970 Madison • Oak Park • Illinois • 60302 • ph: 708.524.3000 • fax: 708.524.3019 • www.op97.org

TO:

Dr. Albert G. Roberts, Superintendent

FROM:

Therese M. O'Neill, Assistant Superintendent for Finance & Operations

RE:

**Longfellow Field** 

DATE:

March 13, 2012

As you know, I have been scheduling a pre-meeting with each principal (Beye, Holmes & Longfellow), with their respective PTO leadership, Altamanu representatives (along with their civil engineering partner – Ben Ahring from Manhard Consulting Engineers), Norman Lane and me to strategize each school's first community meeting specific to the anticipated playground upgrade scheduled for the summer of 2012.

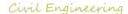
At my meeting on Wednesday, February 29, 2012, at Longfellow, not only did the PTO leadership comment on the condition of the Longfellow Field, but the consultants also described some safety concerns. Following that meeting and, with your authority, I asked for a more comprehensive assessment and attached is the report prepared by the civil engineer along with the cost estimate. The civil engineer's estimate did not include a cost for plantings (beyond grass seed) underneath the trees and it was suggested that Altamanu might be able to offer some guidance. Also attached is their recommendation, along with a cost estimate.

In total this project, if we accept Altamanu's landscape recommendations, would cost in the range of \$125,000 - \$183,600. As we have previously discussed, one possible solution to finding the financial resources to address this problem now is using Medicaid dollars. We have received over \$400,000 of Medicaid money thus far this year and created a budget of only \$180,000, thus rendering a surplus of \$220,000. Secondly, we built a 2011-12 budget of \$554,101 for the repayment of unused 2010-11 Medicaid money but, following Medicaid's audit, were billed only \$409,040, adding another surplus amount of \$145,061.

I am recommending that we commission the landscape architect to prepare bid specifications and go out to bid for this work in conjunction with the other work associated with the three playgrounds for the summer of 2012, or, if need be, as a separate construction project. This matter was also discussed at the FAC meeting this past evening and there was support for resolving this now, rather than later.

This would return to the Board for formal approval at their April 10, 2012 meeting.

# Attachments (3)



Surveying

Water Resources Management

Water & Wastewater

Engineering

Construction Management

Environmental Sciences

Cowhey Manhard

A MANHARD CONSULTING DIVISION

March 3, 2012

Ms. Therese M. O'Neill
Assistant Superintendent for Finance & Operations
Oak Park Elementary School District #97

RE: Condition of field at Longfellow Elementary School, Oak Park

### Dear Therese:

This letter summarizes my site visit to Longfellow Elementary School on March 3 to inspect the condition of the open field. This letter is in conjunction with the memo from John Mac Manus of Altamanu, dated March 2, 2012. Below are my findings.

Upon review of the site, I agree with the Altamanu letter, stating safety concern for the field.

### **Summary of Findings:**

The field has multiple issues: Soil settlement, inadequate drainage, safety concerns and lack of grass. With these issues combined, the field usage is at a minimum while the potential for injury is increased.

#### Soil Settlement:

The existing field has substantial settlement. There are two types of settlement that appear in the field. The first type is random depressions that occur throughout the field. These spots typically occur for two reasons, improper soil compaction during construction or the degrading of foreign materials, such as collapsed housing debris, underneath the soil. Given the history of the site explained in the Altamanu letter, it stands to reason that the latter is the issue. It also seems likely that improper



compaction of the soil occurred during the filling of the demolished houses causing many additional depressions. It is worth noting that all of the settlement issues occur in the proximity of the old house foundations. There does not appear to be any settlement issues where the back yards of the old houses were.

The second type of settlement is utility trench settlement. This settlement leads to the linear depressions in the soil over the utility trenches. This is typically caused by improperly compacted soil over a utility and is often common.

Cowhey Manhard

700 Springer Drive • Lombard, Illinois 60148

tel: (630) 691-8500 • fax: (630) 691-8585 • www.manhard.com

## Drainage:

The field does not drain. The storm sewers are completely compacted with debris, allowing no water to drain into them. To check the density (or compaction) of the debris, I removed one of the inlet lids and stood inside the storm structure. My weight did not compact the debris any further.



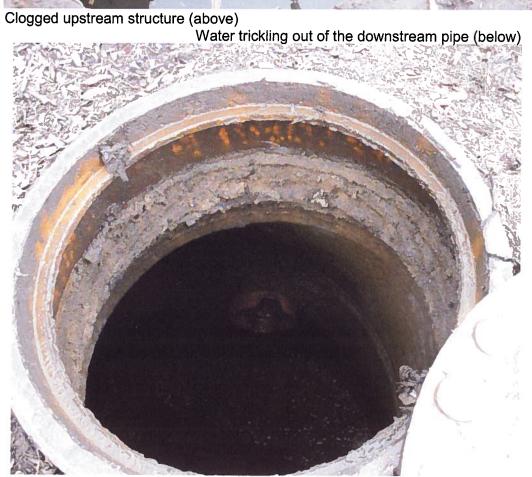




It appears that minor swales were constructed to drain water toward the inlets located within the field. These swales give the appearance of utility trench settlement areas. When a field has clogged drainage structures, water collects in the swales. Over time these swales becoming muddy, the grass dies off and the soil starts to erode, accentuating the depressional area. The eroded soil ends up in the structure and the water continues to pond, worsening the field condition. Eventually the depressed areas become lower than the storm structures and water ponds in the field.

In addition, I believe there is a collapsed pipe or severely clogged pipe between the inlet located along the western edge of the playground (in the asphalt) and the main sewer structure which conveys the water south along Kenilworth. The inlet has approx. 7.5" of water standing on top of compacted debris, which is over a foot deep. The downstream pipe has water barely trickling out of it. If the pipe is clogged, simply cleaning it should greatly improve the situation. However, if the pipe is collapsed, either due to the age of the pipe or from a tree root that has broken thru the pipe, the pipe will need to be replaced. (See images, next page)





## Safety - Field:

There are two structures that have exposed metal frames. These exposed frames pose a safety hazard to users of the field.



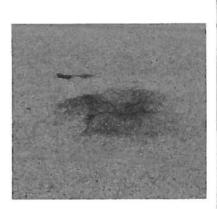
In addition to these exposed structures, the settlement throughout the field increases the chances for tripping and falling due to the sudden and erratic changes in elevation. These items pose a potential liability to the School District.

### Safety - Asphalt:

In trying to better understand the drainage of the field, other storm structures were investigated. As part of that investigation, two potential safety issues were noted in the asphalt area between the school and the field. The first is the storm structure located west of the 8W door to the school. The structure has bricks that have severely deteriorated. This will eventually lead to the collapse of the structures frame and grate. In the picture you can see the bricks on the right have deteriorated to rubble while the bricks on the left remain intact.



The other asphalt issue is a small upheaval in the asphalt. There are many reasons this could have occurred but they are typically caused by water freeze thaw cycles. Eventually this bump will burst.





#### Recommendations:

Ideally, the old foundations and debris is removed and hauled off. However, this can be a costly procedure; especially if soil testing is required (I can discuss the School District's options for soil testing if desired).

In lieu of removing the debris, it will be more cost efficient to use a turf reinforcement mat. These mats are a geotextile mats that improve the tensile strength of the soil; i.e. they reduce settlement. In additions, the soil on the surface needs to be replaced with a better soil mix that will help improve the growing of grass. The area should be graded so water drains to the edges of the field and storm structures are not located within the field. Storm structures shall be adjusted so rims are flush with the ground.

Regarding the clogged or collapsed pipe:

Remove the debris and water from the existing storm structure where water is ponding. Use a plumbers snake to try and dislodge any clogged material in the pipe. Once complete, place a steady stream of water (hose or multiple buckets) of water in the cleaned structure and check the downstream structure to determine if the same amount of water is coming out as is going in. This should help explain if the pipe was clogged or if there is a larger issue, such as a collapsed pipe, to deal with.

Regarding the asphalt bump:

Remove and repave the bump area.

If you have any questions or would like to discuss the field further, feel free to contact me at 630-925-1113.

Sincerely, Cowhey Manhard, Ben J. Ahring, P.E., LEED AP



#### ENGINEER'S CONCEPTUAL OPINION OF PROBABLE COST OAK PARK ELEMENTARY SCHOOL DISTRICT 97 LONGFELLOW ELEMENTARY SCHOOL FIELD 7-Mar-12

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENSION	
Conce	ptual Design Cost opinion				35	
1	Mobilization	1	LUMP SUM	\$3,000.00	\$3,000.00	
2	Silt Fence (Wire Back)	780	LF	\$2.50	\$1,950.00	
3	Tree Protection Fence	400	LF	\$2.25	\$900.00	
4	Inlet Protection Baskets	6	EACH	\$200.00	\$1,200.00	
5	Till and regrade existing soil - 1' depth	1,670	CY	\$15.00	\$25,050.00	
6	Import Topsoil - 1' depth	1,670	CY	\$25.00	\$41,750.00	
7	Storm Sewer Allowance	1	LUMP SUM	\$20,000.00	\$20,000.00	
8	Seeding Class I	1.05	ACRE	\$3,500.00	\$3,675.00	
			SUBTOTAL		\$97,525.00	
ALTER	NATES					
1	High Strength Fabric Myrafi RS380I (Assume over Trenches only: 800 L.F 10' wide) OR	900	SY	\$5.00	\$4,500.00	
2	High Strength Fabric Myrafi RS380I (Assume over old Building Foundations)	2400	SY	\$5.00	\$12,000.00	
SOFT COST  NPDES Permit, MWRD Permit, Engineering Plans					\$8,000.00	
CONTI	NGENCY @20%			include based on Alternates selected		

**COST RANGE** 

\$125,000.00 - \$140,000.00

Prepared By:

Cowhey Manhard 700 Springer Drive Lombard, Illinois 60148

Estimate does not include: Landscape plantings Land surveying

NOTE: This Engineer's Opinion of Probable Cost is made on the basis of Engineer's experience and qualifications using plan quantities and represents Engineer's best judgment as an experienced and qualified professional engineer generally familiar with the construction industry. However, since the Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, or over quantities of work actually performed, Engineer cannot and does not guarantee that proposals, bids or actual Construction Cost will not vary from Opinions of Probable Cost prepared by Engineer. This Opinion of Probable Construction Cost is limited to those items stated herein and does not include permit fees, recapture costs, consultant fees, landscaping, dewatering, maintenance, bonds or the like.



landscape architecture & urban design 1700 w. irving park road, suite 202 Chicago, Illinois 60613 773.528.7492 phone info@altamanu.com

To:

Therese O'Neill, Assistant Superintendent - Oak Park District 97

From: Josephine Bellalta, President - Altamanu, Inc

CC:

Phillip Hutchinson, John Mac Manus, Ben Ahring, Mark Jirik

Date:

3/7/2012

Re:

Longfellow School Field Planting

Therese,

Due to the small size of the field and the heavy use by the elementary school children, I would hesitate to add plantings under the trees or near the playground.

We would like you to consider the following as possible upgrades from Ben Ahring's (Manhard) costs to improve the field:

- 1. Substitute Manhard's seed cost with sod. We have found that in high use situations such as this, seed will keep the field out of commission for quite a long time. (4-6 months). Sodding will allow us to use the field within a couple of months.
  - 5,000 Square Yards (approx.) at a cost of \$7/SY

= \$35,000

- Add a Hedge row along the alley fence to screen out the alley
  - 300 Linear Feet = 100 shrubs at a cost of \$50/each

= \$5,000

- Replace the Ash trees along the alley side with another species
  - 6 Ash trees at a cost of \$600 each

= \$3,600

Let us know if you should need additional information

Best regards,

Josephine Bellalta, ASLA, RLA Principal