Dudley-Charlton Regional School District



Dudley Capital Improvement Plan 2027-2036

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Capital Improvement Plan Summary

In May of 2024, Habeeb & Associates was contracted to conduct a Facilities Condition Assessment and Student Capacity Report, as approved by the towns of Dudley and Charlton, on all seven schools within the Dudley-Charlton Regional School District. The Facilities Condition Assessment was developed to address the physical structure, mechanical, electrical, plumbing, fire protection and sewage disposal systems of the schools and surrounding site areas. This assessment describes current conditions and provides priority recommendations and budget estimates for repair or replacement of deficient building components and systems, which are intended to be used for short and long-term capital planning. The goal being to utilize this assessment in context with the facilities goals, as defined by the Dudley-Charlton Regional School District, for the development of a 10-year Capital Improvement Plan.

The Facilities Condition Assessment summarizes DCRSD's aging infrastructure on a per school basis, and graded the needs of each facility on a scale of immediacy. As part of the district's response to the Facilities Assessment, the Facilities Director, along with Head Custodians of each school, organized each school's needs and projected these needs into a 10-year Capital Improvement Plan. The Capital Improvement Plan tries to remain cognizant of factors such as project order of operations, recurring administrative costs and project need immediacy. I/T capital needs, which were not on the Facilities Condition Assessment, have additionally been included as part of the overall Capital Improvement Plan, as certain I/T infrastructure needs are considered capital in nature and are outside the scope of general operational budgeting. Each item within the Capital Improvement Plan is numbered to correlate to the specific area of need within the Facilities Condition Assessment.

It's important to understand with rising inflation, wage rates and cost escalation, prolonged deterioration from deferred maintenance becomes more costly over time. Building materials damaged by water infiltration and freeze-thaw cycles that are not replaced will continue to deteriorate indefinitely until complete failure occurs. This Capital Improvement Plan seeks to address these issues before a catastrophic failure occurs.

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Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Town of Dudley Totals

					Cost	s Incurred	l in Each	Year			
						Future Pl	an Years				
School Name	Total Estimated Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Mason Road	\$7,313,085	\$3,296,250	\$1,132,915	\$761,873	\$351,570	\$126,150	\$182,004	\$212,240	\$490,623	\$310,210	\$449,250
Dudley Elementary	\$10,301,840	\$4,163,300	\$512,717	\$1,042,000	\$732,883	\$373,300	\$331,050	\$404,740	\$726,917	\$764,218	\$1,250,715
Dudley Middle	\$8,916,865	\$167,050	\$1,193,935	\$362,850	\$397,100	\$1,124,370	\$2,140,332	\$2,469,834	\$465,350	\$506,110	\$89,934
Shepherd Hill High School @46.21%(FY2025 enrollment)	\$13,427,081	\$888,354	\$1,115,793	\$4,694,012	\$995,974	\$844,399	\$1,332,487	\$817,982	\$697,836	\$1,147,055	\$893,189
TOTAL PROJECT COSTS	\$39,958,871	\$8,514,954	\$3,955,360	\$6,860,735	\$2,477,527	\$2,468,219	\$3,985,873	\$3,904,796	\$2,380,726	\$2,727,593	\$2,683,088

Key Points for Consideration

- 2027 Mason Road and Dudley Elementary both require roof replacment. See Facilities Codition Assessment(FCA) pages 51,58,87,&93
- 2028 Mason Road and Dudley Middle School both require boiler replacemnt. See FCA pages 55,61,125,&131
- 2029 Shepherd Hill High School requires roof replacemnt. See FCA pages 139&148
- 2031 Dudley Middle School requires masonary repair and sealing. See FCA pages 139,140,&148
- 2032 Dudley Middle School requires new building management & security systems. Shepherd Hill High School requires new timeclock/paging and security upgrades. See FCA pages 125,127,131,132,&145
- 2033 Dudley Middle School requires paving replacement and replacement of timeclock/paging system. See FCA pages 119,127,128,&132
- 2035 Shepherd Hill High School requires paving and sitework improvements. See FCA pages 137,138,&147

Town of Dudley Totals Page 4 of 18



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Mason Road

							Costs Incurre	d in Each Year				
Project Name	Year	Total Estimated						lan Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1.1 Granite Curbing: Granite curbing is damaged in few areas. Replace with new granite curbs.	2000	\$1,280							\$1,280			
Bituminous sidewalks: Bituminous sidewalks are deteriorated and cracked. Replace with new bituminous sidewalks.	2000	\$35,100							\$35,100			
Concrete sidewalks: Remove and replace deteriorated sections of the concrete sidewalks.	2000	\$73,710							\$73,710			
1.4 Accessible Van Parking: Create one accessible van parking space.	2000	\$6,500							\$6,500			
1.5 Catch Basin / Manhole: Rebuild sinking manhole and reset storm drainage cover.	2000	\$32,500							\$32,500			
Mood Fiber Playground Surfacing: Wood mulch is compacted and depleted. Remove and replace with poured in place rubber surfacing.	2000	\$71,500										\$71,500
Concrete Loading Dock: Patch/repair and seal loading dock.	2000	\$3,900							\$3,900			
Drainage Issue at Parking lot East Side: The drainage appears to be inadequate. Conduct storm drainage study.	2000	\$26,000							\$26,000			
1.9 Fuel Oil Tank: Remove existing abandoned underground fuel oil tank, backfill and infill pavement.	1962	\$32,500							\$32,500			
1.10 Fencing: Replace damaged sections of chain link fence.	2000	\$36,660									\$36,660	
2.1 Membrane PVC Roof System: The existing PVC roof is at the end of its life expectancy. Replace with new PVC roof system.	2000	\$3,295,500	\$3,295,500									
2.2 Staining and Efflorescence: Power wash and clean at various locations of the masonry veneer wall, approximately 40% to 50% of 14,000 SF.	2000	\$136,500								\$136,500		
Exterior Doors Weather Stripping: Replace weather stripping on exterior doors.	2000	\$2,340								\$2,340		
2.4 Window Glazing: Existing windows are in fair condition. Some units need reglazing or replacement.	2000	\$32,500								\$32,500		
Window and Door Perimeter Sealants: Remove and replace failing sealant joints with new sealants and backer rods.	2000	\$37,050								\$37,050		
Masonry Joints Sealant: Remove and replace deteriorated sealant joints with new sealants and backer rods.	2000	\$12,675								\$12,675		
Paint Underside of Exposed Roof Deck: Prepare, prime and paint underside of exterior soffit and beams.	2000	\$3,900								\$3,900		
Exterior Egress Doors: Some doors and frames are rusting at the bottom. Replace doors and frames.	2000	\$12,870									\$12,870	
Exterior Door and Frame not ADA Compliant: Remove existing door and frame and replace with ADA compliant unequal pair.	2000	\$4,290									\$4,290	

Mason Road School Page 5 of 18



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Mason Road

							Costs Incurred	in Each Year				
Project Name	Year	Total Estimated					Future Pla	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new 2' x 4' ceiling system.		\$312,000										\$312,000
3.2 Floor cracked between new and old building: Remove VCT flooring, add expansion joint, level subfloor and replace VCT flooring.	1963/ 1999	\$1,430						\$1,430				
Radon piping interferes with accessibility clearance requirements. Reroute radon piping.	1999	\$15,600						\$15,600				
3.4 Bathroom towel holders encroaching on ADA clearance: Relocate towel holder.	1999	\$4,225						\$4,225				
3.5 Worn Carpet: The original carpet is past its effective useful life. Replace with new carpet.	1999	\$62,400					\$62,400					
Cracks in VCT Flooring: VCT flooring is worn and beyond its useful life. Remove and install new VCT.	1999	\$819						\$819				
3.7.1 ADA Toilet Partitions: Existing partitions are deteriorating.		\$18,720						\$18,720				
3.7.2 Standard Toilet Partitions: Deteriorating partition screens.		\$20,800						\$20,800				
3.7.3 Urinal Screen: Install accessible toilet partition screens.		\$3,380						\$3,380				
Inadequate Guardrail Design: Guardrail missing tensions at top and bottom.		\$37,440									\$37,440	
3.9 Sinks in Staff Rooms and Classrooms not ADA Compliant: Remove existing casework and counters at sink. Replace with new casework and countertop providing 30" min. wide kneespace access to sink.		\$83,980						\$83,980				
3.10 Door into Exitway Vestibule: Remove existing deteriorating door and frame and replace with new.	1963/ 1999	\$1,950									\$1,950	
Interior Doors: Some rusting present at classroom toilet room doors. Recommend replacing frames.		\$15,600									\$15,600	
Hot Water Boilers: Boilers have cracked sections. Replace with new units.	1999	\$1,040,000		\$1,040,000								
Back-flow Preventers at Chemical Mixers: Chemical mixers in janitorial closets are required to have backflow preventers.	1999	\$650									\$650	
Circulating Pumps: Circulating pumps are approaching end of expected useful service life. Replace pumps.	1999	\$59,865		\$59,865								
4.4 Hot Water Distribution Piping: Copper piping is leaking and corroded. Replace with new distribution piping.	1999	\$233,708								\$233,708		
4.5 Classroom Sinks: Classroom sinks are non-accessible. Replace with new accessible sinks.	1999	\$31,200								\$31,200		
4.6 Building Management System: Facility lacks integrated HVAC controls and energy management system. Provide fully integrated BMS.	1999	\$467,415			\$467,415							
5.2 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.	1999	\$60,000			\$60,000							

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Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Mason Road

							Costs Incurred	l in Each Year				
Project Name	Year	Total Estimated					Future PI	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
5.3 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.	1999	\$303,820				\$303,820						
Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1999	\$233,708			\$233,708							
5.5 Theatrical Lighting and Sound: Lighting and sound systems are obsolete. Replace with new systems.	1999	\$65,000										\$65,000
6.1 Carpet Machine: Machine is past usefull life. Replace with new.	1999	\$22,000				\$22,000						
6.2 Floor Scrubber Machine: Machine is past usefull life. Replace with new.	1999	\$25,000				\$25,000						
6.3 John Deere Tractor	1999	\$0										
6.4 Mower	2019	\$0										
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$335,100	\$750	\$33,050	\$750	\$750	\$63,750	\$33,050	\$750	\$750	\$200,750	\$750
TOTAL PROJECT COSTS		\$7,313,085	\$3,296,250	\$1,132,915	\$761,873	\$351,570	\$126,150	\$182,004	\$212,240	\$490,623	\$310,210	\$449,250

Key Points for Consideration

- 2027 Mason Road require roof replacement. See Facilities Codition Assessment(FCA) pages 51 & 58
- 2028 Mason Road requires boiler replacemnt. See FCA pages 55 & 61
- 2029 Mason Road requires building management system, phone system, and paging/timeclock. See FCA pages 55,56,61,&62

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Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Dudley Elementary

		Costs Incurred in Each Year											
Project Name	Year	Total Estimated					Future Pla						
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Drives and Walks: Paving is cracked and showing its age. Replace bituminous paving on existing base at drives and parking lots.	2000	\$623,623								\$623,623			
1.2 Bituminous Curbing: Replace bituminous curbing at drives and parking lots.	2000	\$39,000								\$39,000			
Precast Concrete Curbs: Remove and replace deteriorated concrete curb at various locations throughout the site.	2000	\$1,404								\$1,404			
1.4 Granite Curbing: Existing granite curbs are generally in good condition. Some sections need to be replaced/reset.	2000	\$960								\$960			
1.5 Concrete sidewalks Concrete sidewalks are generally in good condition. Some areas need to be patched/repaired.	2000	\$4,680								\$4,680			
Catch Basin / Manhole: Some catch basins and manholes are in poor condition and need to be rebuilt.	2000	\$13,000								\$13,000			
Catch Basin / Manhole: Some catch basin / manhole are in fair condition but need adjustment.	2000	\$16,250								\$16,250			
Storm Drainage: Storm drainage appears to be inadequate. Report of overflow and flooding in the classroom. Conduct storm drainage study.	2000	\$26,000								\$26,000			
1.9 Accessible Entrance Approach: Existing ramp needs minor patching/repair.	2000	\$2,600						\$2,600					
1.11 Fencing: Chain link fencing around play areas in good condition. Provide poison ivy control.	2000	\$7,000		\$7,000									
Playground: Planground is past usful life. Replace with new equipment.		\$65,000					\$65,000						
2.1 PVC Roofs: The existing PVC roof is at the end of its life expectancy. There is significant ponding throughout the roof areas. Replace with new PVC roofing system.	2000	\$4,157,400	\$4,157,400										
2.2 Brick Masonry Mortar Joints: Mortar joints are failing in some areas. Repoint brick masonry walls.		\$35,100		\$35,100									
2.3 Damaged Brick Walls: Replace cracked bricks.		\$52,000		\$52,000									
2.4 Staining, Efflorescence and Moss: Power wash and clean at various locations of the masonry veneer wall, approximately 40% to 50% of 20,400 SF.		\$195,000		\$195,000									
2.5 Deteriorating Steel Lintels: Replace rusting steel lintels.		\$32,500		\$32,500									
Rust Steel Lintels: Paint all steel lintels on the exterior wall.		\$91,650		\$91,650									
are rusting at the bottom. Replace doors and frames.	2000	\$25,000					\$25,000						
2.8 Exterior Doors Weather Stripping: Replace weather stripping on exterior doors.	2000	\$5,000					\$5,000						
Window glazing: Existing windows are in fair condition. Some units need to be reglazed or replaced.	2000	\$16,250						\$16,250					

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Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Dudley Elementary

		Total Estimated					Costs Incurred					
Project Name	Year	Total Estimated					Future PI	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.10 Glass Block: Existing glass blocks at the gym												
are leaking. Replace all with aluminum window		\$152,750						\$152,750				
system. 2.11 Window and Door Perimeter Sealants:		\$152,750						φ132,730				
	2000											
new sealant and backer rods.		\$91,650						\$91,650				
2.12 Masonry Joints Sealants: Remove all												
	2000											
new sealant and backer rod.		\$8,190		\$8,190								
2.15 Exterior Stairs: Remove one existing stair and												
replace with new cast-in-place reinforced concrete	2000											
stair with frost-protected footings.		\$19,500		\$19,500								
2.16 Exterior Handrails: Replace/add new		710,000		7.0,000								
galvanized steel handrails.	2000	\$1,560							\$1,560			
3.1 Unsightly 2' x 4' ACT Ceilings: Replace												
sagging / stained suspended acoustic ceiling with new		850.000										250 000
2' x 4' ceiling system.		\$59,280										\$59,280
3.2 Unsightly Gym Ceiling: Remove old paint and repaint.		\$20,670		\$20,670								
3.3 Cracking Masonry: Patch and repoint cracks		Ψ20,070		Ψ20,070								
and joints as needed.		\$8,307		\$8,307								
3.4 Worn Carpet: The original carpet				. ,								
is past its effective useful life. Replace with new												
carpet.		\$238,290							\$238,290			
3.6 Urinal Screen: Install accessible toilet fixtures.		\$5,070							\$5,070			
3.7 Sinks in Staff and classrooms not ADA												
compliant: Remove existing casework and counters												
at sink. Replace with new casework and countertop												
providing 30" min. wide knee space access to sink.		\$118,560							\$118,560			
3.8 General Office Door: Remove existing door		\$110,000							\$110,500			
leaves and replace with unequal pair to meet												
accessibility requirements.		\$3,900							\$3,900			
4.1 Back-flow Preventers at Chemical Mixers:												
	2000											
have backflow preventers.		\$1,300					\$1,300					
4.2 Variable Frequency Drives (VFDs): VFDs are obsolete technology. Replace with new.	2000	\$91,000					\$91,000					
		φ31,000					φ91,000					
4.3 Art Room Sinks: Sinks at Art Room are non-	2000											
accessible. Replace with accessible sinks.		\$9,360							\$9,360			
4.4 Building Management System: Facility lacks												
	2000											
system. Provide fully integrated BMS.		\$1,124,435										\$1,124,435
4.5 Kitchen Grease Trap: 1500 gal. precast		\$1,124,435										φ1,124,435
	2000											
grease trap.		\$26,000							\$26,000			
4.6 Chimney Cap: Chimney currently does not have												
a cap allowing water intrusion in boiler room. Add cap.		** ***										
· · · ·		\$3,900	\$3,900									
4.7 Boilers: Boilers have cracked sections and are beyond their useful service life expectancy. Replace	2000											
boilers with new.	2000	\$1,040,000			\$1,040,000							

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Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Dudley Elementary

							Costs Incurred	in Each Year				
Project Name	Year	Total Estimated					Future Pla	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
5.1 Fluorescent Lighting: T8 parabolic and CFL lighting is inefficient. Replace with LED.	2025	\$0										
5.2 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.	2000	\$60,000					\$60,000					
Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	2000	\$562,218									\$562,218	
5.4 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.	2000	\$730,883				\$730,883						
5.5 Theatrical Lighting: Incandescent lighting is excessively hot and not used. Replace with LED system.	2000	\$65,000										\$65,000
6.1 John Deere Utility Tractor	2000	\$0										
6.2 John Deere x350 Tractor	2024	\$0										
6.3 Windsor ommodore Duo Carpet Machine	2008	\$25,000					\$25,000					
6.4 Windsor Floor Scrubber	2005	\$25,000						\$25,000				
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$400,600	\$2,000	\$42,800	\$2,000	\$2,000	\$101,000	\$42,800	\$2,000	\$2,000	\$202,000	\$2,000
TOTAL PROJECT COSTS		\$10,301,840	\$4,163,300	\$512,717	\$1,042,000	\$732,883	\$373,300	\$331,050	\$404,740	\$726,917	\$764,218	\$1,250,715

Key Points for Consideration

- 2027 Dudley Elementary requires roof replacment. See Facilities Codition Assessment(FCA) pages 87,&93
- 2030 Dudley Elementary requires security system. See FCA page 91
- 2034 Dudley Elementary requires driveway and walkway replacement. See FCA pages 85 &92
- 2035 Dudley Elementary requies replacement of paging/timeclock system and IT upgrades. See FCA pages 91&96

Dudley Elementary School Page 10 of 18



							Costs Incurred	l in Each Year				
Project Name	Year	Total Estimated					Future Pla	an Years				
•	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Drives and Walks: Paving is cracked and heavily deteriorated with potholes and heaves. Replace bituminous paving and base.	1998	\$1,358,500							\$1,358,500			
Granite Curbing: Existing granite curbs are in good condition. Some sections need to be replaced/reset.	1998	\$5,117							\$5,117			
1.3 Bituminous Curbing: Bituminous curbing is damaged. Replace bituminous curbing at parking lots.	1998	\$210,600							\$210,600			
Bituminous sidewalks: Bituminous sidewalks are deteriorated and cracked. Replace with new bituminous sidewalks.	1998	\$104,000							\$104,000			
Concrete walks: Remove and replace deteriorated areas of the concrete walk.	1998	\$87,750									\$87,750	
Catch Basin / Manhole: Rebuild sinking manhole and reset storm drainage cover.	1998	\$110,500							\$110,500			
1.7 Accessible Parking Identification: Add missing or replace broken signage at accessible parking spaces.	1998	\$2,600							\$2,600			
Brainage Issue at Play Fields: The drainage appears to be inadequate. Conduct storm drainage study.	1998	\$26,000								\$26,000		
1.9 Fencing: Fencing is generally in good condition. Some sections needs repair/replacement.	1998	\$2,444										\$2,444
Road Leading to School Building: The road leading to the school building is in fair condition, provide maintenance.	1998	\$20,000							\$20,000			
Staining, Efflorescence and Moss: Power wash and clean at various locations of the masonry veneer wall, approximately 40% to 50% of 51,200 SF total.	1998	\$499,200					\$499,200					
2.2 Exterior Egress Doors: Some doors and frames are rusting at the bottom. Replace doors and frames.	1998	\$80,000					\$80,000					
Exterior Doors Weather Stripping: Replace weather stripping on exterior doors.	1998	\$3,900				\$3,900						
2.4 Window Glazing: Existing windows are in fair condition. Some units need reglazing or replacement.	1998	\$6,500				\$6,500						
Window and Door Perimeter Sealants: Remove and replace failing sealant joints with new sealants and backer rods.	1998	\$73,125				\$73,125						
2.6 Masonry Joints Sealant: Remove and replace failing sealant joints with new sealants and backer rods.	1998	\$83,850					\$83,850					
2.7 Water Infiltration at Masonry Wall: It was reported that the leak occurred during a wind-driven rain. Per existing details, the wind-driven rain appears to enter the wall at the louver and drops or travels along the perimeter beam before dropping at a low point. Replace louver with storm resistant louver.	1998	\$222,950					\$222,950					
2.8 Concrete Loading Dock: Loading dock is in fair condition. Remove and replace bituminous apron with concrete.		\$42,120					\$42,120					

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			Costs Incurred in Each Year											
Project Name	Year	Total Estimated						lan Years						
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
3.1 Unsightly 2' x 4' ACT Ceilings: Replace stained suspended acoustic ceiling with new 2' x 4' ceiling system.		\$36,400										\$36,400		
3.2 Unsightly Painted Walls: Paint in pumphouse is degraded, remove existing and repaint.		\$3,120										\$3,120		
3.3 Unsightly Painted Ductwork: Painted ductwork in gym is deteriorated, remove existing and repaint.		\$3,640										\$3,640		
3.4 Worn Carpet: The original carpet is past its effective useful life. Replace with new carpet.		\$386,100								\$386,100				
3.5 VCT Flooring: VCT flooring is worn and beyond its useful life. Remove and install new VCT.		\$31,200	\$31,200											
3.6 Ceramic Tile Flooring: Tile at locker room to gym connection shows damage. Recommend replacing.		\$2,000										\$2,000		
3.7 Crack in Terrazzo Floor: Existing terrazzo flooring contains cracks in several locations at entry.		\$7,000										\$7,000		
3.8 Sinks in Staff rooms and classrooms not ADA compliant: Remove existing casework and counters at sink. Replace with new casework and countertop providing 30" min. wide kneespace access to sink.		\$182,780									\$182,780			
3.9 Classroom Door Approach: Additional lockers have been added in the hallways outside of classrooms resulting in ADA approach clearance issues. Recommend removing 1 to 2 lockers to provide clearance.		\$13,000									\$13,000			
3.10 Interior Doors to Exitways: Damaged vertical rod, recommend replacing hardware.		\$780									\$780			
3.11 Interior Door to Gym: Door is damaged and does not close easily, recommend replacing.		\$1,950									\$1,950			
4.1 Exhaust Fans: Rooftop exhaust fans are beyond expected useful service life. Replace exhaust fans.	1999	\$112,125				\$112,125								
Boilers: All boilers have replacement sections and are approaching end of expected useful service life. Replace existing boilers.	1999	\$1,040,000		\$1,040,000										
Circulating Pumps: Circulating pumps are approaching end of expected useful service life. Replace pumps.	1999	\$139,685		\$139,685										
4.4 ACCU-1: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$19,500				\$19,500								
4.5 ACCU-2: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$19,500				\$19,500								
4.6 ACCU-3: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$19,500				\$19,500								

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							Costs Incurred	in Each Year				
Project Name	Year	Total Estimated					Future Pla	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
4.7 ACCU-4: Air Cooled Condensing Unit is failing	1999											
and beyond end of useful service life. Replace unit.	1999	\$39,000				\$39,000						
4.8 ACCU-5: Air Cooled Condensing Unit is failing	1999											
and beyond end of useful service life. Replace unit.	1999	\$8,450				\$8,450						
4.9 Building Management System: Facility lacks												
integrated HVAC controls and energy management	1999											
system. Provide fully integrated BMS.		\$1,288,534						\$1,288,534				
4.10 Fire Pump: Control panel is obsolete. Replace control panel.	1999	\$13,000			\$13,000							
4.11 Water Service Pump: Pump and control panel												
are beyond expected useful service life. Replace both.	1999	\$15,600			\$15,600							
4.12 Inaccessible Drinking Fountains in Gym:	1998	·										£00.000
Install accessible drinking fountains. 4.13 Back-flow Preventers at Chemical Mixers:		\$28,080										\$28,080
Chemical mixers in janitorial closets are required to	1999											
have backflow preventers.		\$2,600									\$2,600	
5.1 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.	1999	\$42,250				\$42,250						
5.2 Security System: Upgrade security system with												
integrated electronic security system consisting of	1999											
intrusion, card access, and CCTV.		\$837,548						\$837,548				
5.3 Paging/Timeclock System: Existing systems												
are non-integrated, unsynchronized and obsolete.	1999											
Replace with new integrated system.		\$644,267							\$644,267			
5.4 Lighting: Upgrade second floor fluorescent lighting to LED.	2025	\$0										
5.5 Pump House FACP: FACP at pump house is	1999											
obsolete. Replace control panel.	1555	\$13,000	\$13,000									
5.6 Transfer Switch: Faulty standby generator transfer switch trips when transferring load back to	1999											
normal power. Replace transfer switch.	1333	\$15,600	\$15,600									
Water Tower Repair	1999											
water rower repair	1000	\$85,000	\$85,000									
Gym Floor - Sand, paint, refinish	1999	\$20,000	\$20,000									
		\$20,000	\$20,000									
Shed - Exterior Storage	1999	\$35,000					\$35,000					
ADA ELLI D. II.		, : ,,,,,,,										
ADA Field Paths		\$15,000									\$15,000	
Chiller	1999											
		\$250,000			\$250,000							
John Deere 5210 Tractor	1999	\$70,000			\$70,000							
		φ10,000			Ψ10,000							
Exmark Mower	2013	\$15,000					\$15,000					
	4000	712,200					,					
John Deere Snowblower	1999	\$5,000										\$5,000

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							Costs Incurred	l in Each Year				
Project Name	Year	Total Estimated					Future Pla	an Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Tenet Floor Machine	2024	\$0										
Windsor Carpet Machine	2024	\$0										
CAT Scissor Lift	1999	\$0										
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$516,500	\$2,250	\$14,250	\$14,250	\$53,250	\$146,250	\$14,250	\$14,250	\$53,250	\$202,250	\$2,250
TOTAL PROJECT COSTS		\$8,916,865	\$167,050	\$1,193,935	\$362,850	\$397,100	\$1,124,370	\$2,140,332	\$2,469,834	\$465,350	\$506,110	\$89,934

Key Points for Consideration

- 2028 Dudley Middle requires new boilers and circulator pumps. See Facilities Condition Assessment(FCA) pages 125 & 131
- 2031 Dudley Middle requires cleaning and sealing of masonary. See FCA pages 121 & 129
- 2032 Dudley Middle requires building management and security systems. See FCA pages 125,127,131,&132
- 2033 Dudley Middle requires replacement of driveways&walways. See FCA pages 119&128

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			Costs Incurred in Each Year									
Project Name	Year	Total Estimated					Future Pl	lan Years				
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Drives and Walks: Paving is cracked and deteriorated with potholes and heaves. Replace bituminous paving and base.		\$1,658,800									\$1,658,800	
Granite Curbing: Existing granite curbs are in fair to poor condition. Some areas need to be replaced/reset.		\$53,300									\$53,300	
1.3 Bituminous Curbing: Bituminous curbing is damaged. Replace bituminous curbing at parking lots.		\$46,800									\$46,800	
Bituminous sidewalks: Bituminous sidewalks are deteriorated and cracked. Replace with new bituminous sidewalks.		\$91,000									\$91,000	
Catch Basin / Manhole: Some catch basins/manholes are in fair condition but need adjustment.	1998	\$16,250									\$16,250	
Basketball Court: The basketball courts are in fair to poor condition. Patch and repair.	1998	\$21,840									\$21,840	
Tennis Courts: The tennis courts are in fair to poor condition. Patch and repair.	1998	\$49,400									\$49,400	
1.8 Fencing: Fencing is generally in good condition. Some sections need repair/replacement.		\$3,055									\$3,055	
Accessible Parking Identification: Add signage at accessible parking spaces.		\$9,100									\$9,100	
1.10 Drainage Issue at Play Fields: The drainage appears to be inadequate. Conduct storm drainage study.		\$26,000									\$26,000	
Modified Bitumen Roofing: The existing roof is at the end of its life expectancy. Replace with new PVC roofing system.	1998	\$10,140,000			\$10,140,000							
Staining and Efflorescence: Power wash and clean at various locations of a brick veneer masonry wall, approximately 40% to 50% of 62,000 SF.		\$604,500								\$604,500		
2.3 Damaged Brick Veneer: There is damaged brick veneer throughout the exterior walls. Replace with new.		\$26,000								\$26,000		
Damaged Masonry Mortar Joints: There are damaged masonry mortar joints throughout the exterior walls. Replace with new.		\$23,400								\$23,400		
2.5 Deteriorating Steel Lintels: Some lintels at exterior doors are rusting and sagging and need to be replaced.	1973	\$31,850								\$31,850		
2.6 Exterior Egress Doors: Doors and frames are rusting at the bottom. Replace frames and doors.	1973 2012	\$42,900								\$42,900		
Exterior Doors Weather Stripping: Replace weather stripping on 90% of exterior doors.	2012	\$102,050								\$102,050		
Window Balancing System: Window balancing has failed and windows are hard to open. Replace with new balancing system.	2012	\$32,500								\$32,500		
2.9 Window Glazing: Repair and replace glazing at windows with a broken seal.	2012	\$32,500								\$32,500		

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			Costs Incurred in Each Year									
Project Name	Year	Total Estimated					Future PI	lan Years				
·	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.10 Window and Door Perimeter Sealants:		-										
Remove and replace deteriorated sealant joints with	2012											
new sealants and backer rods.		\$73,125								\$73,125		
2.11 Masonry Joints Sealant:												
Remove and replace failing sealant joints with new												
sealants and backer rods.		\$19,500								\$19,500		
2.12 Water Infiltration at Unit Ventilation: Replace		204 200								004 000		
louver with storm resistant louver.		\$31,200								\$31,200		
2.13 Concrete Loading Dock:												
Loading dock is in poor condition. Remove and		\$9,360								\$9,360		
replace bituminous apron with concrete.		\$9,360								\$9,300		
3.1 Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new												
2' x 4' ceiling system.		\$93,600								\$93,600		
										. ,		
3.2 Unsightly Painted Walls: Paint walls.		\$2,600								\$2,600		
3.3 Stair Treads: Replace damaged or missing stair		¢40 040								\$48,048		
treads.		\$48,048								\$48,048		
3.4 VCT Flooring: VCT flooring is worn and beyond												
its useful life. Remove and install new VCT.		\$468								\$468		
3.5 Synthetic Gym Floor: Floor is		\$400								φ400		
worn and beyond its useful life. Remove and replace												
with new flooring.		\$104,000								\$104,000		
3.6 Urinal Screen: Install accessible toilet partition		\$104,000								ψ104,000		
screens.		\$27,040								\$27,040		
3.7 Non-ADA single occupant restrooms: Modify		421,040								Ψ21,040		
to meet accessibility guidelines.		\$97,500								\$97,500		
3.8 Inadequate Guardrail Design: Guardrails		701,000								701,000		
mounted too low and missing extensions. Replace to												
meet guidelines.		\$252,720									\$252,720	
3.9 Classroom Door Approach: Additional lockers		, ,									. ,	
have been added in the hallways outside of												
classrooms resulting in ADA approach clearance												
issues. Recommend removing 1 to 2 lockers to												
provide clearance.		\$2,600							\$2,600			
3.10 Classroom door approach: Doors and walls												
have been placed in such a way as to not provide												
enough clearance as required by accessibility												
guidelines.		\$65,000							\$65,000			
3.11 Sinks in Staff Rooms and Classrooms not												
ADA Compliant: Remove existing casework and												
counters at sink. Replace with new casework and												
countertop providing 30" min. wide kneespace access		\$98,800							\$98.800			
to sink.		\$98,800							\$98,8UU			
3.12 Unsightly Finishes in Restrooms: Provide		\$585,000							\$585,000			
new finishes. 3.13 Doors and Hardware: Doors have inconsistent,	—	\$303,000							φ303,000			
or missing hardware.		\$6,240							\$6,240			
4.1 Fire Sprinkler System: Building lacks a		Ψ0,240							Ψ0,2-40			
complete fire sprinkler system. Install a fire sprinkler	1973											
system in all areas.	13/3	\$1,926,892										\$1,926,892
		¥1,020,002										\$1,0±0,00±
4.2 Boilers: Boilers are original equipment and are	1973											
beyond expected useful service life. Replace boilers.	,	\$1,040,000	\$1,040,000									
4.3 Circulation Pumps: Hot water circulation pumps		, ,,	. ,,									
are beyond expected useful service life. Replace	1973											
pumps.		\$59,865	\$59,865									
ш -		. ,										

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							Costs Incurred	in Each Year					
Project Name	Year	Total Estimated											
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
4.4 Piping: Copper hot water piping is corroded and leaking. Replace piping all areas.	1973	\$1,204,307					\$1,204,307						
4.5 Unit Ventilators: Unit ventilators are beyond expected useful service life. Replacement parts no longer available. Replace unit ventilators at classrooms.	1973	\$816,563	\$816,563										
4.6 Exhaust Fans: Rooftop exhaust fans are beyond expected useful service life. Replace exhaust fans.	1973	\$107,640						\$107,640					
Building Management System: Pneumatic temperature controls are obsolete. Replacement parts no longer available. Facility lacks integrated HVAC controls and energy management system. Provide fully integrated BMS.	1973	\$2,408,614		\$2,408,614									
Lab Waste Neutralization: Laboratory sink drains not equipped with acid neutralization. Add chip tanks to each lab sink.	1973	\$109,200							\$109,200				
4.9 Nurse Office Toilets: Toilets are not accessible. Renovate toilet rooms with accessible fixtures.	1973	\$52,000							\$52,000				
4.10 Toilet Rooms: Toilet rooms are not accessible. Renovate toilet rooms with accessible fixtures.	1973	\$364,000							\$364,000				
Kitchen Equipment: Approximately 60% of kitchen equipment is original. Replace with new equipment.	1973	\$455,000							\$455,000				
4.12 Lab Sinks: Laboratory sinks are not accessible. Replace sinks with accessible units.	1973	\$9,750							\$9,750				
Back-flow Preventers at Chemical Mixers: Chemical mixers in janitorial closets are required to have backflow preventers.	1973	\$4,550							\$4,550				
5.1 Switchgear: Electric switchgear is original Federal Pacific equipment and a known fire hazard. Replace switchgear with new equipment.	1973	\$1,204,307				\$1,204,307							
5.2 Electric Distributon: Electrical distribution panels are original Federal Pacific equipment and a known fire hazard. Replace distribution panels with new.	1973	\$843,015				\$843,015							
5.3 Phone System : Phone system is obsolete technology. Upgrade system with VOIP.		\$78,000				·	\$78,000						
5.4 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.		\$1,565,600						\$1,565,600					
5.5 Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1973	\$1,204,307						\$1,204,307					
5.6 Lighting: Upgrade fluorescent lighting to LED.	2025	\$0											
5.7 Fire Alarm: Heat detectors are original and obsolete. Replace with new.	1973	\$130,000					\$130,000						

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			Costs Incurred in Each Year										
Project Name	Year	Total Estimated		Future Plan Years									
	Installed	Project Costs	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
5.8 Standby Power: Circulator pumps and boilers													
are switched manually to generator. Add automatic	1973												
transfer to standby power.		\$60,000					\$60,000						
Football Field and Track: Field is due for	2014												
maintenance and repairs	2014	\$40,000					\$40,000						
7.1 IT Network Infrastructure: Replace servers,													
UPS's, wireless access points, network switches and													
network cables (ethernet and fiber)		\$845,000	\$6,000	\$6,000	\$18,000	\$108,000	\$315,000	\$6,000	\$18,000	\$108,000	\$254,000	\$6,000	
TOTAL PROJECT COSTS		\$29,056,656	\$1,922,428	\$2,414,614	\$10,158,000	\$2,155,322	\$1,827,307	\$2,883,547	\$1,770,140	\$1,510,141	\$2,482,265	\$1,932,892	

Key Points for Consideration

- 2027 Shepherd Hill High School requires new boilers. See Facilities Condition Assessment(FCA) pages 143 & 151
- 2028 Shepherd Hill High School requires a building management system. See FCA pages 143 & 151
- 2029 Shepherd Hill High School requires roof replacement. See FCA pages 139 & 148
- 2030 Shepherd Hill High School requires new electrical switchgear and distribution. See FCA pages 145 & 152
- 2032 Shepherd Hill High School requires new security system and paging/timeclock system. See FCA pages 145 & 152

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