

Updated Executive Summary

To: Board of Education
Fr: Matt Gibson
Re: **August 11, 2010 Agenda Item 1 – Pending Reports, Action to Retain or Remove Stadium Light Poles at Brookfield East and Discussion of Next Steps**

Background – The four poles that light the Brookfield East football stadium were recently recalled by the U.S. Consumer Product Safety Commission. As follow up, testing has been completed by two engineering firms, legal and liability research has occurred, disruption factors from removal have been identified, and replacement costs have been projected. Based on these reports, Board of Education action is projected on August 11 to either retain or remove the light poles. A retention decision could be for one season (with replacement in summer 2011) or a longer period pending periodic engineering checks. A removal decision would be implemented immediately (provider has been identified) and would impact one school year (with replacement in summer 2011). Discussion of next steps following either decision can occur at a later time.

Suggested Criteria and Summary of Key Points for Decision Making –

Results of Testing –

Valmont – August 6 (testing reports are available)

- All four of the base-plate-to-pole-shaft weld connection areas were found to be acceptable and free of any defects.
- Engineer feedback was that weld connections with round poles (East poles) generally show less fatigue than poles with hexagon or octagon shapes (due to their multiple sides and corners).
- Recommendation that the grouting around the base plate be removed and that a drain hole be drilled.
- Recommendation that the poles continue to be inspected (annually or after a major wind event) and be visually checked monthly.
- There is no guarantee that the poles will remain stable for the future.

Ambrose – August 10 (testing reports are available)

- Engineer feedback was that twelve foot foundation exceeds the ten foot standard.
- Engineer feedback was that 12 lamps/pole yields less weight than the 24-lamp/pole capacity of the poles.
- No defects were observed in the exterior welds of any of the poles.
- While no cracks were observed in the weld material, a small section of galvanized coating was found to have chipped away in several sections on all four poles.
- Recommendation that the galvanized coating chips be cleaned, primed, and recoated with a galvanic paint.
- In summary, the poles are structurally sound with no recommended repairs or modifications at this time.
- Predicting the service life of the poles is outside the scope of the report and would be extremely unpredictable on structures that are subject to fatigue loading.

Legal and Liability Research Should a Pole(s) Fail (facts and analysis are available) –

- There is minimal exposure to a products liability lawsuit.
- District liability coverage (up to \$4 million) would be sufficient to cover any property damage should a pole(s) fall.
- District liability exposure could be significant should an individual(s) be injured or killed by a fallen pole. For example, a plaintiff could file a variety of tort claims including negligence, gross negligence, and wrongful death.
- While district liability insurance would cover a negligence claim, the \$4 million coverage may or may not be sufficient to cover damages.
- While the testing reports are currently clean, the engineering firms will not guarantee the stability of the poles into the future.

Disruption Factors –

- If the poles are retained for at least one school year, there is no disruption to evening use of the stadium field.
- If the poles are removed immediately, home varsity football games would need to be played at 5pm on Friday nights or Saturday afternoons, which is possible but difficult to schedule and undesired if the disruption can be avoided. For example, officiating crews would need to arrive an hour early by WIAA rules and many officials could not be available at 4pm. Also, home JV football games would need to be played at 5pm on Thursday nights or Saturday afternoons.

Replacement Costs and Budget –

- The projected cost of replacing the poles is \$200,000 to include the cost of dismantling and reassembling the bleachers that surround one of the poles.
- This projected cost is the same regardless of retention or removal, with replacement projected for summer 2011 in either case.
- Based on bankruptcy of the manufacturer of the poles, there is no provision to file a claim to attempt to recoup expenses from them for removal or replacement of the poles.
- It is not too late to attempt to recoup some expenses from the distributor of the poles.
- There is no district budget to replace the poles in 2010-2011. The replacement could be budgeted for 2011-2012 to occur in summer 2011.

Brief Analysis – The results of the testing provide confidence that the poles are currently safe and the recommendations from the engineer provide measures that will be taken to provide confidence of continuing safety for 2010-2011. Balancing these levels of confidence are the potential exposures to the district referenced in the legal and liability research. While not a guarantee, these exposures will be lessened by deploying the monthly visual inspections and contracting for professional testing again should a major wind event occur. Based on a call to the engineer at Valmont, a major wind event for most of the country is defined at gusts of 70MPH or higher.

Recommended Board Action – **That, given the (clean) results of the testing in response to the recall notice, and the implementation of recommended further measures to provide continuing confidence levels of safety, the Board of Education approves retaining the four stadium light poles at Brookfield East for the 2010-2011 school year.** MG/eastpoles81010