School District of New Berlin
Strategic Facilities Assessment
Prepared by IFF
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Table of Contents

Appendices

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SCHOOL DISTRICT OF NEW BERLIN STRATEGIC FACILITIES ASSESSMENT

PART I: EXECUTIVE SUMMARY

The School District of New Berlin (~~t~~the District") currently operates seven schools throughout the District, including five elementary schools and two middle/high schools. In addition, the District owns two buildings which are not presently used as schools. As part of a broad effort to ensure that the District continues to achieve excellence in education, the District is completing an initiative to identify both short- and long-term facility renovation priorities. The District aims to plan strategically for its facility renovations and consider building condition, current and future predicted enrollment patterns, and occupancy costs as factors in identifying priorities.

In the spring of 2011, the District engaged IFF to assist with this effort. During the month of May 2011, IFF visited each District facility and conducted an analysis of current building condition. Based on these assessments, IFF prepared a set of recommended short- and long-term facility improvements and completed a high-level cost estimate. Estimates represent a preliminary approximation of cost for discussion purposes. In setting priorities and recommending improvements, IFF assumed strategies that minimize costs and focus on ensuring that facilities are in compliance with current Code and life safety standards, address any deferred maintenance items, and bring facilities into standards for new construction. Standards for new construction, as used by IFF, indicates that the facility functions as it did when new and finishes are in as-new condition. Estimates do not include costs for improvements related to changing education standards or changes to meet a modern design aesthetic. IFF assumes strategies, where possible, that phase costs in over time and minimize annual outlays.

IFF also reviewed occupancy cost data supplied by the District; the May 13th, 2011, Eppstein Uhen Architects' Land Use Analysis and Enrollment Projection Report; and conducted a preliminary market analysis to identify potential revenue to be gained from the sale of unused facilities. These analyses together informed IFF's recommendations for District-wide priorities and strategies to achieve its facility goals.

IFF recommends that the District use this report as a tool to help make decisions and plan for its future facility use. Recommended facility improvements and approximate costs, placed in context of the District's enrollment trends, are intended to stimulate discussion about potential opportunities for cost savings by consolidation and/or maximization of existing resources as well as on how improvements may be phased in over time in order to minimize costs. As the District moves forward with its future facility plans, other improvements may surface as important needs and the District may elect to pursue other renovations not outlined in this report. This report should serve as a baseline that allows the District to make informed decisions about minimum needed expenditures and areas where it elects to make additional investments.

Overall, the District's portfolio of seven active facilities reflects a rigorous program of ongoing maintenance and repair. The District's two newest elementary schools are in good

condition and are expected to require little additional investment in the coming years. Eisenhower Middle/High School (~~E~~isenhower") and Glen Park Elementary School (~~G~~len Park") require the most extensive renovations. Eisenhower currently operates above capacity, based on IFF's calculations using a District-provided formula. The school presently enrolls nearly 1,200 students representing 25 percent of the total District enrollment. As such, Eisenhower is an important facility in the District's portfolio. IFF recommends implementing a phased plan to bring the facility up to standard with the District's other facilities. Recommendations specific to Eisenhower as well as each other District facility are included as Appendix A to this report.

Glen Park, with 297 currently enrolled students, is the District's smallest school. The magnitude of needed investment, approximately $3.5 million in hard costs alone, is the third highest of all the District facilities despite its small size. Even at full capacity, bringing the facility up to the same condition as the newer elementary schools would cost the District nearly $8,746 per student for construction. By comparison, the next highest per student cost (for Eisenhower) is only approximately $4,814 per student. Given this, as well as multiple other factors detailed later in the report, IFF recommends that the District consider closing this school and redistributing enrollment to nearby schools which are not at their full enrollment capacity. However, IFF recognizes that factors that are outside of this report may lead the District to continue operating Glen Park, and has included renovation recommendations and recommendations for improvements to be phased in over time in Appendix A to this report.

Altogether, the estimated construction cost for recommended immediate improvements across all facilities is $3.1 million for construction, with allowances for soft costs and contingency bringing the total estimate to approximately $4.1 million. Over time, should the District elect to complete all of the facility improvements outlined in this report, the total construction cost is estimated at approximately $19 million. With soft costs, such as architectural and other fees, and contingency the total cost is approximately $25 million. Assuming bond financing with similar terms to recent transactions, the District can expect an annual cost of $3.1 million. These figures as well as estimates throughout the report are presented in current year costs. Costs may increase over time; actual costs will be a function of the final scope of work and market conditions at the time the work is completed. For facility improvements where the scope of repairs cannot be fully known until a project commences, such as parking lot improvements, the District may elect to budget a larger contingency than that used by IFF.

Some of this cost may be offset by optimization of heating and cooling systems, which at some facilities do not appear to be operating at maximal efficiency. Closure of Glen Park would also decrease annual occupancy costs by $300,000 to $500,000, and sale of the property could infuse additional funds into the District. The District could also pursue sale of the currently closed properties as another means of accessing additional revenue and minimizing occupancy costs. Potential revenues will vary widely, however, depending on market conditions. The most likely use of any of the District's property is for either institutional use, for which buyers are few, or residential redevelopment for which the market is currently slow.

Recommended facility improvements generally assume the most cost effective strategies to maintain and improve the District's facilities. There may be some cases, however, where the District elects to use available revenues to complete additional upgrades beyond those assumed in the baseline facility assessments. These are presented as alternates in the facility assessments. Rebuilding of the pools at Eisenhower and New Berlin West Middle/High School (~~N~~New Berlin West") requires the most significant investment of these. Rebuilding of the pool at Eisenhower is expected to cost upwards of $4 million, after inclusion of soft costs and contingency. For New Berlin West, the existing pool could be rebuilt in the existing location for $2.75 million plus soft costs and contingency. Under this scenario, the overall pool facility size would remain limited. In order to offer a larger pool facility at New Berlin West, a new natatorium would be required at a cost roughly estimated at upwards of $6 million or as much as $8 million including soft costs and contingency.

The potential of separating the middle school students and high school students, with one group in each current middle/high school, and upgrading only one of the two pools was explored. Initial high-level cost estimates for this suggest that the expansion costs required to accommodate the full 9th through 12th grade program at one of these sites is not likely to be cost effective. If, however, there are multiple reasons to pursue this option, IFF recommends that the District further study the cost implications.

The following section presents IFF's analyses in greater detail and the final section summarizes IFF's recommended strategies and overall cost implications for the District.

PART II: ANALYSES

Facility Assessments

The District presently owns nine facilities, seven of which are currently used for school operations. Of the two vacant properties, one is a former elementary school and the other is a maintenance shed and office used by buildings and grounds staff. Analyses of these facilities are presented in Appendix B. The District's administrative offices and additional maintenance space are adjacent to the southeast wing of the Eisenhower Middle/High School Campus. The seven active school buildings comprise 1.3 million square feet. The two middle/high schools and three elementary schools were erected in the 1950s and 1960s. The Elmwood Elementary School (~~"E~~Elmwood") and Ronald Reagan Elementary School (~~"R~~Ronald Reagan") campuses were constructed in 2001 and 2004, respectively. The District has system-wide capacity for 5,763 students and current enrollment of 4,633. Enrollment is spread evenly among the middle/high school population (52 percent) and elementary school population (48 percent).

The following table contains a brief description of each campus, including grades served, address, square feet, capacity as calculated using a District formula (described in the Enrollment Analysis section later in Part II of this report), and student enrollment provided by a District report generated on July 18, 2011. The District reports that this data reflects enrollment for the 2010-2011 school year.

Table 1: Summary of School District of New Berlin Facilities [1]

Campus	Grades Served	Address	Approx. Square Feet	Year Built	Capacity/ Enrollment 2010
Eisenhower Middle/High School	7-12	4333 South Sunnyslope Road	272,000	1969	1,119/ 1,184
New Berlin West Middle/High School	7-12	18695 West Cleveland Avenue	400,000	1961 + additions	1,404/ 1,209
Elmwood Elementary School	K-6	5900 South Sunnyslope Road	102,000	2001	605/ 494
Glen Park Elementary School	K-6	3500 South Glen Park Road	62,000	1965	432/ 297
Orchard Lane Elementary School	K-6	2015 South Sunnyslope Road	69,000	1960s+ additions	605/ 321
Poplar Creek Elementary School	K-6	17401 West Cleveland Avenue	81,000	1950s+ addition	670/ 490
Ronald Reagan Elementary School	K-6	4225 South Calhoun Road	145,000	2004	929/ 638
Little Grove	Vacant	3800 South Racine Avenue	5,600	1950s	N/A
Prospect Hill	Vacant	5330 South Racine Avenue	80,000	1950s	N/A

[1] Enrollment capacity estimated using a formula for optimal functional use, not approved occupancy per code/fire safety.

During May 2011, IFF visited each of the District's active facilities, met with District staff, and reviewed available and pertinent facility reports. Based on information gathered at these visits, IFF prepared an assessment of facility condition. IFF's assessment includes an analysis of building Code and accessibility compliance issues; an evaluation of building systems and structural elements; and identification of deferred maintenance issues. In general, IFF assumes a goal of bringing all facilities up to the same standard for building condition. Except where otherwise noted, IFF does not assume that all facilities will have the same amenities or include building modifications that may be desired for programmatic reasons, such as addition of new programs or spaces. IFF has prioritized recommended improvements for each facility and across the District's portfolio of properties, and prepared a phased cost estimate for each facility, prioritizing work to be performed. IFF has also prepared an implementation plan for recommended capital improvements and a maintenance plan for the ongoing upkeep and maintenance of the District's facilities that is included in the Strategic Priorities section of this report. Detailed facility assessments and cost estimates for each facility are included in Appendix A to this report.

Recommended Capital Improvements By Facility

This section presents the key findings and recommendations of IFF's facility assessments. IFF's assessments reflect conditions at each site as of the day of the walk through and, unless explicitly stated, do not take into consideration any modifications that may have occurred after IFF's site visit. By and large, the District's operable facilities have been well-maintained and updated to keep pace with changing Codes, standards and aesthetics since its first buildings were constructed in the 1950s. The total construction cost for improvements, detailed throughout the report, of $19 million represents the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction. It should be noted that costs in the section represent the estimated construction cost for improvements. In planning for the total development cost, the District should allow an additional 20 percent for soft costs, such as architecture, engineering and other fees, and a 10 percent project contingency allowance for most improvements. For facility improvements where the scope of repairs cannot be fully known until a project commences, such as parking lot improvements, the District may elect to budget a larger contingency than that used by IFF.

Recommendations in this section focus on individual facility needs. The final section of this report discusses overall recommended District priorities that account for both individual facility conditions and overall District financial and enrollment needs.

In presenting its findings and recommendations, IFF first discusses common themes and findings observed across all sites followed by specific findings for each site. Common findings are grouped into five main categories:

1. Compliance with accessibility guidelines and requirements;
2. Life safety and other building Code issues;
3. Building systems and structural issues;
4. Quality improvements; and,

5. Alternates.

Recommended improvements can be phased in over time. IFF recommends the District should focus first on life and safety improvements and securing the building envelopes (walls, roofs and windows) to prevent further deterioration or damage to building contents. These improvements, where needed in the immediate term, are highlighted in the facility summaries below and are detailed in the facility assessments.

The individual facility assessments included in the appendices detail improvements recommended by level of necessity: items that can be addressed immediately; items that should be addressed within the next two to five years; and items that can be addressed in five years and beyond. In some cases, the same item may be listed as an immediate action for one campus, but an intermediate action at another. This relates to the order of magnitude of improvements recommended at a given campus, and IFF's attempt to reasonably spread improvements (and cost) over time without compromising the integrity of the facility and safety of its occupants.

The following recommendations represent the best of IFF's knowledge regarding conditions at the District's facilities. IFF recommends that the District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements. In addition, IFF strongly encourages the District to consider all applicable Code requirements when undertaking an improvement. For example, if the District is replacing doors for fire rating purposes, the replacement doors should also meet accessibility requirements. IFF's cost estimates take into consideration that the District will meet all Code requirements upon any upgrade, replacement or repair.

Accessibility Guidelines and Requirements

The District has clearly taken steps to embrace accessibility throughout its schools, as IFF found many areas of ADA compliance across all campuses and especially in classrooms for special-needs students. Where areas of non-compliance were identified, IFF recommends implementation of a plan to achieve full compliance with all accessibility guidelines and requirements over time. Issues that have been grandfathered into compliance can or—in some cases—must be addressed as part of future renovations, as undertaking significant renovations to a facility can trigger varying compliance requirements. While IFF makes preliminary assumptions, as described throughout the individual facility assessments, the necessary level of compliance with accessibility guidelines and requirements will be determined in the development of architectural plans, in consultation with regulatory officials and during the plan review process.

Unique priority areas of accessibility compliance noted in IFF's assessments include:

1. An elevator will need to be installed at Glen Park in the future to ensure that both floors and all unique programs are accessible to all occupants.
2. The auditorium seating area at Eisenhower does not appear to meet current requirements for accommodating persons with disabilities; additional evaluation to

confirm compliance or identify strategies to meet current requirements is recommended.

Other accessibility Code issues observed at multiple campuses can be phased in over time as funding allows or as part of other renovation projects:

1. Provide at least one Code-compliant, accessible entryway and path of egress for each building, including automated push pads and appropriate clearances;
2. Install hi-low drinking fountains;
3. Adjust countertops that currently exceed the maximum accessible height;
4. Adjust wall-mounted equipment, including dispensers, blackboards, and signage, throughout the facility to meet accessible height requirements;
5. Install accessible lockers per Code requirements and to meet student's needs; and
6. Upgrade all non-accessible doors to be fully compliant with all applicable Code requirements (e.g., swing in direction of egress, fire-rated, push/pull hardware, proper clear space).

Code and Life Safety

IFF recommends full compliance with all building Code and life safety requirements. Because the District's facilities have always been used as schools, they are considered as existing uses and therefore are exempt from certain building Code requirements that would apply to new construction. However, building renovations could trigger compliance with current Code requirements and the District may elect to comply with some standards in order to ensure that facilities meet current life safety standards. Therefore, IFF's recommendations include improvements that bring each facility up to current Code to the best of IFF's knowledge. Improvements to address Code issues can be phased in over time, as reflected in IFF's recommendations and cost estimates. Compliance with building Code requirements will be determined in the development of architectural plans and during the permit application process. IFF encourages the District to continue its on-site Asbestos Management Reporting and to maintain buildings and grounds staff qualified to perform Asbestos Containing Materials (ACM) abatement activities.

Unique priority areas related to Code-compliance observed at District campuses:

1. Replace cloth-insulated wiring and conduit at Eisenhower;
2. Repair the bowing exterior masonry wall at New Berlin West;
3. Resolve issue of overflowing swale at Elmwood; and
4. Upgrade fire protection system and maintenance program at Glen Park.

Two areas of Code issues observed in numerous campuses can be addressed immediately at little or no cost:

1. Utilize janitor's closet with mop sink only for cleaning and cleaning supplies storage; and
2. Upgrade exit signs and emergency lighting to include battery back-up.

Other building Code issues observed at multiple campuses, while necessary, can be phased in over time as funding allows or as part of other renovation projects:

1. Transoms above doors should be removed;
2. Replace doors into corridors, stairwells, and mechanical rooms that are not currently fire-rated and remove paint covering fire rating labels at existing rated doors;
3. Enclose stairways with proper fire-rated walls, install Code-compliant handrails, and provide designated areas of rescue assistance; and
4. Install complete, Code-compliant sprinkler systems as per the individual facility recommendations.

Structural, Building Systems, Exterior and Other

IFF observed a number of common themes across the District's facilities with regard to necessary improvements to structural components and building systems. For the most part, the District's facilities are structurally sound and do not exhibit major structural defects. The priority issues observed by IFF along with common themes across multiple campuses are summarized below, and are discussed in more detail in the facility assessments. Improvements to address building systems issues can be phased in over time, as reflected in IFF's recommendations and cost estimate. Compliance with building Code requirements will be determined in the development of architectural plans and during the permit application process.

Unique priority areas related to structural and building systems observed at District campuses:

1. Work with the City of New Berlin to explore options to bring City water service to New Berlin West; and
2. At Elmwood, adjust or add to the exhaust system within the warming kitchen to collect the steam generated by the dishwasher.

Other structure and building systems issues observed at multiple campuses can be phased in over time as funding allows or as part of other renovation projects:

1. Test and balance all climate control systems;
2. Begin program of replacing deteriorated exterior doors and hardware;
3. Catalogue and begin replacing outdated windows with operable, energy-efficient models;

4. Re-caulk the perimeter of exterior doors and windows not scheduled for replacement;
5. Repair cracked or displaced sections of sidewalk around building perimeter; and
6. Begin program of systematic resurfacing or replacement of parking lots, to be phased in over several years.

Current inspection, replacement, and repair programs should be continued, including:

1. Repairing roofs with focus on penetrations, flashings, copings, and parapets as required,
2. Replacing existing, outdated light fixtures with new, energy-efficient fixtures,
3. Regularly inspecting brick façades and tuckpointing deteriorated areas as needed.
4. Upgrading older restroom fixtures, such as toilets, sinks, and faucets; and
5. Installing or upgrading security key fob systems and interior security cameras.

Quality Improvement Items

IFF has identified a number of items to improve the quality of the environment of the buildings. These items are of lesser priority and do not concern Code or life safety issues, and include:

1. Paint walls, ceilings, doors, frames and window frames throughout the facility;
2. Replace older flooring with new resilient flooring, carpet or carpet tile;
3. Add whiteboards, storage units and tack boards to the classrooms;
4. Install occupancy sensors to operate lights in classrooms and offices;
5. Upgrade toilet accessories, including hand dryers, mirrors, and partitions;
6. Annually review and replace as necessary the Code-compliant engineered play lot wood chips; and
7. Replace existing furniture and add overhead storage bins in administrative areas.

Swimming Pool Renovations and Other Alternate Items

In general, IFF assumes the most cost effective improvements throughout its assessments in order to balance the need for Code-compliance, quality improvements and overall highest and best use of the facilities. In some cases, however, pay back over time or other District priorities may suggest pursuit of alternate improvement strategies. These alternate costs include rebuilding of the two middle/high school swimming pools, and at various campuses: parking lot or roof replacement, higher quality exterior doors, and sprinkler systems.

For the swimming pools, the total construction cost of rebuilding or constructing both pools ranges from approximately $6 million to more than $10 million, depending on the extent of renovations pursued. This well exceeds the cost of ongoing maintenance to preserve the

existing pools over time. In formulating recommendations, discussed later in this report, IFF considered separating the middle/high schools into one middle school and one high school, partly so that the District could focus investment in a swimming pool and other athletic and performance art spaces at only one school.

FRP doors are also included as an alternate. While these doors have a longer life than steel doors, IFF recommends that the District consider alternate strategies of preserving the substantially less expensive steel doors, such as preventing snow and salt from being pushed up against the doors and frames or applying an anti-corrosive sealant at steel doors. Additional discussion of the pros and cons of each alternate item is included in the individual facility assessments.

Facility Highlights

The following section summarizes specific or unique areas of concern for each facility. Common improvements across facilities discussed above are not necessarily repeated for each facility in the summaries below, but still apply to many of the sites. See attached facility assessments for more detailed information on each site.

Eisenhower Middle/High School
4333 South Sunnyslope Road

Grades served:	7-12	Square feet:	272,000
Student capacity:	1,119	Year built:	1969
Current enrollment:	1,184	Total construction cost of recommendations:	$5.4 million

The Eisenhower campus comprises a ground floor and a lower level which offers access to athletic fields on the north side of the site. In addition to classrooms and administrative offices adjacent to the southeast wing of the facility, the campus features a swimming pool, auditorium, two gymnasiums, and an auxiliary garage/workshop.

Overall, the building is in fair to acceptable condition relative to the other facilities operated by the District, although various building Code and deferred maintenance issues were identified as areas for improvement. The total construction cost of recommended improvements over time is estimated at $5.4 million, representing the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction. This baseline cost estimate includes a minimal allocation for annual swimming pool repairs and maintenance. Because the swimming pool does not meet current standards for competition, an estimated cost to rebuild the pool is included separately in the cost estimate, as an alternate cost of $3.9 million.

Below are the highest priority areas of improvements recommended for the Eisenhower facility, and are included in the cost estimate as immediate-term improvements.

1. Upgrade to Code-compliant wiring and conduit;

2. Replace doors on building's south side near the auditorium; and
3. Replace cooler and freezer in the kitchen. (The District reports that this was completed following IFF's site visit.)

Below are improvements requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Resurface the parking lot, which is recommended as a temporary measure to delay more significant costs associated with complete removal and replacement ($450,000), or alternately remove and replace damaged portions of the lot with limited repairs to the subgrade as necessary ($1.3 million);
2. Replace all exterior doors with hollow metal doors ($350,000), or alternately FRP doors ($1 million);
3. Reconfigure classroom doors and lever hardware ($275,000);
4. Replace the roofing system as an alternative to continued roof repair – phased over time ($900,000); and
5. Rebuild the pool as an alternative to completing repairs and quality improvements ($3.9 million).

As with the pool and other alternate costs provided by IFF, the estimated cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular project.

New Berlin West Middle/High School
18695 West Cleveland Avenue

Grades served:	7-12	Square feet:	400,000
Student capacity:	1,404	Year built:	1961 + additions
Current enrollment:	1,209	Total construction cost of recommendations: $4.7 million	

Built on two stories, the New Berlin West high school facility is the larger of the District's two middle/high schools, and features a recently added field house as well as a gymnasium, an outdated pool, a library and Idea Lab, and a state-of-the-art performance arts center completed in 2007. The grounds include athletic field space to the east of the building, including a full track, baseball fields, tennis courts, and a soccer field, as well as amenities and concessions for visitors.

Overall, the campus facilities are in fair to acceptable condition relative to the other facilities operated by the District. The facility has been well maintained, exhibiting relatively little of the wear and tear that would be expected of a 40-year-old facility. The total construction cost of recommended improvements over time is estimated at $4.7 million, representing the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction. This baseline cost estimate includes a nominal allowance for annual swimming pool repairs and maintenance. The

alternate cost to rebuild the pool ($2.8 million) or construct a new pool ($6 million) are included separately as alternates in the cost estimate.

Below are the highest priority areas of improvements recommended for New Berlin West, and are included in the cost estimate as immediate-term improvements.

1. Replace flickering light fixtures in problem areas;
2. Repair the exterior bowing masonry wall near loading dock area; and
3. Remove all stored materials from the electrical/mechanical rooms.

Below are improvements for New Berlin West requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Resurface the parking lot, which is recommended as a temporary measure to delay more significant costs associated with complete removal and replacement ($500,000), or alternately remove and replace damaged portions of the lot with limited repairs to the subgrade as necessary ($1.4 million);
2. Replace windows with operable, energy-efficient windows ($500,000);
3. Replace all exterior doors with hollow metal doors ($400,000), or alternately FRP doors ($1.2 million); and
4. Rebuild to match existing or construct a new pool facility as alternate to completing repairs ($2.8 million and $6 million, respectively).

As with the pool and other alternate costs provided by IFF, the estimated cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular project.

Elmwood Elementary School
5900 South Sunnyslope Road

Grades served:	K-6	Square feet:	102,000
Student capacity:	605	Year built:	2001
Current enrollment:	494	Total construction cost of recommendations: $475,000	

Elmwood was constructed with four wings to house classrooms, with separate grade levels in each wing. It was designed so that a fifth wing could be constructed later. The facility also includes a gymnasium and cafeteria (both with a raised stage), music and art rooms, library resource center and technology lab. All student activities are located on the ground level. The ceiling in the entry atrium and the gymnasium both extend up to the elevation of a second story, but the mechanical equipment room is the only functional space located on a second level.

Overall, the campus facilities are in good condition relative to the other facilities operated by the District, and few building Code and deferred maintenance issues were identified.

However, parking appears to be insufficient for the needs of faculty, staff and visitors. The building is not sprinklered, but to the best of IFF's knowledge, no sprinkler system is required. The total construction cost of recommended improvements over time is estimated at $475,000, and represents the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction.

Below are the highest priority areas of improvements recommended for the Elmwood facility, and are included in the cost estimate of immediate-term improvements.

1. Resolve the issue causing water to overflow from the swale south of the building; and
2. Adjust or add to the kitchen's exhaust system to better collect dishwasher steam.

Below are improvements for Elmwood requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Paint - phased over time ($75,000);
2. Treat exterior doors and frames with anti-corrosive coating ($50,000), or alternately install FRP doors ($400,000); and
3. Seal around all windows, curtain wall and exterior doors ($45,000).

As with FRP door replacement and other alternate costs provided by IFF, the cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular improvement.

Glen Park Elementary School
3500 South Glen Park Road

Grades served:	K-6	Square feet:	62,000
Student capacity:	432	Year built:	1965
Current enrollment:	297	Total construction cost of recommendations: $3.8 million	

The Glen Park campus is located within a residential neighborhood and is landlocked by developments on all sides. The grounds contain abundant green area, with baseball diamonds and a parking lot. Corridors separate an outer ring of classrooms and offices from the inner circle containing a two-story gymnasium as well as storage, kitchen, and locker rooms.

Overall, the facility appears to be in poor but functional condition relative to the other facilities operated by the District, and a variety of building Code, accessibility, and deferred maintenance issues were identified. Additionally, parking appears to be insufficient for the needs of faculty, staff and visitors. The building does not have a sprinkler system, though to the best of IFF's knowledge, none is required at this time. The total construction cost of recommended improvements over time is estimated at $3.8 million, and represents the

Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction.

Below are the highest priority areas of improvements recommended for the Glen Park facility, and are included in the cost estimate of immediate-term improvements.

1. Upgrade fire alarm protection system and maintenance program;
2. Upgrade utility service entrances; and
3. Upgrade exit signs and emergency lighting to include battery back up.

Below are improvements for Glen Park requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Resurface the parking lot, phased over time, which is recommended as a temporary measure to delay more significant costs associated with complete removal and replacement ($400,000), or alternately remove and replace damaged portions of the lot ($800,000);
2. Reconfigure classroom doors and hardware ($225,000); and
3. Replace all exterior doors with hollow metal doors and Code-approved hardware ($250,000), or alternately FRP doors ($400,000).

As with FRP door replacement and other alternate costs provided by IFF, the cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular improvement.

Orchard Lane Elementary School
2015 South Sunnyslope Road

Grades served:	K-6	Square feet:	69,000
Student capacity:	605	Year built:	1960s + additions
Current enrollment:	321	Total construction cost of recommendations: $2.1 million	

Over the past 15 years, multiple significant remodeling projects have been completed to expand and upgrade the Orchard Lane Elementary School (~~"O~~rchard Lane") campus, and the building offers a welcoming atmosphere to students and visitors. The facility features a shared gymnasium and cafeteria, multi-purpose room and library. The most recent addition to the campus added approximately 5,000 square feet of accessible, Code-compliant classroom space. The addition was designed to allow a second level to be constructed if the District chooses to expand vertically. Completion of an upper level would likely require installation of an elevator.

Overall, the facility appears to be in poor to acceptable condition relative to the other facilities operated by the District. The structural system is composed of concrete masonry and steel, and exhibits no indications of deterioration. However, parking appears to be

insufficient for the needs of faculty, staff and visitors. The total construction cost of recommended improvements over time is estimated at $2.1 million, and represents the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction.

Below are the highest priority areas of improvements recommended for the Orchard Lane facility, and are included in the cost estimate of immediate-term improvements.

1. Replace deteriorated exterior doors;
2. Upgrade exit signs and emergency lighting to include battery back up; and
3. Inspect exterior brick façade and tuckpoint as needed.

Below are improvements for Orchard Lane requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Install air conditioning system throughout – phased over time ($250,000);
2. Replace existing windows with new energy efficient, operable windows ($200,000);
3. Upkeep and necessary replacement of all interior finishes (e.g., paint, ceiling tile, floor tiles)($175,000);
4. Replace all exterior doors with hollow metal doors ($120,000), or alternately FRP doors ($500,000); and
5. Replacing roof as alternate to continued roof repair – phased over time ($650,000). (The District reports that this work has commenced following IFF's site visit.)

As with FRP door replacement and other alternate costs provided by IFF, the cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular improvement.

Poplar Creek Elementary School
17401 West Cleveland Avenue

Grades served:	K-6	Square feet:	81,000
Student capacity:	670	Year built:	1950s + addition
Current enrollment:	490	Total construction cost of recommendations: $2 million	

A substantial addition to the Poplar Creek Elementary School (~~P~~oplar Creek") campus was constructed during 2004, designed by the same architect that was responsible for the design of the Ronald Reagan Elementary School campus. The facility comprises two levels with a gymnasium, cafeteria and library, and provides access to the exterior in the front on the upper level and in the rear on the lower level.

Overall, the campus facility appears to be in poor to acceptable condition relative to the other facilities operated by the District. The facility remains functional but exhibits clear signs of age-related wear in the form of outdated finishes and slowly deteriorating surfaces.

The exterior appearance of the facility is pleasantly landscaped and the façade is well maintained, projecting a pleasing environment to visitors. A key concern at this facility, however, is the inadequate size and the condition of the parking lot. IFF found no issues related to building Code or accessibility in the building expansion.

The total construction cost of recommended improvements over time is estimated at $2 million, and represents the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction.

Below are the highest priority areas of improvements recommended for the Poplar Creek facility, and are included in the cost estimate of immediate-term improvements.

1. Upgrade fire alarm protection system in older parts of the building;
2. Remove all stored materials from the electrical/mechanical rooms; and
3. Install ADA-compliant accessible lockers.

Below are improvements for Poplar Creek requiring the largest investment by the District, but are not necessarily the most urgent priorities.

1. Resurface the parking lot, which is recommended as a temporary measure to delay more significant costs associated with complete removal and replacement ($250,000), or alternately remove and replace deteriorated portions ($800,000);
2. Upkeep and necessary replacement of all interior finishes (e.g., paint, ceiling tile, floor tiles) - phased over time ($200,000); and
3. Replace outdated existing windows with new energy efficient, operable windows ($200,000).

As with parking lot replacement and other alternate costs provided by IFF, the cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular improvement.

Ronald Reagan Elementary School
4225 South Calhoun Road

Grades served:	K-6	Square feet:	145,000
Student capacity:	929	Year built:	2004
Current enrollment:	638	Total construction cost of recommendations:	$650,000

The Ronald Reagan campus features first floor and ground levels. The grade of the parking lot allows access to the exterior from both levels. Classrooms for each grade unit are grouped in a ~~"~~pod" system of grade separation similar to Elmwood Elementary. The facility features a gymnasium, cafeteria, library and multiple art and music rooms.

Overall, the campus facilities are in good condition relative to the other facilities operated by the District, and few building Code and deferred maintenance issues were identified. The majority of IFF's recommendations regarding this facility will refer to maintenance items necessary for proper upkeep and implemented to extend the serviceable life of the facility while limiting future replacement or wholesale renovation expenses.

The total construction cost of recommended improvements over time is estimated at $650,000, and represents the Code, building system and quality improvements or repairs needed to bring the facilities into full Code compliance and standards for new construction.

Below are the highest priority areas of improvements recommended for the Ronald Reagan facility, and are included in the cost estimate of immediate-term improvements.

1. Replace flickering light fixtures in problem areas;
2. Repair gymnasium demising curtain motor; and
3. Engage appropriate engineer to resolve issues with building system's control logic.

To maintain the facility's current level of quality, upkeep and necessary replacement of all interior finishes, phased over time ($150,000) would require the largest investment by the District.

The cost of implementing recommended improvements may increase depending upon the solution or approach chosen by the District for a particular improvement.

Cost Estimates to Address Capital Improvements

IFF estimated total costs to implement the full scope of recommended capital improvements. IFF's cost estimate phases in improvements over time to reflect prioritization of immediate, intermediate, long-term, and quality improvement items.

Tables 2a and 2b below summarize cost per campus by priority and per enrolled student (A detailed cost estimate for each facility is attached).

Table 2a: Cost Summary per Student by Site [1][2][3]

Campus	Immediate	Intermediate Years 2-5	Long Term Years 5+	Quality Improvements	TOTAL
Eisenhower					
Total Cost	$735,359	$1,979,129	$2,091,969	$578,145	$5,384,603
SF Unit Cost	$2.70	$7.28	$7.69	$2.13	$19.80
Cost per Student	$657	$1,769	$1,870	$517	$4,814
New Berlin West					
Total Cost	$826,645	$1,553,129	$1,813,040	$469,108	$4,661,921
SF Unit Cost	$2.07	$3.88	$4.53	$1.17	$11.65
Cost per Student	$589	$1,106	$1,291	$334	$3,320
Elmwood					
Total Cost	$51,982	$242,161	$152,143	$25,358	$471,645
SF Unit Cost	$0.51	$2.37	$1.49	$0.25	$4.62
Cost per Student	$86	$400	$251	$42	$780
Glen Park					
Total Cost	$690,984	$1,134,735	$1,648,218	$304,286	$3,778,223
SF Unit Cost	$11.14	$18.30	$26.58	$4.91	$60.94
Cost per Student	$1,599	$2,627	$3,815	$704	$8,746
Orchard Lane					
Total Cost	$380,358	$538,841	$840,591	$297,948	$2,057,738
SF Unit Cost	$5.51	$7.81	$12.18	$4.32	$29.82
Cost per Student	$629	$891	$1,389	$492	$3,401
Poplar Creek					
Total Cost	$361,340	$697,323	$678,305	$240,895	$1,977,863
SF Unit Cost	$4.46	$8.61	$8.37	$2.97	$24.42
Cost per Student	$539	$1,041	$1,012	$360	$2,952
Ronald Reagan					
Total Cost	$48,179	$139,465	$228,215	$228,215	$644,073
SF Unit Cost	$0.33	$0.96	$1.57	$1.57	$4.44
Cost per Student	$52	$150	$246	$246	$693
Total Cost					
Total Cost	$3,094,846	$6,259,425	$7,427,124	$2,194,670	$18,976,065
SF Unit Cost	$2.74	$5.53	$6.57	$1.94	$16.78
Cost per Student	$537	$1,086	$1,289	$381	$3,292

[1] This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards (—Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues.

[2] Add 20 percent for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.

[3] Add 10 percent for project contingency to provide funds for unforeseen conditions with any project.

Table 2b: Cost Summary per Campus by Priority [1][2][3]

Campus	Approx. Bldg SF	Immediate	Intermediate Years 2-5	Long Term Years 5+	Quality Improvements	TOTAL
Eisenhower	272,000	$735,359	$1,979,129	$2,091,969	$578,145	$5,384,603
New Berlin West	400,000	$826,645	$1,553,129	$1,813,040	$469,108	$4,661,921
Elmwood	102,000	$51,982	$242,161	$152,143	$25,358	$471,645
Glen Park	62,000	$690,984	$1,134,735	$1,648,218	$304,286	$3,778,223
Orchard Lane	69,000	$380,358	$538,841	$840,591	$297,948	$2,057,738
Poplar Creek	81,000	$361,340	$697,323	$678,305	$240,895	$1,977,863
Ronald Reagan	145,000	$48,179	$139,465	$228,215	$228,215	$644,073
Total Cost	**1,131,000**	**$3,094,846**	**$6,259,425**	**$7,427,124**	**$2,194,670**	**$18,976,065**
Soft Costs (20%)		**$618,969**	**$1,251,885**	**$1,485,425**	**$438,934**	**$3,795,213**
Project Contingency (10%)		**$371,382**	**$751,131**	**$891,255**	**$263,360**	**$2,277,128**
Grand Total		**$4,085,197**	**$8,262,441**	**$9,803,804**	**$2,896,965**	**$25,048,406**

[1] This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards (—Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues, including Title IX and accessibility.
[2] Add 20 percent for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
[3] Add 10 percent for project contingency to provide funds for unforeseen conditions with any project.

Table 3 below summarizes cost per campus by priority and per enrolled student capacity (A detailed for each facility is attached).

Table 3: Cost Summary per Campus and per Enrolled Students [1][2][3][4]

Campus	Maximum Student Capacity	Immediate	Per Student Cost - Immediate	Intermediate Years 2-5	Per Student Cost – Intermediate	Long Term Years 5+ and Quality	Per Student Cost - Long Term	TOTAL	Total Cost Per Student
Eisenhower	1,119	$735,359	$657	$1,979,129	$1,769	$2,091,969	$1,870	$4,806,457	$4,297
New Berlin	1,404	$826,645	$589	$1,553,129	$1,106	$1,813,040	$1,291	$4,192,813	$2,986
Elmwood	605	$51,982	$86	$242,161	$400	$152,143	$251	$446,287	$738
Glen Park	432	$690,984	$1,599	$1,134,735	$2,627	$1,648,218	$3,815	$3,473,936	$8,042
Orchard Lane	605	$380,358	$629	$538,841	$891	$840,591	$1,389	$1,759,790	$2,909
Poplar Creek	670	$361,340	$539	$697,323	$1,041	$678,305	$1,012	$1,736,968	$2,592
R. Reagan	929	$48,179	$52	$139,465	$150	$228,215	$246	$415,858	$448
Total Cost	**5,763**	**$3,094,846**	**$537**	**$6,259,425**	**$1,086**	**$7,427,124**	**$1,289**	**$16,781,395**	**$2,912**

[1] This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards (—Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues, including Title IX and accessibility.

[2] Add 20 percent for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
[3] Add 10 percent for project contingency to provide funds for unforeseen conditions with any project.
[4] Enrollment capacity estimated using a formula for optimal functional use, not approved occupancy per code/fire safety.

Occupancy Cost Analysis

Using historical expenses, budgets, and other information provided by the District, IFF constructed an analysis of estimated occupancy costs for each of the District's seven active campuses to isolate costs associated with operating district facilities. The analysis, together with an analysis of student enrollment and with comprehensive facility assessments of each campus, was used to inform options for the District to reduce occupancy costs. IFF has explored consolidation and disposition scenarios to enable the District to reduce its overall facility portfolio while still serving current and projected student enrollment. These scenarios are presented in Part III of this report.

This occupancy cost analysis includes the costs of buildings and grounds personnel as well as non-personnel occupancy costs: property insurance, utilities, annual repair or replacement of furniture and equipment, and routine maintenance of the buildings and grounds. The District's annual debt service for repayment of bond issues is noted separately as part of this analysis, but is not included in occupancy costs. This analysis does not include the costs of delivering educational and other programming. As such, costs for teacher and administrative personnel, text books, athletic equipment, classroom supplies, food service, and the like are excluded from this analysis.

As shown in Table 4 below, total annual occupancy costs for the District's seven facilities are approximately $8.4 million, with a per student cost of $1,806. Per campus occupancy costs range from $514,127 to $2.8 million, and from $1,298 to $2,311 per enrolled student. IFF observed that the largest and most costly campus to operate—New Berlin West—has the lowest per square foot cost ($6.98), while the smallest and least costly campus to operate—Glen Park—has the highest per square foot cost ($8.29). In general, however, there is not substantial variability on a per square foot basis.

Table 4: Analysis of Estimated Occupancy Costs

	Eisenhower	New Berlin West	Elmwood	Glen Park	Orchard Lane	Poplar Creek	Ronald Reagan	Total – All Campuses
Total Buildings and Grounds Personnel Costs	$803,224	$981,357	$322,476	$251,024	$267,951	$279,721	$404,331	**$3,320,083**
Total Non-Personnel Occupancy Costs	$1,236,778	$1,812,344	$468,808	$263,102	$285,435	$356,470	$623,772	**$5,046,710**
Total Occupancy Costs (Excluding Debt Service)	**$2,040,001**	**$2,793,701**	**$801,284**	**$514,127**	**$553,386**	**$636,191**	**$1,028,103**	**$8,366,793**
Occupancy Costs Per Enrolled Student	$1,723	$2,311	$1,622	$1,731	$1,724	$1,298	$1,611	**$1,806**
Occupancy Costs Per Student Capacity	$1,824	$1,990	$1,325	$1,190	$915	$950	$1,107	**$1,452**
Occupancy Costs Per Square Foot	$7.50	$6.98	$7.86	$8.29	$8.02	$7.85	$7.09	**$7.40**

Table 5 below compares estimated occupancy costs per enrolled student and per square foot of the middle/high schools, the elementary schools and all campuses.

Table 5: Estimated Occupancy Costs

	Per Enrolled Student	Per Student Capacity	Per Square Foot
Middle/High School Campuses	$2,017	$1,907	$7.24
Elementary School Campuses	$1,597	$1,097	$7.82
All Campuses	$1,806	$1,452	$7.40

Enrollment Analysis

IFF's enrollment analysis centered on identifying current and future projected enrollment by facility, as a means of informing decisions regarding facility improvement priorities and to identify potential for consolidation. IFF compared maximum student capacity for each campus with current enrollment and assessed capacity for each campus and system-wide. Total capacity was then compared with estimated projections in K-12 student growth provided by Eppstein Uhen Architects (EUA) in its May 13, 2011, Land Use Analysis and Enrollment Projection Report. This report projects growth of the student age population in the City of New Berlin at two intervals: 10 years out (2021) based on historical rates of household growth and ratio of K-12 school age children per household, and long-term, assuming all land zoned residential is developed according to municipal land use plans.

In order to determine capacity of each school facility, IFF first calculated the total number of classrooms per building based on the facility floor plans. IFF then applied the following assumptions supplied by the District: 85 percent of middle/high school classrooms and 90 percent of elementary school classrooms are in use at any given time, and per classroom enrollment is 28 students in the middle/high schools and 24 students in the elementary schools. Total building capacity, therefore, was calculated as total number of classrooms x 85/90 percent x 28/24 students per classroom. Per classroom capacity assumptions used for purposes of this study are averages, and total capacity numbers reflect use of all rooms

that could potentially accommodate a classroom, which may not reflect actual room use within a given campus at this time. Further, it is recognized that many elementary and high school classrooms may be able to accommodate more than 24 and 28 students, respectively; however, a conservative assumption of 24 and 28 helps to ensure that capacity is not overstated.

This analysis resulted in total District-wide capacity of 5,763 in the currently occupied school facilities.

Current enrollment data was gathered from the Student Enrollment Summary Report generated by the District on July 18, 2011. These data were then compared against the individual facility and District-wide capacity numbers in order to determine the total magnitude of excess capacity as well as the percentage of available capacity in use (enrollment/capacity) by individual school and school type (middle/high or elementary). Results of this analysis are shown in Table 6 below.

Table 6: Enrollment Analysis [1][2]

	Notes	Eisenhower Middle/High School	New Berlin West Middle/High School	Elmwood Elementary School	Glen Park Elementary School	Orchard Lane Elementary School	Poplar Creek Elementary School	Ronald Reagan Elementary School	Total
Campus Student Capacity	1	1,119	1,404	605	432	605	670	929	5,763
Current Student Enrollment	1	1,184	1,209	494	297	321	490	638	4,633
Excess Capacity		**-**	**195**	**111**	**135**	**284**	**180**	**291**	**1,130**
Percentage of Capacity in Use		**106%**	**86%**	**82%**	**69%**	**53%**	**73%**	**69%**	**80%**
Total Excess Capacity for Middle/High and Elementary Schools		195		1,000					
Percentage of Total District Capacity in Use for Middle/High and Elementary Schools		95%		69%					

[1] Enrollment capacity estimated using a formula for optimal functional use, not approved occupancy per code/fire safety.
[2] Current student enrollment data obtained from the District's Student Enrollment Summary Report (generated on July 18, 2011).

As the above table shows, percentage of capacity that is in use varies widely across District schools. Orchard Lane has the lowest percent of capacity that is in use at 53 percent, while Eisenhower has the highest at 106 percent. In the aggregate the District is currently using 80 percent of available capacity. The bulk of this excess capacity is at the elementary level, with 1,000 seats of excess capacity.

The EUA report projections suggest that the District can expect minimal student growth over the next ten years and low to moderate growth if all available residential land is developed. Table 7 identifies the potential future capacity based on household growth projections.

10-Year Projected Student Growth

As a result of net new household growth by 2021, it is estimated that the District may add 99 to 172 K-12 school age students. This would reduce system-wide excess capacity to 958 to 1,031.

Long-Term Student Growth

Development of all land zoned residential in the City of New Berlin results in a projected 324 to 562 additional students. On average, the District could add up to 43 students per grade, system wide, if maximal growth projections are reached.

Table 7: Future K-12 Student Growth and Future Capacity [1][2]

	Low Estimate	High Estimate
Estimated K-12 student population growth by 2021	99	172
Estimated excess student capacity by 2021	1,031	958
Percent reduction in system-wide capacity	9%	15%
Estimated maximum K-12 student population growth	324	562
Estimated long-term excess student capacity	806	568
Percent reduction in system-wide capacity	29%	50%

[1] Enrollment capacity estimated using a formula for optimal functional use, not approved occupancy per code/fire safety.
[2] Projections in K-12 student population provided by Eppstein Uhen Architects.

Geographic distribution of growth, as predicted in the EUA report, roughly follows current usage patterns. In other words, schools that are currently the closest to achieving full capacity are also largely located in the areas of New Berlin expected to see the bulk of the growth. For example, there is not growth predicted for the Orchard Lane elementary school, which currently has the lowest usage rate. Overall, the EUA report indicates the following, with respect to geographic distribution of growth:

1. No growth is projected in the Orchard Lane attendance area;
2. Multiple pockets of growth are likely in the Glen Park and Elmwood attendance areas, though some of these are small and may not significantly impact enrollment patterns;
3. Slow growth is anticipated throughout much of the Ronald Reagan attendance area;
4. Some slow growth is anticipated in the southern half of the Poplar Creek attendance area; and
5. Overall, most of the growth anticipated is in the southern half of the District.

This analysis suggests that, while system-wide facility usage is relatively high at 80 percent there is enough excess capacity and variability across school facilities to suggest that consideration could be given to closing or consolidating one of the District's elementary schools. Given that capacity is already assumed to include use of 90 percent of elementary classrooms, it is reasonable to expect a usage level close to 100 percent of calculated capacity. Potential disposition and consolidation scenarios that take into account not only

this analysis, but also renovation needs and occupancy costs are presented in Part III of this report.

Because both middle/high schools are currently close to or, in the case of Eisenhower exceeding, full capacity, IFF does not recommend consolidation of the middle/high schools. However, it may be feasible to separate the middle/high schools and create one middle school, and one separate high school. Table 8 summarizes current enrollment by middle/high school grade and shows total enrollment by potential grade configuration.

Table 8: Current Enrollment by Middle/High School Grade

	Eisenhower	New Berlin West	TOTAL
7th	178	203	381
8th	179	196	375
9th	207	209	416
10th	197	210	407
11th	203	190	393
12th	220	201	421
Total 7th-8th	357	399	**756**
Total 7th-9th	564	608	**1,172**
Total 10th-12th	620	601	**1,221**
Total 9th-12th	827	810	**1,637**

Total Eisenhower Capacity = 1,119
Total New Berlin West Capacity = 1,404

Either middle/high school could accommodate the current system-wide middle school enrollment (either 7th through 8th only or 7th through 9th) while allowing for some minimal to moderate growth, depending on the model pursued. New Berlin West is large enough to accommodate the current system-wide 10th through12th grade enrollment of 1,221 students, however this would maximize current capacity and future growth could not be accommodated without an addition. An addition would also be required to accommodate the full 9th-12th grade enrollment (currently 1,637) should the District prefer this model for consistency with current middle/high school configurations or for other reasons. These options will be discussed further in Part III of the report.

Market Analysis for Vacant Properties

As part of its facilities assessments of the District's campuses, IFF completed an assessment of the two vacant school facilities, Little Grove and Prospect Hill. These reports can be found in Appendix B of this report. This section explores current uses and utilization of the facilities, as well as discusses zoning, allowable uses and preferred uses for the facilities, and potential market value should the District choose to sell the properties.

Both facilities are zoned I-1: Institutional, and are located in the southwest quadrant of the municipality. The southwest quadrant is primarily zoned for land uses targeted to low-

density development, rural/agriculture uses, and green space (e.g., open land, recreational, and environmental corridors). The District's remaining three quadrants are more developed with industrial corridors, and medium and high density residential.

Little Grove

This 5,600 square feet facility is set on a 10-acre parcel located to the south of the former Barrett Landfill on the far western side of the District attendance area. The site is undeveloped, except for the structure and the associated well and septic system. A small dirt- and rock-covered road provides access onto the site and up to the building. Built in the 1950s, the facility has never been used as a school building. Despite its age, and the lack of maintenance or repairs over the years, the facility remains in functional condition. No immediate hazards to occupant safety were identified, and no problems limiting the current use of the facility were reported.

The facility is now used as an office and maintenance shed for buildings and ground staff. Extra parts for furnishings and equipment are warehoused here, in addition to an office area that houses operations and maintenance manuals for District property. Buildings and grounds staff use the facility only as needed, and none use it as their assigned office or workspace.

In context of the larger neighborhood, the New Berlin 2020 Comprehensive Plan calls for, ~~a~~ desire to balance the preservation of the rural and environmental character with the need to maintain adequate property values for area landowners." As such, current zoning regulations permit a maximum of one dwelling unit per five acres.

Because the facility is not fully utilized now, nor is it designed to be used for educational and classroom space, the facility appears not to be adding substantial value to the District's operations. Furthermore, the property is located in an area of New Berlin that is zoned for low-density development, agriculture, and conservation. Consequently, this section of the city will not generate a large pipeline of new K-12 school age children through household growth.

Given these factors of the property's underutilization and the area's low-density land use plan, IFF suggests the District consider selling the facility and using proceeds to fund necessary repairs on its operable campuses. Considering the current condition of the facility as well as its size in context of the 10-acre parcel, the most marketable option would be to demolish the building and market the land as a vacant parcel.

Potential uses for a buyer, given current zoning or a zoning change in line with community preferences expressed in the comprehensive plan, include:

1. Arts and crafts community
2. Rural-oriented retail (e.g., small grocer, feed and seed store, farm implement sales and supply store)
3. Landscaping businesses or commercial nursery

4. Low-density residential housing development
5. Organic or specialty farm
6. Storage facility

IFF conducted a survey of purchase prices for vacant land (five- to fifteen-acre parcels) that sold from 2009 to 2011 in Waukesha County. This generated eight properties, with purchase prices ranging from $0.35 to $6.46 per square foot and an average purchase price of $2.24 per square foot. The low-density zoning of Little Grove's location within New Berlin will likely contribute to a lower purchase price, as development options are more limited. Consequently a potential market value would likely fall somewhere at or below the average sales prices described above, resulting in a potential market valuation of $153,760 to $975,487. Market conditions at the time of sale will influence potential sales price.

Prospect Hill

The Prospect Hill campus comprises an 80,000 square foot former elementary school building on a seven-acre parcel in the southwest quadrant of the District attendance area. Built in the 1950s, the District discontinued this use more than 10 years ago. Following closure, a church leased the space for 10 years and made a failed attempt to purchase the building. The District leased the building to Wisconsin Air Academy briefly before the Academy closed in 2009.

The property is currently used by the New Berlin Police Department for training purposes. Significant deterioration has resulted since its closure, as the District has maintained the grounds but not the building or its interior. Resuming operations would require a thorough investigation by licensed architects and engineers. IFF's assessment identified substantial unresolved roof leaks at several locations, dysfunction of the well water and septic systems, unabated asbestos-containing materials throughout, and aging boilers which may not function properly when restarted. Additionally, the two-story building does not feature an elevator.

The New Berlin 2020 Comprehensive Plan acknowledges the District's vacant school campus. It recommends that if the District were to sell the property, that "Country Residential" would be a more appropriate zoning designation to replace the current Institutional designation. Country Residential encompasses most of the area in the western portion of the municipality, with the primary land use being single-family detached homes. The average density of this area is envisioned to have a density of one dwelling unit per five acres.

With the existing building on this parcel, current zoning would allow for uses such as a senior living facility, municipal building, technical college or trade school, and similar institutional uses. IFF's survey of sales of similarly sized buildings (2009-2011) needed to be extended to adjacent suburban counties (Milwaukee County excluded) to find similarly sized buildings. Per Table 8 below, no school buildings sold during this period. The properties sold during this period that were most similar to a school building were light industrial (e.g., warehouses and flex/research and development) and commercial self-

storage facilities. Of those, seven properties were found, ranging in purchase price from $9 to $52 per square foot, with an average purchase price of $38 per square foot.

To identify current or former school buildings, a survey was extended to most of southeast Wisconsin and as far back as 2006.

Per Table 9 below, this resulted in a mix of churches, schools and community centers, ranging in purchase price from $6 to $71 per square foot, with an average purchase price of $28 per square foot.

Table 9: Survey of Purchase Prices for School Buildings and Similar Buildings

City	Specific Use	Gross Building Area	Gross Land Area	Sale Date	Sold Price	Building Price PSF
Milwaukee	School or Related Use	185,300	497,691	2009	$1,200,000	$6.48
North Prairie	Other (e.g. Warehouse, R&D, Self-Storage)	87,555	87,556	2011	$800,000	$9.14
Milwaukee	School or Related Use	64,000	54,189	2007	$1,000,000	$15.63
Racine	School or Related Use	48,144	45,840	2006	$830,000	$17.24
West Allis	School or Related Use	65,128	71,874	2009	$1,150,000	$17.66
Milwaukee	School or Related Use	16,800	50,372	2007	$352,100	$20.96
Waukesha	Other (e.g. Warehouse, R&D, Self-Storage	84,528	104,544	2009	$1,825,000	$21.59
Milwaukee	School or Related Use	43,500	53,143	2007	$1,000,000	$22.99
Milwaukee	School or Related Use	105,000	434,729	2010	$2,600,000	$24.76
Sussex	Other (e.g. Warehouse, R&D, Self-Storage)	64,760	465,656	2009	$2,270,000	$35.05
Milwaukee	School or Related Use	7,920	15,131	N/A	$322,000	$40.66
Menomonee Falls	Other (e.g. Warehouse, R&D, Self-Storage)	70,372	205,603	2010	$3,300,000	$46.89
Jackson	Other (e.g. Warehouse, R&D, Self-Storage)	86,680		2011	$4,100,000	$47.30
Delafield	Other (e.g. Warehouse, R&D, Self-Storage)	62,070	234,440	2009	$3,250,000	$52.36
Sheyboygan	School or Related Use	28,000	197,327	2007	$1,900,000	$67.86
Appleton	School or Related Use	50,000	1,664,426	2007	$3,550,000	$71.00
		Low				$6.48
		High				$71.00
		Average All Buildings (Excluding High/Low)				$31.43
		Average School Buildings (Excluding High/Low)				$28.47
		Average Other Buildings (Excluding High/Low)				$37.71

The restrictive zoning surrounding the Prospect Hill campus and the lower demand for school buildings in New Berlin would likely contribute to a lower purchase price. In researching purchase prices on comparable facilities, IFF found that in 2009 the District received an offer on the Prospect Hill campus for $1,250,000 ($15.63 per square foot) from a church; the offer was later retracted due to lack of financing. Given this information, building condition, and the decline in value of properties over time, the market valuation would likely not exceed $10-$15 per square foot, or $800,000 to $1.2 million. Should the City of New Berlin allow sale only for residential development, sale price would likely be based on the value of the land. Assuming the same per square foot average sale price of $2.24, as referenced for Little Grove, the potential sale price of the property could be approximately $675,000 or less.

Depending on the District's economic condition and the opportunities available to dispose of the site or construct an updated facility on the parcel, demolition of the existing structure may be the most effective means of managing the property. Several factors contribute to the overall demolition costs of this facility. An approximate cost for the demolition of two-story institutional building can be expected to range from approximately $0.50 to $1.20 per square foot, depending on the scope of work undertaken, excluding remediation of environmental concerns. Other factors such as the configuration of footings and foundations, requirements from utility service providers, and requirements for the condition of the parcel after demolition have a substantial impact on demolition costs. Observations made during IFF's walk-through strongly suggested the presence of lead paint and asbestos, particularly in the boiler room and in outdated hallway floor tiles. Subject to actual quantities and locations of asbestos or other environmental factors, an additional expenditure of $0.50 to $1.00 per square foot for remediation may be necessary.

In summary, the low-density residential development targeted in the southwestern quadrant of the municipality, which includes both vacant school properties, is expected to generate only slow growth in the K-12 school age population of which most can be accommodated within the existing school properties. The previous *Enrollment Analysis* section details these conclusions. Given that the Little Grove facility is not large enough to accommodate a school, and both properties require extensive renovation, IFF does not see a clear reason based on the information gathered for this report for the District to retain these properties into the future. While neither property is likely to generate substantial revenue for the District, the District does expend some costs presently to complete minimal maintenance on the grounds and potential revenues would offset some of the costs of future projects. The timeframe to identify a suitable buyer may be extensive, however, and the future direction of the housing market in particular is likely to significantly affect the District's ability to identify a buyer willing to pay a reasonable sum for either property. IFF therefore recommends that the District not depend on sale revenue to fund its most pressing projects, but rather as a potential source of debt repayment or funds for lower priority projects or upgrades.

It should be noted that estimated market valuations are based on a cursory search of purchase prices of similarly sized buildings or parcels. IFF recommends the District consult a licensed appraiser, broker and other appropriate real estate professionals to assist with any efforts to value or sell its properties.

PART III: STRATEGIC PRIORITIES

Returning to the overall purpose of completing the assessment, the District wishes to establish a strategy that minimizes renovation costs, while ensuring that all students are accommodated in a quality facility and that the District is prepared to absorb potential enrollment increases over time. This report has outlined a set of analyses which aim to inform this plan: assessment of the current condition and future renovation needs of the District's seven active facilities, an assessment of the occupancy costs associated with each facility, an enrollment analysis that evaluates building capacity and usage against predicted enrollment trends over time, and a market analysis that assessed potential to recapture revenue from vacant, unused facilities.

The facility assessments identified that, while District facilities are in fair to good condition, some facilities are in substantially better condition than others. Table 10 below groups all seven facilities into one of three ranks, based on building condition:

Table 10: Ranking of Facilities by Condition [1]

Rank	Campus	Facility Comments	Operating Comments	Total Cost Estimate for Rank
1	• Ronald Reagan Elementary • Elmwood Elementary	Both schools constructed within the past 10 years, have been well-maintained, and require the least capital investment in the foreseeable future.	The newer facilities make operations easier with more or better space available for non-teaching functions, e.g., staff offices, storage, food service, recreation. Maintaining and improving the integrity of these areas will promote better teaching and serve as examples to other campuses.	$1.1 million
2	• Poplar Creek Elementary • Orchard Lane Elementary • New Berlin West Middle/High School	These campuses have undergone significant renovations in the recent past, which will extend the useful life and improve conditions for students and staff. Portions of each campus which were not recently improved are candidates for additional investment, whether through renovations or additions, to promote improved, lasting performance.	These older facilities can be operated well into the future with continued rigorous maintenance. The District, however, will need to determine a course regarding the pool areas at Berlin West and Eisenhower (ranked below).	$8.7 million

Rank	Campus	Facility Comments	Operating Comments	Total Cost Estimate for Rank
3	• Eisenhower Middle/High School • Glen Park Elementary	Glen Park Elementary requires significant investment in order to function at the level of the District's other elementary schools. Eisenhower has ample opportunities for functional and aesthetic upgrades, requiring substantial resources due to its size and use.	Eisenhower, with its adjacent District offices and location near a lower density residential area, is ideally located to serve the District administrative needs and high school population of New Berlin. Glen Park is a strong candidate for closure due to its substantial need for investment and due to District enrollment projections suggest closure of one elementary school is needed.	$9.2 million

[1] Facilities within each ranking group are listed in alphabetical order.

Possible Consolidation Strategies

The enrollment analysis indicated that, based on current and predicted future enrollment, the District could potentially close one of its elementary schools. The relatively poor condition of Glen Park suggests that this building is a good candidate for closure. This is substantiated throughout the following analyses: Glen Park is the District's smallest school and currently enrolls only 297 students, suggesting closure would impact the fewest number of students. The school also has the highest per pupil and per square foot occupancy costs of all schools in the District and is functionally obsolete. Further, although there are a handful of household growth pockets in the vicinity, Glen Park does not have enough additional capacity (only 135 seats at present) to absorb significant growth. Nor does Glen Park have the ability to easily expand through addition or major renovation due to its cylindrical shape. Therefore, the needed investment of $3.8 million would be spread across a limited number of students and the per pupil renovation costs, as shown in Table 2a, is $8,746 as compared with the next highest per pupil cost of approximately $4,814 at Eisenhower. In addition to savings in potential renovation costs, the District could save upwards of $300,000 in annual occupancy costs ($300,000 assumes some ongoing costs for mothballing; if sold, savings would be approximately $500,000 per year). Further, even if a future addition is required at another elementary school, assuming at least half of currently enrolled students can be accommodated at schools currently below capacity, the cost of the addition is likely to be less than the cost of renovating Glen Park.

The most likely candidates to receive students from the school are Orchard Lane and either Elmwood or Poplar Creek, based on location and available capacity. A minority of students may also be relocated to Ronald Reagan, however, given that the bulk of potential enrollment growth is likely to occur in the southern half of the District.

IFF recognizes that there may be additional factors outside of this report that may affect the District's decision to close Glen Park or any other facility. Should the District elect to continue Glen Park's operations but look to close another school, the next most likely

candidate would be Orchard Lane. Orchard Lane presently has the lowest usage rate (only 53 percent of available capacity is presently used) and no growth is predicted in the Orchard Lane attendance area. Renovation requirements are moderate at a total of $1.5 million including future improvement needs, however, and the facility incurs roughly the same magnitude of occupancy costs as Glen Park, despite its larger size.

The District has also considered the possibility of consolidating its middle/high schools by designating one as a middle school and one as a high school. As is discussed in the enrollment analysis, either facility could accommodate the current 7th and 8th or 7th through 9th enrollment, though Eisenhower would be slightly over capacity with three middle school grades. Accommodating the current 10th through 12th grade enrollment at Eisenhower would exceed the school's maximum capacity by over 100 students. While the school may be able to accommodate this moderate amount of excess capacity, there would be no room for future growth unless the District considered relocating its administrative space to another location. Accommodating the full 9th through 12th grade enrollment at Eisenhower would require an addition of approximately 50,000 square feet to accommodate current enrollment (assumes 100 square feet per student) and up to approximately 70,000 square feet if full projected District growth is realized. New Berlin West could accommodate the present 10th through 12th grade enrollment, but would also require an addition to accommodate growth over time or a full 9th to 12th grade model. In order to accommodate all 9th through 12th graders currently and in the future, New Berlin West would need to add approximately 23,000 square feet to accommodate current 9th through 12th grade enrollment and as much as 45,000 square feet to accommodate maximum long-term growth (assumes 100 square feet per student).

Current costs for construction of an addition range significantly based on the facility design and amenities sought. Assuming a typical cost for an economical facility of $165 per square foot for school construction, costs for an addition at either school range as follows in Table 11.

Table 11: Estimated Facility Addition Costs

	New Berlin West	Eisenhower
Current Enrollment		
Construction ($165 PSF)	$3,795,000	$8,250,000
Soft Costs (20%)	$759,000	$1,650,000
Contingency (10%)	$455,400	$990,000
TOTAL:	**$5,009,400**	**$10,890,000**
Maximum Future Enrollment		
Construction ($165 PSF)	$7,425,000	$11,550,000
Soft Costs (20%)	$1,485,000	$2,310,000
Contingency (10%)	$891,000	$1,386,000
TOTAL:	**$9,801,000**	**$15,246,000**

If identifying a means to offer a fully upgraded pool to all 9th graders is a major factor in the District's decision to consolidate the high school grades into a single facility, then the District may also consider the cost of pool reconstruction. Table 12 includes a rough

estimate of the total cost to construct a new pool at each facility, assuming that the New Berlin West pool would be housed in a new natatorium and including soft costs and contingency.

Table 12: Estimated Combined Cost of Maximum Capacity Addition and Reconstructed Pool

	New Berlin West	Eisenhower
Total Cost of Maximum Capacity Addition	$9,801,000	$15,246,000
Total Cost of New Pool/Natatorium	$8,000,000	$5,300,000
Grand Total	**$17,801,000**	**$20,546,000**

It would appear based on this rough estimate that pursuing an addition and a pool at the New Berlin West location would cost less than a larger addition and pool rebuilding at Eisenhower. In either case, however, constructing two new pools and a new natatorium (roughly $13.3 million) would be the less expensive option. This suggests that substantial cost savings are not likely to be realized by consolidating the middle/high schools in separate facilities. The most economical option for housing students over time would be to maintain the current grade configurations, channel future enrollment growth to New Berlin West, and, if the pools are to be rebuilt, use the Eisenhower pool for major competitions allowing the New Berlin West pool to remain in the current location. However, if for programmatic or other reasons the District elects to pursue evaluation of this option, IFF suggests conducting additional due diligence as to the actual costs of construction and feasible models to contain cost.

Should the District decide to pursue middle/high school separation with 9th through 12th grade housed at New Berlin West, IFF recommends that the District also give consideration to how to more optimally use Eisenhower. With only 7th and 8th grades, Eisenhower will have an enrollment of less than 800 students, despite its capacity to accommodate up to 1,119 students. One strategy would be to make Eisenhower a 6th through 8th grade school. Eisenhower could feasibly accommodate the District's entire current and future 6th through 8th grade enrollment. This would ease pressure on elementary schools that may be close to full enrollment if they absorb additional students should the District pursue closure of any of its facilities. The District may also wish to further explore relocation of the District administrative offices, as this could significantly reduce costs to accommodate expansion in the future and provide an opportunity to reallocate under-utilized space in another facility.

In general, IFF recommends that the District further explore its consolidation options, given the overall low utilization and minimal predicted enrollment growth. To the extent that facilities costs can be contained by minimizing the overall amount of space, while still meeting education goals, the District can potentially save costs that could be put toward upgrades at other facilities or other priority projects or initiatives. This report focused on building condition, occupancy costs, and enrollment trends. In evaluating potential options, IFF recommends the District also consider the following factors:

1. Impact on staffing needs and costs;

2. Maximum desirable travel distance from home to school, particularly for elementary school students;
3. Desirable minimum and maximum total school size; and,
4. Any other factors that may be important to the District and impacted by consolidation.

Facility Renovation Priorities and Estimated Cost

The facility assessments highlight IFF's recommendations within and across facilities. These included several facility-specific recommendations as well as a few renovation needs that are shared across facilities. The District's facilities range in condition, with relative cost estimates for improvements ranging from $475.000 for Elmwood Elementary to $5.4 million for Eisenhower Middle/High School.

As was shown in Table 2b, total construction costs for immediate recommended improvements across facilities is $3.1 million. Over time, and if the District elects to complete quality improvements also, the District can expect to invest $19 in construction cost for facility improvements in current year costs. With soft costs (20 percent) and contingency (10 percent), the total development cost is estimated at $25 million. As previously discussed, this budget assumes cost containment and improvements that are focused on Code, life safety, and basic aesthetic improvements. If the District elects to pursue items identified as alternates or major building renovations to alter the current functionality of its facilities, these costs could increase substantially. Table 13 below summarizes system-wide total development costs by timeframe.

Table 13: Total Estimated Development Costs by Timeframe

	Immediate Improvements	Intermediate Improvements	Long-Term Improvements	Quality Improvements	TOTAL
Total Construction Cost	**$3,094,846**	**$6,259,425**	**$7,427,124**	**$2,194,670**	**$18,976,065**
Soft Costs (20%)	**$618,969**	**$1,251,885**	**$1,485,425**	**$438,934**	**$3,795,213**
Contingency (10%)	**$371,382**	**$751,131**	**$891,255**	**$263,360**	**$2,277,128**
TOTAL	**$4,085,197**	**$8,262,441**	**$9,803,804**	**$2,896,965**	**$25,048,406**
Total Cost PSF	*$3.61*	*$7.31*	*$8.67*	*$2.56*	*$22.15*
Total Cost Per Student	*$709*	*$1,434*	*$1,701*	*$503*	*$4,346*

Table 14 shows annual cost of debt, assuming the District accesses bond financing with terms similar to average terms on the most recent issues (4.2 percent over 10 years is assumed) and finances 100 percent of the total estimated development cost.

Table 14: Annual Principal and Interest Costs by Timeframe

	Type of Improvement				TOTAL
	Immediate	Intermediate	Long-Term	Quality	
Total Development Cost	$4,085,197	$8,262,441	$9,803,804	$2,896,965	$25,048,406
Annual Cost of Principal & Interest	$501,001	$1,013,290	$1,202,319	$355,278	$3,071,888

Table 14 assumes that the District pursues the lower cost renovations outlined in the facility reports and does not pursue alternates. Table 15 shows the impact on total and annual costs, should the District elect to pursue the two most sizeable alternates: rebuilding of pools at the two high schools and replacement of exterior doors with FRP doors in lieu of steel. The cost for the New Berlin West Pool assumes rebuilding within the existing location.

Table 15: Total and Annual Cost of Alternates

	Estimated Construction Cost
Eisenhower Pool	$3,900,000
New Berlin West Pool	$2,750,000
FRP Doors (All Sites)	$3,600,000
Replace Parking Lot	$4,250,000
Total Construction Cost	$14,500,000
Soft Costs (20%)	$2,900,000
Contingency (10%)	$1,740,000
Total Development Cost	**$19,140,000**
Annual Cost of Principal and Interest	**$2,323,010**

Implementation

Current District Facility Management Organization and Operations

IFF understands that the District's organizational structure for managing the maintenance of its facilities is currently under review, due to the retirement of its long-time facilities director.

The District's seven operating campuses are clustered primarily in the eastern third of the City of New Berlin, where more of the residential land use is zoned higher and medium density, thus generating more households with K-12 school age children. The District's campuses range in age from less than 10 years old to approximately 50 years old and in condition from fair to good, with some campuses needing extensive renovations. IFF's immediate- and intermediate-term estimates through 2016 indicate capital repair and improvement needs of $9.7 million. Despite the range in condition, the District has maintained a rigorous maintenance system with funds available, using the annual budget cycle and a computerized work order system to prioritize maintenance, repairs and upgrades.

A commitment to remaining aware of and trained in the most current technology and product innovations related to sharing information and performing maintenance and custodial tasks should be emphasized as a priority for all personnel at all levels. Key personnel at each school should be trained in the efficient use of the District's electronic work order tracking system. All mid- to senior-level employees should be encouraged to attend regular training on advances in the technologies and methods for completing tasks effectively, and to inform and advise other members of the staff. Key personnel should be responsible for maintaining a set of knowledge and skills dealing with specific subject areas that are critical to all schools, including pool maintenance, ACM abatement, HVAC troubleshooting, plumbing and sewer maintenance, etc., and should be consulted as the District's resident experts on these subject areas when issues need to be resolved.

The District should maintain a single point of contact to manage the relationships with outside contractors and consultants, from requests for proposal through project close-outs, as related to short-term maintenance projects. Larger capital improvement projects should be managed separate from maintenance projects, as the budgets for larger improvements are often from a segregated pool of funds.

All documentation related to campus repairs performed by the District's staff should be maintained at the particular campus; work that is outsourced to contractors or consultants should be kept at a centralized location at District headquarters. Cost data should be maintained at District offices and segregated by building, broken down by standard maintenance procedures or special circumstances.

Recommendations

IFF continues to recommend *preventive maintenance* procedures as a cost-effective means of reducing exposure to higher cost remedial measures over time. The District should implement regular professional programs of inspection and repair:

1. The District should outsource major repairs of electrical, mechanical, plumbing and fire protection systems;
2. Inspect and clean roofs, gutters and downspouts semi-annually in spring and late fall and make repairs as required;
3. Inspect plumbing and site utility clean-outs semi-annually and clean as necessary;
4. For new and recently tuckpointed exterior masonry walls, inspect those areas bi-annually for deteriorated brick, mortar and lintels above doors and windows and make repairs as required;
5. Inspect joints around exterior doors and windows annually and make sealant repairs as required;
6. Perform annual spot inspections of all fire alarm and life safety system devices, including smoke detectors, visual and audio alarms, generators, etc.;
7. Conduct fire pump tests regularly per Code and make repairs as required;

8. Inspect boilers semi-annually at seasonal startup and shutdown and make repairs or adjustments as required; maintain other HVAC equipment, including air-handling units, chillers, humidity controllers, and control panels on a similar basis;
9. Inspect and clean grease traps annually or more often as dictated by usage or by health inspectors;
10. Clean and inspect kitchen freezers and coolers quarterly or more often as dictated by usage or by health inspectors;
11. Monitor and remove abandoned pipes, wires and other equipment left in place as part of ongoing maintenance;
12. Inspect fire extinguishers regularly per Code and recharge and tag extinguishers as required;
13. Inspect and test elevator and lift equipment regularly per Code and make repairs as required;
14. Perform warranty work on materials and systems per specifications to preserve warranty benefits;
15. Annually review all building material storage spaces and re-organize for safety and space efficiency;
16. Annually review document storage spaces to ensure proper fire protection and compliance with other Code requirements; and
17. Maintain accurate, comprehensive records of all work performed, using an information sharing system accessible to workers at all schools, and update on a daily basis.

IFF estimates the range of costs for this work to be $10,000 to $25,000 per year per campus.

IFF also recommends the District's immediate priorities should focus on life and safety improvements and securing the building envelopes (walls, roofs and windows) to prevent further deterioration or damage to building contents. This report should serve as a guide to bringing all facilities deficient in these areas up to a common high level. In order to accomplish these initial goals, IFF recommends the following:

1. Issue Request for Qualifications/Proposals (RFQ/RFP) to engage a life safety specialty firm to review system status and engineer upgrades as needed at all campuses relative to Code-compliance of fire alarm, fire extinguisher and sprinkler systems.
2. Issue RFQ/RFP to engage a masonry consultant/contractor to provide consistent inspections, specifications, and contractor supervision on all masonry repair projects.

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Eisenhower Middle and High School Campus
4333 South Sunnyslope Road, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the School District of New Berlin facility, located at 4333 South Sunnyslope Road in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Eisenhower Middle and High School campus is one of two middle/high schools operated by the school District. The campus has capacity to serve approximately 1,119 students in grades seven through twelve, based on the formula for capacity described in the Enrollment Analysis section in Part II of this report. For the 2010 school year,

attendance was reported to be 1,184 students. Originally constructed in 1969, the campus consists of the District's administrative headquarters in addition to functioning as a school. The total building area of approximately 272,000 square feet consists of two levels, a ground floor and a lower level which offers access to athletic fields on the north side of the site. In addition to classrooms and administrative offices, the campus features a swimming pool, auditorium, two gymnasiums, and an auxiliary garage/workshop. The main building houses all the classrooms and the current use of the building, by function, is approximately 65 percent classroom and program space and 35 percent administrative, office, mechanical, toilet, staff lounge and circulation space.

Overall, the building is in fair to acceptable condition relative to the other facilities operated by the District, although various building Code and deferred maintenance issues were identified as areas for improvement. Renovations and updates are needed to bring the facility into full compliance with current Code and accessibility regulations.

The building contains no sprinkler system, which has been grandfathered in through various renovations, but it is expected that any major renovation plans will require the installation of a complete system. The building is served by a fire alarm system that is monitored and maintained by SimplexGrinnell.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASSIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
4333 South Sunnyslope Road New Berlin, Wisconsin 53151	I-1, Institutional District	Educational	Load bearing masonry exterior walls with steel columns and joists	Approximately 600 spaces with sufficient number of handicap spaces

Use of the facility as a public school is permitted under the current classification of this site. The existing parking lot, with capacity for around 600 vehicles, appears to be sufficient in size for the needs of the students and staff.

IFF makes recommendations throughout the Facility Assessment to bring the facility up to current Code requirements that would be applicable as the City may require these improvements during the implementation of the capital improvement plan. IFF's recommendations phase in these Code improvements over time, as reflected in the General Facility Recommendations section of this report and the attached budget.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The existing parking lot is nearing the end of its useful life and should be resurfaced to limit decline of the surface over coming years, with limited repairs to areas where

cracks and other defects have become a serious problem. The costs for resurfacing are phased in over time in the attached cost estimate, and it is assumed that resurfacing would encompass the entire parking lot but include only limited full-depth repairs where necessary. Resurfacing and repairs are temporary measures that will extend the life of the lot for a limited amount of time. The District may choose to remove and replace those sections of the parking lot which have suffered the most significant deterioration, and an alternate price is included in the cost estimate for pavement replacement. The alternate value for lot replacement is based on the assumption that the sub-grade below the pavement is in adequate condition such that only isolated areas of remediation will be necessary, and that portions of the lot that remain in good condition will not need to be replaced. The District is advised to allocate a sizeable contingency for any work performed on the parking to account for restoration of deficiencies that may be discovered upon removal of the existing pavement.

2. All existing entry doors to the building are corroding due to frequent winter salting of the parking lots and are in need of replacement. The District has received a proposal to replace around 100 exterior doors and frames with FRP doors to avoid future issues with corrosion; the estimate is approximately $1,000,000. The use of FRP doors is often recommended in schools and other public institutions because they are better able to resist wear and corrosion and are often considered easier to clean than typical hollow metal doors. The expected service life of the FRP doors can be up to three to four times that of a typical hollow metal door in a public school application. However, there is a significant premium associated with upgrading the doors, and the school District should balance its long term maintenance costs against its immediate budget constraints when choosing what product will best fit the 7long term needs of the facility and the staff. IFF recommends replacing all exterior doors and frames with new, insulated hollow metal doors and frames and projects that the work will be phased in over time. IFF's cost estimate also shows a cost for FRP doors as an upgrade option (Alternate 1), if budget allows.
3. Exterior windows throughout the facility are old, single-pane inoperable metal units, which are repaired or replaced on an as-needed basis. Replacement of all windows with thermally insulated, operable units is recommended as a quality improvement work item, and the cost for this work is shown as being phased in with other long-term repairs.
4. The concrete pathways and sidewalks around the campus should be replaced to eliminate cracks and areas for additional water seepage.
5. Water infiltration could occur at the joints where building and sidewalk meet. IFF recommends sealing all joints at sidewalk/building contact with appropriate exterior grade caulk or other sealant. The estimated cost of this work is included in the intermediate needs section of the attached.

Structure

1. The building structural system appears to be generally in acceptable shape; no indications of differential settlement or foundation wall cracks were observed.
2. Recent tuckpointing has reduced the scope of exterior masonry restoration needed, but additional tuckpointing is needed to restore the exterior to its original water-tight condition. No lintels were identified as being in need of immediate repair or replacement; frequently, lintels which appear to be acceptable are found to be corroded once the adjacent brick has been removed. IFF's cost estimate includes an allowance for tuckpointing work to be phased in over time, and it is recommended

that lintels be examined during tuckpointing operations to identify areas of needed repair or replacement.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and other regulations. The items listed below are typical requirements for existing buildings with no change in use under the Code. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building meets the minimum required number of exits by Code.
2. The stairways are not enclosed with proper fire rating as required by Code. Stair railings do not meet Code and should be upgraded in the future. The stairways may be grandfathered in unless any significant improvements are undertaken in these areas, in which case full compliance with Code may be required. An estimated cost for enclosing the stairwells and installing accessible-height handrails is included in the attachment.
3. Computer and telephone equipment are located in a janitorial closet alongside a mop sink and cleaning chemicals. Per Code, the electrical equipment must be enclosed in a fire rated room. IFF recommends utilizing a room within the administrative area for server and IT equipment. As an alternative solution, the electrical room may be divided into two separate areas, in conformance with applicable Code provisions, so that the mop sink and janitorial supplies are not located in the same room as electrical equipment.
4. Solid-core wood doors at most classrooms and offices throughout the school are equipped with a glass transoms located above a doorway. IFF recommends infilling the existing transoms to meet Code and the costs for these improvements are assumed to be phased in over the intermediate and long-term.
5. All doors currently swing in the direction of egress, as required by Code.
6. Several of the doors on the south side of the building near the auditorium do not function as intended, either because they will not open when the panic bar is pressed, or because they will not close completely under the power of the mechanical closers. This bank of doors is the most frequently utilized entrance to the facility, particularly for extra-curricular activities involving members of the community, and should be repaired immediately for functional and aesthetic purposes. Cost for repairs is included in the immediate needs section of the cost estimate.
7. Localized areas of deteriorating finishes, including metal window frames and exterior soffits require continued maintenance and repair.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process. Undertaking significant renovations to the building can trigger differing

compliance requirements, and compliance with accessibility requirements is subject to the interpretation of reviewing agencies. IFF advises that the District should verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. All entrances are accessible at grade from the surrounding sidewalks. The main building entrance on the east side of the building has an automated door opener for persons with disabilities.
2. An elevator that was installed at the time of original construction remains the primary means of vertical accessibility between floors. The elevator is old, but inspected and operated frequently, and continues to serve the needs of the school.
3. A classroom and auxiliary area containing therapy and restroom facilities has been remodeled to fulfill the requirements of the District's special education students. This area is fully accessible, including combination shower-toilet units, lifts to changing stations, and hospital-style beds.
4. The auditorium seating area is not designed for accessibility, and may need to be re-configured. A small section at the front and back rows may need to be reconfigured to accommodate accessibility requirements at a minimum cost. The cost of reconfiguration is estimated in the intermediate section of the attached estimate. Additional evaluation is recommended to confirm compliance or identify strategies to meet current requirements.
5. Accessible toilet stalls, one per gender, are available on each floor of the building, in accordance with accessibility Code and guidelines.
6. Existing classroom doors do not have the appropriate width clearances on the pull side and the push side, as required to meet ADAAG. IFF assumes that during a major renovation project, the City may require reconfiguration of the existing classroom doors to meet accessibility guidelines.
7. Thumb-turn (knob) door hardware, observed at most classrooms throughout the building, does not meet Code. Lever-type hardware should be installed to meet Code.
8. Countertops should not exceed accessible height above the floor throughout the building to comply with accessibility Code requirements. At least one room for each unique space should be reconfigured such that the maximum counter height meets Code requirements.
9. Per Code, at least one accessible (high-low) drinking fountain or water cooler should be provided on each floor. Non-accessible drinking fountains were observed during IFF's walk through.
10. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.
11. Mounting heights for wall-mounted equipment, including dispensers, blackboards, and signage, throughout the facility do not meet ADAAG maximum height requirements. IFF assumes these will need to be brought up to Code during major remodeling in these areas.

Life and Safety

1. Evacuation plans are posted throughout the facility, including corridors, classrooms and common areas per Code.
2. The facility contains a centralized fire alarm tied directly to the SimplexGrinnell monitoring system. SimplexGrinnell inspects the system on an annual basis, and updates as necessary.

3. The audio and visual fire alarm annunciators are observed throughout the building. Audio and visual alarms are required by Code in each classroom and in common areas.
4. The facility does not feature a sprinkler system, and it is assumed that none is required by Code at this time. Installing a new sprinkler system is included as an alternate cost in the attached cost estimate, and the District should speak to a licensed fire sprinkler consultant to determine what modifications to the existing water service are necessary to accommodate a sprinkler system.
5. Smoke and heat detectors are present throughout and are hard wired into the fire alarm system, as per Code.
6. Code requires designated areas of rescue assistance at stairwells on any floor lacking direct access to grade level. This includes a two-way communication system, signage with Braille, and sufficient space inside a stairwell for wheelchair users to wait for help in an emergency. IFF's cost estimate assumes this work can be completed in the long term timeframe.
7. Fire extinguishers were observed to be sufficient in terms of locations and numbers. Extinguishers are inspected annually by a third party testing firm and replaced as needed.
8. Existing emergency lighting and exit lighting have battery back-up per Code, and were observed to be sufficient in terms of number and location.

Roof

1. The existing flat roof system is composed of an adhered 75-mil EPDM roofing membrane that is inspected by a third-party firm annually. The structure of the roof is divided into multiple levels of flat walking surfaces with varying sizes and elevations.
2. The roof exhibits frequent small leaks on a not irregular basis. Local areas of leakage are located by the facility maintenance staff as leaks are discovered, or by the District's third-party inspection consultant. Roof system repairs are completed each summer by a contractor selected through a competitive bid process. Interior ceiling finishes are repaired or replaced after roof leaks are resolved.
3. Observation of the roof revealed very few of the common visible indicators of deterioration, usually found at seams, roof penetrations, and the perimeter --an indication that annual repairs are completed thoroughly and professionally.
4. IFF recommends continuing the current program of annual inspection and localized repair, in order to limit the total capital costs in any given year. Records of repair locations and warranties should be maintained and referenced as appropriate.
5. The roof of the swimming pool area was damaged by recent storm events and will need to be thoroughly repaired or completely replaced in the immediate future.

Plumbing

1. Each floor contains a suitable number of restrooms, including acceptable ADA facilities for water closets and sinks.
2. The kitchen is used primarily for re-heating, rather than cooking, and contains adequate number of plumbing fixtures and facilities for water supply and drainage.
3. A new water main will need to be installed as a part of any retrofit performed to add a sprinkler system. Upgrades to the water service entrance may become a necessity for any sprinkler system installed.

4. District staff report that the sewer system connections are generally functional, but not logically installed. IFF recommends a thorough camera investigation and cleaning of the site utilities under immediate needs of the attached estimate.

Pool

1. The swimming pool was installed with the original building construction, and is now a major source of concern for the school District. The pool has most likely exceeded the useful life for which it was designed, and further repairs are a costly solution for maintaining the pool in serviceable condition. In 1998 or 1999, the pool basin was sealed by installing a fiberglass liner over the existing aluminum surface. Recently, the State Department of Health has cited the school due to issues related to pool water draining through cracks, despite the recent liner repairs, requiring additional repairs in order to prevent any leaking.
2. Each year for approximately four weeks, the entire pool area is shut down for annual maintenance, including cleaning, painting, checking/replacing filters, and other necessary repairs, inconveniencing for the pool users and the staff. Substantial repairs to the pool may allow the District to streamline its annual maintenance program and allow the pool to be used for a greater portion of the year.
3. Pool operations equipment – pumps, filters, etc. – are maintained only by licensed, trained members of the District's maintenance staff, as required by state law, or by qualified outside consultants or contractors.
4. The District reportedly spends approximately $30,000 annually to maintain the Eisenhower pool and related equipment in functional condition. The District should budget for this amount at a minimum in order to maintain the functionality of the pool area, potentially more in successive years as the pool continues to age.
5. District staff reports that achieving proper ventilation in the pool area has been a cause for concern and that the issue is likely to be the result of flawed design parameters in this area. Any examination of the school's climate control system, as referenced in the HVAC section of this assessment, should include an analysis of the pool area.
6. The locker room facilities serving the pool area likely will need to be brought into compliance with accessibility guidelines as part of any substantial renovation project involving the pool area. All amenities should be fully accessible, including entrances and lockers.
7. IFF recommends the District examine two options as related to the pool, depending on the projected programming needs of the District and financial constraints:
    - In the short term, IFF recommends following the District's current maintenance agenda meticulously, including regular cleaning, disinfecting, and making repairs as needed and costs associated with this work are budgeted in the deferred maintenance section of the cost estimate. Unless safety, programming needs, or regulatory compliance are immediate concerns to the school District, extending the existing pool's service life through proper maintenance and necessary repairs is the most economical solution.
    - In the long term, the District should consider having the existing pool re-built in kind by a qualified licensed contractor familiar with similar pool projects, to meet all current Codes and regulations, and to better suit the needs of the school District. The District has received estimates placing the cost of replacing the pool in kind at around $3.8 million, which is included in the attached cost estimate as an alternate. As another option, the school District

should consider whether to invest in the construction of an entirely new pool in the same area or a separate natatorium. Although clearly the most expensive option, building a brand new pool facility offers long-term benefits to the students and the community, and can be implemented at any point in the coming years.

HVAC/Refrigeration

1. District staff reported that ventilation and cooling is a problem in certain areas of the building, particularly in the basement level, where temperatures often stay in the upper seventies due to ineffective cooling. IFF recommends engaging a licensed mechanical consultant to analyze the parameters of the existing ventilation system and to propose solutions for adjusting or remodeling the system to provide adequate heat, cooling, and ventilation throughout the facility, with emphasis on the basement level and the pool area.
2. Multiple air handling units distribute air throughout the facility. The combination of the forced air and the temperature control piping leading from the boiler or the chiller are used to control climate in the building.
3. Controls for both heating and cooling are located within the mechanical room.
4. The building is heated using steam generated by five centrally-located high-efficiency boilers, manufactured by Patterson-Kelley and installed in 2010. The District's boiler maintenance program is excellent, and these units should last for several years.
5. Conditioned air is supplied from a centralized, screw-type chiller, approximately 25 years old, manufactured by York. IFF recommends replacing the chiller in the 5-10 year time horizon, or sooner if needed due to maintenance or functionality problems.
6. Both heat and conditioned air are distributed throughout the building in a single-tube delivery system equipped with ceiling-mounted unit ventilators serving as distribution hubs and plenum-type return system above the ceiling grid.
7. The system is adjusted from heating to cooling operations manually by the facility staff, but changing from heating to cooling, or in reverse, taxes the system considerably, and leaks are observed at valves within the mechanical room at each switchover. IFF recommends immediately replacing valves, couplings, and other miscellaneous fittings within the mechanical room to maximize the upgraded system.
8. The existing kitchen requires upgrades to the existing walk-in cooler and freezer; replacement with new units is the best option, and this cost has been included under the immediate needs section of the cost estimate. [The District reports that this work was completed during the summer of 2011.]

Electrical

1. Three service panels were observed at the electrical service entrance: a 4000-amp main distribution panel and subpanels of 3000-amps and 1200-amps. The existing 4000-amp service is the largest size that the electrical utility permits at this location, and is considered sufficient for a building of this size.
2. The electrical wiring is reportedly original to the building, except where recent renovations have taken place, consisting in many cases with old cloth wire insulation, according to District staff. IFF recommends replacing any outdated wiring and conduit with Code-compliant wiring and conduit. This is a potential safety and fire concern and the necessary repairs are noted in the immediate section of the cost estimate.

3. Several breaker panels contain overloaded circuits which present a substantial fire hazard, and the load will need to be redistributed to resolve the problem.
4. Power distribution within the classrooms and the corridors appears adequate; very few power cords were observed.
5. Almost all light fixtures observed were fluorescent drop-in fixtures with plastic lenses, installed within the drop ceiling grid. IFF recommends upgrading lamps and ballasts to improve energy efficiency within the long-term needs sections of the assessment.

Technology

1. The building has a data service and Wi-Fi capability throughout.
2. A closed-circuit television monitoring system serves the campus. Recordings are maintained on site, and the local police department also has access to the feed.
3. Telephone and data jack locations appear sufficient throughout the building. No issues were noted during the walk-through.
4. For security purposes, IFF recommends installing new security key fob system and additional interior security cameras. IFF assumes this work will be phased over time.
5. Telephone and data jack locations appear sufficient throughout the building. No issues were noted during the walk-through.

Environmental Conditions

1. District staff maintain on-site Asbestos Management Reports, and several members of the facility maintenance staff are qualified to perform ACM abatement activities.
2. IFF observes thermal pipe wrap throughout, and in older buildings, this pipe wrap is frequently an Asbestos Containing Material (ACM). ACM can usually be found over plumbing and steam pipes. If any work performed by the District or its contractors disturbs existing asbestos material, the ACM will need to be properly abated, and the area tested for residual fibers in accordance with applicable state and federal law.
3. Because the facility was constructed prior to 1978, it is likely that the walls have been painted with Lead Based Paint (LBP) in the past. The walls which likely have LBP were observed to be in good condition. As long as there is no chipping or peeling of the paint, it is acceptable to repaint the walls, which serves to encapsulate the LBP underneath. However, if the LBP is disturbed in any way (drilling holes, removing walls, etc.), licensed lead abatement personnel must be engaged to ensure lead dust does not contaminate the facility.
4. Any existing pre-1979 fluorescent light fixtures may have PCB-containing ballasts, which should be disposed of by an appropriately licensed professional as hazardous waste.
5. Any area finished with 9” x 9” vinyl floor tiles is suspected to have ACM in the floor tiles, the mastic, or both. IFF observed several areas that will need to be tested, and potentially abated, if they are to be disturbed during construction.
6. Mold remediation was performed in the kitchen in the recent past, but evidence of mold within the office area and the kitchen will need to be investigated further and cleaning any areas where mold has been found should be performed frequently and meticulously.

General Interior

1. Walls throughout the facility are mostly painted concrete block and in good condition. A 2’x4’ drop ceiling, consisting of aluminum grid and lay-in ceiling tiles is present

throughout most of the facility, except where the existing structural joists are exposed, in areas such as the gymnasium and the lunchroom. Other wall finishes include ceramic tile in the restrooms. As a quality improvement item, IFF recommends new paint throughout the facility and updated flooring in certain areas to maintain and upgrade the aesthetic appearance of the facility.
2. Toilet accessories throughout the building are old and in need of replacement. These include towel dispensers, soap dispensers, and mirrors. A cost for this work is included in the quality improvements section of the attached cost estimate.
3. IFF recommends replacing the buckling floor in the kitchen area due to moisture beneath freezer. [The District reports that this work was completed during the summer of 2011.]
4. Furniture throughout the building is well maintained.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the campus and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation on each floor only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. If moving electrical and IT equipment is not a consideration, a partition wall should be constructed separating the electrical facilities from the custodial area within janitor's closets.
2. Engage a licensed electrician to rebalance the entire electrical load on the system. Install new electrical panels and distribution gear as needed.
3. Replace cloth-insulated wiring and conduit and replace with Code-compliant wiring and conduit.

Structural, Building Systems, Exterior, and Other

1. Begin program of resurfacing with limited repairs to heavily damaged areas of the pavement. Alternately, the District may opt to remove and replace the existing parking lot with limited repairs to areas of the subgrade material. This work can be phased in over several years to defer costs.

2. Remove and replace all damaged concrete sidewalks and walkways around the site. This work may be phased in over time.
3. Begin program of replacing deteriorated exterior side doors with insulated energy efficient metal doors and frames with proper hardware. Alternatively, the District may choose to replace existing doors with FRP doors which are expected to provide a longer service life but are significantly more expensive (see cost for Alternate 1, FRP doors, in Attachment A). All exterior doors should have weather stripping and be caulked around the perimeter to help prevent heat loss. Door replacement may be phased in over several years.
4. Thoroughly repair or replace the damaged roofing system of the pool area, and complete other identified roof repair work per the District's annual program.
5. The bank of doors on the south side of the building near the auditorium should be replaced immediately in order to maintain proper means of entrance and egress.
6. Engage an appropriately licensed mechanical consultant to test and balance existing heating system and temperature climate control devices and to provide recommendations for upgrading the existing air circulation mechanisms (air handler units, ceiling fans, etc.) to provide more even thermal distribution and ventilation throughout the building. Recommended upgrades may be phased in over several years to defer the costs.
7. Replace valves, couplings, and other miscellaneous fittings within the mechanical room. This work may be coordinated with implementation of recommendations made by the mechanical consultant referenced above, if the District chooses to implement any changes.
8. Begin program of re-caulking around the perimeter of all exterior doors and windows that are not scheduled to be replaced.
9. Replace existing cooler and freezer in the kitchen with similar, updated models. The school District or its contractors will need to investigate what interconnections, or necessary additional alterations to the area around the coolers, will be required as a result of this renovation. The buckled portions of the kitchen floor at the freezer should be repaired during this process. (The District reports that this work was completed during the summer of 2011.)
10. Investigate below-ground storm water/sanitary sewer systems with camera line, document existing conditions and routing, and remedy any blockages.

Total Estimated Cost for Immediate Items: $735,359
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

<u>Intermediate: Items to be Addressed in Years Two through Five</u>

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Begin infilling existing glass transom windows with fire safety glass or other rated material to maintain classroom and corridor ratings.

2. Interior doors opening into corridors, stairwells or mechanical or electrical rooms should be replaced with appropriately fire rated doors where not present. All replacement doors should be installed to meet accessibility Codes and other requirements as per below.

Accessibility

1. Furnish and install ADA-compliant hi-low drinking fountains, at least one per level.
2. Perform additional evaluation to confirm compliance or identify strategies to meet current ADAAG requirements for accessible seating in the auditorium.
3. Interior doors for unique program areas which do not currently meet all accessibility guidelines should be replaced. Thumb-turn hardware, at all doors, should be replaced to lever action hardware to meet Code. All doors should swing in the direction of egress, be fire-rated doors, and meet all other specifications required by Code.
4. Remove and replace existing non-compliant countertops in unique program areas to meet maximum height accessibility requirements.
5. Replace non-compliant railings in the stairwells.

Structural, Building Systems, Exterior, and Other

1. Continue program of resurfacing, or replacement of, the existing parking lot.
2. Continue program of repairs to the roof with focus on penetrations, flashings, copings, and parapets as required.
3. Continue replacing deteriorated exterior side doors with insulated, energy efficient metal doors and frames with proper hardware, or with FRP models if the District chooses to upgrade.
4. Seal the joint where sidewalk and building exterior walls meet to prevent water seepage into the building. Sealant at joints should be inspected annually and updated as needed.
5. Install new security key fob system and additional interior CCTV security cameras.
6. Continue re-caulking program for exterior doors and windows.

Total Estimated Cost for Intermediate Items: $1,979,129

(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

<u>Long-Term: Items to be Addressed in Year Five or Beyond</u>

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. Long-term items are presented in three main categories: code and life safety, accessibility, and structural and building systems.

Code and Life Safety

1. Enclose stairways them with proper fire rated walls to meet Code. Provide designated areas of rescue assistance at stairwells on all floors lacking direct access to grade level, as required by Code. Areas of rescue assistance must include a two-way communication system, signage with Braille, and sufficient space inside the stairwell for wheelchair users to wait for help in an emergency.

2. Abate remaining ACM boiler pipe wrap.
3. Install a complete, Code-compliant sprinkler system to serve the entire facility. Upgrades to the sprinkler system may be required as a part of any significant renovations, if required by fire protection authorities. Installation of a comprehensive system to serve the entire building is shown in the cost estimate as Alternate 2.

Accessibility

1. Replace remaining existing countertops throughout to meet maximum height accessibility requirements.
2. Adjust remaining wall-mounted equipment (dispensers, blackboards, signage, etc.) to be located at accessible heights to meet Code in each accessible space.
3. Furnish and install sufficient number of ADA-compliant accessible lockers to meet Code.

Structural, Building Systems, Exterior, and Other

1. Continue program of resurfacing, or replacing, the existing parking lot.
2. Address all maintenance issues related to the pool area, which may involve major renovations to the existing pool basin, pool filter and other accessory equipment, thermal and ventilation control and distribution systems, locker rooms, etc. Alternatively, the school District may wish to construct a new pool area to replace the existing.
3. Continue replacing deteriorated exterior side doors with insulated, energy efficient metal doors and frames with proper hardware, or with FRP doors if the District chooses to upgrade.
4. Complete upgrades to older restroom fixtures, such as toilets, sinks, and faucets.
5. Continue re-caulking program for exterior doors and windows.
6. Replace existing outdated light fixtures and ballasts with energy efficient fluorescent models.
7. Replace the existing chiller, in lieu of making constant repairs, as maintenance concerns become more frequent.
8. Repair or augment the existing warming kitchen exhaust system to better control the presence of steam in the kitchen area.

Total Estimated Cost for Long Term Items: $2,091,969

(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

<u>Quality Improvement Items</u>

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues. In general, it is assumed that quality improvements will only take place in areas that are being renovated in order to comply with Code, accessibility, or system upgrades as noted above, or in areas that have deteriorated to an unfit condition.

1. Replace existing inoperable or hand-crank model windows with new energy efficient, operable windows.

2. Upgrades to all toilet accessories, including hand dryers, mirrors, and partitions
3. Repair and repaint walls and ceiling where they are damaged or stained.
4. Replace stained ceiling tiles as roof repairs are completed.
5. Replace older flooring with new resilient flooring, carpet or carpet tile, as desired, to help enhance the space throughout the building.
6. Replace existing furniture and add overhead storage bins in administrative area to help enhance the space and provide a more functional environment.
7. Provide a cosmetic facelift of chosen areas of the facility, including new paint and carpeting.

Estimated Cost for Quality Improvement Items: $578,145
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1][4]	$735,359	$1,979,129	$2,091,969	$578,145	$5,384,603
Cost per SF [2]	$2.70	$7.28	$7.69	$2.13	$19.80
Cost per Student [3]	$657	$1,769	$1,870	$517	$4,814

[1] Includes estimates for general conditions, insurance, bonds, and 10% contingency.
[2] Cost per square foot based on estimated building area of 272,000 square feet
[3] Cost per child based on maximum capacity of 1,119 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR THE SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Eisenhower Middle and High School Campus
4333 South Sunnyslope Road, New Berlin, Wisconsin
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 272,000
Maximum Building Capacity (students): 1,119

Description	Immediate Improvements	Intermediate Improvements	Long-Term Improvements	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$40,000	$230,000	$250,000	$0	$520,000	$15,000	Replace egress doors at south building entrance to open and close properly ($25,000) Infill existing glass transom windows ($275,000) Install walls within the janitor's closet to isolate electrical/IT ($5,000) Enclose stairs; install code-compliant railings and area of rescue ($200,000) - See General Note #5 Miscellaneous repairs ($15,000)
ADAAG & Handicap Accessibility Issues	$0	$107,000	$270,000	$0	$377,000	$0	Accessible Lockers ($20,000) Hi-low drinking fountains ($12,000) Accessible-height countertops ($20,000) Reconfigure classroom doors and lever hardware ($275,000) - work phased in over time Accessible auditorium seating ($25,000) Communication devices, signage, etc. ($25,000)
Exterior and Structure	$150,000	$500,000	$550,000	$0	$1,200,000	$35,000	Resurface exterior parking lot, isolated repairs ($450,000) - work phased over time - See Alternate 4 for replacement option Replace exterior doors with insulated HM doors ($350,000) - work phased over time - See Alternate 1 for FRP doors Replace existing concrete sidewalk around the building ($250,000) Tuckpointing Allowance ($150,000)
Roof	$45,000	$45,000	$45,000	$0	$135,000	$10,000	Remove and replace damaged area at pool ($30,000) Assumes additional roof repairs phased in over time - See Alternate 5 for new roofing budget
Sealant and Caulking	$15,000	$20,000	$30,000	$0	$65,000	Included	Seal joints where sidewalk abuts building ($25,000) Seal around all windows, curtain wall, and exterior doors ($40,000)
Plumbing	$50,000	$50,000	$40,000	$0	$140,000	$7,500	Investigate, clean out subgrade sewer system and necessary repairs ($100,000) Upgrade bathroom fixtures ($40,000)
Pool	$0	$30,000	$30,000	$0	$60,000	$30,000	Assumes on-going annual repairs - See Alternate 3 for rebuilding existing pool
Electrical and HVAC	$185,000	$175,000	$175,000	$0	$535,000	$7,500	Commissioning and adjustment of existing HVAC systems ($40,000) Replace all valves, couplings, and fittings in mechanical room ($20,000) New electrical panels; Replace all cloth-insulated wiring; Balance entire electrical system ($350,000) Replace existing Chiller ($75,000) Adjust/replace kitchen exhaust fan ($25,000)
Technology	$0	$50,000	$0	$0	$50,000	Included	Key fobs and new CCTV cameras ($50,000)
General Interior and Environmental	$95,000	$354,000	$260,000	$456,000	$1,165,000	$15,000	Replace existing walk-in cooler and freezer in kitchen ($30,000 per unit); Mold remediation ($10,000) and Associated miscellaneous repairs ($5,000) [The District reports that this work was completed during the summer of 2011.] Replace damaged/discolored ceiling tiles. ($20,000) Upgraded, energy-efficient light fixtures ($50,000) Upgraded lockers ($210,000) - work phased over time Upgrades to certain areas of carpeting, tile, and painting (phased in over several years) ($250,000) Replace outdated windows with new energy efficient, operable windows ($400,000) Upgrade Toilet Accessories ($10,000) Upgrade furniture and equipment ($100,000) Abate all remaining ACM ($50,000)
Construction Cost Subtotal	**$580,000**	**$1,561,000**	**$1,650,000**	**$456,000**	**$4,247,000**	**$120,000**	
General Conditions and GC fees (10%)	**$58,000**	**$156,100**	**$165,000**	**$45,600**	**$424,700**	**$0**	Includes mobilization, GC fees, O&P and etc.
Permit & Tap Fees	**$17,400**	**$46,830**	**$49,500**	**$13,680**	**$127,410**	**$0**	Allowance
Insurance and Bonds (2%)	**$13,108**	**$35,279**	**$37,290**	**$10,306**	**$95,982**	**$0**	
Construction Contingency (10%)	**$66,851**	**$179,921**	**$190,179**	**$52,559**	**$489,509**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$735,359**	**$1,979,129**	**$2,091,969**	**$578,145**	**$5,384,603**	**$120,000**	
Per SF Costs	**$2.70**	**$7.28**	**$7.69**	**$2.13**	**$19.80**	**$0.44**	
Per Student Costs, maximum capacity	$657	$1,769	$1,870	$517	$4,814	$107	
ADD Alternate 1: Replace exterior doors with FRP doors	$0	$500,000	$500,000	$0	$1,000,000	$0	Assumes work is phased over time
ADD Alternate 2: Install sprinkler system and upgrade to water service	$0	$306,000	$448,800	$0	$754,800	$7,500	Installing sprinkler system and upgrading the water system is assumed as an alternate and would require a licensed architect's confirmation
ADD Alternate 3: Rebuild existing pool	$0	$0	$3,900,000	$0	$3,900,000	$30,000	The proposal SDNB has received is for $3,800,000 and IFF's estimate assumes additional $100,000 for unforeseen conditions
ADD Alternate 4: Remove and replace damaged portions of the parking lot	$350,000	$450,000	$450,000	$0	$1,250,000	$10,000	This cost will be in lieu of resurfacing. Minimal sub-grade remediation is assumed to be necessary and suitable sections of pavement can remain.
ADD Alternate 5: Replace roof with TPO system	$272,000	$317,333	$317,333	$0	$906,667	$10,000	Assumes work is phased over time

General Notes:

1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school District's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Assumes that stairs will not need to be re-built to meet Code
6. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Eisenhower Middle and High School Campus
4333 South Sunnyslope Road, New Berlin, Wisconsin

Site Plan

Exterior View

Exterior View

Sidewalk

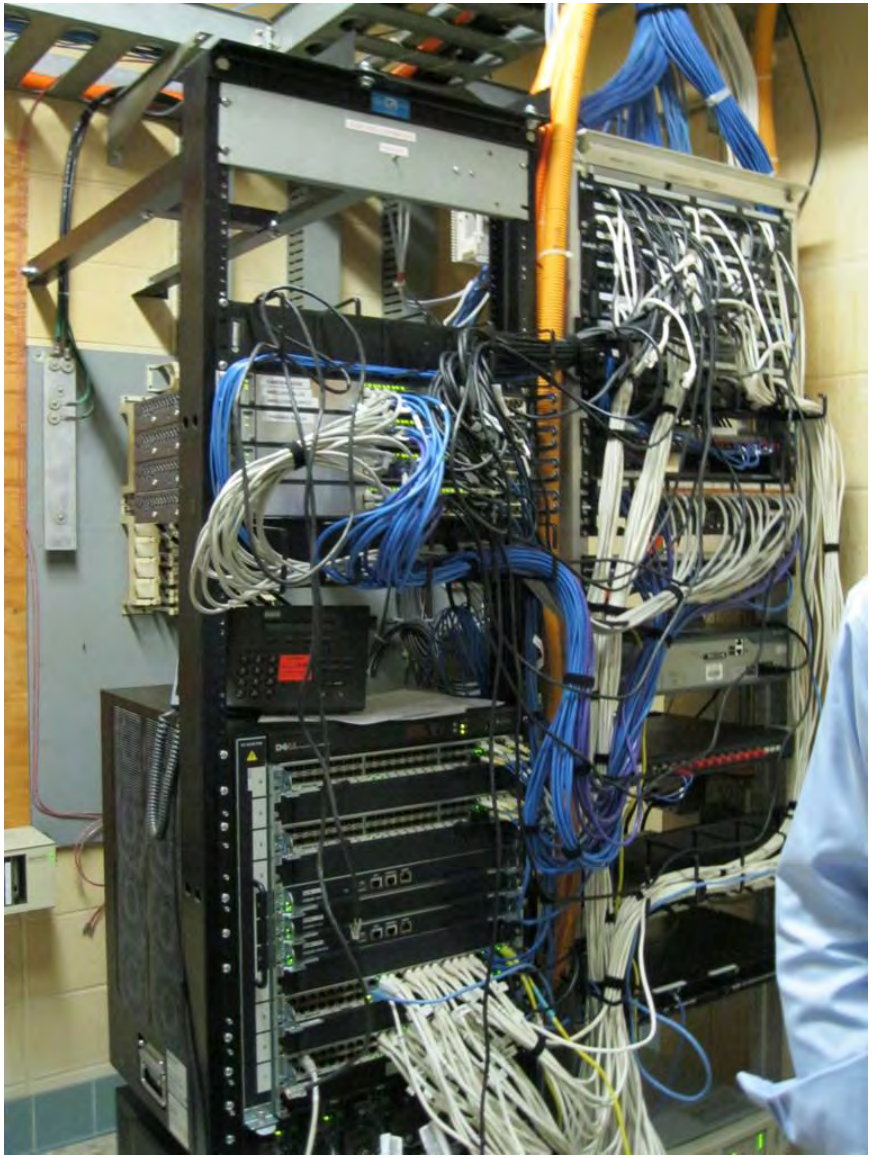
Corridor and Lockers

View of Corridor

View of Stairwell

Typical Ceiling

Deteriorated Window Frame



Server and IT Rack

Gymnasium

Auditorium

Pool

Pool Mechanical Room

Science Lab

Cafeteria

Kitchen Prep Area

Kitchen

Kitchen Equipment

Deteriorated Freezer

Roof

Roof Drain

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
New Berlin West Middle/High School Campus
18695 West Cleveland Avenue, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the New Berlin West Middle and High School facility, located at 18695 West Cleveland Avenue in May 2011 as part of a District-wide Strategic Facility Assessment project.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The New Berlin West Middle and High School campus is the larger of two combination middle/high schools operated by the school District at around 400,000 square feet. The campus has capacity for approximately 1,404 students in grades seven through twelve,

based on a formula for capacity described in the Enrollment Analysis section in Part II of this report. For the 2010 school year, enrollment is reported to be 1,209 students. Originally opened in 1961 the initial structure was designed to allow for possible expansion, and substantial additions and renovations have taken place over the past decades. Many of the issues related to updated building Codes and accessibility have been addressed during these projects. Areas constructed or renovated within the past 10-15 years, having been designed by a licensed architect and permitted by the City, are assumed to meet all Code and accessibility requirements.

Built on two stories, the New Berlin West high school facility features a recently added field house as well as a gymnasium, an outdated pool, a library and Idea Lab, and a state-of-the-art performance arts center completed in 2007. The facility has been very well maintained, exhibiting relatively little of the wear and tear that would be expected of a 40-year-old facility. The grounds include athletic field space to the east of the building, including a full track, baseball fields, tennis courts, and a soccer field, as well as amenities and concessions for visitors. The main building houses all the classrooms and the current use of the building, by function, is approximately 65 percent classroom and program space, 35 percent administration, office space, mechanical room, restrooms, staff lounge and other circulation space.

Overall, the building is in fair to acceptable condition relative to the other facilities operated by the District, but there are a few building Code and deferred maintenance issues that may be addressed. The building contains a sprinkler system, which has been analyzed and modified through recent building renovations, and is assumed to be in full compliance with applicable Code requirements. The building is served by a fire alarm system that is monitored and maintained by SimplexGrinnell.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
18695 West Cleveland Avenue New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing masonry/precast exterior walls with steel columns and joists	Appears to be sufficient for current levels of faculty and staff

Use of the facility as a public school is permitted under the current classification of this site. The existing parking lot appears to be sufficient in size for the needs of the students and staff. Accessibility features are integrated very well into the facility, an example of which is the strategic locations of three elevators within the building to maximize mobility between floors.

There are several mechanical equipment rooms throughout the facility, with differing areas of influence and a variety of climate control equipment in each room. The swimming pool is an original feature of the campus, having been in service since the early 1960's. New Berlin West's pool presents similar problems related to leaking and

upkeep as the Eisenhower MHS pool, but encompasses a much smaller area within the building.

IFF provides recommendations throughout the Facility Assessment to bring the New Berlin West Middle and High School facility up to current Code requirements that would be applicable as the City may require these improvements during the implementation of future capital improvements. IFF's recommendations phase in these Code improvements over time, as reflected in the General Facility recommendations section of this report and the attached budget.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The existing parking lot, in some sections, is nearing the end of its useful life and should be resurfaced to limit decline of the surface over coming years, with limited repairs to areas where cracks and other defects have become a serious problem. The costs for resurfacing are phased in over time in the attached cost estimate, and it is assumed that resurfacing would encompass the entire parking lot but include only limited repairs where necessary. Resurfacing and repairs are temporary measures, and District may choose to remove and replace those sections of the parking lot which have suffered the most significant deterioration, and an alternate price is included in the cost estimate for pavement replacement. The alternate value for lot replacement is based on the assumption that the sub-grade below the pavement is in adequate condition such that only isolated areas of remediation will be necessary, and that portions of the lot that remain in good condition will not need to be replaced. The District is advised to allocate a sizeable contingency for any work performed on the parking to account for restoration of deficiencies that may be discovered upon removal of the existing pavement.
2. Several of the existing entry doors to the building are corroding due to frequent winter salting of the parking lots and are in need of replacement. IFF recommends replacing corroded exterior doors with new hollow metal doors; this cost is assumed to be phased in over time within the attached cost estimate. The use of FRP doors is often recommended in schools and other public institutions because they are better able to resist wear and corrosion and are often considered easier to clean than typical hollow metal doors. The expected service life of the FRP doors can be up to three to four times that of a typical hollow metal door in a public school application. However, there is a significant premium associated with upgrading the doors, and the school District should balance its long term maintenance costs against its immediate budget constraints when choosing what product will best fit the long term needs of the facility and the staff. IFF recommends replacing all exterior doors and frames with new, insulated hollow metal doors and frames and projects that the work will be phased in over time. IFF's cost estimate also shows a cost for FRP doors as an upgrade option (Alternate 2), if budget allows.
3. The concrete sidewalk around the facility should be monitored and repaired as needed to eliminate cracks and areas of water seepage which can lead to cracks and spalling. No immediate problems with the existing sidewalk were noted. However, IFF recommends an annual program of inspecting and treating cracks, joints, and locations where the sidewalk abuts a dissimilar material with appropriate sealant in order to prevent deterioration due to freeze-thaw cycles.

4. Exterior windows throughout the older portions of facility are old, single-pane metal units; some windows are inoperable, others are operated by a hand crank. Replacement of all outdated windows with operable, thermally insulated units is recommended over time, and the cost for this work is shown as being phased in with other ongoing repairs as a quality improvement item. Where building additions or substantial renovations have taken place in the last 15 years, windows are updated energy-efficient, double-pane.
5. Water infiltration could occur at the joints where the building and sidewalk meet. IFF recommends sealing all joints at sidewalk/building contact with appropriate exterior grade caulk or other sealant. The estimated cost of this work is included in the intermediate and long term needs sections of the attachment.

Structure

1. The building structural system appears to be generally in good shape; no major indications of cracked structural walls, differential settlement, or heaving were identified.
2. Regular tuckpointing has been effective in reducing the scope of critical exterior masonry restoration, but additional tuckpointing is needed to restore the exterior to its original water-tight condition. Continued thorough examination of the entire building perimeter on a regular basis is encouraged to identify areas of need, and repairs should be completed as necessary. IFF's cost estimate includes an allowance for tuckpointing work to be phased in over time.
3. Exterior precast concrete panels enclose the Fieldhouse and other areas which have been added over time. All exterior precast appears to be in excellent condition.
4. An existing brick wall near the staff loading dock is visibly bowing out from the building and will require replacement very soon. IFF recommends immediately correcting this condition, and includes an estimated cost within the immediate needs section of the attached cost estimate. [The District reports that this work was completed during the summer of 2011.]

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and other regulations. The items listed below are typical requirements for existing buildings with no change in use under the Code. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits by Code.
2. All exterior doors currently swing in the direction of egress, as required by Code.
3. Many stairways are not enclosed with proper fire rating as required by Code. Several stair railings do not meet Code and should be upgraded. The stairways may be grandfathered in unless any significant improvements are undertaken in these areas, in which case full compliance with Code may be required.

4. The existing curtain at the stage in the smaller, older auditorium, designated the Little Theater, is likely not fire rated, as required by Code, and IFF recommends replacement of the curtain in the intermediate term improvements section of the cost estimate.
5. Localized areas of deteriorating finishes, including metal window frames and exterior soffits require continued maintenance and repair.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process. Undertaking significant renovations to the building can trigger differing compliance requirements. In addition, compliance with accessibility requirements is subject to the interpretation of reviewing agencies and the School District should verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. Several elevators were observed to be strategically located around the facility. Each one is reportedly in operation on a daily basis and is inspected frequently. Regular inspections of all elevator components are critical to ensure the safety of the students and staff.
2. A classroom and auxiliary area containing therapy and restroom facilities has been remodeled to fulfill the requirements of the District's special education students. This area was constructed to be fully accessible, including combination shower-toilet units.
3. In some locations, the educational unit offices are located on a mezzanine level accessible only by a small stairway, and installing accessible pathways to these mezzanines is an unfeasible, expensive solution. IFF recommends that all unique programs or services be located on accessible floors.
4. The main building entrances on the north and east sides of the building are equipped with electronically controlled push-button door entry systems. IFF recommends posting signs to direct occupants to accessible entrances.
5. The performance art center, constructed in 2007, appears to comply with all applicable accessibility guidelines; no modifications are recommended in this area. In the Little Theater, seating area does not accommodate for people with disabilities. IFF recommends removing sufficient number of fixed seating in front and rear of the theater to accommodate for persons with disabilities. The School District should engage a licensed architect to confirm the number of seats required and locations.
6. Accessible toilet stalls, a minimum of one per gender, are available on each floor in each building, in accordance with accessibility Code and guidelines.
7. Not all existing classroom doors have the appropriate width clearances on the pull side and the push side, as required to meet ADAAG. IFF assumes that during a major renovation project, the City may require reconfiguration of the existing classroom doors to meet accessibility guidelines.
8. Thumb-turn (knob) door hardware, observed at several classrooms throughout the building, does not meet Code. Existing non-compliant hardware should be replaced with lever-type hardware, closers, and other features to meet accessibility guidelines.
9. Countertops are at improper heights above the floor throughout the older portions of the building. At least one room for each unique space should be reconfigured such that the maximum counter height meets Code requirements.

10. Per Code, at least one accessible (high-low) drinking fountain or water cooler should be provided on each floor. Non-accessible drinking fountains were observed during the IFF's walk through; and the cost for replacing these fountains is included in the long-term needs section of the attached estimate.
11. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.
12. Mounting heights for all wall-mounted equipment, including dispensers, blackboards, and room identification signage, throughout the facility should be adjusted to meet ADAAG maximum height requirements where not already compliant.

Life and Safety

1. Evacuation plans are posted throughout the facility, including corridors, classrooms and common areas per Code.
2. The facility contains a centralized fire alarm tied directly to the SimplexGrinnell monitoring system. SimplexGrinnell inspects the system on an annual basis, and updates as necessary.
3. Code requires designated areas of rescue assistance at stairwells on any floor lacking direct access to grade level. This includes a two-way communication system, signage with Braille, and sufficient space inside a stairwell for wheelchair users to wait for help in an emergency. IFF's cost estimate assumes this work can be completed in the long term timeframe.
4. Fire extinguishers were observed to be sufficient in terms of locations and numbers. Extinguishers are inspected annually by a third party testing firm and replaced as needed.
5. Smoke and heat detectors are present throughout and are hard wired into the fire alarm system, as per Code.
6. Existing emergency lighting and exit lighting have battery back-up per Code, and were observed to be sufficient in terms of number and location.
7. There are audio and visual fire alarm annunciators and pull boxes throughout the building as required by Code in each classroom and common area.

Roof

1. The existing flat roof system is composed of a 75-mil EPDM roofing membrane that is divided into multiple flat walking surfaces with varying sizes and elevations. The entire roof is inspected by a third-party firm annually. The District identifies areas of needed repairs each year and bids the work out to independent contractors.
2. The structure of the roof is divided into multiple flat walking surfaces with varying sizes and elevations. The majority of the roof, mostly over the original structure and older additions, is a fully adhered membrane system. Above the recent additions, including the performance arts center and media center and Fieldhouse, the membrane is held in place by ballast.
3. The roof exhibits occasional small-scale leaks. Local areas of leakage are detected by the facility maintenance staff as discovered, and an independent third-party inspection is performed annually. Roof system repairs are completed each summer by a contractor selected through a competitive bid process.
4. Observation of the roof revealed very few of the common visible indicators of deterioration, usually found at seams, roof penetrations, and the perimeter, an indication that annual repairs are completed professionally and thoroughly. IFF recommends continuing the current program of annual inspection and localized

repair, based on need and budget constraint, in order to limit the total capital costs in any given year. Records of repair locations and warranties should be maintained and referenced as appropriate.

Plumbing

1. The New Berlin West facility is served by City of New Berlin sanitary facilities, but draws its own water from wells located on the site. Well water treatment equipment within the facility is functional, and no problems were reported with respect to water quality or pressure. IFF recommends regular, thorough inspections of the associated water filtration, softener, and other water supply system equipment as part of the District's annual maintenance.
2. It is reported that the City of New Berlin has declined requests to install city water service at the facility. IFF recommends revisiting the option of installing city water service as a part of any campus expansion plans.
3. Each floor contains a suitable number of restrooms, including accessible facilities for water closets and sinks.
4. The kitchen at New Berlin West is one of two main food preparation and distribution facilities operated by the District, along with the kitchen at Eisenhower MHS. No problems were reported within the kitchen area, and IFF observed adequate facilities related to water supply and drainage, temperature and humidity control, and heating and cooking.

Pool

1. The swimming pool was installed with the original building construction, and is now a source of concern for the District due to continuing maintenance problems and outdated construction that does not meet current standards for competition. Continuous repairs have been performed on the pool area over the past several decades to ensure that it remains functioning properly. For example, wall and floor tiles within the pool basin require repair too frequently, submerged windows between the below-ground chase and the pool exhibit leaks, and the ventilation in the pool area needs to be evaluated.
2. A below-ground chase corridor contains windows with a view of the pool from under water.
3. The locker room facilities serving the pool area likely will need to be brought into compliance with accessibility guidelines as part of any substantial renovation project involving the pool area. All amenities should be fully accessible, including entrances and lockers.
4. Pool operations equipment – pumps, filters, etc. – are outdated but functional, and are maintained by licensed, trained members of the District's maintenance staff, as required by state law, or by qualified outside consultants or contractors.
5. IFF recommends the District examine several options as related to the pool, depending on the projected programming needs of the District and financial constraints:
    - In the short term, the facility's maintenance staff has taken excellent care of the pool facility, and IFF recommends following the District's current maintenance agenda meticulously, including regular cleaning, disinfecting, and making repairs as needed. Costs associated with this work are included in the deferred maintenance section of the cost estimate. Unless safety, programming needs, or regulatory compliance are immediate concerns to the

school District, extending the existing pool's service life through proper maintenance and necessary repairs is the most economical solution.

- In the long term, IFF recommends that the existing pool be re-built in kind by a qualified licensed contractor familiar with similar pool projects, to meet all current Codes and regulations and limit the demand for and the costs of ongoing maintenance and repairs.
- Because the pool is inadequate to meet the requirements of the District's athletics governing body for competition, the District should consider the costs and benefits of constructing a new, Code-compliant aquatic facility and repurposing the existing pool area for other needs. A newly constructed pool area allows the District to implement a variety of forward-thinking technologies and approaches, and may potentially lead to lower operating costs for a larger and more sustainable facility. Construction of a new Code-compliant pool facility will cost several million dollars, as indicated by the quote presented to the District to re-build the Eisenhower MHS pool, but may be the most favorable solution for the long-term needs of the students and the community.

HVAC/Refrigeration

1. Significant renovations and additions to the facility spanning several years have created multiple, unrelated zones throughout the building with a unique climate control system serving each. IFF was unable to observe and document all of the mechanical systems and controls, but, reportedly, at least three separate mechanical rooms are located throughout the building with separate boilers, air handlers, chillers, and controllers serving distinct zones. IFF recommends engaging a qualified mechanical engineer or commissioning engineer to advise the District of its options for operating all mechanical climate control equipment from a single point of control.
2. Multiple air handling units distribute air throughout the facility. The combination of forced air, unit ventilators, and the temperature control piping leading from the boiler or the chiller are used to control the building climate.
3. Controls for both heating and cooling are located within the mechanical rooms.
4. The older areas of the building are heated using high-efficiency boilers, manufactured by Patterson-Kelley and installed around 2000. The District's boiler maintenance program is excellent, and these units should last for several years. Newer areas are heated using high-efficiency boilers, manufactured by Thermal Solutions. Distribution through a network of supply ducts is assisted by Variable Air Volume terminal units and unit ventilators, depending on the area in the facility. Return air is processed back to the mechanical equipment through a centrally ducted return system.
5. The main school kitchen serves as a primary preparation and distribution hub for prepared food items to be provided to several of the District's Elementary schools, in addition to serving the population of New Berlin West. Over time, the efficiency of the existing walk-in freezer and cooler has declined, and the school District indicates that both units are planned for replacement in the near future. An estimated cost for this work is included within the immediate needs section of the attached. (The District reports that this work was completed following IFF's site visit.)

Electrical

1. Electrical service into the building consists of a 4,000-amp service, the largest size permitted by WE Energies. No overhead service entrance is visible at the site, and it is assumed that electrical facilities enter the building below ground.
2. Distribution of the electrical system has been modified and reconfigured during successive renovations to such an extent that tracking individual circuits requires a detailed analysis by a licensed electrical engineer or similarly qualified electrician. IFF recommends that the loads be identified and balanced across the system as part of any successive renovation design, and includes an estimated cost of this analysis in the intermediate and long-term needs sections of the attachment.
3. Power distribution within the classrooms and the corridors appears adequate; very few power cords were observed in use. Wire mold is utilized in several locations to extend electrical service within classrooms.
4. Almost all visible classroom and corridor light fixtures were fluorescent drop-in fixtures with plastic lenses, installed within the drop ceiling grid. IFF recommends upgrading outdated fixtures to energy-efficient units and assumes that this cost can be phased in over time.
5. The District reports problems related to uncontrolled flickering of lights, particularly notable within the music wing of the building. Attempts to isolate and resolve the issue have been unsuccessful, indicating that the optimal solution may be the replacement of the fixtures in which flicker is a problem. A projected cost for replacement is noted in the attached cost estimate.

Technology

1. The building has a data service and Wi-Fi capability throughout.
2. A closed-circuit television monitoring system serves the campus. Recordings are maintained on site, and the local police department also has access to the feed.
3. For security purposes, IFF recommends installing new electronic key fob entry controls at additional entrances and additional interior security cameras.
4. Telephone and data jack locations appear sufficient throughout the building. No issues were noted during the walk-through.

Environmental Conditions

1. The District maintains on-site Asbestos Management Reports, and several members of the facility maintenance staff are qualified to perform ACM abatement activities.
2. IFF observed thermal pipe wrap throughout the mechanical equipment rooms and, in older buildings, this pipe wrap is frequently an Asbestos Containing Material (ACM). ACM can usually be found over plumbing and steam pipes, and should be abated per applicable Codes and regulations where encountered.
3. In areas of the facility constructed prior to 1978, it is likely that the walls have been painted with Lead Based Paint (LBP) in the past. The walls which likely have LBP were observed to be in good condition. As long as there is no chipping or peeling of the paint, it is acceptable to repaint the walls, which serves to encapsulate the LBP underneath. However, if the LBP is disturbed in any way (drilling holes, removing walls, etc.), licensed lead abatement personnel must be engaged to ensure lead dust does not contaminate the facility.
4. Any existing pre-1979 fluorescent light fixtures may have PCB-containing ballasts, which should be disposed of by an appropriately licensed professional as hazardous waste.

5. No concerns related to excess moisture or mold were observed in the public areas of the facility. Ponding water was observed in a basement mechanical room, near the sanitary sump pump. IFF recommends that the District's maintenance staff attempt to isolate and remediate the source of the water, or engage a licensed plumbing professional to assist with investigation and repair.

General Interior

1. Walls throughout the facility are mostly painted concrete block and in good condition. Other wall finishes include 12" ceramic tile in restrooms, wallpaper, and exposed brick. The aesthetic layout of the various alternative wall finishes creates a very welcoming environment.
2. A 2' x 2' drop ceiling, consisting of aluminum grid and lay-in ceiling tiles is present throughout most of the facility, except where the existing structural joists are exposed, in areas such as the gymnasium, the pool, and the field house. Prefinished ceiling panels are installed in the performance arts center.
3. Flooring finishes consist of a mixture of carpet and vinyl composition tile (VCT) throughout most of the corridors and classrooms. Ceramic tile was observed in the restrooms, pool area, and locker rooms. In some older areas of the building, the flooring has been replaced with upgraded VCT, in excellent condition similar to the condition of the VCT flooring in the additions. Dated, deteriorating VCT flooring remains in some of the older portions of the building. IFF recommends upgrading the remaining VCT with newer stock.
4. Toilet accessories throughout older portions of the building are aging and in need of replacement. These include towel dispensers, soap dispensers, and mirrors. A cost for this work is included in the quality improvements section of the attached cost estimate. Toilet accessories within newer additions to the building are in excellent condition and will require regular maintenance to remain so.
5. Furniture throughout the building is well maintained, but IFF recommends budgeting for furniture upgrades as part of any future renovation project.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the campus below and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation on each floor only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. Where janitorial and electrical share space, a partition wall should be constructed creating two rooms to separate the electrical facilities from the janitorial supplies and the mop sink.
2. Engage a qualified masonry restoration contractor to repair the exterior masonry wall near loading dock area where existing brick is bowing out away from the building. The school District should consider isolating this area for safety reasons until repairs are completed. (The District reports that this work was completed during the summer of 2011.)

Structural, Building Systems, Exterior, and Other

1. Engage a mechanical engineer or commissioning engineer to recommend solutions for operating all of the facility's climate control equipment from a single source of control and optimizing operational efficiency of the system(s).
2. Replace existing cooler and freezer in the kitchen with similar models. The school District should investigate what interconnections, or necessary additional alterations to the area around the coolers, will be required as a result of this renovation. Some mold remediation activities may also be necessary depending on the conditions encountered upon removal of the existing cooler and freezer.
3. Begin program of systematic resurfacing of the parking lot with limited repairs to damaged areas, to be phased in over time to spread out the cost. The attached cost estimate includes Alternate 1 if the District wishes to implement complete structural replacement of the lot and limited subgrade remediation in lieu of resurfacing.
4. Begin program of replacing deteriorated exterior side doors with insulated energy efficient metal doors and frames with proper hardware. Alternatively, the District may choose to replace existing doors with FRP doors which are expected to provide a longer service life but are significantly more expensive (see cost for Alternate 2, FRP doors, in Attachment A). All exterior doors should have weather stripping and be caulked around the perimeter to help prevent heat loss. Door replacement may be phased in over several years.
5. Begin program of cataloging and replacing outdated windows with operable, energy-efficient models.
6. Begin program of re-caulking around the perimeter of all exterior doors and windows that are to remain.
7. Investigate below-ground storm water/sanitary sewer systems with camera line and remedy any blockages.
8. Begin systematic replacement of existing, outdated light fixtures with new, energy-efficient fixtures
9. Replace all light fixtures that continue to flicker or that exhibit limited functionality despite attempts to resolve the issue by adjusting lamps and ballasts.

Total Estimated Cost for Immediate Items: $826,645
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

<u>Intermediate: Items to be Addressed in Years Two through Five</u>

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Replace non-fire rated stage curtain with appropriately fire rated curtain.
2. Older interior doors opening into the corridors, doors opening into the stairwells, and mechanical and electric room doors should be replaced with fire-rated doors, as required by Code.

Accessibility

1. Furnish and install ADA-compliant hi-low drinking fountains to replace existing non-compliant units. At least one hi-low drinking fountain should be located on each floor.
2. All newly installed doors should meet accessibility requirements to allow proper clear space on the pull side and the push side of doors. All doors should swing in the direction of egress.
3. Replace any outdated door hardware that is not in compliance with applicable accessibility guidelines. Thumb-turn hardware, located at doors within older sections of the building, should be replaced to lever action hardware and accessories to meet Code.
4. Remove and replace existing non-compliant countertops in unique program areas to meet maximum height accessibility requirements.
5. Adjust wall-mounted equipment, including dispensers, blackboards, and signage, throughout the facility to meet accessible height requirements where not already compliant.

Structural, Building Systems, Exterior, and Other

1. Working with the City of New Berlin, determine the District's options with regard to having City water service brought to the facility in the future.
2. Continue program of systematic resurfacing, or alternatively removal and replacement, of the parking lot with regard to need and cost.
3. Continue replacing deteriorated exterior side doors with insulated, energy efficient metal doors and frames with proper hardware, or with FRP doors if the District chooses to upgrade.
4. Continue program of replacing outdated windows with operable, energy-efficient models.
5. Continue replacing existing, outdated light fixtures with new, energy-efficient fixtures.
6. Continue re-caulking of exterior doors and windows which are not scheduled for replacement.
7. Seal the joint where sidewalk and building exterior walls meet to prevent water seepage into the building. Sealant at joints should be inspected annually.

Total Estimated Cost for Intermediate Items: $1,553,129
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Long-Term: Items to be Addressed in Year Five or Beyond

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Enclose stairways with proper fire rated walls to meet Code, and ensure that all other Code requirements related to stairwells, including accessibility guidelines, are met.
2. Replace existing, non-compliant hand rails within stairwells.
3. Abate ACM boiler pipe wrap as work is performed in the mechanical rooms or other areas where ACM is suspected.

Accessibility

1. Provide designated areas of rescue assistance at stairwells on all floors lacking direct access to grade level, as required by Code. Areas of rescue assistance must include a two-way communication system, signage with Braille, and sufficient space inside the stairwell for wheelchair users to wait for help in an emergency.

Structural, Building Systems, Exterior, and Other

1. Engage a qualified electrical consultant to investigate the current electrical system and to recommend appropriate modifications to keep the loads on each panel balanced throughout the school and for optimizing energy consumption throughout the facility.
2. Engage appropriately licensed professionals to review the condition of the existing swimming pool area and to propose solutions for upgrading or replacing entirely.
3. Continue resurfacing, or replacement, of the parking lot with regard to need and cost.
4. Continue replacing existing exterior doors using similar hollow metal units or upgraded FRP models.
5. Continue replacing older windows with operable, energy-efficient models.
6. Review the condition of exterior masonry façade and perform necessary tuckpointing.

Total Estimated Cost for Long Term Items: $1,813,040
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues. In general, it is assumed that quality improvements will only take place in areas that are being renovated in order to comply with Code, accessibility, or system upgrades as noted above, or in areas that have deteriorated to an unfit condition.

1. Replace older flooring with new resilient flooring, carpet or carpet tile, as desired, to help enhance the space throughout the building.
2. Replace existing furniture and add overhead storage bins in administrative area to help enhance the space and provide a more functional environment.
3. Replace existing, outdated light fixtures with new, energy-efficient fixtures.
4. Provide a cosmetic facelift of chosen areas of the facility, including new paint, carpeting, and ceiling tiles where stained or damaged.
7. Install occupancy sensors to operate lights in classrooms and offices.
8. Install new security key fob system and additional interior security cameras.
5. Upgrade outdated plumbing fixtures in older sections of the building.

Estimated Cost for Quality Improvement Items: $469,108
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1] [4]	$826,645	$1,553,129	$1,813,040	$469,108	$4,661,921
Cost per SF [2]	$2.07	$3.88	$4.53	$1.17	$11.65
Cost per Student [3]	$589	$1,106	$1,291	$334	$3,320

[1] Includes estimates for general conditions, architectural/engineering fees, and 10% contingency.
[2] Cost per square foot based on estimated building area of 400,000 square feet
[3] Cost per student based on maximum capacity of 1,404 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
New Berlin West Middle and High School Campus
18695 West Cleveland Avenue, New Berlin, Wisconsin
Prepared by IFF
June 2011

Building Square Footage (SF): 400,000
Maximum Building Capacity (students): 1,404

Description	Immediate Improvements	Intermediate Improvements	Long-Term Improvements	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$40,000	$125,000	$160,000	$0	$325,000	$20,000	Replace existing stage curtain with fire rated curtain ($75,000) Enclose stairs and provide areas of rescue assistance ($200,000) - See General Note #5 Replace stairwell railings with code-compliant rails ($30,000) Install walls within the janitor's closet to isolate eletrical/IT ($5,000) Miscellaneous Code issues ($15,000)
ADAAG & Handicap Accessibility Issues	$77,000	$95,000	$155,000	$0	$327,000	$0	Hi-low drinking fountains ($15,000) Reconfigure classroom doors and hardware ($250,000) Accessible lockers and and countertops ($32,000) Other miscellaneous accessibility upgrades ($30,000)
Exterior and Structure	$175,000	$450,000	$450,000	$0	$1,075,000	$45,000	Repair bowing masonry wall ($100,000) [The District reports that this work was completed during the summer of 2011.] Replace doors with HM doors ($400,000) - See Alternate 1 for FRP doors Resurface parking lot, isolated repairs - phased in over time ($500,000) - See Alternate 2 for replacement option Review exterior brick and tuckpoint as needed ($75,000)
Roof	$45,000	$75,000	$75,000	$0	$195,000	$15,000	Assumes roof repairs (phased over time)
Sealant and Caulking	$35,000	$40,000	$50,000	$0	$125,000	Included	Caulk/seal around all perimeter doors and windows that are not scheduled for replacement ($75,000) Caulk/seal around building perimeter where building abuts sidewalk or pavement ($50,000)
Plumbing	$75,000	$35,000	$25,000	$15,000	$150,000	$10,000	Investigate, rod out problem areas of underground storm and sanitary systems, and other repairs as needed ($75,000) Upgrade outdated fixtures in older restrooms ($25,000) Insulate pipes and miscellaneous repairs ($50,000)
Electrical and HVAC	$100,000	$150,000	$180,000	$0	$430,000	$10,000	Engage a licensed Mechanical consultant to analyze and install improvements to the mechanical climate control system, including bringing all controls together in a unified system ($175,000) Engage a licensed Electrical consultant to investigate and recommend changes for optimizing performance and maximizing conservation and implement recommendations ($130,000) Replace light fixtures that continue to flicker despite continued attempts to repair ($50,000) Miscellaneous repairs and upgrades ($75,000)
Pool	$0	$45,000	$45,000	$0	$90,000	$45,000	Assumes on-going annual repairs - See Alternate 3 for rebuilding the pool
Technology	$0	$0	$0	$30,000	$30,000	$0	Install keyfob system ($30,000)
General Interior and Environmental	$105,000	$210,000	$290,000	$325,000	$930,000	$25,000	Replace existing walk-in cooler and freezer in kitchen ($30,000 per unit); Mold remediation ($10,000); and Associated miscellaneous repairs ($5,000) Paint touch-ups ($50,000) Replace existing outdated VCT flooring ($50,000) Replace inefficient light fixtures ($120,000) Upgrades to existing ACT ceiling tile system ($50,000) Replace outdated windows with operable, energy-efficient windows ($500,000) - work phased in over time Install occupancy sensors ($30,000) Abate remaining ACM ($55,000)
Construction Cost Subtotal	**$652,000**	**$1,225,000**	**$1,430,000**	**$370,000**	**$3,677,000**	**$170,000**	
General Conditions and GC fees (10%)	**$65,200**	**$122,500**	**$143,000**	**$37,000**	**$367,700**	**$0**	Includes mobilization, GC fees, O&P and etc.
Permit & Tap Fees	**$19,560**	**$36,750**	**$42,900**	**$11,100**	**$110,310**	**$201,060**	Assumes permit fees waived by City and no tap fees required
Insurance and Bonds (2%)	**$14,735**	**$27,685**	**$32,318**	**$8,362**	**$83,100**	**$0**	
Construction Contingency (10%)	**$75,150**	**$141,194**	**$164,822**	**$42,646**	**$423,811**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$826,645**	**$1,553,129**	**$1,813,040**	**$469,108**	**$4,661,921**	**$371,060**	
Per SF Costs	**$2.07**	**$3.88**	**$4.53**	**$1.17**	**$11.65**	**$0.93**	
Per Student Costs, maximum capacity	**$589**	**$1,106**	**$1,291**	**$334**	**$3,320**	**$264**	
ADD Alternate 1: Remove and replace deteriorated sections of parking lot	$400,000	$500,000	$500,000	$0	$1,400,000	$5,000	This cost will be in lieu of resurfacing. Minimal sub-grade remediation is assumed to be necessary and suitable sections of pavement can remain.
ADD Alternate 2: Replace exterior doors with FRP doors	$350,000	$350,000	$500,000	$0	$1,200,000	$0	In lieu of replacing with similar insulated hollow metal doors
ADD Alternate 3: Rebuild pool, as constructed	$0	$0	$2,750,000	$0	$0	$0	Estimate
ADD Alternate 4: Construct new pool facility and repurposing existing pool area	$0	$0	$6,000,000	$0	$0	$0	Estimate

General Notes:
1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Assumes that stairs will not need to be re-built to meet Code
6. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
New Berlin West Middle and High School Campus
18695 West Cleveland Avenue, New Berlin, Wisconsin

Site Overview

Building Overview

Front Entrance

Performing Arts Center Glass Curtain Wall

Entrance Vestibule

Corridor at Main Entrance

View of Interactive Media Center

Alternative View of Interactive Media Center

View of Performing Arts Center Seating & Stage

Alternate View of Performing Arts Center Seating & Stage

Typical Office Area

Typical Stairwell

Typical Classroom

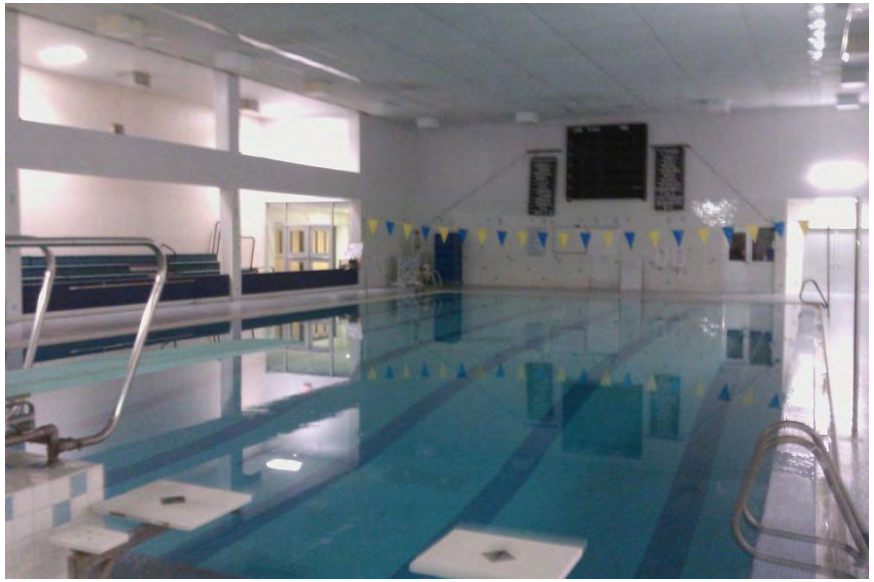
Typical Classroom

View of Conference/Lecture Hall

Cafeteria

View of Kitchen

Kitchen Freezer & Cooler



Swimming Pool

Swimming Pool Below Ground Corridor

Renovated Men’s Restroom

Typical Older Window

Ballasted EPDM Roof

View of Precast Wall Panels

Typical Air Handling Unit

Water Heater

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Elmwood Elementary School Campus
5900 South Sunnyslope Road, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the Elmwood Elementary School facility, located at 5900 South Sunnyslope Road in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Elmwood Elementary Campus was constructed to serve approximately 605 students from kindergarten through grade six, based on a formula for capacity described in the Enrollment Analysis section in Part II of this report. For the 2010 school year, student enrollment was reported to be 494 students. The facility, constructed in 2002, is

approximately 102,000 square feet and divided into four wings. The current use of the building, by function, is approximately 65 percent classroom and program space, including a gymnasium and library and lunch room, and about 35 percent administration, office space, toilet, staff lounge and other circulation space.

All of the wings house classrooms, with separate grade levels in each wing. All student activities are located on the ground level, but building system equipment is located within a second floor mechanical room that is less than the full building footprint. The ceiling in the entry atrium and the gymnasium both extend up to the elevation of a second story, but the mechanical equipment room is the only functional space located on a second level. The mechanical room is accessible only to the facility operations staff, with an entrance leading to the maintenance office. The building does not have a basement.

Overall, the campus facilities are in good condition relative to the other facilities operated by the District, and few building Code and deferred maintenance issues were identified. The building is not sprinklered, but to the best of IFF's knowledge, no sprinkler system is required. The building is served by a fire alarm system that is maintained by SimplexGrinnell and tied directly to their private monitoring system, as with all the District's schools except for one.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASSIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
5900 South Sunnyslope Road New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing masonry exterior walls, steel columns and joists	Appears insufficient for current use

Use of the facility as a school is permitted under the current zoning classification of this site. The existing parking lot is in good condition and has been protected by annual re-sealing. However, the number of existing parking spaces appears to be insufficient to meet the needs of the faculty and staff.

Expansive undeveloped space to the east, south, and west of the site open up a diverse range of possibilities for expansion of the campus and/or building, if expansion is necessary in order to serve more students.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The sidewalk, curbs, and parking lot appear to be in good condition and well-maintained. A curbless asphalt drive surrounds the facility.
2. After heavy rains, the drainage swale located on the south side of the property will fill up and standing water comes near to the building. IFF recommends installing an appropriately designed culvert, or other stormwater control device, to contain and direct the flow of water in this area. A licensed civil engineer should be engaged for

the design of any adjustments to the stormwater control systems, accounting for the existing site drainage characteristics.
3. Trash bins are located in an enclosure on the north side of the building.
4. Exterior windows are thermally insulated glazing with aluminum frames throughout. Windows on the first floor are operable. All visible lintels appear to be in good condition.
5. Two playlots are located at the northeast and southeast corners of the building. The ground surfaces at the playlots are covered with engineered wood chips to meet accessibility guidelines. IFF recommends restoring the playlots with new engineered wood chips as part of the District's annual maintenance plan.

Structure

1. The building's overall structural system appears to be in excellent condition.
2. The exterior façade of the facility appears to be in excellent condition, and no tuckpointing is recommended at this time.
3. No water seepage into the facility was observed at any location.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and regulations. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits.
2. An existing janitor's closet, with Code-required mop sink, is also used for electrical equipment storage. IFF recommends, relocating the server room equipment to a dedicated room, or otherwise constructing walls and another doorway to separate electrical equipment from the janitor's closet containing the mop sink and cleaning supplies.
3. All doors swing in the direction of egress, as required by Code.
4. Corridors, stairs, and mechanical room doors should meet minimum fire rating requirements. Per Code, fire rating labels must be visible. IFF recommends that the building engineer remove paint from fire rating labels wherever obstructed labels are encountered, and assumes that removal of paint from fire tags can be carried out by facility maintenance staff in the course of daily operations.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the applicable provisions of the Wisconsin Uniform Building Code. The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process for any significant renovations. In addition, compliance with accessibility requirements is subject to the interpretation of reviewing agencies and the School District should verify specific

requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. The main front entrance of the building is fully accessible and equipped with a push pad for mechanical door operation.
2. There is no vertical accessibility required, as only the mechanical equipment is located above ground level and there is no basement level.
3. Two stages, one serving the gymnasium and the other in the lunchroom, are both accessed by a commercial chair lift. District staff indicated no problems related to the lift.
4. Existing doors appear to have the appropriate width clearances on the pull side and on the push side to meet Code.
5. All doors throughout the facility have lever-type hardware or push-bars for operation, as required by Code.
6. Countertops are at a height accepted by ADA throughout the building.
7. Accessible, hi-low drinking fountains and hand washing stations are located throughout the facility.
8. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.
9. In the warming kitchen, one wall-mounted sink located near the entry door requires the installation of an insulating sleeve at the drainage piping, in order to meet accessibility Code. IFF assumes that the District's maintenance staff can perform this operation as part of their daily responsibilities.

Life and Safety

1. Evacuation plans are posted throughout the facility, including corridors, classrooms and common areas per Code.
2. The facility is served by a fire alarm system tied to, and monitored by, SimplexGrinnell. The alarm system is inspected annually, and upgrades are performed by SimplexGrinnell as needed.
3. Smoke and heat detectors are present throughout and appear to be hard wired into the fire alarm system, as per Code.
4. Fire extinguishers were observed to be sufficient in terms of location and number.
5. Existing emergency lighting and exit lighting have battery back-up per Code, and were observed to be sufficient in terms of number and location.
6. There are strategically located audio and visual fire alarm enunciators in the building. Audio and visual alarms are required by Code in each classroom and common area.

Roof

1. The roof of the structure is divided into multiple levels of flat walking surfaces of varying sizes and elevations with a black 75-mil EPDM roofing membrane system.
2. No evidence of leakage was observed throughout the building, and District staff indicate that the condition of the membrane is inspected annually for deterioration.
3. IFF recommends continuing the current program of inspections of the roof membrane to identify areas of deterioration before any infiltration is observed.

Plumbing

1. All restrooms contain sufficient amenities to meet Code, including fixture counts and compliance with accessibility guidelines.
2. The facility is served by three (3) 125-gallon, high efficiency hot water tanks, which are reported to be more than adequate to meet the needs of the faculty, staff, and students.
3. District staff reported no problems with existing plumbing system with regard to temperature, water pressure, or waste drainage.

HVAC

1. The facility is heated using two steam boilers, manufactured by Smith, which were installed in the early 2000's during building construction, and a VAV (variable air volume) system of dampers to control the thermal distribution to each area.
2. Approximately three (3) air-handling units (AHUs), manufactured by McQuay, and an extensive network of ducts distribute air throughout the building after it has been heated or cooled. Additionally, heat recirculation apparatuses are present, but not visible, to assist the system operate efficiently.
3. Return air is pulled into the plenum space above the ceiling grid to be returned to the AHUs.
4. A roof mounted chiller operates full time despite the ambient temperature, indicating a potential issue with the design or the implementation of the entire system. IFF recommends engaging a licensed building commissioning agent to analyze the system, with emphasis on the chiller and its function and balance, to determine the optimal strategy for resolving this issue. IFF also recommends regularly balancing the system.
    a. During IFF's visits, District staff stated that a technical consultant had examined the HVAC system's digital controls and discovered a glitch in the programming leading to inefficiencies in the operation of the building. It was reported to IFF that the District intends to rectify the programming error and re-assess the state of the climate systems in the near term, and therefore no estimate of this cost is provided.
5. Inside air returns to the HVAC system using a plenum-style return arrangement, with return grilles located in the ceiling grids in the corridors.
6. The facility's warming kitchen features a commercial dishwasher reported to create excessive steam during operation, inhibiting the effectiveness and comfort of the staff and potentially damaging the finishes in the area. IFF recommends adjusting the strength of the kitchen exhaust fan for short term approach and installing a new exhaust fan as noted in Attachment A.
7. The design and implementation of the building's operating systems earned an Energy Star designation in 2009.

Electrical

1. The main building's electrical service is sufficient for a building of this size and use, although the specific size of the service entering the building was not evident. No exterior weatherhead was visible, indicating that power enters the building below ground. No problems with the electrical service were reported by District staff.
2. Power distribution outlets are located strategically around the facility, including several locations where wire mold has been utilized to bring electricity to areas not previously served.

3. Lighting throughout the building and the grounds is functional and adequate. Ceiling mounted can lights illuminate the main corridors. Lay-in 2'x4' fixtures, equipped with either opaque lenses or parabolic louvers, and are strategically placed within the ceiling grid to provide light within classrooms. Metal halide fixtures are utilized in the gymnasium.

Technology

1. The building has a T-1 data service for use by the students and faculty, and limited Wi-Fi service is available.
2. An emergency telephone system is present for use by the staff and faculty when required.
3. Telephone and data jack locations are sufficient throughout the building.
4. Electronic key fobs are located at entrances to control staff and faculty entry into the building.

Environmental Conditions

1. Since the facility was constructed after 1978, it is extremely unlikely that the walls have been painted with Lead Based Paint (LBP) or that Asbestos Containing Material (ACM) was used for any purpose within the building. IFF did not observe anything that would indicate the presence of lead paint, asbestos, mold, or under/above ground tanks.

General Interior

1. Flooring in the building is a mixture of 12-inch Vinyl Composition Tile (VCT) and carpet. Main corridors are tiled, while the corridors within each section of classrooms are carpeted. Within the classrooms is a mix of carpet and VCT. Flooring is in good condition throughout, and should be maintained diligently to remain so. Near wet walls, ceramic tile is present in some locations.
2. Walls are mostly composed of painted concrete masonry unit (CMU) block with vinyl base in good condition. Other wall finishes include ceramic tile at wet walls.
3. Ceiling throughout is composed of acoustical ceiling tiles in a metal grid. There is exposed roof deck within the primary corridor leading to/from the front main entrance; however, this area has been finished with decorative "clouds" of ceiling tile in aesthetic arrangements. Painted metal deck and roof joists are exposed in the gymnasium.
4. Millwork throughout the facility, including but not limited to student cubbies and classroom cabinets, appears in good condition.
5. IFF recommends installing a fresh coat of paint throughout the building under quality improvements.
6. Furniture throughout the building is relatively new and very well maintained.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the Elmwood Elementary Campus and also has

prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Engage a licensed civil engineer to review the conditions at the swale south of the building to recommend a permanent solution for overflow onto the school grounds.

Structural, Building Systems, Exterior, and Other

1. Engage a licensed building commissioning agent to analyze the system, with emphasis on the chiller and its controls, to determine a strategy to optimize the chiller efficiency.
2. Test and balance all other components of the mechanical climate control systems including, but not limited to, the chiller, hot water heaters, air handling equipment, and controls.
3. Adjust or add to the exhaust system within the warming kitchen to collect the steam generated by the dishwasher.

Total Estimated Cost for Immediate Items: $51,982
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Intermediate: Items to be Addressed in Years Two through Five

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Accessibility

1. Wrap exposed piping serving the hand sink with insulation in the warming kitchen.
2. Furnish and install ADA-compliant accessible lockers for the required number of all student lockers.

Code and Life Safety

1. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. If moving electrical and IT equipment is not a consideration, a partition wall should be constructed separating the custodial area and the electrical facilities area into distinct rooms.

Structural, Building Systems, Exterior, and Other

1. Begin program of treating exterior hollow metal doors with anti-corrosion coating, since these doors have experienced little corrosion relative to other schools in the District. Alternatively, the District may choose to replace existing doors with FRP doors which are expected to provide a longer service life but are significantly more expensive (see cost for Alternate 2, FRP doors, in Attachment A).
2. Balance heating, ventilation, and air conditioning systems regularly.
3. Continue with current roof inspection and maintenance program to repair roof membranes, penetrations, flashings, copings, and parapets as required.
4. Begin annual re-caulking program for exterior doors and windows.
5. Begin annual program of sealing interfaces where building abuts adjacent sidewalk, parking lot, or landscaped areas.

Total Estimated Cost for Intermediate Items: $242,161
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Long-Term: Items to be Addressed in Year Five or Beyond

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. IFF recommends funding a replacement reserve in anticipation of the need for these items. It should be noted that IFF's long-term recommendations represent the full extent of work to be done on the Elmwood Park facility required to make the facility fully accessible. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Structural, Building Systems, Exterior, and Other

1. Continue program of treating exterior hollow metal doors with anti-corrosion coating.
2. Continue re-caulking program for exterior doors and windows.
3. Continue program of sealing interfaces where building abuts adjacent sidewalk, parking lot, or landscaped areas.

Total Estimated Cost for Long Term Items: $152,143
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues.

1. Paint common areas regularly.
2. Annually review the volume and condition of the Code-compliant engineered wood chips at both playlots and replenish with similar, approved wood chips as necessary.

Estimated Cost for Quality Improvement Items: $25,358
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1] [4]	$51,982	$242,161	$152,143	$25,358	$471,645
Cost per SF [2]	$0.51	$2.37	$1.49	$0.25	$4.62
Cost per Student [3]	$86	$400	$251	$42	$780

[1] Includes estimates for general conditions, insurance, bonds, and 10% contingency.
[2] Cost per square foot based on estimated building area of 102,000 square feet
[3] Cost per child based on maximum capacity of 605 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Elmwood Elementary School Campus
5900 South Sunnyslope Road, New Berlin, Wisconsin
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 102,000
Maximum Building Capacity (students): 605

Description	Immediate	Intermediate	Long-Term	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$10,000	$65,000	$0	$0	$75,000	$10,000	Investigation of South Swale ($10,000) Install walls within the janitor's closet to isolate eletrical/IT ($5,000) Miscellaneous Code-related repairs ($65,000)
ADAAG & Handicap Accessibility Issues	$0	$31,000	$10,000	$0	$41,000	$0	ADA-compliant lockers ($30,000) Wrap pipes at sinks ($1,000) Miscellaneous improvements ($10,000)
Exterior and Structure	$0	$25,000	$40,000	$0	$65,000	$15,000	Treat exterior doors and frames with anti-corrosive coating ($50,000) - See Alternate 2 for FRP doors Miscellaneous exterior/structural repairs ($15,000)
Roof	$0	$0	$0	$0	$0	$15,000	Assumes annual maintenance costs
Sealant and Caulking	$0	$40,000	$40,000	$0	$80,000	included	Seal joints where asphalt abuts concrete in parking lot ($35,000) Seal around all windows, curtain wall and exterior doors ($45,000)
Plumbing	$0	$0	$0	$0	$0	$5,000	Staff indicated no issues related to the plumbing systems
Electrical and HVAC	$31,000	$0	$0	$0	$31,000	$5,000	Mechanical engineer investigation of roof-mounted chiller and test & balance of Overall System ($30,000) Adjust exhaust fan in warming kitchen ($1,000) - See Alternate 1 for new kitchen exhaust fan
Technology	$0	$0	$0	$0	$0	$0	
General Interior and Environmental	$0	$30,000	$30,000	$20,000	$80,000	$10,000	Paint - phased over time ($75,000) Wood chips ($5,000)
Construction Cost Subtotal	**$41,000**	**$191,000**	**$120,000**	**$20,000**	**$372,000**	**$60,000**	
General Conditions and GC fees (10%)	**$4,100**	**$19,100**	**$12,000**	**$2,000**	**$37,200**	**$0**	Includes mobilization, GC fees, O&P and etc.
Permit & Tap Fees	**$1,230**	**$5,730**	**$3,600**	**$600**	**$11,160**	**$0**	Allowance
Insurance and Bonds (2%)	**$927**	**$4,317**	**$2,712**	**$452**	**$8,407**	**$0**	
Construction Contingency (10%)	**$4,726**	**$22,015**	**$13,831**	**$2,305**	**$42,877**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$51,982**	**$242,161**	**$152,143**	**$25,358**	**$471,645**	**$60,000**	
Per SF Costs	**$0.51**	**$2.37**	**$1.49**	**$0.25**	**$4.62**	**$0.59**	
Per Student Costs, maximum capacity	$86	$400	$251	$42	$780	$99	
ADD Alternate 1: Install new kitchen exhaust fan	$0	$0	$20,000	$0	$20,000	$0	
ADD Alternate 2 Replace exterior doors with FRP doors	$0	$200,000	$200,000	$0	$400,000	$0	Assumes work is phased over time

General Notes:
1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Elmwood Elementary School Campus
5900 South Sunnyslope Road, New Berlin, Wisconsin

Site Plan

Exterior View

Playground

View of Main Corridor

View of Cafeteria

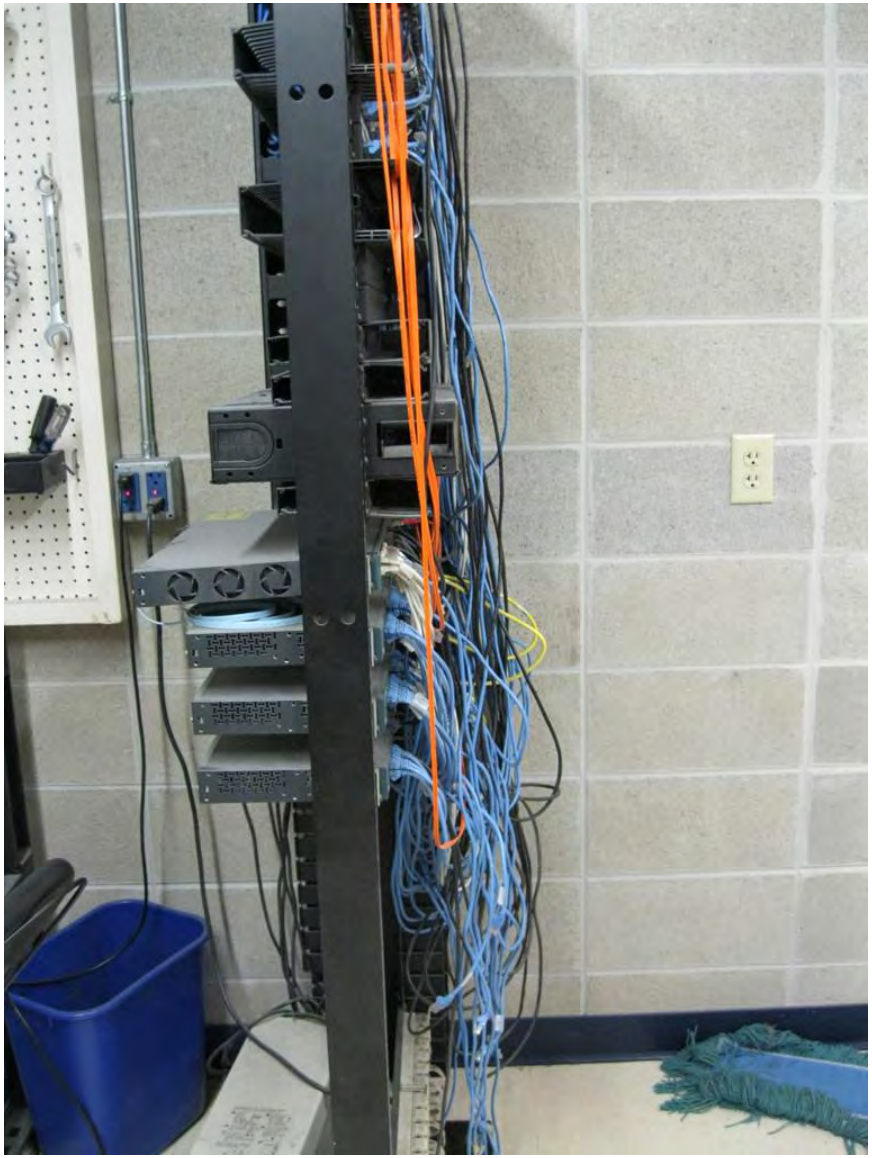
Cubbies

View of Classroom

View of Classroom

Gymnasium

Stage in Gymnasium



Server Rack

Typical Exterior Door

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Glen Park Elementary School Campus
3500 South Glen Park Road, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the Glen Park Elementary School facility, located at 3500 South Glen Park Road, in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Glen Park Elementary facility was constructed with capacity for approximately 432 students from kindergarten through grade six. Student capacity for Glen Park is based on a formula for capacity described in the Enrollment Analysis section in Part II of this

report. For the 2010 school year, student enrollment was reported to be 297 students. The facility, constructed in 1965, was designed to be circular in shape, featuring approximately 62,000 square feet over two levels above grade on a site of approximately 10 acres. The current use of the building, by function, is approximately 75 percent classroom and program space, including a gymnasium and library and lunch room, and about 25 percent administration, office space, toilet, staff lounge and other circulation space, excluding the mechanical room.

The facility is located within a residential neighborhood and is landlocked by developments on all sides. The grounds contain abundant green area, with baseball diamonds and parking lot. Corridors separate an outer ring of classrooms and offices from the inner circle containing a two-story gymnasium as well as storage, kitchen, and locker rooms. Building system equipment, including two boilers, hot water heater, and controls, is located in a basement mechanical room that occupies less than the full building footprint. A below-ground mechanical chase corridor, accessible from the mechanical room, wraps around the perimeter of the building and contains electrical and mechanical process piping and ductwork.

Overall, the facility appears to be in poor but functional condition relative to the other facilities operated by the District, and a variety of building Code, accessibility, and deferred maintenance issues were identified. The building does not have a sprinkler system, though to the best of IFF's knowledge, none is required at this time. The building is served by an outdated, but functional, fire alarm system. Replacing damaged or defective devices such as strobes and horns and pull stations is a major concern because the devices are no longer available commercially. District staff have stored unused devices for potential future use, but newly purchased devices are incompatible with the existing system, necessitating replacement or a major upgrade to the existing system in the near future. Like all New Berlin schools, the fire alarm system is monitored by SimplexGrinnell; however, Simplex does not perform maintenance or provide a warranty because it is not their proprietary system.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
3500 South Glen Park Road New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing exterior masonry walls, steel columns and joists	Insufficient for staff and faculty needs

The use of the facility as a school is permitted under the current zoning classification of this site. The parking lot is nearing the end of its useful life, and requires substantial maintenance work each year. The existing lot is reported to be insufficiently sized for the current volume of faculty and staff. Expansion of the lot will likely be a necessary part of any building addition.

The expansive undeveloped space to the east, south, and west of the site opens up a diverse range of possibilities for expansion of the campus and/or building, if expansion is

necessary in order to serve more students. Constructing an addition to a round building may be a challenge, and development of a separate facility or demolition and development of a new building is likely the optimal solution if the student population is expected to increase and the District elects to increase the capacity of the facility.

The installation of new utility service entrances for water and electrical are imminent needs for the Glen Park campus. Within the past year, as reported by District staff, the water main entering the building has split open and flooded the mechanical equipment room in the basement of the building. The repairs performed by the school District have been adequate, but IFF recommends implementing a more permanent solution to prevent a recurrence and replacing equipment that was affected by the event.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The existing parking lot is nearing the end of its useful life and should be resurfaced to limit decline of the surface over coming years, with limited repairs to areas where cracks and other defects have become a serious problem. The costs for resurfacing are phased in over time in the attached cost estimate, and it is assumed that resurfacing would encompass the entire parking lot but include only limited full-depth repairs where necessary. Resurfacing and repairs are temporary measures that will extend the life of the lot for a limited amount of time. The District may choose to remove and replace those sections of the parking lot which have suffered the most significant deterioration, and an alternate price is included in the cost estimate for pavement replacement. The alternate value for lot replacement is based on the assumption that the sub-grade below the pavement is in adequate condition such that only isolated areas of remediation will be necessary, and that portions of the lot that remain in good condition will not need to be replaced. The District is advised to allocate a sizeable contingency for any work performed on the parking to account for restoration of deficiencies that may be discovered upon removal of the existing pavement.
2. Cracks and displacements of the sidewalk around the perimeter of the facility pose a tripping hazard to occupants and visitors, and should be repaired and replaced along with parking lot upgrades.
3. Trash containers are located in a corner of the parking lot near the gas meter and the northwest building entrance, with no barrier to restrict access to students and staff. IFF recommends that trash bins be located in an enclosure at the exterior of the building and accessible only to building maintenance staff. Construction of the trash enclosure should be considered with planned revisions to the parking lot.
4. Exterior windows are operable single-pane, non-insulated glazing units with aluminum frames throughout. Replacement of all windows with thermally insulated, operable units is recommended as a quality improvement work item, and the cost for this work is assumed to be distributed over time.
5. All existing hollow metal entry doors to the building are corroding and in need of replacement due to frequent winter salting of the parking lots. The existing doors may be replaced in kind, however, FRP doors are often recommended in schools and other public institutions because they are better able to resist wear and corrosion and easier to clean than typical hollow metal or wood doors. The expected service life of the FRP doors can be up to three to four times that of a typical hollow metal

door in this application. However, there is a significant premium associated with upgrading the doors, and the school District should balance its long term maintenance costs against budget constraints when choosing what product will best fit the needs of the facility and occupants. IFF recommends replacing all exterior doors and frames with new insulated, hollow metal doors and frames and projects that this work will be phased in over time. IFF's cost estimate shows replacement of FRP doors as an upgrade option (Alternate 1), if budget allows.

6. The age of the building indicates that the weatherproof seals at all window and door frames have likely deteriorated over time. IFF recommends that all exterior door frames and windows be caulked where they abut the exterior brick.
7. Water infiltration could occur at the joints where the building and sidewalk meet. IFF recommends sealing all joints at the point of sidewalk/building contact with appropriate exterior-grade caulk or other sealant. The estimated cost of this work is included in the immediate and intermediate needs sections of the attached cost estimate.
8. The steel structure being used to protect the gas meters exterior of the building should be replaced with properly installed protective bollards set into the concrete sidewalk to below frost depth. IFF assumes this work to be completed within the scope of the parking lot rehabilitation.

Structure

1. The building's overall structural system, comprised primarily of load bearing perimeter masonry walls with steel columns and joists, appears to be in good condition; no indications of differential settlement or foundation wall cracks were observed.
2. The front façade of the facility appears in good condition, particularly the glass, metal, and stone front entry, which is very well preserved.
3. The existing masonry walls appear to be in good condition, with isolated areas in need of touch up work. Frequent review of the condition of the exterior façade has been effective, and should remain a part of the District's annual maintenance program, with repairs completed as determined by need and budget.
4. All existing lintels should be inspected and damaged lintels should be scraped and painted with an exterior-grade, corrosion resistant coating to match the surrounding brick and window frame.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and regulations. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits.

2. Corridors, stairs, and mechanical room doors should meet minimum fire rating requirements and fire rating labels must be visible. Replacement of non-fire-rated doors is included in the intermediate needs section of the attached cost estimate.
3. Stairways are not enclosed with proper fire rated walls and openings as required by Code. Stair railings do not meet Code and should be upgraded. The stairways may be grandfathered in unless any significant improvements are undertaken in these areas, in which case full compliance with Code will likely be required. IFF includes costs for upgrading the stairwells, phased in over time in the attached cost estimate.
4. Electrical and mechanical equipment and controls in the basement and other sensitive areas of the building should be tested regularly to ensure proper function and to identify any deficiencies before encountering significant problems.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the applicable provisions of the Wisconsin Uniform Building Code. The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process for any significant renovations, and compliance with accessibility requirements is subject to the interpretation of reviewing agencies. IFF advises that the School District should verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. Entrances into the facility, the main front entrance on the west side of the building in particular, are not equipped with required accessibility features. All public means of egress should be equipped with ADA-approved hardware, including panic bars and closers, and at least one public entrance shall be equipped with a push pad door opener for accessible entry. The cost of these upgrades is included in the immediate needs section of the attached estimate.
2. There is no vertical accessibility between the first and second floor. IFF recommends installing an elevator in the future to ensure that both floors and all unique programs are accessible to all occupants. A cost for the elevator installation is included in the long-term needs section of the attached estimate.
3. All existing classroom and administrative office doors throughout the facility should be upgraded with lever-type hardware for accessible operation, as required by Code.
4. Existing interior doors do not appear to have the appropriate width clearances on the pull side and the push side to meet Code. This condition is likely grandfathered in, unless significant renovations are planned which involve the reconfiguration of classroom walls. The cost for this work is assumed in the long term improvements section of the attached cost estimate.
5. Countertops should not exceed maximum accessible height above the floor throughout the building to comply with accessibility Code requirements.
6. Exposed piping below sinks in the restrooms should be wrapped with insulation to meet Code where not already in place. The facility's maintenance staff may be able to install insulating sleeves, avoiding costs for the installation.
7. Drinking fountains throughout the facility should be replaced with accessible, hi-low drinking fountains in the future.
8. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.

Life and Safety

1. Evacuation plans are posted throughout the facility, including corridors, classrooms and common areas per Code.
2. Smoke and heat detectors are present throughout and appear to be hard wired into the fire alarm system, as per Code.
3. There is no fire suppression system present in the building. It is critical that local fire and smoke detectors are properly installed and checked for functionality regularly. IFF recommends contacting a licensed architect to determine if a sprinkler is required for this building use and construction type, or to analyze whether a sprinkler system is necessary for any future addition or renovation. An upsized water service entrance is likely to be required if a fire sprinkler system is installed in the building. Installing a new sprinkler system is assumed as an alternate cost (see Alternate 2) in attached cost estimate.
4. The facility is served by a fire alarm system monitored by SimplexGrinnell. The alarm system is inspected annually, and upgrades are performed by SimplexGrinnell as needed. The absence of a functional fire suppression system, and the difficulty of servicing the existing system make upgrading the existing fire alarm a top priority for the building. A cost for a complete system renovation is included in the attached estimate.
5. Audio and visual fire alarm annunciators are observed throughout the building. Audio and visual alarms are required by Code in each classroom and common areas.
6. Fire extinguishers were observed to be sufficient in terms of locations and numbers. Fire extinguishers and smoke detectors should be inspected and maintained regularly, at least one time each calendar year and preferably more often.
7. Exit signs and emergency lighting throughout the building will need to be upgraded to Code-compliant battery back-up fixtures. Exit signs should be present at all means of egress and pathways leading to means of egress.

Roof

1. The facility has a flat roof system featuring a black 75-mil EPDM roofing membrane, chemically adhered to the structural roof deck and divided into two levels.
2. Discontinuities in the roof membrane, at the perimeter and at elevation changes, appear to be well maintained and no signs of deterioration were observed.
3. No evidence of leakage was observed throughout the building, and District staff indicate that the condition of the membrane is inspected for deterioration. and repaired annually
4. IFF recommends continuing the current program of annual inspections and identifying repairs of the roof before any water infiltration occurs.

Plumbing

1. A major water supply line, entering the building below ground into the mechanical room, recently burst causing flooding of the basement mechanical area and temporarily disrupting the operation of various electrical and/or control panels and the equipment connected thereto. The water main has been repaired, and IFF recommends coordinating with the City of New Berlin to have the damaged section replaced and to inspect the remaining pipe for other potential problems.
2. District staff report problems with existing plumbing system with regard to water pressure throughout the facility, and advised that replacement of water supply lines

is the optimal method to improve water pressure. IFF agrees with this assessment, and recommends including selected plumbing system rehabilitation as part of any planned renovation project. Cost of renovating the plumbing supply lines is included in the long term needs section of the attached estimate.

3. The facility is served by a 125-gallon, high efficiency hot water tank, which was installed in recent years. District staff report that the hot water supply is presently adequate to meet the needs of the faculty, staff, and students. IFF's cost estimate includes a cost for replacing the hot water tank in the future.
4. IFF recommends investigating the state of the underground sanitary and stormwater management systems to identify and eliminate any potential issues before problems occur. Cost for this item is split between the immediate and intermediate needs within the attached estimate.
5. All restrooms contain sufficient amenities to meet Code; however pipe insulation is required for all piping that can be contacted by building occupants, and should be installed by the facility's maintenance staff where not already in place.
6. Toilet fixtures and partitions were recently replaced throughout the building, which appear to be Code-compliant and in good working order.
7. If a sprinkler system is installed in the building, it is likely that the existing water main will need to be upsized, or augmented by a second water service, to serve the building adequately. Water service entrance piping upgrades related to installation of a sprinkler system, including all related valves and accessories, is assumed as a part of Alternate 2 in attached cost estimate. General upgrades to the water service entrance not related to a sprinkler system are included in the Plumbing section of the cost estimate.

HVAC

1. District staff indicate that the layout of the building is advantageous for ventilation and circulation, and that maintaining a temperate environment has not been a problem despite the lack of central air. This should be considered in choosing to implement mechanical systems upgrades in the future.
2. The facility is heated by two aging steam boilers, manufactured by Cleaver Brooks, and controlled by pneumatic thermostats located throughout the building which feed information back to a centralized HVAC control panel.
3. Two air-handling units and an extensive network of ducts distribute air throughout the building after it has been heated. Additionally, heat recirculation apparatuses and unit ventilators help to improve the operational efficiency of the system.
4. Return air is pulled into the plenum space above the ceiling grid in the corridors to be returned to the air handlers. Return grilles are located above the doors, or built into the doors, of some classrooms to allow air transfer back into the corridors.
5. There is no centralized air conditioning system present; however, one classroom for each grade level is equipped with a window air conditioning unit for students requiring a conditioned environment. IFF recommends engaging a licensed mechanical consultant to analyze the system and to determine the optimal strategy for heating and cooling the building based on the school District's needs and budget.
6. Local pneumatic thermostats permit the faculty some limited control over the temperature in each classroom, within a limited set point range. Primary control of the system is managed by a centralized digital operating system, located in the basement mechanical area.

Electrical

1. The building's electrical service consists of a three-phase, 240V service and a single-phase, 120V service. District staff indicate that the electrical service is undersized to meet the needs of the building occupants. IFF recommends engaging WE Energies and the City of New Berlin to coordinate installation of an upgraded electrical service entrance. An estimated cost for increased electrical service is included in the immediate needs section of the attached cost estimate.
2. The electrical distribution system, with service panels located primarily in the basement mechanical equipment room, is inadequate to manage the loads required throughout the building. Most of the circuit breaker panels are overloaded, and IFF recommends immediately engaging a licensed electrician to balance the load on the existing panels, and to install and utilize one or more new panels to spread out the load. IFF's cost estimate assumes this work will begin in the near term and be phased in over time.
3. Electrical outlets are located strategically around the facility, but any major renovation of the facility should be reviewed by a licensed electrical design engineer with respect to current and future power needs.
4. A generator located in the basement mechanical room is used to provide emergency power to several specific pieces of equipment, including the emergency lighting and the speaker system.
5. Lighting throughout the building and the grounds is functional and adequate, but outdated. Ceiling-mounted 1' x 4', two-lamp fixtures are prevalent throughout the classrooms and the corridors. Metal halide fixtures are utilized in the gymnasium. IFF recommends replacing existing light fixtures with energy efficient, T8 fluorescent fixtures throughout. The cost of the replacement may be spread over several years to defer the cost, shown in the attached cost estimate as a quality improvement item.

Technology

1. The building has a T-1 data service for use by the students and faculty, and limited Wi-Fi service is available.
2. Telephone and data jack locations appear sufficient throughout the building for the needs of an elementary school.
3. Closed circuit television cameras were visible near building entrances. The feed from these cameras is captured in the staff offices within the school.
4. There is no electronic key fob building access system at this facility, and IFF recommends that the District consider adding this security feature as a quality improvement option. Associated cost is included under long-term of attached cost estimate.

Environmental Conditions

1. Since the building was constructed prior to 1978, it is likely that the walls have been painted with Lead-Based Paint (LBP) in the past. As long as there is no chipping or peeling of the paint, it is acceptable to repaint the walls, which serves to encapsulate the LBP underneath. However, if the necessary scope of work for any project disturbs the LBP in any way (drilling holes, removing walls, etc.), a licensed lead abatement professional must be engaged to ensure lead dust does not contaminate the facility.
2. District staff indicate that asbestos containing materials (ACMs) have been, and continue to be, abated when encountered during any renovation; the school District

has employees on staff that are trained and licensed to abate ACMs. Insulation around the existing boiler, and some of the associated process piping, appear to contain ACMs. If the school District intends to remove or modify the furnaces, IFF recommends that a licensed asbestos abatement contractor be hired to identify/remediate all ACMs.
3. No issues related to mold were observed or reported, and infiltration is dealt with swiftly to reduce the occurrences of environmental problems.

General Interior

1. Flooring in the corridors and the classrooms is composed of 12-inch Vinyl Composition Tile (VCT); the flooring is generally in adequate condition, although repairs and cleaning to remove scuff marks will be beneficial in some locations.
2. Restroom floors are composed of terrazzo, which is maintained well for its age but requires patching or polishing in some select areas. Cost for terrazzo repairs are included in the long-term needs section of the attached estimate.
3. Walls are mostly composed of painted concrete masonry unit block with vinyl base in good condition. Decorative tiles are present in varied locations around the building, for example at wet walls holding water fountains and sink basins in the restrooms.
4. Ceiling throughout is composed of an outdated mode of 9" acoustical ceiling tiles. IFF recommends considering other ceiling systems which may replace the existing tile as a quality improvement. There is exposed painted metal deck and roof joists in the gymnasium.
5. Millwork throughout the facility appears in serviceable condition. IFF recommends upgrading the existing cabinetry as part of any large-scale renovation of the classrooms.
6. IFF recommends fresh paint throughout the building under quality improvements.
7. Furniture throughout the building is relatively old but well maintained and functional.

GENERAL FACILITY RECOMMENDATIONS:

IFF has prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the Glen Park Elementary Campus below and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Upgrade existing fire alarm system throughout the facility and engage Simplex for maintenance corresponding with the remainder of the schools in the District.
2. Upgrade exit signs and emergency lighting throughout the building to Code-compliant units with battery back-up.
3. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation on each floor only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. Where janitorial and electrical share space, a partition wall should be constructed separating the custodial area from the electrical facilities within janitor's closets.
4. Investigate the condition of the below-ground storm and sanitary systems and rod out the existing piping as required.

Accessibility

1. Provide at least one Code-compliant, accessible entry into the building, including automated push pad and appropriate clearances.
2. All egress doors should have proper hardware, including push bars to meet Code.
3. Begin program of reconfiguring classroom and office door entryways and replacing existing knob-style hardware at classrooms and other doors with Code-compliant lever-type hardware and appropriate closers.

Structural, Building Systems, Exterior, and Other

1. Work with the City of New Berlin and WE Energies to request and install upgraded water and electrical services to the building. Upgrades may need to be spread out over several years for proper installation.
2. Engage a licensed electrical engineer to analyze and propose solutions for thoroughly upgrading all components of the facility's electrical distribution system.
3. Engage a licensed mechanical consultant or building commissioning agent to analyze the climate control system and to recommend strategies for optimizing performance and efficiency.
4. Identify improperly functioning portions of the existing domestic water supply system and replace as needed. Non-essential plumbing upgrades are recommended as a long-term improvement.
5. Scrape and paint damaged lintels with an exterior-grade, corrosion resistant coating to match the surrounding brick and window frame, or replace lintels if repair is not feasible.
6. Begin program of systematic resurfacing of the parking lot including limited repairs to areas where cracks and other defects are causing significant problems. Alternatively, the District may consider removing and replacing the existing parking lot. It is assumed that the sub-grade is suitable for compaction and reuse, and only the pavement section will need to be replaced. This work can be phased in over several years to defer costs.
7. Repair cracked and displaced sections of sidewalk around building perimeter.
8. Repair roofing and penetrations, flashings, copings, and parapets as required following the District's program of annual roof inspection and restoration.
9. Begin program of caulking around all windows, curtain wall, and doorframes.
10. Begin program of replacing deteriorated exterior side doors with insulated energy efficient metal doors and frames with proper hardware. Alternatively, the District may choose to replace existing doors with FRP doors which are expected to provide a longer service life but are significantly more expensive (see cost for Alternate 1, FRP

doors, in Attachment A). All exterior doors should have weather stripping and be caulked around the perimeter to help prevent heat loss. Door replacement may be phased in over several years.

Total Estimated Cost for Immediate Items: $690,984
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Intermediate: Items to be Addressed in Years Two through Five

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety, accessibility, and structural and building systems.

Code and Life Safety

1. Mechanical and electrical rooms should have minimum fire rating required by Code, including fire rated doors with rating label shown on the door frame.

Accessibility

1. Continue program of replacing classroom doors and existing knob-style hardware with Code-compliant lever-type hardware and appropriate closers.
2. Install ADA-compliant hi-low drinking fountains.
3. Adjust countertops, where possible, to not exceed the maximum accessible height.
4. Install room identification signage at appropriate height to comply with accessibility guidelines.

Structural, Building Systems, Exterior, and Other

1. Begin systematic replacement of existing light fixtures using ceiling-mounted energy-efficient T8 fixtures throughout the facility.
2. Begin program of sealing all joints at the building perimeter with appropriate exterior grade caulk or other sealant.
3. Implement selected recommendations of electrical and mechanical design professionals to improve functional efficiency of the existing building systems with consideration given to the potential future power needs of the facility.
4. Continue to repair roofs and penetrations, flashings, copings, and parapets as required following the District's program of annual roof inspection and restoration.
5. Continue re-caulking program for exterior doors and windows.
6. Continue resurfacing and making repairs, or removal and replacement, to the parking lot and repairs to the walkways.
7. Continue program of replacing exterior doors with new hollow metal units, or FRP units as described in Alternate 1.

Total Estimated Cost for Intermediate Items: $1,134,735

(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Long-Term: Items to be Addressed in Year Five or Beyond

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. IFF recommends funding a replacement reserve in anticipation of the need for these items. It should be noted that IFF's long-term recommendations represent the full extent of work to be done on the Glen Park facility required to make the facility fully accessible. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Enclose stairways with proper fire rated walls to meet Code and provide designated areas of rescue assistance at stairwells on all floors lacking direct access to grade level.
2. Replace handrails in stairways that do not meet Code requirements for height.
3. Install a complete, Code-compliant sprinkler system to serve the entire facility. Localized fire sprinkler system installation may be required as significant renovations to program spaces are undertaken. A cost estimate for installing a comprehensive sprinkler system is included as Alternate 2.
4. Eliminate transfer grilles above doorways and install return air conveyance pathways with better fire protection.

Accessibility

1. Continue program of replacing classroom doors and existing knob-style hardware with Code-compliant lever-type hardware and appropriate closers with appropriate clearances on push side and pull side.
2. Install a fully-accessible, Code-compliant elevator to provide access to second floor. In lieu of an elevator, the school may, if possible, provide program space for each unique program or activity on the first floor level.
3. Furnish and install ADA-compliant accessible lockers for the required percentage of all student lockers in corridors, classrooms, and locker rooms.
4. Adjust wall-mounted equipment (dispensers, blackboards, signage, etc.) to accessible heights to meet Code.

Structural, Building Systems, Exterior, and Other

1. Continue program of resurfacing and repairing the parking lot, replacing exterior doors, and repairing roof as needed.
2. Continue re-caulking program for exterior doors and windows.
3. Continue program of replacing exterior doors with new hollow metal units, or FRP units as described in Alternate 1.
4. Continue to repair roofs and penetrations, flashings, copings, and parapets as required following the District's program of annual roof inspection and restoration.
5. Replace existing plumbing supply lines throughout the school. This work may be included within the scope of a larger rehabilitation project in which the plumbing lines are exposed or fixtures are replaced.

6. Replace the existing hot water heater, or add a second hot water heater as necessary.

Total Estimated Cost for Long Term Items: $1,648,218
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues.

1. Replace all windows with thermally insulated, operable units throughout the building. This work may be phased in over several years to defer cost.
2. Replace older flooring with new resilient flooring, carpet or carpet tile, as desired, to help enhance the space throughout the building.
3. Replace existing outdated light fixtures with energy-efficient models. Enhanced lighting will create an improved atmosphere for students and staff.
4. Provide a cosmetic facelift of chosen areas of the facility, including new paint and carpeting where applicable.
5. Localized areas of deteriorating finishes, including metal window frames, require maintenance and repair.
6. Engage a qualified architect or other consultant to recommend solutions for upgrade or replacement of the ceiling tile system currently in place.
7. Abate asbestos containing materials which are part of the boiler pipe wrap, or wherever else encountered within the facility.

Estimated Cost for Quality Improvement Items: $304,286
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1][4]	$690,984	$1,134,735	$1,648,218	$304,286	$3,778,223
Cost per SF [2]	$11.14	$18.30	$26.58	$4.91	$60.94
Cost per Student [3]	$1,599	$2,627	$3,815	$704	$8,746

[1] Includes estimates for general conditions, insurance, bonds, and 10% contingency.
[2] Cost per square foot based on estimated building area of 62,000 square feet
[3] Cost per child based on maximum capacity of 432 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Glen Park Elementary School Campus
3500 South Glen Park Road, New Berlin, Wisconsin
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 62,000
Maximum Building Capacity (students): 432

Description	Immediate Improvements	Intermediate Improvements	Long-Term Improvements	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$100,000	$120,000	$100,000	$0	$320,000	$10,000	Upgrades of Fire Alarm System ($100,000) Fire rated doors for mechanical and electrical rooms ($10,000) Enclose stairwells and replace handrails ($150,000) - phased in over time - See General Note #5 Install walls within the janitor's closet to isolate electrical/IT ($5,000) Miscellaneous Code-related upgrades ($55,000)
ADAAG & Handicap Accessibility Issues	$55,000	$150,000	$290,000	$0	$495,000	$0	Accessible building entrances with push pads and accessible routes of egress ($45,000) ADA-compliant drinking fountains ($25,000) Accessible-height countertops ($15,000) Accessible lockers ($20,000) Accessible signage and etc ($5,000) Reconfigure classroom doors and hardware ($225,000) Install elevator ($160,000)
Exterior and Structure	$145,000	$275,000	$385,000	$0	$805,000	$25,000	Bollards protecting gas meters ($10,000) Scrape and paint lintels ($50,000) Tuckpointing, assumed to take place in the future ($75,000) Replace exterior doors with HM doors and Code approved hardware ($250,000) - See Alternate 1 for FRP doors Resurface parking lot, with limited repairs - phased in over time ($400,000) - See Alternate 3 for pavement replacement Repair damaged portions of sidewalk ($20,000)
Roof	$25,000	$45,000	$65,000	$0	$135,000	$10,000	Assumes minor roof repairs in the future
Sealant and Caulking	$0	$40,000	$40,000	$0	$80,000	Included	Caulk/seal around all perimeter doors and windows that are not scheduled for replacement ($40,000) Caulk/seal around building perimeter where building abuts sidewalk or pavement ($40,000)
Plumbing	$100,000	$75,000	$120,000	$0	$295,000	$7,500	Upgrade or replacement of existing City water service ($40,000) Investigate, clean out subgrade sewer system and necessary repairs ($75,000) Hot water tank ($25,000) Investigate, rod out problem areas of underground storm and sanitary systems, and other repairs as needed ($55,000) Replace portions of domestic water supply as needed ($75,000) Additional fixture upgrades in addition to those recently completed ($25,000)
Electrical and HVAC	$55,000	$65,000	$100,000	$120,000	$340,000	$7,500	Engage licensed Mechanical and Electrical engineers to analyze and recommend improvements to the electrical distribution system and the mechanical climate control system throughout ($25,000) Replace audio/visual alarms, emergency lighting, and exit signage with code-compliant devices ($50,000) Upgrades to electrical service and distribution system, per engineers' recommendations, including new distribution panels ($55,000) Replace inefficient light fixtures ($120,000) Miscellaneous future power upgrades ($50,000) Miscellaneous upgrades to HVAC systems ($40,000)
Technology	$0	$0	$50,000	$0	$50,000	$0	Install key fob security ($50,000)
General Interior and Environmental	$65,000	$125,000	$150,000	$120,000	$460,000	$10,000	Paint touch-ups ($75,000) Replace existing VCT flooring throughout ($100,000) Upgrades to existing ceiling tile system ($75,000) Replace windows with operable, energy-efficient windows ($150,000) Abate remaining ACMs ($30,000) Repairs and upgrades to miscellaneous finishes ($30,000)
Construction Cost Subtotal	**$545,000**	**$895,000**	**$1,300,000**	**$240,000**	**$2,980,000**	**$70,000**	
General Conditions and GC fees (10%)	**$54,500**	**$89,500**	**$130,000**	**$24,000**	**$298,000**	**$0**	Includes mobilization, GC fees, O&P, insurance, bonds and etc.
Permit & Tap Fees	**$16,350**	**$26,850**	**$39,000**	**$7,200**	**$89,400**	**$0**	Allowance
Insurance and Bonds (2%)	**$12,317**	**$20,227**	**$29,380**	**$5,424**	**$67,348**	**$0**	
Construction Contingency (10%)	**$62,817**	**$103,158**	**$149,838**	**$27,662**	**$343,475**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$690,984**	**$1,134,735**	**$1,648,218**	**$304,286**	**$3,778,223**	**$70,000**	
Per SF Costs	**$11.14**	**$18.30**	**$26.58**	**$4.91**	**$60.94**	**$1.13**	
Per Student Costs, maximum capacity	$1,599	$2,627	$3,815	$704	$8,746	$162	
ADD Alternate 1: Install FRP doors in lieu of hollow metal	$100,000	$200,000	$200,000	$0	$500,000	$7,500	Not to be combined with replacement of existing doors with similar hollow metal doors and work is assumed to be phased over time
ADD Alternate 2: Install sprinkler system and related upgrade to water service	$0	$0	$235,000	$0	$0	$7,500	Installing sprinkler system and upgrading the water system is assumed as an alternate and would require a licensed architect's confirmation
ADD Alternate 3: Remove and replace damaged portions of the parking lot	$0	$350,000	$450,000	$0	$800,000	$10,000	This cost will be in lieu of resurfacing. Minimal sub-grade remediation is assumed to be necessary and suitable sections of pavement can remain.

General Notes:

1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Assumes that stairs will not need to be re-built to meet Code
6. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Glen Park Elementary School Campus
3500 South Glen Park Road, New Berlin, Wisconsin

Site Plan

Exterior View

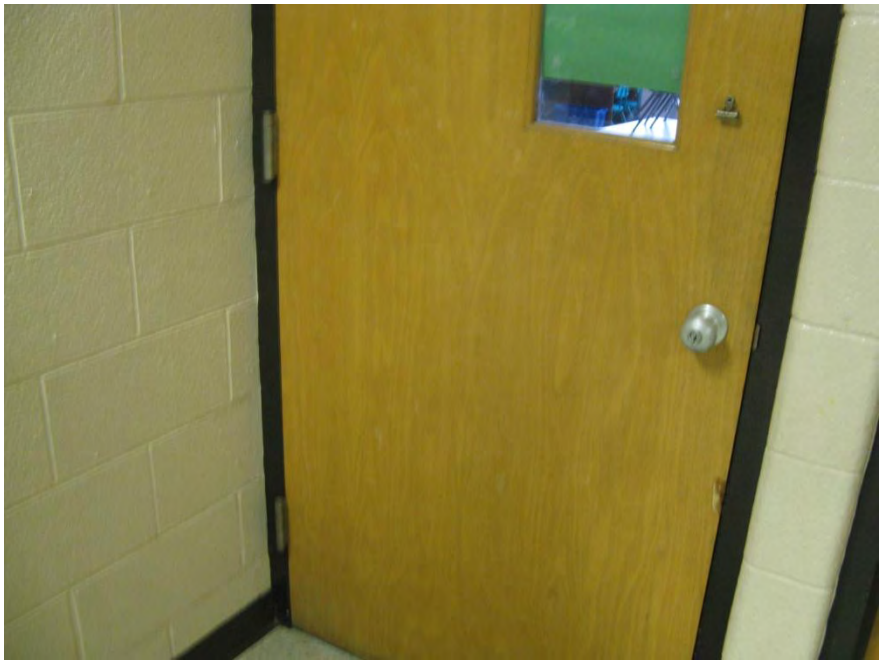
Exterior View and Main Entry

View of Sidewalk

View of Front Facade

Gas Meter

Typical View of Gymnasium Doors



Classroom Door

View of Lockers

Typical View of Bathroom

Classroom Air Conditioner and Unit Ventilator

Typical View of Classroom

Typical Light Fixture

Door and Transom

Boiler Room

Hot Water Tank

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Orchard Lane Elementary School Campus
2015 South Sunnyslope Road, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the Orchard Lane Elementary School facility, located at 2015 South Sunnyslope Road in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Orchard Lane Elementary Campus was constructed with capacity to serve 605 students from kindergarten through grade six, based on a formula for capacity described in the Enrollment Analysis section in Part II of this report. For the 2010 school year,

student enrollment was reported to be 321 students. The facility, originally constructed decades ago plus more recent renovations and additions, now features approximately 69,000 square feet on one level on a site approximately 10 acres in area. The facility is located along Sunnyslope Road, a major local thoroughfare, and is landlocked by developments on all sides.

Over the past 15 years, multiple significant remodeling projects have been completed to expand and upgrade the school, and the building offers a welcoming atmosphere to students and visitors. The most recent addition to the campus added approximately 5,000 square feet of accessible, Code-compliant classroom space. The addition was designed to allow a second level to be constructed if the District chooses to expand vertically. Completion of an upper level would require installation of an elevator.

Overall, the campus facility appears to be in poor to acceptable condition relative to the other facilities operated by the District, but it is wearing with age and a variety of building Code, accessibility, and deferred maintenance issues were identified. The building is protected by a fully functional sprinkler system and a fire alarm system that is monitored and maintained by SimplexGrinnell. The structural system is composed of concrete masonry and steel, and exhibits no indications of deterioration or settlement. Building system equipment, including two boilers, hot water heater, and controls, is located in a second floor mechanical room. The building houses around two dozen classrooms and the current use of the building, by function, is approximately 75 percent classroom and program space, including a gymnasium and library and lunch room, and about 25 percent administration, office space, toilet, staff lounge and other circulation space.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
2105 South Sunnyslope Road, New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing exterior masonry walls, steel columns and joists	Insufficient for staff and faculty needs

Use of the facility as a school is permitted under the current zoning classification of this site. The parking lot is in good condition, but is beginning to show signs of extended wear and it is reported to be insufficiently sized for the current volume of faculty and staff. Expansion of the lot will likely be a necessary part of any future building addition, with consideration given to the needs of school buses entering and exiting to Sunnyslope Road.

Two large common areas are used as a gymnasium/cafeteria and a multi-purpose room for school assemblies and other functions. An interactive media center is located south of the entry in the less recently completed addition. Classrooms in the original school building average about 900 square feet, but newer classrooms, added in the last 15 years average over 1,200 square feet.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance. IFF recommendations assume that the school District

chooses to maintain and operate the existing facility, based on the expected residency characteristics of the community. If expansion of the student population is expected, construction of a new facility will likely be the optimal long-term solution.

Exterior

1. The sidewalk, curbs, and parking lot appear to be well maintained. IFF recommends actively monitoring the exterior surfaces for signs of deterioration and remedying areas of distress as needed.
2. The glass and metal façade on the west elevation of the building appear to be in excellent condition. Annual inspection and maintenance of all plastic/rubber gaskets is recommended.
3. Several areas of the brick facade require tuckpointing, and IFF recommends continuing the District's current program of annual inspection and repair of all brick and mortar over time.
4. Exterior windows are operable single-pane, non-insulated glazing units with metal frames throughout. Replacement of all windows with thermally insulated, operable units is recommended, and the cost for this work is shown as being phased in over several years.
5. The existing entry doors are showing early signs of corrosion, similar to corrosion experienced by all the District's facilities, due to snow, salt, and weather. IFF recommends establishing a phased approach to replacing all exterior doors over time. The use of FRP doors is often recommended in schools and other public institutions because they are better able to resist wear and corrosion and are often considered easier to clean than typical hollow metal doors. The expected service life of the FRP doors can be up to three to four times that of a typical hollow metal door in a public school application. However, there is a significant premium associated with upgrading the doors, and the school District should balance its long term maintenance costs against its immediate budget constraints when choosing what product will best fit the needs of the facility and the staff. IFF's cost estimate indicates a cost associated with replacing doors with insulated hollow metal doors and frames and includes a cost for FRP doors as an upgrade option (Alternate 1), if budget allows.
6. Trash receptacles should be kept in an enclosure and access to students limited. Cost for installing a trash bin enclosure is included in the attached estimate.
7. The weatherproof seals at older window and door frames have begun to deteriorate over time. IFF recommends that selected exterior door frames and windows be caulked where they abut the exterior brick.

Structure

1. The building's overall structural system appears to be in good condition; no indications of differential settlement or bearing wall cracks were observed.
2. The existing masonry surface and all lintels around the perimeter of the building appear to be in good condition. IFF recommends continuing the current program of annual inspections of mortar joints and lintels, with repairs completed as determined by need and budget.
3. The front façade of the facility appears in good condition, particularly the glass and metal curtain wall system.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and regulations. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits.
2. Solid-core wood doors to classrooms must meet minimum fire rating and fire rating tag should remain visible. The facility maintenance staff should remove paint from any obscured fire rating labels throughout the school when encountered.
3. An existing janitor's closet, with a mop sink, is also used for electrical equipment and server equipment. IFF recommends, relocating the server room equipment to a dedicated room or constructing a partition to separate the janitor's closet from electrical equipment.
4. Electrical and mechanical equipment and controls should be tested regularly to ensure proper function and to identify any deficiencies before encountering significant problems.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the applicable provisions of the Wisconsin Uniform Building Code. The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process for any significant renovations. In addition, compliance with accessibility requirements is subject to the interpretation of reviewing agencies and the School District should verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. The main front entrance on the east side of the building is equipped with ADA-approved hardware and a push pad door opener for accessible entry. IFF recommends installing additional accessible entrances as a long term quality improvement item.
2. Older existing doors do not appear to have the appropriate width clearances on the pull side and the push side to meet Code. This condition is likely grandfathered in, unless significant renovations are planned which involve the reconfiguration of classroom walls.
3. Countertops should meet accessible height above the floor throughout the building to meet accessibility Code requirements.
4. Drinking fountains throughout the older portions of the facility should be replaced with accessible, hi-low drinking fountains in the future.
5. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.
6. The stage in the gymnasium can be accessed by a commercial chair lift. District staff indicate no problems related to the lift.

Life and Safety

1. Evacuation plans and first aid kits are posted throughout the facility, including corridors, classrooms and common areas per Code.
2. The facility is served by a fire alarm system monitored and maintained by SimplexGrinnell. The alarm system is inspected annually, and upgrades are performed by SimplexGrinnell as needed. IFF recommends continuing the current program of regular inspections and upgrades to the fire alarm system.
3. Smoke and heat detectors are present throughout and appear to be hard wired into the fire alarm system, as per Code.
4. Fire extinguishers were observed to be sufficient in terms of locations and numbers. Fire extinguishers and smoke detectors must be inspected and maintained regularly.
5. There are strategically located audio and visual fire alarm enunciators in the building. Audio and visual alarms are required by Code in each classroom and common area.
6. Exit signs and emergency lighting throughout the older portion of the building will need to be upgraded to Code-compliant fixtures with battery back-up capability. Exit signs should be present at all means of egress and pathways to means of egress.

Roof

1. The roof of the facility is divided into several discrete sections at varying elevations. The building additions, and select areas of the original structure, feature a black 75-mil EPDM roofing membrane which is adhered to the roof structure, similar to other recent roof construction projects undertaken by the District. Portions of the original building are protected by the original built-up roof system protected with stone ballast.
2. All discontinuities in the roof membrane, at roof edges or changes in roof elevation for example, appear to be very well maintained, and termination bars appear to be in excellent shape.
3. There was no water seepage in the facility observed at any location; however, District staff report sporadic occasions when roof leaks are encountered and promptly fixed. IFF recommends continuing the school District's program of annual assessment and repair. Replacement of entire roof system is assumed as Alternate 2 in attached cost estimate.

Plumbing

1. All restrooms contain sufficient amenities to meet Code; pipe insulation is required for all piping that can be contacted by the students or faculty.
2. Toilet fixtures within the recent additions are sufficient to meet Code requirements and to serve the staff and students.
3. Accessible, single-occupancy unisex restrooms are available within the main hallway of the building addition, in lieu of adding full accessibility to each public restroom.
4. The facility is served by a 125-gallon, high efficiency hot water tank, which was installed in recent years. District staff report that the supply hot water is adequate to meet the needs of the faculty, staff, and students.
5. Due to the age of the building, and the issues recognized at other District facilities of similar age, IFF recommends investigating the state of the underground sanitary system on a regular basis to identify and eliminate any potential issues before problems occur. Cost for this item is included in the attached estimate.
6. District staff report experiencing no problems with existing plumbing system with regard to water pressure, drainage, or temperature control throughout the facility.

HVAC

1. The facility is heated using two recently installed steam boilers, manufactured by Patterson Kelly, and controlled by pneumatic thermostats located throughout the building which feed into a centralized mechanical climate control operator.
2. Several air-handling units and an extensive network of ducts distribute air throughout the building after it has been heated or cooled. Additionally, heat recirculation apparatuses are present to improve the operational efficiency of the system.
3. Return air is pulled into the plenum space above the ceiling grid in the corridors to be returned to the air handlers. Return grilles are located above the doors, or built into the doors, of some classrooms to allow air transfer back into the corridors.
4. There is no centralized air conditioning system present; however, one classroom for each grade level is equipped with a window air conditioning unit for students who require a conditioned environment. IFF recommends engaging a licensed mechanical designer to analyze the system to determine the optimal strategy for heating and cooling the building.
5. With multiple additions to the mechanical systems over time, there is no single operational control system serving the entire school. Older areas are managed by local pneumatic controls tied to an aging logic control panel. Newer areas are controlled by a central building management system. IFF recommends engaging a mechanical design firm with significant experience with system controls to identify solutions for managing the climate control systems from a single operator.

Electrical

1. The main building's electrical service is considered sufficient for a building of this size and use. District staff reported no problems related to the electrical operations of the facility.
2. Service panels for the electrical distribution system are located primarily in the basement mechanical equipment room and are reported to be adequate to manage current loads throughout the building.
3. Electrical outlets are located strategically around the facility, but any major renovation of the facility should be reviewed by a licensed electrical design engineer to with respect to the current power needs of the facility.
4. Lighting throughout the building and the grounds is functional and adequate, consisting primarily of 2'x4' drop in fixtures located within a grid and tile drop ceiling system.
5. Incandescent fixtures are utilized in the larger gymnasium. IFF recommends replacing existing light fixtures with energy efficient fixtures with covers in which the lamps are protected from shattering. The cost of the replacement may be spread over several years to defer the cost.

Technology

1. The building has a T-1 data service for use by the students and faculty, and limited Wi-Fi service is available.
2. Telephone and data jack locations appear sufficient throughout the building for the needs of an elementary school.
3. District staff report that no burglar alarm or camera-based security system is present, and none was observed.

4. The main facility entrance is equipped with an electronic key fob to control access by District faculty and staff. Additional key fobs are recommended in the long term as a quality improvement upgrade.

Environmental Conditions

1. Within the portion of the building was constructed prior to 1978, it is likely that the walls have been painted with Lead-Based Paint (LBP) in the past. As long as there is no chipping or peeling of the paint, it is acceptable to repaint the walls, which serves to encapsulate the LBP underneath. However, if the necessary scope of work for the project disturbs the LBP in any way (drilling holes, removing walls, etc.), licensed lead abatement personnel must be engaged to ensure lead dust does not contaminate the facility.
2. District staff indicate that most asbestos containing materials (ACMs) have been, or continue to be, abated when encountered during any renovation; the school District has employees on staff that are trained and licensed to abate ACMs. Insulation around the existing boiler, and some of the associated process piping, appear to contain ACMs that will need to be properly abated if work is performed in these areas.

General Interior

1. Flooring in the corridors is composed of 12-inch Vinyl Composition Tile (VCT); the flooring is generally in good condition, although repairs and cleaning to remove scuff marks may be beneficial in some locations. Classroom floors are composed of a combination of VCT and carpet. Flooring in older classrooms is well maintained, but upgrading to match the newer finishes in the near future is a recommended quality improvement item.
2. In older areas of the building, the ceramic floor tile in the restrooms is worn and will require replacement in the near future. Cost for replacement is included in the attached cost estimate.
3. Walls are mostly composed of painted concrete masonry unit block with vinyl base in good condition. Wall tile is present in various locations around the building, including at wet walls holding water fountains and sink basins in the restrooms.
4. Ceiling throughout is composed of 2'x4' acoustical ceiling tiles. There is exposed painted metal deck and roof joists in the gymnasium and multi-purpose room.
5. Millwork throughout the facility appears in serviceable condition. IFF also recommends upgrading the existing cabinetry.
6. Furniture throughout the building is relatively old but well maintained and functional. The school District may need to budget for upgrading furniture in the future. A price for furniture upgrades is not included in the cost estimate.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the campus below and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Upgrade exit signs and emergency lighting throughout the older sections of the building to Code-compliant units with battery back-up.
2. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation on each floor only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. Where janitorial and electrical share space, a partition wall should be constructed separating the custodial area from the electrical facilities within janitor's closets.

Accessibility

1. Adjust wall-mounted equipment (dispensers, blackboards, signage, etc.) at accessible heights to meet Code in each accessible space.
2. Replace existing non-compliant countertops in unique program areas with new counters per maximum height accessibility requirements.

Structural, Building Systems, Exterior, and Other

1. Begin program of replacing deteriorated exterior doors with insulated energy efficient metal doors and frames with proper hardware. Alternatively, the District may choose to replace existing doors with FRP doors which are expected to provide a longer service life but are significantly more expensive (see cost for Alternate 1, FRP doors, in Attachment A). All exterior doors should have weatherstripping and be caulked around the perimeter to help prevent heat loss. Door replacement may be phased in over several years.
2. Inspect exterior brick façade and tuckpoint deteriorated areas as needed. Identify and scrape all deteriorated lintels and paint with an exterior-grade, corrosion resistant coating to match the surrounding brick and window frame, or replace lintel if repair is not feasible.
3. Begin program of treating caulking around all windows and doorframes that are to remain.

Total Estimated Cost for Immediate Items: $380,358
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Intermediate: Items to be Addressed in Years Two through Five

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Furnish and install an exterior trash container enclosure, and restrict access to all occupants other than maintenance staff.

Accessibility

1. Furnish and install ADA-compliant hi-low drinking fountains.
2. Adjust countertops, where possible, to not exceed the maximum accessible height.
3. Install Code-required minimum number of accessible lockers within corridors and classrooms as applicable.

Code, Structural, Building Systems, Exterior, and Other

1. Install walls around the janitor's closet and relocate the IT equipment elsewhere in the building.
2. Begin program of replacing outdated windows with new energy efficient, operable windows.
3. Investigate the state of the underground sanitary system to identify problematic areas to be resolved.
4. Continue phased program of replacing corroded exterior doors with hollow metal doors or FRP doors.
5. Continue existing program of regular inspections of brick façade and tuckpoint deteriorated areas as needed.
6. Seal all joints where the building meets the parking lot, landscaping, or sidewalk with appropriate exterior grade caulk or other sealant. This work can be completed immediately or spread out over time to defer cost.

Total Estimated Cost for Intermediate Items: $535,841
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

<u>Long-Term: Items to be Addressed in Year Five or Beyond</u>

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. IFF recommends funding a replacement reserve in anticipation of the need for these items. It should be noted that IFF's long-term recommendations represent the full extent of work to be done on the Orchard Lane facility required to make the facility fully accessible. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Structural, Building Systems, Exterior, and Other

1. Continue phased program of replacing exterior doors.
2. Continue phased program of replacing outdated windows with new thermally efficient operable windows.
3. Continue existing program of regular inspections of brick façade and tuckpoint deteriorated areas as needed.
4. Furnish and install a centralized air conditioning system to serve the entire building; engage a mechanical engineer to identify optimal design and construction options.
5. Engage a licensed mechanical consultant to identify solutions for managing all mechanical climate control equipment in the facility using an integrated operating system.
6. Replace hi-bay gymnasium light fixtures with energy efficient fluorescent models featuring protection for lamps.

Total Estimated Cost for Long Term Items: $840,591
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues.

1. Replace older flooring with new resilient flooring, carpet or carpet tile, as desired, to help enhance the space throughout the building.
2. Replace existing plumbing fixtures in restrooms within the older sections of the building with newer, Code-compliant fixtures.
3. Begin replacing restroom floor tile and consider applying matching wall tile.
4. Provide a cosmetic facelift of chosen areas of the facility, including new paint and carpeting where applicable.
5. Touch up paint on corrugated metal gymnasium ceiling.
6. Engage a qualified architect or other consultant to recommend solutions for upgrade or replacement of the ACT ceiling tile system currently in place.
7. Install accessible entry equipment, including ADA push button entry and Code-compliant egress at additional locations.
8. Clean and organize faculty storage areas, including the main office area and the maintenance room.

Estimated Cost for Quality Improvement Items: $297,948
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1]	**$380,358**	**$538,841**	**$840,591**	**$297,948**	**$2,057,738**
Cost per SF [2]	**$5.51**	**$7.81**	**$12.18**	**$4.32**	**$29.82**
Cost per Student [3]	$629	$891	$1,389	$492	$3,401

[1] Includes estimates for general conditions, architectural/engineering fees, and 10% contingency.
[2] Cost per square foot based on estimated building area of 69,000 square feet
[3] Cost per child based on maximum capacity of 605 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Orchard Lane Elementary School Campus
2015 South Sunnyslope Road
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 69,000
Maximum Building Capacity (students): 605

Description	Immediate	Intermediate	Long-Term	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$30,000	$40,000	$25,000	$0	$95,000	$15,000	Install walls within the janitor's closet to isolate electrical/IT ($5,000) Install trash bin enclosure ($15,000) Upgrade exit signs and emergency lighting ($30,000) Miscellaneous repairs ($45,000)
ADAAG & Accessibility Issues	$20,000	$50,000	$55,000	$0	$125,000	$0	Accessible countertops ($20,000) Install hi-low drinking fountains ($20,000) Accessible Lockers ($15,000) ADA automated entrances ($50,000) Miscellaneous accessibility upgrades ($20,000)
Exterior and Structure	$55,000	$65,000	$110,000	$0	$230,000	$25,000	Replace exterior doors with HM doors ($120,000) - See Alternate 1 for FRP doors Tuckpointing ($75,000) Miscellaneous repairs ($35,000)
Roof	$20,000	$45,000	$45,000	$0	$110,000	$15,000	Assumes minor repairs - See Alternate 2 for replacement of roof
Sealant and Caulking	$20,000	$30,000	$50,000	$0	$100,000	included	Seal joints where sidewalk, parking lot, or landscaped area abuts building ($40,000) Seal around all windows, curtain wall, and exterior doors ($60,000)
Plumbing	$35,000	$30,000	$30,000	$50,000	$145,000	$2,500	Investigate and repair underground sanitary system ($65,000) Replace outdated restroom fixtures ($50,000) Miscellaneous upgrades ($30,000)
Electrical and HVAC	$45,000	$90,000	$250,000	$0	$385,000	$5,000	Evaluation of HVAC control systems for system integration ($15,000) Replace hi-bay gymnasium lights with efficient, protected fixtures ($40,000) Install air conditioning system throughout ($250,000) - worked phased in over time Miscellaneous upgrades ($50,000)
Technology	$0	$0	$8,000	$0	$8,000	$0	Additional key fobs ($8,000)
General Interior and Environmental	$75,000	$75,000	$90,000	$185,000	$425,000	$10,000	Replace existing windows with new energy efficient, operable windows ($200,000) Replace outdated or damaged restroom floor tile ($40,000) Upkeep and necessary replacement of all interior finishes - paint, ceiling tile, floor tiles, millwork - phased in over time ($175,000) Miscellaneous improvements ($10,000)
Construction Cost Subtotal	**$300,000**	**$425,000**	**$663,000**	**$235,000**	**$1,623,000**	**$72,500**	
General Conditions and GC fees (10%)	**$30,000**	**$42,500**	**$66,300**	**$23,500**	**$162,300**	**$0**	Includes mobilization, GC fees, O&P and etc.
Permit & Tap Fees	**$9,000**	**$12,750**	**$19,890**	**$7,050**	**$48,690**	**$0**	Allowance
Insurance and Bonds (2%)	**$6,780**	**$9,605**	**$14,984**	**$5,311**	**$36,680**	**$0**	
Construction Contingency (10%)	**$34,578**	**$48,986**	**$76,417**	**$27,086**	**$187,067**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$380,358**	**$538,841**	**$840,591**	**$297,948**	**$2,057,738**	**$72,500**	
Per SF Costs	**$5.51**	**$7.81**	**$12.18**	**$4.32**	**$29.82**	**$1.05**	
Per Student Costs, maximum capacity	$629	$891	$1,389	$492	$3,401	$120	
ADD Alternate 1: Replace exterior doors with FRP doors, in lieu of hollow metal doors	$0	$250,000	$250,000	$0	$500,000	$0	Estimate
ADD Alternate 2: Replace roof	$0	$350,000	$300,000	$0	$650,000	$0	Estimate

General Notes:
1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Orchard Lane Elementary School Campus
2015 South Sunnyslope Road, New Berlin, Wisconsin

Overview

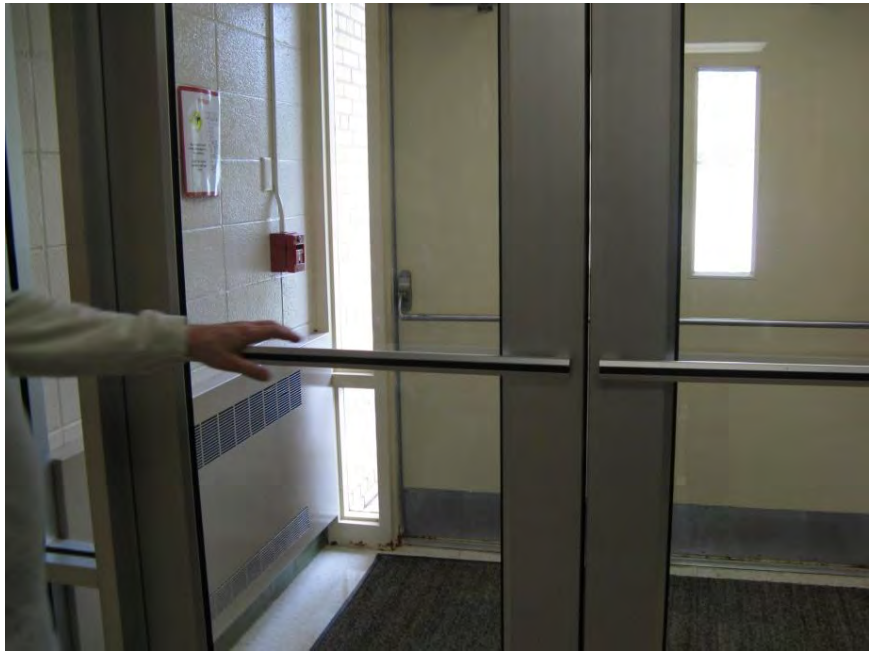
Front Entrance

Assembly Hall and Stage

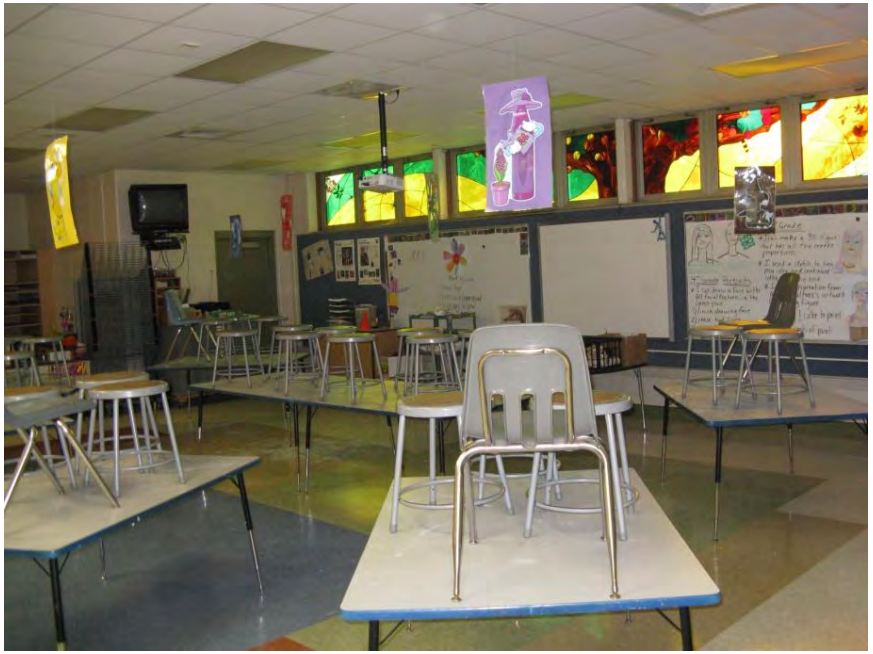
Assembly Hall Ceiling Showing Outdated Light Fixtures

Typical Classroom

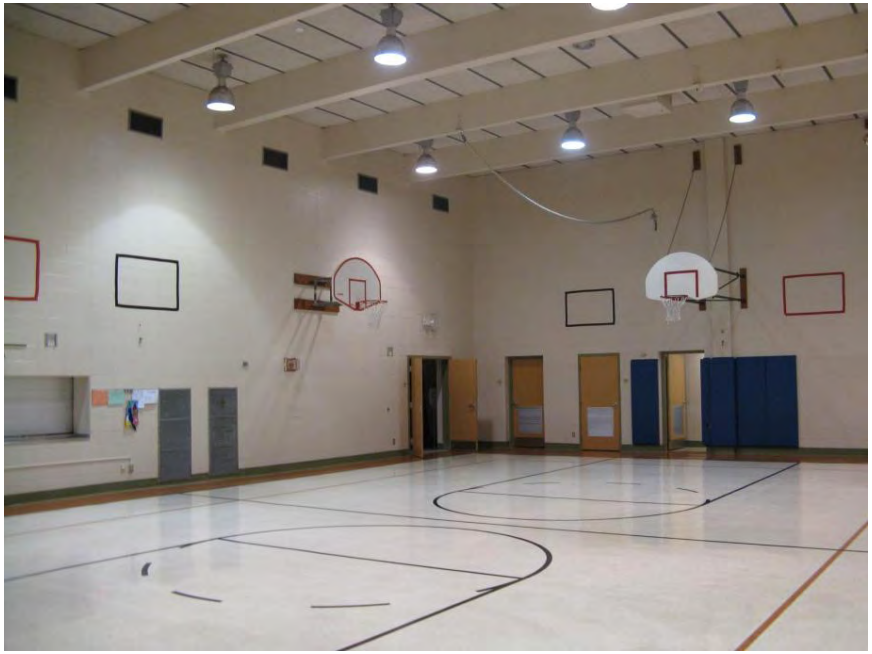
Alternate View of Typical Classroom



Entry Vestibule



Typical Classroom



Gymnasium

Gymnasium Ceiling with Typical Tectum Ceiling Panels

Landscaping in Rear of Building

Ballasted Roof Showing Membrane Termination Detail and Vent

Ballasted Roof (left) and Adhered Roof (right bottom)

Typical Roof Drain

Trash Containers Lacking Enclosure

Boilers within Mechanical Room

Outdated Men's Restroom

Typical Classroom Cabinetry

Typical Accessible Bathroom

Interactive Media Center

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Poplar Creek Elementary School Campus
17401 West Cleveland Avenue, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the Poplar Creek Elementary School facility, located at 17401 West Cleveland Avenue in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Poplar Creek Elementary Campus was built with capacity for approximately 670 students from kindergarten through grade six, based on a formula for capacity described in the Enrollment Analysis section in Part II of this report. For the 2010 school year,

student enrollment was reported to be 490 students. The facility, constructed in the 1950s, contains approximately 81,000 square feet on two levels, with access to the exterior in the front on the upper level and in the rear on the lower level. The facility remains very functional but exhibits clear signs of age-related wear in the form of outdated finishes and slowly deteriorating surfaces. The exterior appearance of the facility is pleasantly landscaped and the façade is well maintained, projecting a pleasing environment to visitors. However, a key concern at this facility is the size and the condition of the parking lot, which is smaller than other elementary schools in the District and located very near to the adjacent county road.

A substantial addition to the building was constructed during 2004, designed by the same architect that was responsible for the design of the Ronald Reagan Elementary School campus. IFF found no issues related to building Code or accessibility in the building expansion. Most of the recent upgrades described by District staff that have taken place at Poplar Creek over the past several years have focused on the mechanical and plumbing systems and on upgrading finishes including carpeting and tile. Work included among recent renovations includes replacement of the fixtures in several restrooms and configuration of one classroom to accommodate the school's special needs population.

The facility is located within a sparsely developed residential area, and lots immediately to the west of the site contain single family homes. The current use of the building, by function, is approximately 75 percent classroom and program space, including a gymnasium and library and cafeteria, and about 25 percent administration, office space, restroom, staff lounge and other circulation space.

Overall, the campus facility appears to be in poor to acceptable condition relative to the other facilities operated by the District, but it is wearing with age and a variety of building Code, accessibility, and deferred maintenance issues were identified. The building is protected by a fire sprinkler system, which appears to have been installed to meet Code requirements during the building addition. A fully functional fire alarm system is in place, monitored and maintained by SimplexGrinnell. An elevator within the addition provides vertical accessibility between levels.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
17401 West Cleveland Avenue New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing exterior masonry walls, steel columns and joists	Insufficient for staff and faculty needs

Use of the facility as a school is permitted under the current zoning classification of this site. The parking lot is nearing the end of its useful life, and requires substantial work in order to continue serving the needs of the faculty and staff. The existing lot is reported to be insufficiently sized for the current volume of employees, and removal and replacement of the entire pavement section are recommended to be phased in over

time. Expansion or reconfiguration of the lot would likely be a necessary part of any future building addition.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The existing parking lot is nearing the end of its useful life and should be resurfaced to limit decline of the surface over coming years, with limited repairs to areas where cracks and other defects have become a serious problem. The costs for resurfacing are phased in over time in the attached cost estimate, and it is assumed that resurfacing would encompass the entire parking lot but include only limited full-depth repairs where necessary. Resurfacing and repairs are temporary measures that will extend the life of the lot for a limited amount of time. The District may choose to remove and replace those sections of the parking lot which have suffered the most significant deterioration, and an alternate price is included in the cost estimate for pavement replacement. The alternate value for lot replacement is based on the assumption that the sub-grade below the pavement is in adequate condition such that only isolated areas of remediation will be necessary, and that portions of the lot that remain in good condition will not need to be replaced. The District is advised to allocate a sizeable contingency for any work performed on the parking to account for restoration of deficiencies that may be discovered upon removal of the existing pavement.
2. A substantial change in grade elevation occurs in the landscaped transitional space between the parking lot and the face of the building, allowing natural light to reach lower level windows on the north side of the building. Concrete walkways, at the same elevation as the parking lot and the entrance doors, permit access from the lot to the entrances, and steel handrails on either side prevent falls into the grassy pitched area of grade transition. IFF recommends replacing these rails to better prevent students from accessing the sloped area, while still allowing access for maintenance staff to manage the landscaping in the vicinity. Projected costs for this work are included in the long-term needs section of the attached cost estimate.
3. Exterior windows are operable single-pane, non-insulated glazing units with aluminum frames throughout. Replacement of all windows with thermally insulated, operable units is recommended, and the cost for this work is shown as being phased in over several years.
4. The existing masonry surface and the lintels around the perimeter of the building appear to be in good condition. IFF recommends continuing the current program of annual inspections of the brick and mortar and lintels, with repairs completed as determined by need and budget.
5. Water infiltration could occur at the joints where the building meets the parking lot or the landscaped swale at the front of the building. IFF recommends sealing all points of contact between the building face and the parking lot with appropriate exterior grade sealant. The estimated cost of this work is included in the attachment.
6. The age of the building indicates that the weatherproof seals at all window and door frames have likely deteriorated over time. IFF recommends that all exterior door frames and windows be caulked where they abut the exterior brick.
7. The existing entry doors exhibit very few signs of corrosion, in contrast to the level of corrosion experienced at other District facilities. IFF recommends at this time that the doors be treated with an appropriate rust inhibitor and monitored for signs of

corrosion. For future replacement of the doors, the use of FRP doors is often recommended in schools and other public institutions because they are better able to resist wear and corrosion and are often considered easier to clean than typical hollow metal doors. The expected service life of the FRP doors can be up to three to four times that of a typical hollow metal door in a public school application. However, there is a significant premium associated with upgrading the doors, and the school District should balance its long term maintenance costs against its immediate budget constraints when choosing what product will best fit the long term needs of the facility and the staff.

Structure

1. The building's overall structural system appears to be in good condition; no indications of differential settlement or foundation wall cracks were observed.
2. The District's tuckpointing program has been effective in keeping the exterior brick of the structure in acceptable condition. IFF recommends continuing the District's current program of inspections and repairs as necessary to all exterior brick.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and other regulations. The items listed below are typical requirements for existing buildings with no change in use under the Code. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits.
2. Corridors, stairs, and mechanical room doors should meet minimum fire rating requirements. Per Code, fire rating labels must be visible. Replacement of non-fire-rated doors is included in the intermediate needs section of the cost estimate.
3. Localized areas of deteriorating finishes, including metal window frames, require maintenance and repair.
4. No exposed piping beneath plumbing fixtures was observed at sinks in the restrooms and all restroom fixtures appear to meet Code.
5. Electrical and mechanical equipment and controls throughout the facility should be tested regularly to ensure proper function and to identify any deficiencies before encountering significant problems.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process. Undertaking significant renovations to the building can trigger differing compliance requirements and compliance with accessibility requirements is subject to the interpretation of reviewing agencies. IFF advises that the school District should

verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. The main front entrance on the north side of the building is equipped with required accessibility features, including ADA-approved hardware, panic bars, and closers. IFF advises that the District may consider installing additional accessible entrances to the facility. An estimated cost for this recommendation is included in the long-term needs section of the attached cost estimate.
2. An elevator, installed with the recent addition, provides vertical accessibility between the first and second floor. The District staff report that the elevator is functional and compliant with all Code requirements. IFF recommends continuing to have the elevator inspected annually to identify and correct any issues immediately if they arise.
3. Classroom doors throughout the facility should be upgraded with lever-type hardware for accessible operation, as required by Code, where not already in place.
4. Existing doors do not appear to have the appropriate width clearances on the pull side and the push side to meet Code. This condition is likely grandfathered in, unless significant renovations are planned which involve the reconfiguration of classroom walls.
5. Countertops should meet maximum accessible height above the floor to comply with accessibility Code requirements. This is shown as a long-term work item in the attached cost estimate.
6. A minimum number of lockers in classrooms, corridors, and locker rooms should be replaced with accessible lockers, per Code.
7. Drinking fountains throughout the facility should be replaced with accessible, hi-low drinking fountains.

Life and Safety

1. Evacuation plans and first aid kits are located throughout the facility, including corridors, classrooms and common areas per Code.
2. The facility is served by a fire alarm system monitored by SimplexGrinnell. The alarm system is inspected annually, and upgrades are performed by SimplexGrinnell as needed.
3. Smoke and heat detectors are present throughout and appear to be hard wired into the fire alarm system, as per Code. Fire extinguishers were observed to be sufficient in terms of locations and numbers. Fire extinguishers and smoke detectors must be maintained regularly.
4. Audio and visual fire alarm annunciators are visible throughout the building. Audio and visual alarms are required by Code in each classroom and common area.
5. Exit signs and emergency lighting throughout the building appear to meet Code requirements.

Roof

1. The facility has a flat roof system featuring a black 75-mil EPDM roofing membrane, divided into multiple levels of flat walking surfaces with varying sizes and elevations. Over the majority of the building, the roof membrane is ballasted, but newer parts of the roof feature an adhered membrane system.
2. Water seepage caused by typical weather-related events into the facility was observed at a few locations. District staff indicate that the nature of the ballasted

roofing system makes it difficult to isolate and resolve roof leaks rapidly and state that several roof leaks have been fixed over the recent past.
3. IFF recommends continuing the District program of annual inspections of the roof membrane to identify areas of deterioration before any infiltration is observed.

Plumbing

1. Restroom fixtures, recently replaced throughout the building, appear to be Code-compliant and in good working order.
2. The facility is served by a 125-gallon, high efficiency hot water tank, which was installed in recent years. District staff report that the supply hot water is adequate to meet the needs of the faculty, staff, and students.
3. Due to the age of the building, and the issues recognized at other District facilities of similar age, IFF recommends investigating the state of the underground sanitary system on a regular basis to identify and eliminate any potential issues before problems occur. Cost for this item is included in the attached estimate.

HVAC

1. The newer sections of the facility are heated using the original steam boilers, manufactured by Weil-McLain, and controlled by pneumatic thermostats located throughout the building. Older sections of the building have been retrofitted with energy efficient boilers, manufactured by Patterson-Kelley, and controlled by an Alerton control panel. IFF recommends engaging a qualified mechanical engineer to analyze the existing system of controls and to recommend solutions for integrating the climate control logic of the building's heating and ventilation system in order to improve efficiency and recognize cost savings.
2. There is no centralized air conditioning system present; however, several rooms are equipped with window air conditioning units. The District may consider installing centralized air conditioning as part of any substantial renovation project in the future. Estimated costs are shown in the long-term improvements section of the attached.
3. Air-handling units and an extensive network of ducts distribute air throughout the building. Additionally, heat recirculation apparatuses are present to improve the operational efficiency of the system. Several new unit ventilators were installed as part of the renovation project, and IFF recommends establishing a thorough maintenance program for all univents.
4. Return air is pulled into the plenum space above the ceiling grid in the corridors to be returned to the air handlers. Return grilles are located above the doors, or built into the doors, of some classrooms to allow air transfer back into the corridors.

Electrical

1. The building's main electrical service is considered sufficient for a building of this size and use, but specific parameters of the system were indeterminate due to ambiguously labeled electrical distribution equipment added near the service entrance during prior renovations. During any work performed on the building electrical system, the circuits and panels should be identified and properly labeled.
2. The electrical distribution system, with service panels located primarily in the mechanical equipment room, is reported to be adequate to manage the loads required throughout the building. IFF recommends engaging a licensed electrical engineer to investigate the existing electrical service and distribution system, if

modifications to the mechanical systems or future building additions are planned in the future.
3. Electrical outlets are located strategically around the facility, but any major renovation of the facility should be reviewed by a licensed electrical design engineer to with respect to the future power needs of the faculty and students.
4. Lighting throughout the building and the grounds is functional and adequate, but outdated. Lay-in or ceiling-mounted 1'x4', two-lamp fixtures are prevalent throughout the classrooms and the corridors. Metal halide fixtures are utilized in the gymnasium. IFF recommends replacing existing light fixtures with energy efficient, T8 fluorescent fixtures throughout.

Technology

1. The building has a T-1 data service for use by the students and faculty, and limited Wi-Fi service is available.
2. Telephone and data jack locations appear sufficient throughout the building for the needs of an elementary school.
3. No central burglar alarm or video monitoring system is active in this facility.
4. Electronic key fobs were visible at the main entrance to the facility. Additional key fobs are recommended and shown in the attached cost estimate.

Environmental Conditions

1. Since the building was constructed prior to 1978, it is likely that the walls have been painted with Lead-Based Paint (LBP) in the past. As long as there is no chipping or peeling of the paint, it is acceptable to repaint the walls, which serves to encapsulate the LBP underneath. However, if the LBP is disturbed in any way (drilling holes, removing walls, etc.), licensed lead abatement personnel must be engaged to ensure lead dust does not contaminate the facility.
2. District staff indicate that most asbestos containing materials (ACMs) have been, or continue to be, abated when encountered during any renovation; the school District has employees on staff that are trained and licensed to abate ACMs. Insulation around the existing boiler, and some of the associated process piping, appear to contain ACMs. If the school District intends to remove or modify the furnaces, IFF recommends that a licensed asbestos abatement contractor be hired to identify and remediate the ACMs.
3. No mold or other environmental nuisances were reported by District staff or observed during the site visit.

General Interior

1. Flooring in the corridors and the classrooms is composed of 12-inch Vinyl Composition Tile (VCT); the flooring is generally in adequate condition, however aesthetic upgrades are recommended in the long-term as a quality improvement item. The gymnasium floor is typical hardwood, and there is commercial quality carpet located in the library area; both areas are very well maintained.
2. Walls are mostly composed of painted concrete masonry unit block with vinyl base in good condition. Standard sized brick, similar to the exterior brick façade, is visible within several corridors and classrooms. Restroom floors and wet walls are tiled in ceramic and generally in need of replacement. IFF recommends modernizing the finishes in the restrooms as a quality improvement.

3. Ceiling throughout is commonly 2' x 2' lay-in acoustical ceiling tiles. Drywall ceilings are present in several restrooms, and there is exposed painted metal deck and roof joists in the gymnasium. Stained ceiling tiles should be replaced in coordination with roof repairs.
4. Millwork throughout the facility appears in serviceable condition. IFF recommends upgrading the existing cabinetry as part of any large-scale renovation of the classrooms in the future and this cost is included with the quality improvement items in the cost estimate.
5. Furniture throughout the building is relatively old but well maintained and functional. The school District may need to budget for upgrading furniture in the near future. A cost for furniture upgrades is not included in the attached cost estimate.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the campus below and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Upgrade fire alarm as necessary in older sections of the building, including all audio and visual annunciators.
2. Ensure that borrowed lights within doors to classrooms are not blocked by staff.
3. Utilize the closet space with a janitor's mop sink and proper exhaust ventilation on each floor only for cleaning and maintenance purposes. No electrical or IT equipment or materials should be stored in these rooms. Where janitorial and electrical share space, a partition wall should be constructed separating the custodial area from the electrical facilities.

Accessibility

1. Adjust wall-mounted equipment (dispensers, blackboards, signage, etc.) and room identification signage to accessible heights to meet Code.
2. Replace existing non-compliant countertops in unique program areas with new counters per maximum height accessibility requirements.
3. Furnish and install ADA-compliant accessible lockers for the required percentage of all student lockers.

Structural, Building Systems, Exterior, and Other

1. Begin program of resurfacing the parking lot including limited repairs to cracks and serious defects in the pavement. The attached cost estimate includes an Alternate cost for removing and replacing badly deteriorated sections of the existing lot. It is assumed that the sub-grade is generally suitable for compaction and reuse, and only the pavement section will need to be replaced.
2. Identify and scrape all deteriorated lintels and paint with an exterior-grade, corrosion resistant coating to match the surrounding brick and window frame, or replace lintel if repair is not feasible.
3. Begin organized replacement of outdated windows with thermally insulated, operable units. The District may choose where new windows are most urgently needed and schedule replacements based on need and cost.
4. Begin program of treating caulking around all windows, curtain wall, and doorframes that are to remain.
5. Seal all joints where the building meets the parking lot, landscaping, or sidewalk with appropriate exterior grade caulk or other sealant. This work can be completed immediately or spread out over time to defer cost.

Total Estimated Cost for Immediate Items: $361,340
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Intermediate: Items to be Addressed in Years Two through Five

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Verify that all doors into corridors, stairwells, and mechanical rooms have a visible fire rating, and replace non-rated doors with appropriately rated units; scrape paint as necessary to expose fire rating labels. Where non-rated doors are encountered, replace with properly rated doors, as determined by a licensed architect.

Accessibility

1. Furnish and install ADA-compliant hi-low drinking fountains in lieu of existing fountains.
2. Provide additional Code-compliant accessible entryways into the building, including automated push pads.

Structural, Building Systems, Exterior, and Other

1. Continue systematic resurfacing or replacement of the parking lot.
2. Begin systematic replacement of older light fixtures using energy-efficient T8 fixtures.

3. Continue re-caulking program for exterior doors and windows and at building perimeter.
4. Continue replacement of outdated windows with thermally insulated, operable units.
5. Repair roofing system and penetrations, flashings, copings, and parapets as required following the District's program of annual roof inspection and restoration.
6. Investigate the condition of the below ground sanitary and stormwater management systems and perform maintenance where necessary.

Total Estimated Cost for Intermediate Items: $697,323
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Long-Term: Items to be Addressed in Year Five or Beyond

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Code and Life Safety

1. Abate asbestos containing materials which are part of the boiler pipe wrap, or wherever else encountered within the facility as work is performed in the area.

Accessibility

1. Handrails in stairways should be adjusted to fall within accessibility Code guidelines.

Structural, Building Systems, Exterior, and Other

1. Replace existing steel handrails at sidewalks spanning the grade transition leading from the parking lot to the entrances on the north side of the building.
2. Continue individual programs of upgrading parking lot, replacing exterior doors, and repairing roof as needed.
3. Continue systematic replacement of outdated windows with thermally insulated, operable units.
4. Continue re-caulking program for exterior doors and windows and at building perimeter.
5. Engage a licensed mechanical consultant to establish options for installing centralized air conditioning and for combining heating, ventilation, and air conditioning systems under a unified digital control system for improved performance and efficiency.
6. Engage a licensed electrical consultant to identify the features and deficiencies of the existing system in advance of any renovation work.
7. Upgrade outdated light fixtures in classroom and corridors with energy efficient models.
8. Provide additional electronic key fobs, security cameras, and monitoring equipment.

Total Estimated Cost for Long Term Items: $678,305
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues.

1. Replace older flooring with new resilient flooring, carpet or carpet tile, as desired, to help enhance the space throughout the building.
2. Replace stained ceiling tiles wherever encountered, after isolating and repairing roof leak that caused staining. Ceiling tiles should be reviewed annually, to coincide with roof repairs.
3. Upgrade outdated light fixtures in classroom and corridors with energy efficient models.
4. Upgrade outdated restroom fixtures.
5. Install new ceramic tile and paint exposed brick or ceiling in older restrooms
6. Provide a cosmetic facelift of chosen areas of the facility, including new paint and millwork where applicable.

Estimated Cost for Quality Improvement Items: $240,895
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1][4]	$361,340	$697,323	$678,305	$240,895	$1,977,863
Cost per SF [2]	$4.46	$8.61	$8.37	$2.97	$24.42
Cost per Student [3]	$539	$1,041	$1,012	$360	$2,952

[1] Includes estimates for general conditions, insurance, bonds, and 10% contingency
[2] Cost per square foot based on estimated building area of 81,000 square feet
[3] Cost per child based on maximum capacity of 670 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation unless noted

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Poplar Creek Elementary School Campus
17401 West Cleveland Avenue, New Berlin, Wisconsin
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 81,000
Maximum Building Capacity (students): 670

Description	Immediate	Intermediate	Long-Term	Quality Improvements	TOTAL	Deferred Maintenance [3]	Remarks
Building Code and Life Safety Issues	$20,000	$15,000	$0	$0	$35,000	$15,000	Install walls within the janitor's closet to isolate electrical/IT ($5,000) Replace non-fire rated doors at corridors, stairwells, and mechanical rooms ($15,000) Replace outdated audio/visual alarms, emergency lighting, and exit signage with code-compliant devices ($15,000)
ADAAG & Accessibility Issues	$10,000	$15,000	$25,000	$40,000	$90,000	$0	Accessible Lockers ($10,000) Hi-low drinking fountains ($5,000) Adjust countertops to ADA-compliant heights ($10,000) Additional accessible entrances into the building ($40,000) Miscellaneous accessibility upgrades ($25,000)
Exterior and Structure	$85,000	$120,000	$140,000	$0	$345,000	$25,000	Resurface exterior parking lot, with limited repairs ($250,000) Replace handrails at front entryways ($15,000) Repair damaged lintels ($50,000) Miscellaneous upgrades ($30,000)
Roof	$15,000	$50,000	$50,000	$0	$115,000	$10,000	Assumes roof repairs phased in over time
Sealant and Caulking	$35,000	$30,000	$10,000	$0	$75,000	included	Seal joints where sidewalk, parking lot, or landscaped area abuts building ($30,000) Seal around all windows, curtain wall, and exterior doors ($45,000)
Plumbing	$20,000	$30,000	$45,000	$0	$95,000	$2,500	Investigate underground sanitary system to resolve issues before problems occur ($25,000) Replace outdated restroom fixtures ($50,000) Miscellaneous improvements ($20,000)
Electrical and HVAC	$40,000	$55,000	$90,000	$0	$185,000	$5,000	Evaluation of HVAC control systems for system integration ($30,000) Install air conditioning system throughout ($100,000) Electrical investigation of existing system and coordination with HVAC modifications ($25,000) Replace outdated light fixtures with energy efficient fixtures ($30,000)
Technology	$0	$50,000	$0	$0	$50,000	Included	Additional key fobs, cameras, and monitoring ($50,000)
General Interior and Environmental	$60,000	$165,000	$155,000	$190,000	$570,000	$10,000	Replace outdated existing windows with new energy efficient, operable windows ($200,000) Replace outdated or damaged restroom floor tile ($40,000) Provide additional key fob secured entry operators ($20,000) Replace gymnasium/assembly hall light fixtures with efficient models with protected lamps ($60,000) Upkeep and necessary replacement of all interior finishes - paint, ceiling tile, floor tiles - phased in over time ($200,000) Abate remaining ACM where encountered ($50,000)
Construction Cost Subtotal	**$285,000**	**$530,000**	**$515,000**	**$230,000**	**$1,560,000**	**$67,500**	
General Conditions and GC fees (10%)	**$28,500**	**$53,000**	**$51,500**	**$23,000**	**$156,000**	**$0**	Includes mobilization, GC fees, O&P and etc.
Permit & Tap Fees	**$8,550**	**$15,900**	**$15,450**	**$6,900**	**$46,800**	**$0**	Allowance
Insurance and Bonds (2%)	**$6,441**	**$11,978**	**$11,639**	**$5,198**	**$35,256**	**$0**	
Construction Contingency (10%)	**$32,849**	**$61,088**	**$59,359**	**$26,510**	**$179,806**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$361,340**	**$671,966**	**$652,948**	**$291,609**	**$1,977,863**	**$67,500**	
Per SF Costs	**$4.46**	**$8.30**	**$8.06**	**$3.60**	**$24.42**	**$0.83**	
Per Student Costs, maximum capacity	$539	$1,003	$975	$435	$2,952	$101	
ADD Alternate 1: Remove and replace deteriorated portions of the parking lot	$0	$400,000	$400,000	$0	$800,000	$0	This cost will be in lieu of resurfacing. Minimal sub-grade remediation is assumed to be necessary and suitable sections of pavement can remain.

General Notes:
1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

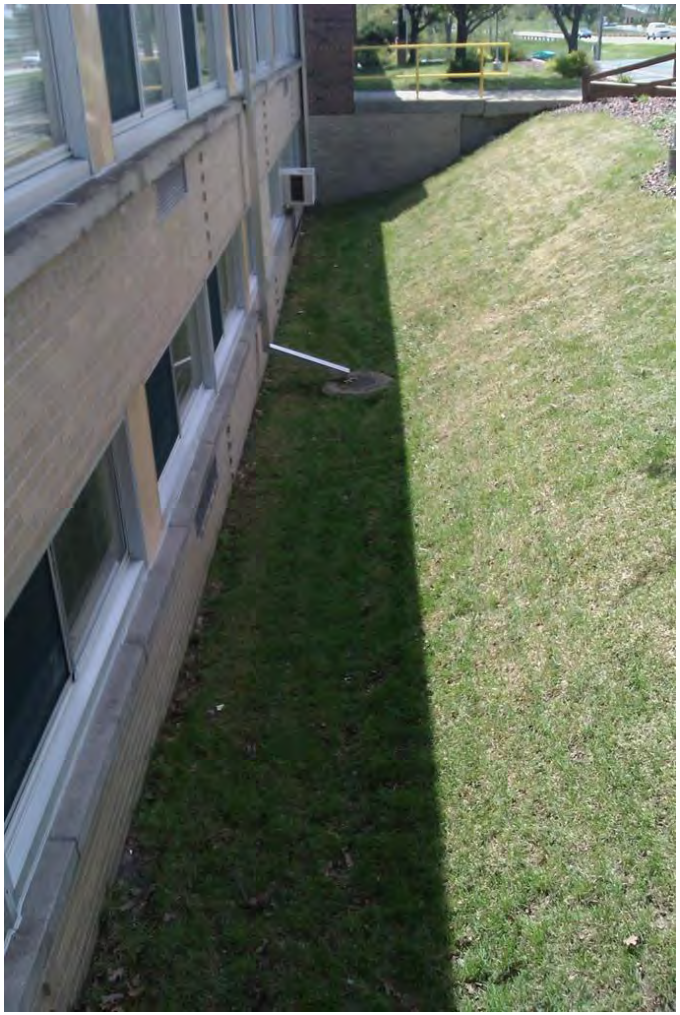
ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Poplar Creek Elementary School Campus
17401 West Cleveland Avenue, New Berlin, Wisconsin

Poplar Creek Overview

Front Building Facade

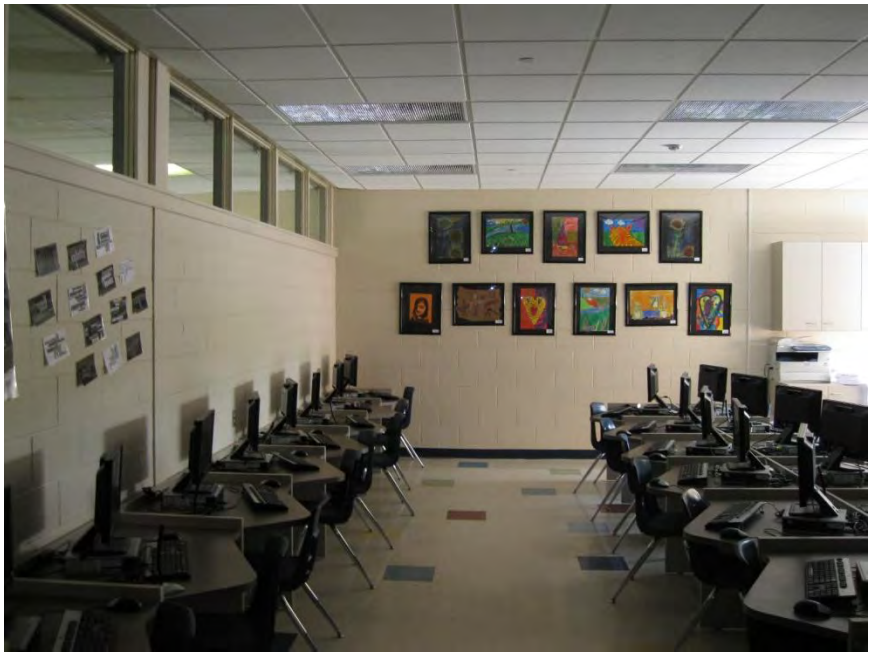
Main Entrance

Alternate View of Front Building Facade



Landscaped Swale at Front of Facility

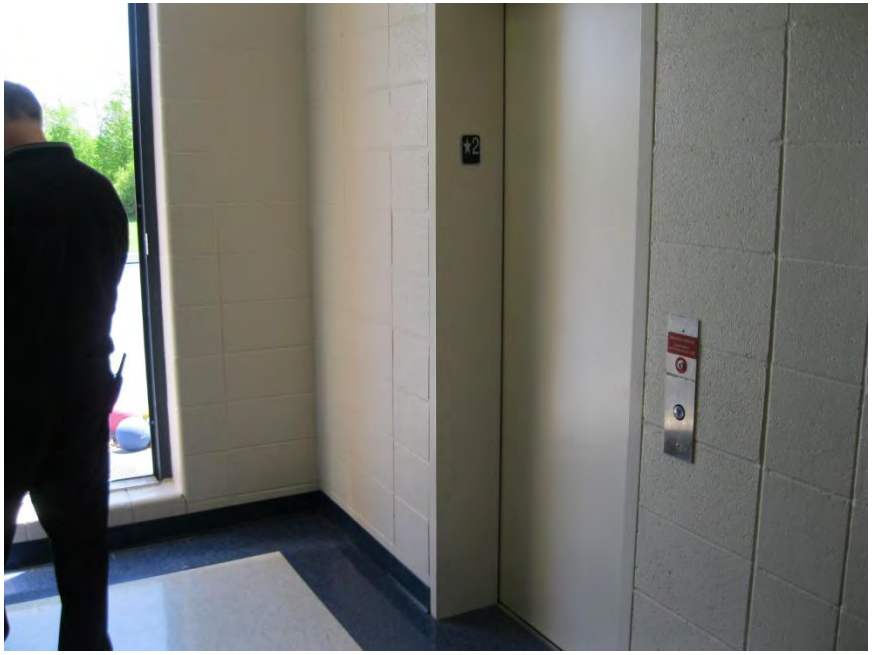
Main Office Area



View of Computer Lab

Typical Classroom

Teachers' Lounge

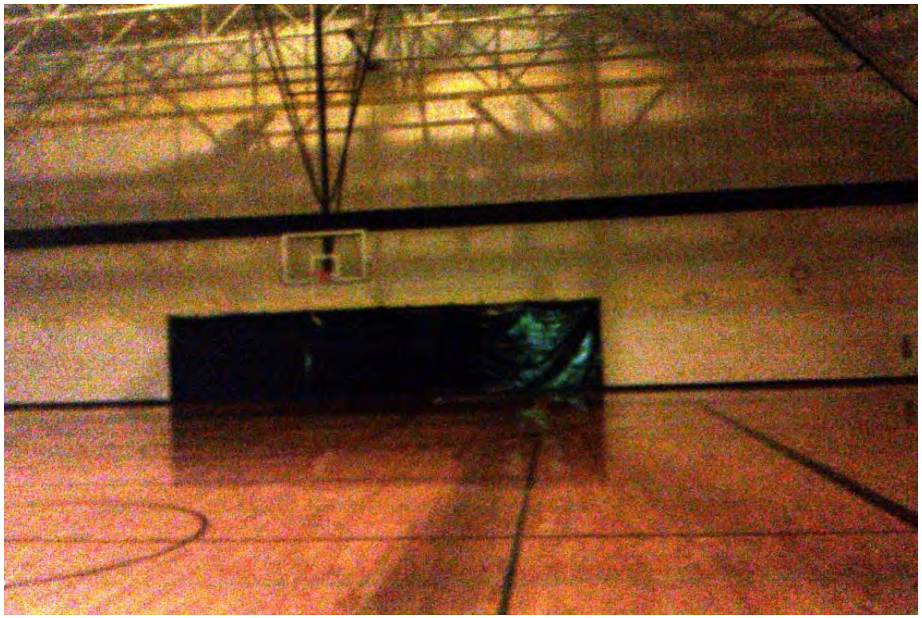


View of Elevator

Typical Outdated Restroom

Typical Restroom Fixtures

Existing Drinking Fountains



Gymnasium

View of Stage & Curtain

Rear Entryway Doors

SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Facility Assessment
Ronald Reagan Elementary School Campus
4225 South Calhoun Road, New Berlin, Wisconsin

Prepared by IFF
August 2011

IFF visited and assessed the Ronald Reagan Elementary School facility, located at 4225 South Calhoun Road in May 2011 as part of a District-wide Strategic Facilities Assessment.

This Facility Assessment is a detailed report of the current physical condition of the buildings and includes: identification of structural and system issues; a preliminary analysis of building Code and accessibility compliance issues; prioritization of items to be addressed; and cost estimates for all improvement items. This assessment focuses on improvements needed to maintain or improve the physical integrity and functional performance of the building. Improvements related to programming needs or changes, aesthetic enhancements, or other renovations that may be desirable but not necessary for the building to continue operating in its current capacity are not included in this report unless otherwise noted. This Facility Assessment represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, accessibility rules and regulations, or other standards are preliminary only. IFF advises that all improvements should be implemented in strict compliance with all local, state and federal statutes and should satisfy the requirements of all authorities having jurisdiction over the District and its facilities. Recommended facility improvements generally assume the most cost effective strategies to maintain and improve facility performance and to bring the facilities into full Code compliance and standards for new construction. IFF recommends that the District engage the services of appropriately licensed professionals for final determination of all applicable Code- and facility-related issues and for confirmation of actual costs.

A detailed cost estimate outlining IFF's recommendations is attached to this assessment to assist the District in budgeting for potential capital improvements in the immediate, intermediate and long-term timeframes. The estimate is intended to be utilized as guidance for projecting the order of magnitude of the suggested improvements, based on IFF's observations of the conditions observed during the walk-through. Where recommendations are made for bringing the facility into compliance with applicable Codes, IFF has assumed that the most cost-effective renovations will be implemented; for example, the cost estimate for enclosing a stairwell does not assume that the stairs will be replaced entirely but rather that the handrails will be adjusted to proper height and the area will be bordered by the minimum fire rated walls to meet Code. Because the costs for individual items within the estimate may vary depending on the scope the District chooses to implement, the cost estimate should be regarded as a high-level approximation of the costs required to achieve compliance goals and is provided for discussion purposes only.

HISTORY AND OVERALL BUILDING AND SITE CONDITIONS:

The Ronald Reagan Elementary Campus, the most recently constructed facility that IFF visited during the facility assessment, was built for a capacity of approximately 929 students from kindergarten through grade six, based on a formula for capacity described

in the Enrollment Analysis section in Part II of this report. For the 2010 school year, student enrollment was reported to be 638 students. Construction of the 145,000 square foot facility was completed in 2004, and the building features first floor and ground floor levels. The grade of the parking lot allows access to the exterior from both levels. Classrooms for each grade unit are grouped in distinct areas, similar to the "pod" system of grade separation also encountered at other grade schools within the District. A small portion of the building features an upper level with a sloped roof and siding, containing mechanical equipment.

The current use of the building, by function, is approximately 65 percent classroom and program space, including a gymnasium and library and lunch room, and about 35 percent administration, office space, toilet, staff lounge and other circulation space.

Overall, the campus facilities are in good condition relative to the other facilities operated by the District, and very few building Code and deferred maintenance issues were identified. The majority of IFF's recommendations regarding this facility will refer to maintenance items necessary for proper upkeep and implemented to extend the serviceable life of the facility while limiting future replacement or wholesale renovation expenses.

The building contains a complete, functional sprinkler system, which IFF assumes to be compliant with all current building and fire Codes. The building is served by a fire alarm system that is maintained by SimplexGrinnell and tied directly to a private monitoring system, as with all the District's schools except for one.

The following table summarizes existing building classifications:

EXISTING BUILDING CLASSIFICATIONS				
Address	**Zoning**	**Current Use**	**Construction Type**	**Existing Parking**
4225 South Calhoun Road New Berlin, Wisconsin	I-1, Institutional District	Educational	Load bearing exterior masonry walls, steel columns and joists	Sufficient for school and for possible expansion

Use of the facility as a school is permitted under the current zoning classification of this site. The existing parking lot is in excellent condition and appears to be sufficiently sized to meet the needs of the faculty and staff.

Immediately prior to IFF's visit to the school, a local mechanical solutions contractor was engaged by the District to investigate the mechanical systems at several facilities throughout the District and to recommend improvements for improving efficiency. Investigation was initiated as a means to verify that the individual systems are performing at optimum efficiency in compliance with the design objectives. According to District staff, the contractor identified a glitch within the controlling logic of the building management system software which is causing the chiller to function more often than intended. District staff were advised that adjusting the operation of the controller is likely to cause notable improvement in the efficiency of the mechanical systems. IFF recommends that the mechanical solutions contractor noted above, or a similarly qualified mechanical systems engineer, be engaged to update the building management system control logic if not already completed.

The following summarizes IFF's facility assessment by functional component and by areas of Code compliance.

Exterior

1. The sidewalk, curbs, and parking lot appear to be in excellent condition, due to annual maintenance.
2. Trash bins are located in an enclosure on the west side of the building.
3. Exterior windows are thermally insulated glazing with aluminum frames throughout. Windows on the first floor are operable. IFF did not observe any problems related to the windows or frames.
4. Existing exterior doors are hybrid FRP corrosion-resistant doors. These doors are in excellent condition, and no signs of corrosion or deterioration were observed at any locations. The FRP doors were installed as an upgrade over the standard hollow metal doors for improved durability and serviceability. The FRP doors at this facility should be monitored very closely to determine whether the added quality of the upgraded doors is sufficient to justify the added expense. The District should review their observations at Reagan when considering whether to replace corroding hollow metal doors with similar units or with FRP units at other facilities in the District.
5. All visible masonry around the building perimeter and all existing lintels appear to be in good condition. IFF recommends regular inspections of the whole exterior façade to identify needed tuckpointing, lintel repair, or other improvements as needed.
6. Visible portions of the second floor mechanical rooms have had wood siding installed around the perimeter. The siding appears to be in excellent condition. The school District should continue monitoring for wear and repair as needed.

Structure

1. The building's overall structural system appears structurally sufficient, as expected of a building so recently completed.
2. No water seepage into the facility was observed at any location.
3. The building site is large enough that expansion at this location is possible in several different areas, either as an addition to the current building or a separate facility, if the District chooses to expand the campus.

Building Code

IFF references the International Building Code (IBC), 2006 edition, and the current edition of the Wisconsin Uniform Building Code, as its guidelines for the assessment. Code requirements include Accessibility, Electrical, Mechanical and Plumbing Codes and other regulations. The items listed below are typical requirements for existing buildings with no change in use under the Code. Code issues specifically related to accessibility and other building components are discussed later in the report under their respective sub-sections. IFF recommends that all improvements be implemented in strict compliance with all local, state and federal statutes and that the District consult with appropriately licensed professionals to ensure compliance with all applicable Code-related issues at the outset of any project.

1. The building was observed to meet the minimum required number of exits.
2. All doors swing in the direction of egress, as required by Code.

3. Corridors, stairs, and other fire-rated rooms appear to meet minimum fire rating requirements and enclosures.

ADAAG and Accessibility

IFF assessed the facility according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The final scope of work to meet these guidelines will be determined in the development of architectural plans and during the permit application process. Undertaking significant renovations to the building can trigger differing compliance requirements and compliance with accessibility requirements is subject to the interpretation of reviewing agencies. IFF advises that the School District should verify specific requirements with licensed professionals at the outset of any new project. The following summarizes accessibility issues identified throughout the facility:

1. The facility appears to have been designed and constructed to meet the applicable local accessibility and ADA guidelines in effect at the time of construction.
2. The main front entrance of the building is fully accessible and equipped with a push pad for mechanical door operation.
3. A fully functional elevator permits vertical accessibility between the first floor and the ground level. Due to the grading of the parking lot, both levels are accessible from exterior, grade level entrances.
4. The stage area located in the gymnasium is accessed by a commercial chair lift. District staff indicated no problems related to the lift.
5. Existing doors appear to have the appropriate width clearances on the pull and the push side to meet Code.
6. All doors throughout the facility have lever-type hardware or push-bars for operation, as required by Code.
7. Countertops are at a height accepted by ADA throughout the building.
8. Accessible, hi-low drinking fountains and hand washing stations are located throughout the facility.
9. A sufficient number required by Code of all lockers in classrooms, corridors or locker room are accessible.
10. All observed wall-mounted sinks have an insulating sleeve at the drainage piping, in compliance with accessibility guidelines.

Life and Safety

1. Evacuation plans are posted throughout the facility, including corridors, classrooms and common areas per Code. First aid kits are located in each classroom.
2. The facility is served by a fire alarm system tied to, and monitored by, SimplexGrinnell. The alarm system is inspected annually, and upgrades are performed by SimplexGrinnell as needed.
3. Smoke and heat detectors are present throughout and appear to be hard wired into the fire alarm system, as per Code.
4. Fire extinguishers were observed to be sufficient in terms of locations and numbers.
5. Existing emergency lighting and exit lighting have battery back-up per Code, and were observed to be sufficient in terms of number and location.
6. There are strategically located audio and visual fire alarm enunciators in the building. Audio and visual alarms are required by Code in each classroom and common area.
7. It is likely that the stage curtain is appropriately fire rated, but no visual evidence to confirm this assumption was available. IFF recommends verifying whether the

existing curtain complies with building and fire Codes, and replacing with appropriately rated curtain if necessary.
8. A mechanically operated demising curtain is used to separate two halves of the gymnasium exhibited early signs of potentially excessive wear due to its installation. District staff indicate that the joist-mounted motor operator is not properly aligned with the axis of the shaft that rotates to raise and lower the curtain. To prevent premature failure of the equipment, IFF recommends adjusting the curtain assembly to relieve any undue stress on the system. Estimated cost for the investigation and correction is included in the immediate needs section of the attached.

Roof

1. The roof of the structure is divided into multiple levels of varying sizes and elevations. A ballasted, black 75-mil EPDM roofing membrane system is installed at all visible locations of flat roof. Above areas of the second story mechanical rooms, a low-slope asphalt shingle roof is visible and appears to be in good condition. IFF understands from discussion with District staff that flat portions of the second-story roof are also ballasted EPDM in similar condition.
2. Seams and areas of membrane discontinuity at parapets or changes in roof elevation exhibit no signs of deterioration or damage. It appears that all original seals remain intact and watertight.
3. No evidence of leakage was observed throughout the building, and District staff indicate that the condition of the membrane is inspected annually for deterioration.
4. Roof penetrations, including roof drains and portals, are in very good shape, but should be monitored regularly.
5. IFF recommends regular inspections of the roof membrane be performed to identify areas of deterioration before any infiltration is observed.

Plumbing

1. All restrooms contain sufficient amenities to meet Code, including minimum number of fixtures and compliance with accessibility guidelines.
2. The facility is served by high efficiency hot water tanks, which are reported to be more than adequate to meet the needs of the faculty, staff, and students.
3. No exposed piping was observed in any locations. Areas of exposed piping are wrapped with insulation where encountered.
4. District staff reported no problems with existing plumbing system with regard to temperature, water pressure, or waste drainage.
5. Mop sinks within dedicated janitorial closets were observed to meet Code.

HVAC

1. The facility is heated using four steam boilers, manufactured by Thermal Solutions, which were installed during building construction, and a variable air volume (VAV) system of dampers to control the thermal distribution to each area.
2. A roof mounted chiller operates more frequently than required regardless of the ambient temperature, indicating a potential issue with the design or the implementation of the entire system. District staff indicate that a problem with the mechanical systems controller was recently identified, and may be resolved without difficulty. As indicated above, IFF recommends implementing the solution of the mechanical solutions contractor to resolve this issue and any others affecting the

operation of the mechanical systems. IFF also recommends regularly balancing the system.
3. Approximately three (3) air-handling units, manufactured by McQuay, and an extensive network of ducts distribute air throughout the building after it has been heated or cooled. District staff indicate that heat recirculation apparatuses are present, but not visible, to assist the system operate efficiently.
4. Inside air returns to the HVAC system using a plenum-style return arrangement, with return grilles located in the ceiling grids in the corridors.

Electrical

1. The building's electrical service has been sized sufficiently for a building of this size and use, although the specific size of the service entering the building was not evident. No problems with the electrical service were reported by District staff.
2. Power distribution outlets are located strategically around the facility, including several locations where wire mold has been utilized to bring electricity to areas not previously served.
3. Lighting throughout the building and the grounds is functional and adequate. Ceiling mounted 2' x 4' lay-in fixtures, equipped with either opaque lenses or parabolic louvers, are strategically placed within the ceiling grid to provide light within classrooms and corridors. At various locations, architectural ceiling-hung halide or tubular fluorescent fixtures are installed.
4. District staff report that energy-efficient fixtures, ballasts, and lamps were incorporated into the design of the facility, and notes that some many of the light fixtures throughout the building have a tendency to flicker or delay when they are switched on. Attempts to isolate and resolve the issue have been unsuccessful, indicating that the optimal solution may be the replacement of the fixtures in which flicker is a problem. A projected cost for replacement of flickering light fixtures is noted in the attached cost estimate.
5. Metal halide fixtures with covered lenses are utilized in the gymnasium.
6. All restrooms are equipped with occupancy sensor lighting controls.

Technology

1. The building has a T-1 data service for use by the students and faculty, and limited Wi-Fi service is available.
2. Telephone and data jack locations are sufficient throughout the building.
3. Key fob security is present at multiple entrances to the building, but no centralized security alarm system or cameras were evident.

Environmental Conditions

1. Since the facility was constructed after 1978, it is extremely unlikely that the walls have been painted with Lead Based Paint (LBP), that Asbestos Containing Material (ACM) was used for any purpose within the building, or that existing underground storage tanks have impacted the site. IFF did not observe anything that would indicate the presence of lead paint, asbestos, or under/above ground tanks.
2. Indoor air quality appeared good, and the flow of fresh air through the facility seems to be adequate.

General Interior

1. Flooring in the building is a mixture of 12-inch Vinyl Composition Tile (VCT) and carpet. Main corridors are tiled, while the portions of the corridors within each section of classrooms are carpeted. Within the classrooms is a mix of carpet and VCT. Flooring is in excellent condition throughout, and should be maintained diligently to remain so. At wet walls where water fountains or sink basins are present, ceramic tile flooring is utilized.
2. Walls are mostly composed of painted concrete masonry unit block with vinyl base in good condition. Other wall finishes include ceramic tile at wet walls and interior brick walls at aesthetically strategic locations throughout.
3. Floors and wet walls within the restrooms are finished with architectural ceramic tile, in excellent condition.
4. The ceiling throughout most of the rooms and corridors is composed of 2'x2' acoustical ceiling tiles in a metal grid. Painted metal deck and roof joists are exposed in the gymnasium.
5. Millwork throughout the facility, including but not limited to classroom cabinets, appears in excellent condition.
6. Interior doors exhibit no signs of wear or decay at either the door slabs or the frames.
7. Furniture throughout the building is relatively new and very well maintained.

GENERAL FACILITY RECOMMENDATIONS:

IFF prioritized its recommendations for facility improvements according to items that need to be addressed immediately (immediate); items that should be addressed within the next two to five years (intermediate); and items that can be addressed in five years and beyond (long term). Cost estimates were prepared for each timeframe. IFF has identified quality improvement items for the campus below and also has prepared a deferred maintenance plan applying to all campuses that will be addressed in a separate section of the comprehensive strategic plan.

The following recommendations represent the best of IFF's knowledge regarding conditions at the site. IFF recommends that the school District engage the services of appropriately licensed professionals to undertake recommended improvements in conformance with all Code requirements.

Items Requiring Immediate Action

Items requiring immediate action present a risk to the viability of the building in the near-term, and may include threats to life safety and/or integrity of major building systems.

Code and Life Safety

1. Investigate the fire rating of the stage curtain and replace if not appropriately rated.

Structural, Building Systems, Exterior, and Other

1. Engage a building management controls engineer to resolve all issues with the building systems control logic. The original mechanical engineer and contractor may be required to return and make appropriate modifications to the system to remedy the current condition now that the issue has been isolated.
2. Investigate and repair as required the gymnasium demising curtain motor.

Total Estimated Cost for Immediate Items: $48,179
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Intermediate: Items to be Addressed in Years Two through Five

Items in this category represent conditions that, if left unaddressed, could deteriorate significantly. Repair or replacement of items in this category are not critical at this time, but will need to be addressed in the next few years. Intermediate items also identify Code items that should be addressed within the near term, including accessibility. Intermediate items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Structural, Building Systems, Exterior, and Other

1. Engage mechanical engineer to regularly analyze and balance the mechanical systems. Analysis and repairs should be completed at regular intervals, or when an issue with the internal climate is identified, and is included in the cost estimate as a deferred maintenance item.
2. Identify the issues causing the delayed start-up and flickering of light fixtures, seeking assistance from a qualified consultant or electrician if necessary. The issue may be caused by improperly installed lamps, ballasts, wiring, or otherwise. Replace fixtures if replacement of components is insufficient to resolve the problem.
3. Inspect roofs and penetrations, flashings, copings, and parapets annually and repair as required, in accordance with the District's annual roofing maintenance program. This is assumed under deferred maintenance in the enclosed cost estimate.
4. Inspect the condition of joints between dissimilar materials – for example, where sidewalk meets brick wall or where window frame meets brick wall – and apply caulk or other sealant as required. This is assumed under deferred maintenance in the enclosed cost estimate.

Total Estimated Cost for Intermediate Items: $139,465
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Long-Term: Items to be Addressed in Year Five or Beyond

Items in this category would eventually bring the facility to full compliance and address all maintenance and replacement needs. Long-term items are presented in three main categories: Code and life safety; accessibility; and structural and building systems.

Structural, Building Systems, Exterior, and Other

1. Continue regular inspections and maintenance under deferred maintenance program.

Total Estimated Cost for Long Term Items: $228,215
(Cost includes estimates for general conditions, insurance, bonds, and 10% contingency)

Quality Improvement Items

Quality improvement items improve the quality of the building environment, increase the building's value, and would contribute directly to the effectiveness of the facility to serve its purpose, but are of lesser priority and do not concern life-safety issues.

1. Paint common areas regularly.
2. Replace existing VCT flooring where it becomes scuffed or discolored over time.
3. Install security cameras and monitoring devices.

Estimated Cost for Quality Improvement Items: $228,215
(Cost includes estimates for general conditions, architectural/engineering fees, and 10% contingency)

Summary of Cost Estimate

The following table summarizes the total estimated cost for immediate, intermediate, long-term, and quality improvement items. A detailed cost estimate is attached as Attachment A.

Summary of Estimated Cost by Priority

	Immediate (Year 1)	Intermediate (Years 2-5)	Long-Term (Years 5+)	Quality Improvements	Total Cost
Total Cost [1][4]	$48,179	$139,465	$228,215	$228,215	$644,073
Cost per SF [2]	$0.33	$0.96	$1.57	$1.57	$4.44
Cost per Student [3]	$52	$150	$246	$246	$693

[1] Includes estimates for general conditions, insurance, bonds, and 10% contingency.
[2] Cost per square foot based on estimated building area of 145,000 square feet
[3] Cost per child based on maximum capacity of 929 students
[4] Add 20% for soft costs such as architectural, engineering, project management fees, etc. to total construction cost for overall project budget
[5] Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation unless noted

Enclosed: Attachment A: Detailed cost estimate
Attachment B: Pictures

ATTACHMENT A: COST ESTIMATE FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Ronald Reagan Elementary School Campus
4225 South Calhoun Road, New Berlin, Wisconsin
Prepared by IFF
August 2011

Approximate Building Square Footage (SF): 145,000
Maximum Building Capacity (students): 929

Description	Immediate Improvements	Intermediate Improvements	Long-Term Improvements	Quality Improvements	TOTAL	Deferred Maintenance[3]	Remarks
Building Code and Life Safety Issues	$10,000	$30,000	$20,000	$0	$60,000	$15,000	Repair the gymnasium demising curtain and operator ($10,000) Confirm whether stage curtain fire rating meets code and replace if insufficient ($30,000) Miscellaneous Code-related improvements ($20,000)
ADAAG & Accessibility Issues	$0	$0	$0	$0	$0	$0	
Exterior and Structure	$0	$30,000	$30,000	$0	$60,000	$25,000	Assumes minor tuckpointing in the future
Roof	$0	$35,000	$50,000	$0	$85,000	$20,000	Assumes ongoing inspections, maintenance as necessary
Sealant and Caulking	$0	$0	$30,000	$30,000	$60,000	included	Seal joints where asphalt abuts concrete in parking lot when necessary per visual inspection ($30,000) Seal around all windows, curtain wall and exterior doors when necessary per visual inspection ($30,000)
Plumbing	$0	$0	$0	$0	$0	$2,500	
Electrical and HVAC	$28,000	$15,000	$15,000	$0	$58,000	$5,000	Modify HVAC control systems logic ($15,000); regular recommissioning ($15,000) Analyze/adjust as necessary electrical load balance ($8,000) Replace existing light fixtures that continue to flicker ($20,000)
Technology	$0	$0	$35,000	$0	$35,000	$5,000	Install security cameras and monitoring devices ($35,000)
General Interior	$0	$0	$0	$150,000	$150,000	$10,000	Upkeep and necessary replacement of all interior finishes, phased over time ($150,000)
Construction Cost Subtotal	**$38,000**	**$110,000**	**$180,000**	**$180,000**	**$508,000**	**$82,500**	
General Conditions and GC fees (10%)	**$3,800**	**$11,000**	**$18,000**	**$18,000**	**$50,800**	**$0**	Includes mobilization, GC fees, O&P, insurance, bonds and etc.
Permit & Tap Fees	**$1,140**	**$3,300**	**$5,400**	**$5,400**	**$15,240**	**$0**	Allowance
Insurance and Bonds (2%)	**$859**	**$2,486**	**$4,068**	**$4,068**	**$11,481**	**$0**	
Construction Contingency (10%)	**$4,380**	**$12,679**	**$20,747**	**$20,747**	**$58,552**	**$0**	Owner keeps any contingency funds that are not allocated
Total Construction Cost	**$48,179**	**$139,465**	**$228,215**	**$228,215**	**$644,073**	**$82,500**	
Per SF Costs	**$0.33**	**$0.96**	**$1.57**	**$1.57**	**$4.44**	**$0.57**	
Per Student Costs, maximum capacity	$52	$150	$246	$246	$693	$89	

General Notes:

1. This cost estimate represents the best of IFF's knowledge regarding observed conditions at the site. Opinions expressed regarding the facility's conformance to any and all building Codes, ADA accessibility laws & regulations, or other standards ("Code") are advisory only. IFF recommends that the School District engage the services of appropriately licensed professionals for determination of Code-related issues and costs. Cost estimates should be considered as an overall approximation over each timeframe or for each subject area; costs for individual work items may vary substantially depending on the scope of work the District chooses to implement and market conditions at the time of construction.
2. GC will need to verify existing dimensions, heights and conditions of Mechanical, Electrical, and Plumbing systems.
3. Deferred maintenance costs are ongoing and should be included in the school district's annual operations budget.
4. Add 20% for soft costs such as architectural, engineering, project management fees, FF&E, etc. to total construction cost for overall project budget.
5. Estimates do not reflect projects started or completed by the District subsequent to IFF's site investigation

Abbreviations:
ADAAG: Americans with Disabilities Act Accessibility Guidelines
HVAC: Heating, Ventilation, Air Conditioning, and Cooling
GC: General Contractor
MEP: Mechanical, Electrical and Plumbing
SF: Square Feet
CCTV: Closed Circuit Television
FF&E: Fixtures, Furniture, and Equipment

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Ronald Reagan Elementary School Campus
4225 South Calhoun Road, New Berlin, Wisconsin

Overview

Front Entrance

Alternative View of Commons Area

Lunchroom/Commons Area

Commons Area Clerestory Windows, HVAC Ducts & Ceiling

View of Common Corridor

Gymnasium Stage

Gymnasium Ceiling

View of Entrance to Classroom Section

Typical View of Classroom

View of Main Office Area

View of Corridor Near Main Entrance

Typical View of Men's Restroom

Typical Single-User Accessible Restroom

View of Interactive Media Center

Typical View of Doors to Enclosed Stairwell

Accessible Drinking Fountains

Thermal Solutions Boiler

Warming Kitchen Equipment

Mechanical Room Roof Access

Exterior View of Upper Level Mechanical Area

Driveway to Front Entrance

SCHOOL DISTRICT OF NEW BERLIN
Facility Assessment
Vacant Facilities

Prepared by IFF
August 2011

The School District of New Berlin has hired IFF to complete a District-wide Strategic Facilities Assessment, which includes a preliminary assessment of their facilities, including the unused former school known as the Prospect Hill Elementary School, located at 5330 South Racine Avenue, and Little Grove site located at 3800 South Racine Avenue. The District is in the process of planning for ongoing facility improvements as well as planning for long term space needs. IFF visited and assessed both facilities in May 2011, as part of a Facility Assessment project to assist the District in the process of planning for upcoming facility improvements and for long term space needs.

The former Prospect Hill campus and the Little Grove facility, described below, are located in the southwest quadrant of the City of New Berlin, which is zoned primarily low density residential, agriculture and conservation. Consequently, the District can expect minimal growth in school age population; an observation reinforced in the May 13th, 2011, Eppstein Uhen Architects' Land Use Analysis and Enrollment Projection Report.

IFF's assessment includes a brief analysis of the current state of each facility, its current use by the District, and recommendations regarding potential future uses of the facilities. The following observations represent the best of IFF's knowledge regarding conditions at the District's buildings. IFF recommends that the District engage the services of appropriately licensed professionals to define the scope of all recommended improvements to ensure compliance with Code. IFF recommends full compliance with Code, life safety and accessibility guidelines and requirements and assumes compliance requirements can be phased in over time.

Former Prospect Hill School

5330 South Racine Avenue
New Berlin, Wisconsin

The former Prospect Hill School encompasses approximately 80,000 square feet on a seven-acre parcel located within the southwest quadrant of the geographic boundaries of the District. Constructed in the 1950s, the District has not used the facility for several years, and significant deterioration has taken place in that time frame. The facility is currently used by the New Berlin Police Department for training purposes.

The Prospect Hill School would require a thorough renovation of all aspects of the building if the District wishes to resume operating the facility. During IFF's visit in May 2011, no gas service or domestic water was available within the building, having been shut down by the District for safety and maintenance purposes. The District maintains the grounds surrounding the facility, but does not maintain the interior of the building.

IFF identified significant required upgrades required to operate the facility, but a comprehensive list of repair priorities will require a more thorough investigation by licensed architects and engineers. The major issues identified by IFF include substantial unresolved roof leaks at several locations, dysfunction of the well water and septic systems, unabated asbestos-containing materials throughout, and aging boilers which may not function properly when restarted. Most, if not all, of the existing door hardware would require replacement with accessible hardware. Much of the flooring throughout the building is damaged and will need to be replaced. The ceiling grid is removed or damaged by roof leaks in multiple locations. Many of the unit ventilators have been dismantled. There is no elevator to provide accessibility to the second floor.

Rehabilitation of the existing facility to meet current building Code and accessibility guidelines will require that extensive work be performed in all parts of the facility. The District should consider the costs and benefits of renovating the facility as compared with constructing a new, Code-compliant facility at this location or elsewhere.

Depending on the District's economic condition and the opportunities available to dispose of the site or construct an updated facility on the parcel, demolition of the existing structure may be the most effective means of managing the property. Several factors contribute to the overall demolition costs of this facility. An approximate cost for the demolition of two-story institutional building can be expected to range from approximately $0.50 to $1.20 per square foot, depending on the scope of work undertaken, excluding remediation of environmental concerns. Other factors such as the configuration of footings and foundations, requirements from utility service providers, and requirements for the condition of the parcel after demolition have a substantial impact on demolition costs. Observations made during IFF's walk-through strongly suggested the presence of lead paint and asbestos, particularly in the boiler room and in outdated hallway floor tiles. Subject to actual quantities and locations of asbestos or other environmental factors, an additional expenditure of $0.50 to $1.00 per square foot for remediation may be necessary.

Little Grove Facility
3800 South Racine Avenue
New Berlin, Wisconsin

The Little Grove facility is a small structure, approximately 5,600 square feet, located on a 10-acre site in a mostly undeveloped section of New Berlin. Constructed in approximately the 1950's, the building is used by the District's facilities staff for maintenance purposes. The site is undeveloped, except for the structure and the associated well and septic system. A small dirt and rock covered road provides access onto the site and up to the building.

The facility has two levels, including an expansive garage on the lower level and an upper level that steps out to grade elevation. The upper floor is used primarily for office use, containing operations and maintenance manuals and workplace equipment, such as computers, telephone, and printers. The lower level consists of storage areas, mechanical equipment areas, and a main garage floor.

The building and the site remain in functional condition. No immediate hazards to occupant safety were identified, and no problems limiting the current use of the facility were reported. However, the age and use of the building indicate that the need to implement repairs is approaching. District staff report that the building is still in frequent use as storage of potentially useful parts, when needed for repair of items such as furniture and equipment. None of the buildings and ground staff use this facility as a permanent office, and most of the activities performed at Little Grove can be performed within the maintenance areas of the middle/high schools.

IFF recommends the District take incremental steps to ensure that the facility continues to function safely and adequately to meet the needs of its maintenance staff. The District should continue to monitor and repair the roof when needed, verify that the climate control systems function adequately, upgrade the locks to prevent break-ins, and eliminate any infiltration immediately upon discovery. Costs for renovating this facility depend largely on the District's goals for the facility and may range anywhere from a few dollars to thousands of dollars per square foot. Disposition of the facility may be the best long-term solution.

IFF understands that the District has taken steps in an attempt to market the two vacant facilities for sale. Both facilities are located farther to the west than any of the District's other

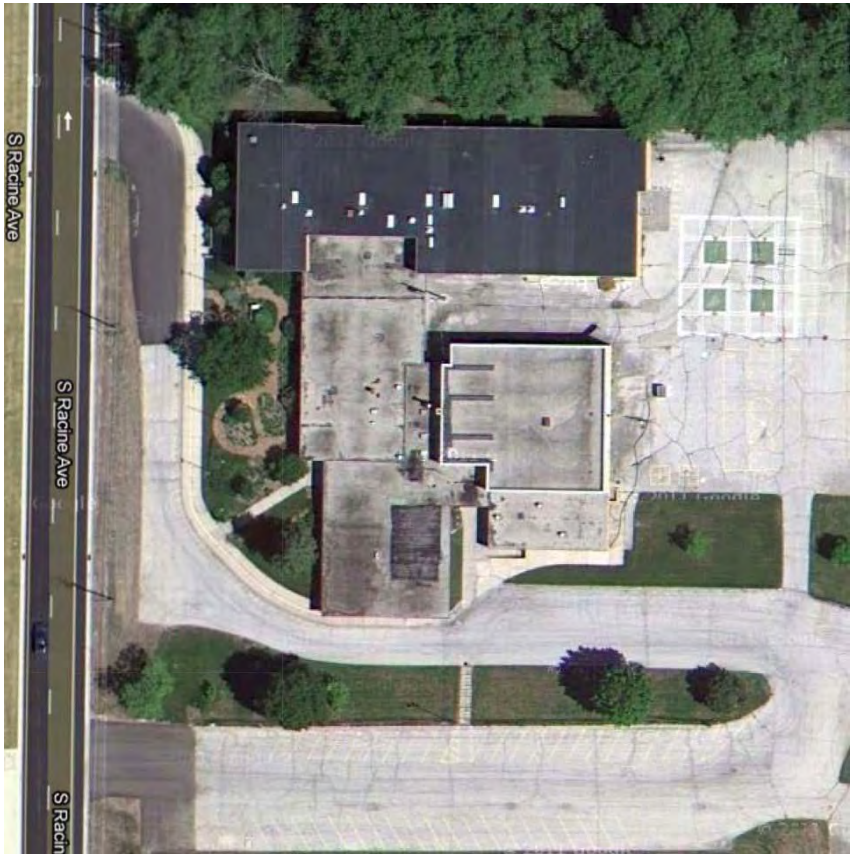
campuses, and the area around both facilities is less densely populated with many areas zoned for agriculture and conservation. Due to the lack of proximity to the remaining schools in the District, it is unlikely that either facility will be useful within the District's operations. Adaptive reuse of either or both facilities should be considered as part of the District's plans for future development.

Enclosed:

Attachment A: Former Prospect Hill School pictures
Attachment B: Little Grove Facility pictures

ATTACHMENT A: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Former Prospect Hill School
5330 South Racine Avenue, New Berlin, Wisconsin

Site Overview



Building Overview

North Elevation

Partial East Elevation

Partial East Elevation

Partial South Elevation

Entry Corridor Floor

Gymnasium with Stage

Ceiling Tiles

Roof Deck

Typical Classroom

Typical Classroom

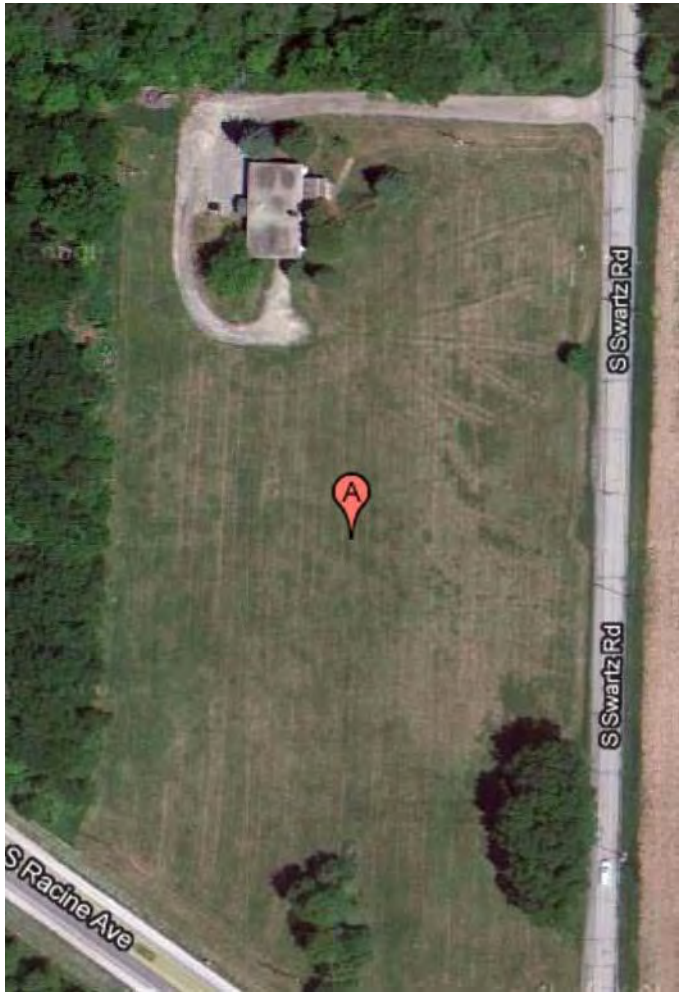
Corridor

Typical Men’s Restroom

Typical Corridor Floor

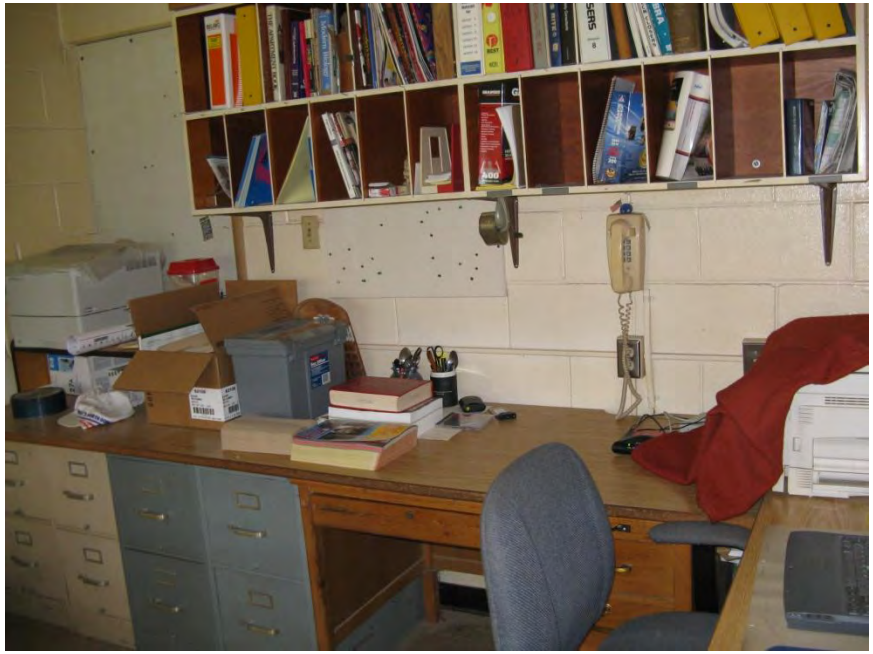
Stairwell

ATTACHMENT B: PHOTOS FOR SCHOOL DISTRICT OF NEW BERLIN (SDNB)
Little Grove Facility
3800 South Racine Avenue, New Berlin, Wisconsin



Site Overview

Building Overview



Interior Workspace

Interior Office Area

Entrance Door

Baseboard Heater

Overhead Door

Storage and Work Area

Storage Area

Equipment Room