

# Building Information Report

Report for Location: McKinley Elementary School

Date Printed: Friday, March 10, 2006

Project: Arlington Public Schools

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Building Name: McKinley Elementary School  
Building Type: Elementary  
Address: 1030 North McKinley Road  
Arlington VA 22205

Contact Name: Patricia Anderson  
Contact Phone: (703) 228-5280  
Contact Position: Principal

Occupant Response: Interview  
Individual Interviewed: Pat Anderson, Blake Tippens, Victor Sanchez  
Ind. Interviewed Position: Principal, Asst. Principal, Chief Custodian

Year Construction: 1950,1970,1995

Drawing Availability: Fire Escape, Orig Plans  
Grade Levels: Preschool, K-5  
'05-'06 Enrollment: 380 Students  
Building Area: 57,360 SF  
Number Floors: 2, no basement  
Sprinklers?: Yes  
Replacement Cost: \$200.00 per SF  
Total Replace. Cost: \$11,472,000  
No.Of Relocatables: 2

#### Assessment Costs by Priority:

Immediate	\$243,391
High	\$1,009,537
Medium	\$974,275
Total Assessed Cost:	\$2,227,203
FCI:	0.19

#### Descriptive Comments

McKinley Elementary is a 57,360sf one story building with a partial lower level area. The site is steep sloping with drainage issues. The main floor houses the majority of classrooms, and a multipurpose room as well as the administrative offices. There is a new addition that was added in the 1990's. That addition consisted of classrooms. There are two classroom trailers on the site.

The building is basically a slab on grade with masonry load bearing walls. The multipurpose room structure is steel frame with concrete plank roofing. The main roofs are flat with a BUR system.

Exterior wall finishes consist of brick and EIFS. All of the entrances are metal doors and metal frames with full glass panels. Windows are aluminum framed, double glazed fixed and operable units.

Recent electrical upgrade to increase capacity was completed approximately in the 1990's. Building electrical service is 1200 amps at 120/208V. The electric meter is installed in the electrical room and circuit breaker panels are located throughout the building. There is a diesel powered 40 KW emergency generator located outside on the west side of the building. The generator serves fire protection systems, emergency lighting, and security systems. The fuel tank is located above ground, directly below the generator. Interior lighting is typically hanging or flush mounted fluorescent fixtures.

Building plumbing supply and distribution piping are reported to be copper. The water meter is located in an exterior

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vault. Sanitary piping within the building is reported to be PVC and cast iron. Domestic hot water is provided by a gas-fired water heater.

Heating and cooling are provided by a two-pipe HW system and DX cooling via terminal and multi-zone units throughout the building. There are two gas-fired boilers. Each of the multi-zone units has on-board DX cooling.

The entire building has a fire sprinkler system.

### Requested Space Considerations

# Assessment Report

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## McKinley Elementary School

### B20 Exterior Enclosure

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
B2010-00-10C Correct 1000 SF Bldg or Less Deteriorated Exterior Walls by Selective Demo and Repair	B2010 Exterior Walls		Correct cracking in masonry mortar by repointing damaged area after structure problem has been properly detected and corrected	Damage/Wear	High	Def Maint	\$2.76	5000	SQFT	\$13,790

Total Cost for B20 Exterior Enclosure \$13,790

### B30 Roofing

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
B3030-00-3C Correct Deteriorated or Inadequate Roof Drainage by Demo & Replace (High)	B3030 Roof Drainage		Entire roof drainage must be demolished and replaced. Blistering and puddling over 95% of the roof structure. This puddling is directly related to the interior ceiling leaks. This item is critical to prevent further damage.	Life Safety	Immediate	Def Maint	\$0.87	55000	BLDG SF	\$47,740

Total Cost for B30 Roofing \$47,740

### C30 Interior Finishes

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
C3020-00-3C Correct Deteriorated Terrazzo & Ceramic & Hardwood by Demo & Replace (High)	C3020 Floor Finishes		Correct cracked terrazzo by replacing it with new.	Damage/Wear	Medium	Def Maint	\$2.88	2000	BLDG SF	\$5,768
C3030-00-6C Correct 1000 SF Bldg or Less Ceiling System by Selective Demo & Replace	C3030 Ceiling Finishes		Replace water-stained tiles with new to match existing.	Damage/Wear	Medium	Def Maint	\$5.78	10000	BLDG SF	\$57,820

Total Cost for C30 Interior Finishes \$63,588

Priority Definitions:

Immediate: Work to be performed as soon as possible  
High: Work to be performed within 2 years

Medium: Work to be performed within 3-5 years  
Low: Work to be performed within 6-10 years

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CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
<b>D30 HVAC</b>										
D3040-00-3C Correct Deteriorated HVAC Distribution System by Demo & Replace (High)	D3040 HVAC Distribution		Staff complained about temperature control problems, and the County stated that the roof top multizone units are only in fair condition. It is suggested that they be replaced possibly in favor of a better system that is more easily controlled and more efficient.	Functionality	Medium	Educ Adeq	\$15.75	57360	BLDG SF	\$903,420
D3040-00-6C Correct Deteriorated HVAC Exhaust System by Demo & Replace (High)	D3040 HVAC Distribution		The kitchen exhaust fan sounds like it may fall at any time due to an imbalance in the fan.	Damage/Wear	Immediate	Def Maint	\$1.83	1500	BLDG SF	\$2,751
D3060-00-2C Correct Deteriorated Controls & Instrumentation System by Demo & Replace (Median)	D3060 HVAC Instrumentation & Controls		Staff complained about temperature control problems. Correct control problem and upgrade system to County's web enabled standard system	Functionality	High	Educ Adeq	\$6.08	57360	BLDG SF	\$348,519
<b>Total Cost for D30 HVAC</b>										<b>\$1,254,690</b>

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
<b>D50 Electrical</b>										
D5010-00-2C Correct Deteriorated or Inadequate Building Electrical System by Demo & Replace (Median)	D5010 Electrical Service & Distribution		Maintenance staff reports that the main switchgear is having issues. It may need to be replaced.	Functionality	High	Def Maint	\$8.65	57360	BLDG SF	\$496,279
D5010-00-5C Correct Deteriorated or Inadequate Distribution System by Demo & Replace (Median)	D5010 Electrical Service & Distribution		Staff reports that they are having trouble with circuit breakers tripping in the library. Suggest that additional capacity be added to account for this.	Functionality	High	Educ Adeq	\$3.54	3000	BLDG SF	\$10,626
D5031-00-2C Correct Deteriorated or Inadequate Security System by Demo & Replace (Median)	D5031 Security Access & Surveillance		Staff reports that existing system is not adequate because no classroom exterior access/egress doors have alarm actuators and gym is not protected by the existing security system.	Functionality	High	Educ Adeq	\$0.28	40000	BLDG SF	\$11,200
D5032-00-2C Correct Deteriorated or Inadequate Clock System by Demo & Replace (Median)	D5032 Clock & Program Systems		Staff reports that some clocks need to be replaced throughout the school	Functionality	High	Educ Adeq	\$0.91	10000	BLDG SF	\$9,100
<b>Total Cost for D50 Electrical</b>										<b>\$527,205</b>

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**G20 Site Improvements**

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
G2020-00-3C Correct Non-Existant Parking Lot by Add New	G2020 Parking Lots		Parking is extremely tight this needs to be corrected by reanalyzing the site and adding an additional lot for staff parking.	Functionality	High	Def Maint	\$30.11	200	SQYD	\$6,023
G2040-00-4C Correct Poor Grading by Regrade & Reseed	G2040 Site Development		Correct the severe drainage problem on the site by regrading and adding berms to direct run off water. They key areas are to the south of the front entrance, in the courtyard by the playground and all throughout the playground.	Damage/Wear	Immediate	Def Maint	\$0.35	30000	SQFT	\$10,500
G2050-00-1C Correct Deteriorated or Inadequate Landscaping by Refurbish	G2050 Landscaping		Trim hedges and shrubs back to prevent cover for rodents	Damage/Wear	Medium	Def Maint	\$7,267.40	1	ACRE	\$7,267

Total Cost for G20 Site Improvements \$23,790

**G40 Site Electrical Utilities**

CorrectionName	Subsystem Name	AreaName	Correction Notes	Reason	Priority	Category	UnitCost	Quantity	UOM	Cost
G4020-00-2C Correct Non-Existing Pole Lighting by New Installation	G4020 Site Lighting		Staff reports need for additional site lighting in the gym entrance area as well as the part of the property that is adjacent to the south sidewalk next to McKinley Road	Life Safety	High	Educ Adeq	\$4.56	25000	BLDG SF	\$114,000
G4020-00-2C Correct Non-Existing Pole Lighting by New Installation	G4020 Site Lighting		Install new pole lighting as well as walkway ground lighting for pathways and sidewalks where they are non-existing.	Life Safety	Immediate	Def Maint	\$4.56	40000	BLDG SF	\$182,400

Total Cost for G40 Site Electrical Utilities \$296,400

Total for: McKinley Elementary School \$2,227,203

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Total Assessment Cost for Selection: \$2,227,203

*Assessment Summary by Priority*

Immediate	\$243,391
High	\$1,009,537
Medium	\$974,275

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# Ten Year Life Cycle Cost Report by System

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Task Type: Replacement

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A10 Foundations										
A20 Basement Construction										
B10 Superstructure										
B20 Exterior Enclosure								\$6,106.49		\$176,991.85
B30 Roofing										
C10 Interior Construction										\$114,397.17
C20 Stairs										
C30 Interior Finishes				\$72,984.16			\$79,942.64			\$46,622.24
D10 Conveying										
D20 Plumbing	\$23,159.67									
D30 HVAC			\$475,606.89		\$230,873.98		\$387,154.06			
D40 Fire Protection										
D50 Electrical	\$489,661.67		\$104,422.92		\$889,991.94		\$880,973.01			\$554,718.37
E10 Equipment										
E20 Furnishings				\$87,671.37		\$59,997.64	\$146,170.41			
F10 Special Construction										
F20 Selective Demolition										
G10 Site Preparation										
G20 Site Improvements										
G30 Site Civil Mech Utilities										
G40 Site Electrical Utilities										
G90 Other Site Construction										
H10 Additional Space Requirements										
Z10 General Requirements										
<b>TOTALS</b>	<b>\$512,821.34</b>		<b>\$580,029.81</b>	<b>\$160,655.53</b>	<b>\$1,120,855.92</b>	<b>\$69,997.64</b>	<b>\$1,894,240.13</b>	<b>\$6,106.49</b>		<b>\$892,729.63</b>