Letter from Linden Park Parent.

PLEASE don't close Linden Park and Today's Family Daycare. It will be the biggest mistake that you have ever made. Linden Park and Today's Family provides Summer Care, March Break, Christmas Holidays and P.D. days. The daycare is open from 7:00 a.m. until 6:00 p.m. The school and daycare work together for parents of children with special needs and for working parents. The school and daycare offer support like you would never receive anywhere else. The children receive healthy snacks and a wonderful environment to learn.

Another one of my biggest concerns is my daughter has a feed tube. There is not a nurse in schools so if there is a problem I have been trained in a course on how to put in the tube if it comes out. My daughter needs to be close to home. If the school moves she will be very far away and it will take too long to get there in case of emergency. The equipment I very expensive and a trained person needs to be close. I can't stress enough how taking children out of their neighborhood is hurting them. People buy houses close to a school for a reason. Many of my neighbors have little ones at home that will be attending Linden Park very soon. PLEASE DON'T HURT OUR CHILDREN.

Linden Park is in the perfect location. It is o convenient for families of young children. We have a recreation centre and school all within walking distance. A new school will not have that.

The property that Linden Park sits on could be used for a new Kindergarten to Grade 8 school. The location is absolutely perfect. We are in a very special spot and that land should never be sold. It is a shame to waste land that was a gift.

The committee needs to make that right choice. KEEP LINDEN PARK OPEN.

Options--Staff, 6, 11, 7, 23, 22, 32	Jan. 24,2014							
		HWDSB						
A New School Construction/Additions/FDK	Status Quo	Staff Opt.	Arc Opt. 6	Arc Opt. 11	Arc Opt. 7	Arc Opt. 23	Arc Opt. 22	Arc Opt. 32
New School Construction	$0	$10,300,000	$0	$12,770,000	$0	$0	$7,400,000	$12,000,000
Full Day Kindergarten	$0	$1,660,000	$2,130,000	$2,610,000	$1,650,000	$945,000	$2,135,000	$950,000
Additions	$0	$1,500,000	$750,000	$2,000,000	$250,000	$250,000	$1,500,000	$750,000
Projected Total		$13,460,000	$2,880,000	$17,380,000	$1,900,000	$1,195,000	$11,035,000	$13,700,000
Ministry Funding (1)								
Potential Cap. Funding--pending Min. approval	$0	$11,800,000	$750,000	$14,770,000	$250,000	$250,000	$8,900,000	$12,750,000
Approved Full Day Kindergarten	$0	$1,660,000	$2,130,000	$2,610,000	$1,650,000	$945,000	$2,135,000	$950,000
Projected Total	$0	$13,460,000	$2,880,000	$17,380,000	$1,900,000	$1,195,000	$11,035,000	$13,700,000
B Allowance to Meet Ministry Benchmark (2)								
Projected Total	$4,500,000	$1,500,000	$2,700,000	$1,800,000	$3,300,000	$3,300,000	$3,000,000	$2,400,000
Renewal Costs--High & Urgent--1-5 Yrs. (3)								
Projected Total	$10,115,187	$4,127,556	$7,069,039	$4,800,578	$8,092,388	$8,092,388	$6,860,386	$4,591,906
Remaining Renewal Costs--Not High &								
Urgent--6+ years (4) Projected Total	$21,522,248	$8,995,975	$12,145,913	$6,630,296	$14,994,386	$14,994,386	$13,546,689	$11,570,226
Total Estimated Renewal Costs	$36,137,435	$14,623,531	$21,914,952	$13,230,874	$26,386,774	$26,386,774	$23,407,075	$18,562,132
Less Proceeds of Disposition (5) Proj.Total	$0	$6,149,000	$6,149,000	$6,149,000	$3,608,000	$3,608,000	$6,143,500	$6,143,500
Balance to Fund by HWDSB	$36,137,435	$8,474,531	$15,765,952	$7,081,874	$22,778,774	$22,778,774	$17,263,575	$12,418,632
Total Cost of Option (A + B)	$36,137,435	$21,934,531	$18,645,952	$24,461,874	$24,678,774	$23,973,774	$28,298,575	$26,118,632
C Annual Administration Savings (6) Proj.Total	$0	$542,207	$542,929	$695,276	$361,925	$361,925	$516,336	$516,805
Annual Operational Savings (7) Projected Tot	$0	$543,122	$601,679	$684,860	$389,082	$389,082	$608,039	$874,555
D Annual Transportation Costs(8) Projected Tot	$346,500	$423,500	$500,500	$616,000	$462,000	$385,000	$346,500	$346,500
Total--Administration + Operational Savings		$1,085,329	$1,144,608	$1,380,136	$751,007	$751,007	$1,124,375	$1,391,360
Annual Savings (admin.+ oper. - transport.)		$661,829	$644,108	$764,136	$289,007	$366,007	$777,875	$1,044,860

John-Paul Danko, P. Eng.
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Attention: **Dr. John Malloy – Director of Education**
Regarding: **Hamilton Central Mountain ARC – Financial Analysis of ARC Options**

Dear Dr. Malloy,

As I am sure you are aware, under section 7.1.2 of the Central Mountain ARC Terms of Reference, the ARC is required to consider the financial effects of school closures including capital implications, the savings expected to be achieved, revenue implications and additional expenditures.

It is the responsibility of the HWDSB to provide financial information to the ARC for their review, and ultimately to the Trustees for their final decision.

However, the Financial Summaries provided to the ARC for the Accommodation Review Options (ARC Options) currently under discussion do not contain the basic level of financial analysis required of public institutions to ensure the responsible expenditure of public funds.

A detailed net present value (NPV) financial analysis of multiple competing options is the standard level of care considered acceptable to public institutions such as school boards, municipalities and the Province of Ontario when evaluating the rehabilitation versus replacement of public infrastructure projects.

A net present value financial analysis is necessary to accurately assess the true cost or savings of various competing options that include capital expenditures and/or projected savings over time.

It is not an acceptable level of due diligence to simply consider the static costs of various options as currently presented in the Financial Summaries without considering the effect of the discount rate of capital over the lifecycle of the various options and the total review period.

The currently accepted net present value discount rate for publicly funded infrastructure projects in the Province of Ontario is 4.3%. Public infrastructure projects are typically evaluated over a 75 year review period, with 50 years considered a minimum while some more rigorous analysis use 100 years and beyond.

Without a detailed net present value financial analysis the ARC and the Trustees do not have the basic financial tools required to reach an informed decision.

The following are five examples showing how a detailed net present value financial analysis would significantly change the financial effects required to be considered under the terms of reference as currently under review by the Central Mountain ARC.

1. The financial costing provided to the ARC under Section B of the Financial Summaries currently assumes that all renewal costs will be invested at year zero.

This is an inaccurate assumption that unfairly penalizes accommodation review options such as the Status Quo and Option 22 that rely heavily on the use of existing infrastructure.

As noted in Section B, the renewal costs would in fact be invested over time, not at year zero.

Schedule B of the Financial Summaries states that the high and urgent needs improvements are scheduled to be completed in 1 to 5 years with the remainder of the renewal costs scheduled to be invested in 6 or more years.

Therefore, a net present value financial analysis is required to adequately evaluate these renewal costs.

2. The financial costing provided to the ARC assumes that 100% of FCI needs will be invested.

Again, this is an inaccurate assumption that unfairly penalizes accommodation review options, such as the Status Quo and Option 22 that include more extensive use of existing infrastructure rather than new builds.

It is not reasonable to assume that every single repair and maintenance need identified in the FCI reports would be implemented.

Further, many systemic errors have been identified in the FCI costing provided, some that would account for swings of hundreds of thousands of dollars.

A net present value financial analysis is necessary to provide a sensitivity analysis by including a variable level of FCI investment from 50% to 100%, thereby providing a much more accurate evaluation of options, especially options that require extensive renovations and repairs to existing infrastructure.

3. The savings projected for each ARC Option detailed in Section C of the Financial Summaries do not reflect the actual net present value savings that would be projected over the life cycle of each option.

Each ARC option and each school included within each option has a different life cycle.

The projected savings provided to the ARC are an annuity that only remains constant over the life cycle of each school included with each option.

It is grossly inaccurate to simply multiply the projected savings by the number of years under review.

Further, this does not take into account the fundamental accounting principal of applying a discount rate for costs or savings that occur over time.

A net present value financial analysis is necessary to account for the life cycle of each school and each option and accurately predict the actual projected savings as a net present value.

4. The transportation costs detailed in Section D of the Financial Summaries do not reflect the actual net present value transportation cost projected over the full review period.

Transportation costs are a structural annuity that would be projected over the entire net present value review period.

Therefore, a net present value financial analysis is necessary for a meaningful assessment of the projected transportation costs over a minimum review period of 50 years, possibly extending to 75 to 100 years or beyond.

5. The second cycle replacement cost of each school is not taken into consideration in Section A of the Financial Summaries.

Every school currently under review has a different life cycle. Older schools such as Armstrong, and Queensdale are well constructed and would be expected to have a lifespan of 75 to 100 years or more. Newer schools, such as Cardinal Heights and Pauline Johnson would be expected to have a shorter life span of 30 to 50 years.

Each school under review will require a second cycle replacement at the end of its projected residual life span.

The second cycle replacement cost is typically the full cost of a brand new replacement structure.

Including second cycle replacement costs would have a significant impact on the financial implications of the various ARC Options currently under review.

A net present value financial analysis is necessary to evaluate the financial implications of the future replacement costs of each school under review.

Considering the implications described above, I request the following action by the HWDSB:

1. The HWDSB immediately hire an independent consulting engineering firm or accounting firm to perform a detailed net present value financial analysis of all Accomodation Review Options currently under consideration including the Status Quo, the HWDSB Staff Option and all ARC Options currently in discussion.

2. The HWDSB postpone all further deliberation and selection of Accommodation Review Options by the Central Mountain ARC until a complete net present value financial analysis report has been completed and delivered to the ARC and the Trustees for their review.

Conclusion

Thank you for taking the time to address my concerns. I look forward to your detailed response to the two action points requested. I believe that these are reasonable requests that could be acted upon by the HWDSB given the will to do so.

Sincerely,

John-Paul Danko, P. Eng.
Senior Project Manger
ELLIS Engineering Inc.

Also Copied:
Monique Taylor – MPP, Hamilton Mountain
Kathleen Wynne – MPP, Premier
Liz Sandals – MPP, Minister of Education
Scott Duvall – Councillor, City of Hamilton

Michael Prendergast – HWDSB, Superintendent of Student Achievement
Jessica Brennan – Trustee, Chair
Lillian Orban – Trustee, Ward 7 Central Mountain
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Attention: **Dr. John Malloy – Director of Education**
Regarding: **Hamilton Central Mountain ARC –**
FCI and Financial Summary Errors and Omissions

January 26th, 2014

Dear Dr. Malloy,

I am the Senior Project Manager at ELLIS Engineering Inc. and a Professional Engineer specializing in construction cost estimating and the financial analysis of rehabilitation and replacement options for public infrastructure projects throughout Ontario.

I am currently the Contract Administrator for the Burgoyne Bridge Structure Replacement in St. Catharine's, a public infrastructure project that is approximately three times the scope and value of all the work required for the Central Mountain schools combined.

I am also currently the Senior Project Manager at ELLIS Engineering for the St. Lawrence Seaway Marine Quay Rapid Replacement project in Welland - a $150 million dollar heavy civil public infrastructure renewal contract.

As I am sure you are aware, the HWDSB has a duty of care to ensure the responsible expenditure of public funds. A large part of that duty of care is to ensure that the Central Mountain ARC and the Trustees are able to make decisions that are based on accurate and current financial information.

Therefore, I would like to take this opportunity to outline a brief summary of several significant errors and omissions that our community has discovered in the FCI and Financial Summary construction cost estimates provided by the HWDSB to the Central Mountain ARC for their review and consideration:

1. There is no correlation between the volume of capital invested in a particular school over the past 10 years and the amount of work required over the next 10 years.

For example, the HWDSB has invested $2,600,131 at Queensdale since 2005.

This represents an investment of 44.5% of the entire replacement value of the school.

In the construction industry, a rehabilitation investment in the order of 50% of the replacement cost is considered a major rehabilitation and would be expected to restore a structure to nearly new condition.

However, the current Facilities Condition Index (FCI) of Queensdale is listed at 55.17%, meaning that right now the HWDSB is assigning $3,224,866 of repairs to Queensdale.

Clearly, this is impossible as Queensdale would have to have had an FCI of 100% or higher as recently as 2005.

If we compare this to the current FCI at a very similar school - Linden Park which has a current FCI of 44.78% and we know that Linden Park has only had $36,958 of repairs invested since 2005, we can conclude that in 2005 Queensdale would also have also had an FCI in the order of 45%.

If Queensdale had an FCI in the order of 45% in 2005, the FCI would have been reduced to 0% with the $2,600,131 invested, matching the industry standard outcome of a major rehabilitation.

Therefore, we can conclude that current FCI the projected 10 year FCI and the Financial Summary construction costs for Queensdale are grossly inaccurate.

We can also conclude that there are similar errors with the FCIs for other schools, although possibly to a lesser magnitude.

2. There are significant unit price errors throughout the FCI and Financial Summary costs.

For example, Queensdale and Linden Park are assigned construction costs of $500,939 and $520,200 for the "Replacement of Roof Coverings". With roof areas of approximately 2,478 m^2 and 2,624 m^2 respectively, this represents a construction cost unit price for the "Replacement of Roof Coverings" of approximately $200 per m^2 for both Queensdale and Linden Park.

However, the "Replacement of Roof Coverings" cost assigned to Armstrong is only $286,251.

With a roof area of approximately 3,340 m^2 this represents a construction cost unit price for the "Replacement of Roof Coverings" of approximately $85 per m^2 for Armstrong.

All three roofs are similar construction. Further, the roof at Armstrong is known to be currently leaking and in need of immediate replacement.

Therefore, the construction cost unit price should be similar for all three schools, with Armstrong assigned a slightly higher unit price due to the known poor condition of the existing roof and additional site access costs for a three story building.

If the Queensdale / Linden “Replacement of Roof Coverings” unit price of \$200 per m^2 was assigned to Armstrong, this would increase the cost of roof replacement at Armstrong to \$668,000 – making this single item *the most costly* high and urgent need repair for *all* of the Central Mountain schools currently under review.

Alternatively, changing the unit price for this single item at Queensdale and Linden Park from \$200 per m^2 to \$85 per m^2 would reduce the high and urgent needs required by 28.4% and 18.5% for Queensdale and Linden Park respectively.

In the case of Queensdale, this single error represents a full 5% difference in the calculated FCIs.

3. The exact same lump sum unit prices for various items have been assigned to different schools that have a drastically different scope of work.

For example, the same lump sum unit price of \$71,563 has been assigned to both Armstrong and Queensdale for the “Replacement of Wall Finishes”.

However, Armstrong has a gross floor plan area nearly double that of Queensdale (5,401m^2 to 2,805m^2 respectively).

Similarly, the same lump sum unit price of \$57,250 for the “Replacement of Exterior Doors” has been assigned to Armstrong, Queensdale and Eastmount Park despite the fact that all three have very different main floor configurations.

Further, the exterior doors at Queensdale have already been replaced, however the FCI reports and Financial Summaries do not reflect the actual work completed.

This is clearly an error where the same lump sum unit prices have been assigned to the same line items at different schools without consideration to the actual scope of work required at the individual schools.

This type of error is systemic throughout the construction cost estimates provided by the HWDSB to the Central Mountain ARC.

4. There are obvious decimal point errors where item costs have been entered incorrectly.

For example, the item “Study Branch Wiring” is listed at $71,563 for Franklin Road and the same item “Study Branch Wiring” is listed at $7,157 for Armstrong.

This single order of magnitude decimal place error causes the cost of this item to be recorded ten times higher (or 1000% higher) at Franklin Road than at Armstrong.

5. The exact same lump sum unit prices have been assigned to various construction cost items that have a completely different scope of work.

For example, at Armstrong “Replacement of Domestic Water Distribution” and “Replacement of Branch Wiring” have the same cost of $143,125. These are completely different construction items and must have their own individual costs.

At Cardinal Heights, the items “Replacement Interior Stair Construction”, “Replacement Terminal and Package Units”, “Replacement Original Building Standard Foundations”, “Replacement Other Cooling Generating Systems”, “Replacement Original Building Lighting Equipment” and “Replacement Floor Finishes – Concrete Floor” all have the exact same cost of $10,200. These are all drastically different construction items that must have their own individual costs.

At Ridgemount, the items “Replacement Heat Generating Systems”, “Replacement Domestic Water Distribution” and “Replacement Standard Foundation” also cost $10,200.

At Queensdale, the items “Replacement Ceiling Finishes” and “Replacement Playing Field” both cost exactly $57,250 even though these are drastically different items. At Pauline Johnson, the item “Plumbing Fixtures” also costs $57,250.

At Franklin Road, the items “Replacement Exterior Door Hardware” and “Replacement Fencing and Gates” both cost $28,625. Again, both these items have a very different scope of work.

These are all major, systemic lump sum unit price errors found throughout the FCI and Financial Summary costing.

The importance of these errors cannot be overstated – each lump sum construction cost must be accurate to the item scope of work and location to which it is assigned. Without an extensive investigation, it is impossible to know the full magnitude of this error, but given the sheer volume of lump sum unit price errors discovered, it would be reasonable to conclude that they would have a significant impact on both the FCI rankings and the Financial Summaries currently provided to the Central Mountain ARC.

Implication of the Financial Errors and Omissions Outlined

The issues outlined in this letter have been expressed to the Central Mountain ARC and HWDSB staff on several occasions through written and verbal correspondence, as far back as the first Public Consultation Meeting on October 8th, 2013.

No formal response has been provided and no action has been taken by either the Central Mountain ARC or HWDSB staff, therefore, we are writing to you directly.

The Central Mountain ARC has stressed several times, as recently as their Working Group Meeting on January 21st, 2014 their desire to not close schools with favorable FCIs or schools that have had significant recent repairs.

This is a specific area of concern for several influential members of the Central Mountain ARC.

Further, the Central Mountain ARC has repeatedly demonstrated a strong influence towards the bottom line Financial Summaries provided by the HWDSB.

Through recorded votes, various Pupil Accommodation Review Options have already been eliminated in part because they were not seen by the ARC to be financially favorable.

These conclusions were discussed and reached by the ARC despite the fact that the rejected options were projected to be only marginally more costly than competing options.

The Central Mountain ARC has proven a cost differential threshold used to accept or reject Accommodation Review Options that is well within the margin of error outlined above.

Therefore, we know for certain that the level of error present in the FCIs and Financial Summary construction costs presented to the ARC *will have a direct influence on the Central Mountain ARC's final recommendation.*

If it is known that these demonstrated errors have influenced the recommendation of the Central Mountain ARC, the Trustees cannot themselves be in a position to make an informed decision based on the ARC's final report with a reasonable level of care.

Considering the implications described above, I request the following action by the HWDSB:

1. The HWDSB immediately suspend the Central Mountain ARC, as the ARC cannot reasonably be expected to reach an informed decision based on financial information known to contain significant errors and omissions.

2. The HWDSB hire an independent engineering consultant to review and update all construction cost estimates completed over the last ten years, including on site physical inspections and construction cost estimating by an engineer licensed in the Province of Ontario with experience in similar work.

3. Upon completion of the independent engineer's final report, the HWDSB reconvene the Central Mountain ARC and provide the ARC with updated FCI's and Financial Summaries in accordance with the engineer's findings and recommendations.

Thank you for taking the time to address my concerns. I look forward to your detailed response to the three action points requested. I believe that these are reasonable requests and could be acted upon by the HWDSB given the will to do so.

Sincerely,

John-Paul Danko, P. Eng.
Senior Project Manager
ELLIS Engineering Inc.

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