

FACILITY NEEDS ASSESSMENT SUMMARY
Middletown City School District

New Elementary School
October 11, 2008

Overview

The Middletown City School District (currently identified as a district in need of improvement) is projected to see an increase of over 1400 students over the next five years (2014-15). Since most of the increase is coming from new/recent births in our district, elementary grade enrollment is projected to increase from its current of 500 to 650 students. Since there is no available space for additional classrooms in our current buildings, class size averages are projected to increase from 18/19 in the primary grades (K-2) in 2007-08 to 25 by the year 2014-15 and from 25 to 32 in the intermediate grades (3-5).

Grade	2008/09	2014/15
Kdg	551	655
1 st	525	702
2 nd	536	733
3 rd	490	673
4 th	478	661
5 th	486	659
Elem Total	2515	4083 (+1,568)

Additionally, one of our current elementary buildings (Chorley) is in a serious state of physical decline due to the original design and material selection of this building. Essentially the building tears itself apart, requiring excess continuing and costly repairs and the original design has prohibited it from ever being HDAC acceptable.

Target class sizes as approved by the NYSED in our approved Contract for excellence is 18 in grades K-2 and 25 for grades 3-12. **Additional classrooms needed for compliance by the school year 2014-15 and taking into consideration the replacement of Chorley would be 63.** Thus, we have a serious growth problem at the elementary level with one of our elementary buildings in serious need of replacement.

We are proposing to build a new 58 classroom, elementary school, on the Chorley expanded grounds and once built, to demolish the deteriorating Chorley building.

Chorley Demolition Justification

Chorley Elementary school was originally built in 1968 and houses approximately 77,335 sq. ft. of space. This building suffers from extensive physical design problems. It was essentially designed for the southwest, not New York State. The structural members of the building are exposed and penetrate the exterior wall bringing the exterior temperature through the wall and causing excessive movement within the wall. This leads to cracking of the exterior envelope, a time consuming, very costly, and continuous maintenance headache. The roof has 49 separate sloped "plains", all of which pitch down toward masonry or glass walls. This causes leakage at the window flashings and is actually eroding holes in the masonry, in some cases right through the block and into the cavity. The building is literally eating itself up.

The multiple stepped sloped roofs have a built up membrane that is constantly having its gravel coating eroded by runoff leading to "UV" degradation of the membrane causing leaks. Roof maintenance is an ongoing nightmare.

The building structure is exposed without ceilings. This leads to noisy classrooms, though the district has tried various sound attenuation methods with mixed results. To make matters worse, the building has an open plan consistent with the education philosophy of its time.

In addition, the building rises up a hill side with stepped open classroom levels connected by steps. This, along with tiny masonry walled classroom toilets, makes conformance to the mandates of ADA impossible to satisfy within a reasonable cost.

Add to this high energy costs for large glass areas, minimal insulation, and protruding "monitors" housing teacher work areas that bring in excessive heat gain and energy costs to run the facility are excessive.

More mundane issues exist: the facility's electric service is obsolete, storm water drains on site are collapsed and not draining properly, the exterior through the wall structure is constantly rusting, the floor finishes are worn out and in need of replacement, main electric panels are next to the water service and must be moved for life safety, a modernized fire alarm is in order, additional electric circuits are required for today's needs, vestibules must be created to aid in energy conservation, etc.

Costs to correct the more mundane issues would be over \$6,500,000. That would not allow any teaching space to be ADA accessible or correct the destruction of the exterior wall or roof.

To make the building accessible, ramps would have to be built to connect levels, and toilets removed and enlarged. This would require an addition of approximately 25% to the facility. In order to enclose the classrooms for sound attenuation, corridor space would have to be created. This would require an addition of 25%. The cost for these two additions would be approximately \$18,000,000.

In order to correct the runoff eroding the walls a new roof structure would have to be constructed over the existing roof deck and the structure reinforced to take additional snow load. The approximate cost is \$8,000,000.

In order to correct the through wall steel condition the steel would have to be cut and the roof overhangs removed. This would allow the roof runoff to run down the concrete block walls. A bad thing for concrete block. The other option is to remove roof deck and structure and redesign the slope. This is cost prohibitive: \$5,000,000.

The total construction cost equates to between \$35,000,000 and \$40,000,000 or the cost of a new building.