



October 24, 2022
 Revision One March 20, 2023
 Revision Two September 19, 2023
Final Revision November 7, 2023

Ms. Cathy Lauria
 Chief School Business Official
 West Northfield School District No. 31
 3131 Techny Road
 Northbrook, Illinois 60062

RE: **10 YEAR LIFE SAFETY SURVEY
 FIELD AND WINKELMAN SCHOOLS
 PROJECT NO. 22074**

Dear Cathy:

On Wednesday, March 15, 2023 representatives of District 31 and ARCON met to review the initial draft on this 10 Year Life Safety report. Following is the revised Final Report based on revisions discussed at our meeting and subsequent District reviews. Upon District 31 Board of Education approval, this final report, including updated safety reference plans, building descriptions and cost information, will be submitted to the Illinois State Board of Education (ISBE) via the IWAS website.

FIELD SCHOOL
I. ARCHITECTURAL

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>Within 1-5 yrs</u>	<u>Within 6-10 yrs</u>
<u>INTERIOR BUILDING ITEMS</u>			
A1	Door, sidelight, transom or display case glazing – wired glazing or not stamped “tempered”. Multiple locations throughout building.		\$25,000.00
A2	Classrooms 1-6 doors have knobs – replace w/ new lever handles/locksets.		\$7,500.00
A3	Existing acoustical lay-in ceiling tiles stained from pipe or roof leaks. Change out stained ceiling tiles.	\$0.00	
A4	Door does not open and close properly.	\$500.00	

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		Within 1-5 yrs	Within 6-10 yrs
A5*	Existing stage curtain is over 30 years old. It is old and deteriorated. Does not retain flame retarding treatment.	\$50,000.00	
	<u>ROOFING</u>		
R1*	Tighten top ladder.	\$250.00	
R2	Misc. roof, maintenance & repairs.		\$22,000.00
R3	Roof Replacement Entrance Vestibules, School Office & Gymnasium/Commons.	\$30,945.00	
R4	Roof Replacement 1964 Original Building.		\$971,582.00
R5	Roof Replacement 1969 Addition.		\$1,214,325.00
R6	Roof Replacement 1972 Addition.		\$1,514,854.00
R7	Roof Replacement 1991 Addition.		\$1,000,363.00
	<u>EXTERIOR WALLS</u>		
W1	Maintenance and repairs. Sealant replacement at movement control joints.	\$500.00	
W2	Maintenance and repairs grind and point mortar joints.	\$12,000.00	
W3	Maintenance and repairs. Foundation/wall. Cracks in concrete/brick.		\$10,250.00
	Architectural Work Subtotal Within 1-5 yrs (2024-2029)	\$43,945.00	
	Architectural Work Subtotal Within 6-10 yrs (2030-2035)		\$4,765,874.00
II.	MECHANICAL / HVAC		
M1	Air Handler Replacement Stage/Auditorium.		\$150,000.00
M2	Equipment Controls replacement VAV units – District Office/School Office.	\$56,000.00	
	*Indicates item has been completed since original date of report.		

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		Within 1-5 yrs	Within 6-10 yrs
M3	Install new HVAC unit with fresh air provision Maintenance Garage Office.	\$5,000.00	
M4	Replace rooftop mechanical equipment at School Office/Locker Rooms.		\$375,000.00
M5	Replace mini split HVAC units at small classrooms/offices.	\$15,000.00	
M6*	Replace rooftop condensing units. Classroom 34. Auditorium lobby.	\$80,000.00	
	Mechanical/HVAC Work Subtotal Within 1-5 yrs (2024-2029)	\$76,000.00	
	Mechanical/HVAC Work Subtotal Within 6-10 yrs (2030-2034)		\$525,000.00
III.	PLUMBING		
P1	Replace hot water heater. Mechanical room near small gym.	\$50,000.00	
P2	Install expansion tanks at two hot water heaters. Mechanical room near small gym.	\$1,500.00	
P3	Install RPZ at Service sinks. Two locations.	\$5,000.00	
P4	NOT USED		
P5	Install backflow preventor main water service into building.	\$7,500.00	
P6	Art room sink solids interceptor.	\$500.00	
P7	Thermostatic mixing valve. Emergency showers. Two science rooms.		\$15,000.00
P8	Thermostatic mixing valve. Emergency eye wash. Two science rooms.		\$15,000.00
P9	Provide trapped and vented floor drains at emergency showers. Two science room locations.		\$15,000.00
P10	NOT USED		
	*Indicates item has been completed since original date of report.		

		Within 1-5 yrs	Within 6-10 yrs
P11	NOT USED		
P12	Existing domestic cold water piping is deteriorated and no longer provides proper flow. Near boiler room at 2 staff toilets and science room 1.	\$25,000.00	
	Plumbing Work Subtotal Within 1-5 yrs (2024-2029)	\$89,500.00	
	Plumbing Work Subtotal Within 6-10 yrs (2030-2034)		\$45,00.00
IV.	<i>ELECTRICAL</i>		
E1	Install fire alarm notification devices where missing. Approximately 90 locations.		\$45,000.00
E2*	Install GFI protected receptacle at locations near sinks.	\$2,000.00	
E3	NOT USED		
E4*	Fire Alarm notification device install within 15' of both ends of corridor.	\$8,000.00	
E5	Install arc-flash hazard warning on all electrical distribution equipment.		\$75,000.00
E6	Install shunt-tip capability when Ansul activated at 6 kitchen hood locations.	\$3,000.00	
E7	Install carbon monoxide sensors near natural gas source at locations – mechanical, science and home economics rooms.	\$2,500.00	
E8	Fire alarm pull stations required within 5ft of exit. 7 locations. At rooms with direct exit doors. Science rooms, art rooms, band room, exterior storage, school entrance.	\$3,500.00	
E9	Illuminated exit signs required at exit doors. 3 locations. Art room, band room, gym/dining commons exit.	\$1,500.00	
	*Indicates item has been completed since original date of report.		

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		Within 1-5 yrs	Within 6-10 yrs
E10	NOT USED		
E11	Non emergency sound systems must be muted during an emergency alarm.	\$3,000.00	
E12	Existing lighting at Auditorium Stage is energy inefficient and high maintenance due to its age. Replace with new efficient LED fixtures and controls.	\$175,000.00	
	Electrical Work Subtotal Within 1-5 yrs (2024-2029)	\$188,500.00	
	Electrical Work Subtotal Within 6-10 yrs (2030-2034)		\$120,000.00
	FIELD SCHOOL BUDGET SUMMARY		
		Within 1-5 yrs by 2029	Within 6-10 yrs by 2034
	Architectural	\$43,945.00	\$4,765,874.00
	Mechanical / HVAC	\$76,000.00	\$525,000.00
	Plumbing	\$89,500.00	\$45,000.00
	Electrical	\$188,500.00	\$120,000.00
	Sub-Totals	\$397,945.00	\$5,455,874.00
	FIELD SCHOOL LIFE SAFETY TOTALS		
	Sub-Totals	\$397,945.00	\$5,455,874.00
	10% Contingency	\$39,794.00	-
	15% Contingency & Inflation	-	\$818,381.00
	8% A/E Fees	\$35,019.00	\$501,940.00
	GRAND TOTALS FIELD SCHOOL	\$472,758.00	\$6,776,195.00

WINKELMAN SCHOOL
 I. ARCHITECTURAL

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>Within 1-5 yrs</u>	<u>Within 6-10 yrs</u>
<u>INTERIOR BUILDING ITEMS</u>			
A1*	Classroom 68 - door lever handle/lockset missing. Provide new lever handle/lockset to match existing adjacent style, size, function, finish, etc.	\$1,500.00	
A2*	Small gym pair of exterior doors southeast corner sticks. Repair/adjust doors to not stick and open/close smoothly.	\$500.00	
A3	Maintenance Wing 42-44 and North Classroom Wing 34-41 – all doors have knobs. Replace all door knobs with lever handles/locksets.		\$20,000.00
A4	Maintenance Wing 42-44 – pair of interior doors from corridor not labeled. Furnish & install new labeled doors, frame & hardware.		\$4,500.00
A5*	Corridor adjacent to Maintenance Wing 42-44 – remove stored items from corridor blocking path of exit egress.	\$0.00	
A6	Miscellaneous interior doors throughout – remove wired glazing & replace with new 1/4" tempered glazing.		\$30,000.00
A7*	Commons southwest corridor entrance doors do not latch. Adjust closer so doors latch properly.	\$500.00	
	<u>ROOFING</u>		
R1	Misc. roof, maintenance & repairs at modular addition.		\$7,375.00
R2	Roof Replacement 1980 Original Building.	\$3,151,472.00	
R3	Roof Replacement 2002 Additions.	\$2,230,813.00	
	*Indicates item has been completed since original date of report.		

	<u>EXTERIOR WALLS</u>	Within <u>1-5 yrs</u>	Within <u>6-10 yrs</u>
W1	Maintenance and repairs. Sealant replacement at movement control joints.	\$30,590.00	
W2	Maintenance and repairs grind and point mortar joints.		\$6,300.00
	Architectural Work Subtotal Within 1-5 yrs (2024-2029)	\$5,412,875.00	
	Architectural Work Subtotal Within 6-10 yrs (2030-2034)		\$68,175.00
II.	MECHANICAL		
M1	Three (3) boiler room pumps show signs of leaking and should be replaced soon.	\$7,500.00	
M2	Two (2) boiler room hot water system pumps show signs of leaking and should be replaced soon.	\$10,000.00	
M3	Boilers (three) are nearing their life expectancy of 25 years (installed in 2001).	\$650,000.00	
M4	One (1) maintenance garage unit heater piping missing pipe insulation.	\$500.00	
M5	One (1) rooftop unit appears to be past its life expectancy. Should be replaced (gym unit).	\$75,000.00	
M6	One (1) rooftop mini-split cooling unit nearing life expectancy, should be replaced soon.	\$7,500.00	
M7	No exhaust for one (1) janitor's closet.	\$7,500.00	
M8	No ventilation in two (2) storage rooms near kitchen.	\$15,000.00	
	Mech/HVAC Work Subtotal Within 1-5 yrs (2024-2029)	\$773,000.00	
	Mech/HVAC Work Subtotal Within 6-10 yrs (2030-2034)		0

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III.	PLUMBING	Within 1-5 yrs	Within 6-10 yrs
P1	Five (5) roof drains terminations at exterior wall broken off which allows rain to drain into wall at modular addition.	\$2,500.00	
P2	Separate fire and domestic services. IPC now requires that there be an active domestic service on the fire service to prevent long "dead" lengths of water piping. Services will need to be combined at 2002 addition fire sprinkler room.		\$50,000.00
P3*	One (1) boys' toilet does not flush properly. Original building west toilet room.	\$500.00	
P4	One (1) mezzanine domestic hot water heater is nearing its life expectancy and should be replaced soon. Boiler room.	\$25,000.00	
P5	At five (5) janitor's closets - no RPZ on Service sink for chemical feeder connection.		\$12,500.00
P6*	Nine (9) classroom sinks have no hot water/low flow. Original building 2002 addition art room. Classrooms northside.		
P7*	At two (2) toilet rooms - no hot water on lavatory. Modular addition.		
P8	No floor drain – seven (7) toilet room locations. Modular addition / original building southeast corner rooms.		\$35,000.00
P9	IPC no longer allows a central TMV for the building. Will need to be removed and point of use TMVs installed at all sinks.		\$19,800.00
P10*	Two (2) toilet room washfountains have inoperable faucets. 2002 addition.		
P11*	Nurse sink has slow drain.		
P12	NOT USED		
	Plumbing Work Subtotal Within 1-5 yrs (2024-2029)	\$27,500.00	
	Plumbing Work Subtotal Within 6-10 yrs (2030-2034)		\$117,300.00
	*Indicates item has been completed since original date of report.		

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		Within 1-5 yrs	Within 6-10 yrs
IV.	ELECTRICAL		
E1	Provide audio/visual notification device in approximately (43) rooms.	\$21,500.00	
E2	At three (3) locations, receptacle is within 6 feet of water source and must be GFCI protected. Replace with GFCI receptacle.	\$1,500.00	
E3	At nine (9) locations, smoke detector required in closets over 10 sq.ft. Modular addition.	\$4,500.00	
E4	At seven (7) locations, provide audio/visual notification device within 15 feet of end of corridors, and following NFPA spacing.		\$3,500.00
E5	Provide arc-flash hazard warning labels to all electrical distribution equipment.		\$75,000.00
E6*	At four (4) locations, smoke detector required for magnetic door release operation. Learning Resource Center.	\$2,000.00	
E7*	Carbon monoxide detector required near gas source. Penthouse Boiler Room.	\$500.00	
E8	At three (3) locations, pull station required within 5 feet of exit. 2002 addition east direct exit doors.	\$1,500.00	
E9*	Replace exit signs that aren't working – four (4) locations. East exit doors.	\$2,000.00	
E10	Remount pull station height to be mounted between 42-48 inches to center of handle – seven (7) locations. East and north exit doors.	\$3,500.00	
E11	NOT USED		
E12	Non-emergency sound systems must be muted during an emergency alarm. Provide override for sound reinforcement system.	\$1,000.00	
E13*	Replace existing fluorescent light fixtures throughout building with new efficient LED fixtures and controls.		
	*Indicates item has been completed since original date of report.		

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		Within 1-5 yrs	Within 6-10 yrs
	Electrical Work Subtotal Within 1-5 yrs (2024-2029)	\$33,500.00	
	Electrical Work Subtotal Within 6-10 yrs (2030-2034)		\$78,500.00
	WINKELMAN SCHOOL BUDGET SUMMARY		
		Within 1-5 yrs by 2029	Within 6-10 yrs by 2034
	Architectural	\$5,412,875.00	\$68,175.00
	Mechanical / HVAC	\$773,000.00	0
	Plumbing	\$27,500.00	\$117,300.00
	Electrical	\$33,500.00	\$78,500.00
	Sub-Totals	\$6,246,875.00	\$263,975.00
	WINKELMAN SCHOOL LIFE SAFETY TOTALS		
	Sub-Totals	\$6,246,875.00	\$263,975.00
	10% Contingency	\$624,688.00	-
	15% Contingency & Inflation	-	\$39,596.00
	8% A/E Fees	\$549,725.00	\$24,286.00
	GRAND TOTALS WINKELMAN SCHOOL	\$7,421,288.00	\$327,857.00

Sincerely,
 ARCON Associates, Inc.



William M. Strejc, AIA
 Principal