				
1.1	*Phase I and II ESA*	1	L.S.	$140,000	$140,000
1.2	*Remedial Options Analysis and Landuse Planning* • Contractor Liaison • Reporting	1	L.S.	$60,000	$60,000
				Sub-Total	**$200,000**
2.0	**On Site Remediation**				
2.1	*Tender/Specification and Tendering*	1	L.S.	$40,000	$40,000
2.2	*Above Grade Structures* • Building Demolition	20,400	m^2	$25 to $35	$510,000 to $714,000
2.3	*Subgrade Structures*				
	• Excavation and Processing Concrete	24,000 to 36,000	m^3	$15	$360,000 to $540,000
	• Crushing and Stockpiling	24,000 to 36,000	m^3	$20	$480,000 to $720,000
	• Asbestos Piping Disposal	1	L.S.	$250,000	$250,000
	• Waste Materials	500 to 1,000	m^3	$200	$100,000 to $200,000
2.4	*Impacted Fill and Soil*				
	• Excavate/Load/Transport/Disposal	51,750 to 69,000	m^3	$150	$7,762,500 to $10,350,000
2.5	*Wastewater and Groundwater Control*				
	• Pump/Treat/Discharge On Site	1	L.S.	$500,000	$500,000
	• Management of Clean Run-off During Project	1	L.S.	$50,000	$50,000

TABLE 1

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - GENERIC STANDARDS

Item	Activity	Quantity	Unit	Rate	Budget
2.6	*Backfilling and Restoration*				
	• Place and Compact Stockpiled Concrete and Inert Material	24,000 to 36,000	m^3	$7.50	$180,000 to $270,000
	• Acquire/Transport/Place Clean Granular Fill	51,750 to 69,000	m^3	$30	$1,552,500 to $2,070,000
2.7	*Engineering and Environmental Monitoring*	1	L.S.	$200,000	$200,000
	• Engineering and Environmental Oversight				
	• Sampling				
	• Monitoring				
	• Inspection				
2.8	*Regulatory Approvals and Permits*	1	L.S.	$20,000	$20,000
2.9	*Miscellaneous*				
	• On Site Management and Operations Activities	1	L.S.	$100,000	$100,000
				Sub-Total	**$12,105,000 to $16,024,000**
3.0	Off Site Impacts				
3.1	*Land Owner Liaison*				
	• Legal	1	L.S.	$50,000	$50,000
	• Environmental Assessments and Engineering	1	L.S.	$100,000	$100,000
3.2	*Impacted Soil*	1	L.S.	$500,000	$500,000
	• Remediation and Restoration				

TABLE 1

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - GENERIC STANDARDS

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
3.3	*Impacted Groundwater* • Remediation (short term and long term) • Pump and Treat • Bioremediation • Impact Controls	1	L.S.	$500,000	$500,000
3.4	*Compensation* • Compensation for Damages and Disruption	1	L.S.	$500,000 to $1,000,000	$500,000 to $1,000,000
				Sub-Total	**$1,650,000 to $2,150,000**
4.0	**Project Finalization**				
4.1	*Documentation*				
4.1.1	*Regulatory Submissions and Documentation and Peer Review*	1	L.S.	$40,000	$40,000
4.1.2	*Record of Site Condition and Audit*	1	L.S.	$20,000	$20,000
				Sub-Total	**$60,000**
				Sub-Total	**$14,015,000 to $18,434,000**
				10% Contingency	**$1,401,500 to $1,843,400**
				Estimated Budget	**$15,416,500 to $20,277,400**

TABLE 2

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - RISK ASSESSMENT

Item	Activity	Quantity	Unit	Rate	Budget
1.0	Environmental Assessment, Site Characterization, and Risk Assessment				
1.1	*Phase I and II ESA*	1	L.S.	$150,000	$150,000
1.2	*Risk Assessment* • Human Health, Ecological, and Toxicological Data Assessment • Pre-submission to MOE • Risk Assessment	1	L.S.	$150,000	$150,000
1.3	*Remedial Options and Risk Management Strategy*	1	L.S.	$100,000	$100,000
				Sub-Total	**$400,000**
2.0	On Site Remediation				
2.1	*Tender/Specification and Tendering*	1	L.S.	$40,000	$40,000
2.2	*Above Grade Structures* • Building Demolition	20,400	m^2	$25 to $35	$510,000 to $714,000
2.3	*Subgrade Structures*				
	• Excavation and Processing Concrete	24,000 to 36,000	m^3	$15	$360,000 to $540,000
	• Crushing and Stockpiling	24,000 to 36,000	m^3	$20	$480,000 to $720,000
	• Asbestos Piping Disposal	1	L.S.	$250,000	$250,000
	• Waste Materials	500 to 1,000	m^3	$200	$100,000 to $200,000
2.4	*Impacted Fill and Soil* • Excavate/Load/Transport/Disposal (assume 25% to 50% of fill removed)	17,250 to 34,500	m^3	$150	$2,587,500 to $5,175,000

TABLE 2

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - RISK ASSESSMENT

Item	Activity	Quantity	Unit	Rate	Budget
2.5	*Wastewater and Groundwater Control*				
	• Pump/Treat/Discharge On Site	1	L.S.	$250,000	$250,000
	• Management of Clean Run-off During Project	1	L.S.	$25,000	$25,000
2.6	*Backfilling and Restoration*				
	• Place and Compact Stockpiled Concrete and Inert Materials	24,000 to 36,000	m^3	$7.50	$180,000 to $270,000
	• Acquire/Transport/Place Clean Granular Fill	17,250 to 34,500	m^3	$30	$517,500 to $1,035,000
2.7	*Engineering and Environmental Monitoring*	1	L.S.	$200,000	$200,000
	• Engineering and Environmental Oversight				
	• Sampling				
	• Monitoring				
	• Inspection				
2.8	*Regulatory Approvals and Permits*	1	L.S.	$20,000	$20,000
2.9	*Miscellaneous*				
	• On Site Management and Operations Activities	1	L.S.	$50,000	$50,000
				Sub-Total	**$5,570,000 to $9,489,000**
3.0	Off Site Impacts				
3.1	*Land Owner Liaison*				
	• Legal	1	L.S.	$50,000	$50,000
	• Environmental Assessments and Engineering	1	L.S.	$100,000	$100,000

TABLE 2

REMEDIATION COST ESTIMATE FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE - RISK ASSESSMENT

Item	Activity	Quantity	Unit	Rate	Budget
3.2	*Impacted Soil* • Remediation and Restoration	1	L.S.	$500,000	$500,000
3.3	*Impacted Groundwater* • Remediation (short term and long term) • Pump and Treat • Bioremediation • Impact Controls	1	L.S.	$500,000 to $1,000,000	$500,000 to $1,000,000
3.4	*Compensation* • Compensation for Damages and Disruption	1	L.S.	$500,000	$500,000
				Sub-Total	**$1,650,000 to $2,150,000**
4.0	**Project Finalization**				
4.1	*Documentation*	1	L.S.	$40,000	$40,000
	• Regulatory Submissions and Documentation and Peer Review	1	L.S.	$20,000	$20,000
	• Record of Site Condition and Audit				
4.2	*Risk Assessment - Risk Management*	1	L.S.	$40,000	$40,000
	• Certificate of Property Use on Title • Risk Management Program				
				Sub-Total	**$100,000**
				Sub-Total	**$7,720,000 to $12,139,000**
				10% Contingency	**$772,000 to $1,213,900**
				Estimated Budget	**$8,492,000 to $13,352,900**

TABLE 3

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE - GENERIC STANDARDS

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
1.0	Environmental Assessment and Site Characterization				
1.1	*Phase I and II ESA*	1	L.S.	$150,000	$150,000
1.2	*Remedial Options Analysis and Landuse Planning* • Contractor Liaison • Reporting	1	L.S.	$50,000	$50,000
				Sub-Total	$200,000
2.0	On Site Remediation				
2.1	*Tender/Specification and Tendering*	1	L.S.	$40,000	$40,000
2.2	*Above Grade Structures* • Building Demolition	20,400	m^2	$25 to $35	$510,000 to $714,000
2.3	*Subgrade Structures*				
	• Excavation and Processing Concrete	18,000 to 24,000	m^3	$15	$270,000 to $360,000
	• Crushing and Stockpiling	18,000 to 24,000	m^3	$20	$360,000 to $480,000
	• Asbestos Piping Disposal	1	L.S.	$250,000	$250,000
	• Waste Materials	500 to 1,000	m^3	$200	$100,000 to $200,000
2.4	*Impacted Fill and Soil* • Excavate/Load/Transport/Disposal (assume 50% to 75% of fill removed)	34,500 to 51,750	m^3	$150	$5,175,000 to $7,762,500
2.5	*Wastewater and Groundwater Control*				
	• Pump/Treat/Discharge On Site	1	L.S.	$500,000	$500,000
	• Management of Clean Run-off During Project	1	L.S.	$25,000	$25,000

TABLE 3

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE - GENERIC STANDARDS

Item	Activity	Quantity	Unit	Rate	Budget
2.6	*Backfilling and Restoration*				
	• Place and Compact Stockpiled Concrete and Inert Material	18,000 to 24,000	m^3	$7.50	$135,000 to $180,000
	• Acquire/Transport/Place Clean Granular Fill	34,500 to 51,750	m^3	$30	$1,035,000 to $1,552,500
2.7	*Engineering and Environmental Monitoring*	1	L.S.	$200,000	$200,000
	• Engineering and Environmental Oversight				
	• Sampling				
	• Monitoring				
	• Inspection				
2.8	*Regulatory Approvals and Permits*	1	L.S.	$20,000	$20,000
2.9	*Miscellaneous*				
	• On Site Management and Operations Activities	1	L.S.	$50,000	$50,000
				Sub-Total	**$8,670,000 to $12,334,000**
3.0	**Off Site Impacts**				
3.1	*Land Owner Liaison*				
	• Legal	1	L.S.	$50,000	$50,000
	• Environmental Assessments and Engineering	1	L.S.	$100,000	$100,000
3.2	*Impacted Soil*	1	L.S.	$500,000	$500,000
	• Remediation and Restoration				

TABLE 3

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE - GENERIC STANDARDS

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
3.3	*Impacted Groundwater* • Remediation (short term and long term) • Pump and Treat • Bioremediation • Impact Controls	1	L.S.	$500,000 to $1,000,000	$500,000 to $1,000,000
3.4	*Compensation* • Compensation for Damages and Disruption	1	L.S.	$500,000	$500,000
				Sub-Total	**$1,650,000 to $2,150,000**
4.0	**Project Finalization**				
4.1	*Documentation*				
4.1.1	*Regulatory Submissions and Documentation and Peer Review*	1	L.S.	$40,000	$40,000
4.1.2	*Record of Site Condition and Audit*	1	L.S.	$20,000	$20,000
				Sub-Total	**$60,000**
				Sub-Total	**$10,580,000 to $14,744,000**
				10% Contingency	**$1,058,000 to $1,474,400**
				Estimated Budget	**$11,638,000 to $16,218,400**

TABLE 4

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE - RISK ASSESSMENT

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
1.0	Environmental Assessment, Site Characterization, and Risk Assessment				
1.1	*Phase I and II ESA*	1	L.S.	$150,000	$150,000
1.2	*Risk Assessment* • Human Health, Ecological, and Toxicological Data Assessment • Pre-submission to MOE • Risk Assessment	1	L.S.	$150,000	$150,000
1.3	*Remedial Options and Risk Management Strategy*	1	L.S.	$100,000	$100,000
				Sub-Total	$400,000
2.0	On Site Remediation				
2.1	*Tender/Specification and Tendering*	1	L.S.	$40,000	$40,000
2.2	*Above Grade Structures* • Building Demolition	20,400	m^2	$25 to $35	$510,000 to $714,000
2.3	*Subgrade Structures*				
	• Excavation and Processing Concrete	9,000 to 12,000	m^3	$15	$135,000 to $180,000
	• Crushing and Stockpiling	9,000 to 12,000	m^3	$20	$180,000 to $240,000
	• Asbestos Piping Disposal	1	L.S.	$250,000	$250,000
	• Waste Materials	500 to 1,000	m^3	$200	$100,000 to $200,000
2.4	*Impacted Fill and Soil* • Excavate/Load/Transport/Disposal (assume 25% to 50% of fill removed)	17,250 to 34,500	m^3	$150	$2,587,500 to $5,175,000

TABLE 4

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY
PROPERTY USE - RISK ASSESSMENT

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
2.5	*Wastewater and Groundwater Control*				
	• Pump/Treat/Discharge On Site	1	L.S.	$250,000	$250,000
	• Management of Clean Run-off During Project	1	L.S.	$25,000	$25,000
2.6	*Backfilling and Restoration*				
	• Place and Compact Stockpiled Concrete and Inert Materials	9,000 to 12,000	m^3	$7.50	$67,500 to $90,000
	• Acquire/Transport/Place Clean Granular Fill	34,500	m^3	$30	$1,035,000
2.7	*Engineering and Environmental Monitoring*	1	L.S.	$150,000	$150,000
	• Engineering and Environmental Oversight				
	• Sampling				
	• Monitoring				
	• Inspection				
2.8	*Regulatory Approvals and Permits*	1	L.S.	$20,000	$20,000
2.9	*Miscellaneous*				
	• On Site Management and Operations Activities	1	L.S.	$25,000	$25,000
				Sub-Total	**$5,375,000 to $8,394,000**
3.0	Off Site Impacts				
3.1	*Land Owner Liaison*				
	• Legal	1	L.S.	$50,000	$50,000
	• Environmental Assessments and Engineering	1	L.S.	$100,000	$100,000
3.2	*Impacted Soil*	1	L.S.	$500,000	$500,000
	• Remediation and Restoration				

TABLE 4

REMEDIATION COST ESTIMATE FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE - RISK ASSESSMENT

Item	*Activity*	*Quantity*	*Unit*	*Rate*	*Budget*
3.3	*Impacted Groundwater* • Remediation (short term and long term) • Pump and Treat • Bioremediation • Impact Controls	1	L.S.	$500,000 to $1,000,000	$500,000 to $1,000,000
3.4	*Compensation* • Compensation for Damages and Disruption	1	L.S.	$500,000	$500,000
				Sub-Total	**$1,650,000 to $2,150,000**
4.0	**Project Finalization**				
4.1	*Documentation*	1	L.S.	$40,000	$40,000
	• Regulatory Submissions and Documentation and Peer Review	1	L.S.	$20,000	$20,000
	• Record of Site Condition and Audit				
4.2	*Risk Assessment - Risk Management* • Certificate of Property Use on Title • Risk Management Program	1	L.S.	$40,000	$40,000
				Sub-Total	**$100,000**
				Sub-Total	**$7,525,000 to $11,044,000**
				10% Contingency	**$752,500 to $1,104,400**
				Estimated Budget	**$8,277,500 to $12,148,400**