

School Information - Choose District and Then School Name			
Field	Current Info	Proposed Adjustment	Justification for Proposed Adjustment
District (Choose First)	Caesar Rodney School District		
School Name (Choose Second)	Star Hill ES		
School Type	Elementary School		
Year Const.	1926		
Year Last Renovated	2003	2019	
Stories	Unknown		
Gross Area (Required)	48,997		
Net Useable Area	44,294		
Grades	1-5		
Address	594 Voshells Mill Star Hill Rd		
City	Dover		
State	DE		
Zip Code	19901		
Notes			
Fields in Yellow are Required. If any of the fields are incorrect or show "Unknown", please enter the correct value in the "Proposed Adjustment" column and enter the reason in the "Justification" column (if you know the information). Gross Area is required for the tool to work, so please enter a value if "Unknown" is displayed.			

Good Repair Questions					
System Group	Good Repair Questions	Response	Severity	Severity Guidance	Enter Comments Here
Conveyances	Are your elevators unreliable, with frequent service calls?	No		Minor - Occasional nuisance issues with elevator but generally operational Moderate - Usually operational but with some known issues or somewhat frequent downtime. Major - Significant known issues, unreliable and frequent downtime	
Electrical	Are there any problems or inadequacies with exterior lighting?	No		Minor - Most fixtures are operational, some may not work, some may provide intermittent service. Moderate - Most fixtures generally work, some do not work, some areas are not sufficiently lit. Major - Many fixtures are not operational, intermittent and/or there are safety concerns about insufficient lighting.	
	Is the electrical service outdated, undersized, or otherwise problematic?	No		Minor - Some areas do not have enough outlets given the need, occasionally breakers need to be reset due to overload. Moderate - Breaker panels are fully utilized, many areas do not have sufficient outlets, local breaker resets are routine in some areas, main breakers are hot or noisy. Major - Switchgear is overloaded, main breakers trip, some breakers are intentionally shut off to limit use, there are known major issues with the system.	
General	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above?	No		Minor - single or limited number of hazards that don't impact building use or occupant safety Moderate - multiple issues that if left unaddressed could progress to impact building use or occupant safety Major - issues pose an immediate threat to occupant safety or limit building use	
Mechanical Systems	Are any areas of the facility inadequately cooled?	No		Minor - Some inhabited areas are uncomfortable 5-10 days a year Moderate - Many areas are uncomfortable during warm months, the building may occasionally be closed during extreme heat. Major - Most or all areas lack cooling, building will be likely be closed during extreme heat.	
	Are any areas of the facility inadequately heated?	No		Minor - Some inhabited areas are uncomfortable 5-10 days a year Moderate - Many areas are uncomfortable during extreme cold , space heaters are utilized in some areas, lack of heating redundancy. Major - Generally insufficient heating capabilities during cold months, heating systems are maxxed, freezing pipes, school closures due to cold.	
	Are any areas of the facility inadequately ventilated?	No		Minor - Some generally unoccupied or storage areas have poor or no ventilation Moderate - Storage areas are not ventilated and there is insufficient ventilation in some unoccupied areas. Major - The building has generally poor ventilation in a significant amount of occupied spaces.	
	Are there any poorly insulated areas?	No		Minor - Some areas of the building are poorly insulated, generally in unoccupied areas. Moderate - The building has some areas in occupied spaces that are poorly insulated. Major - Much of the building has poor insulation, including occupied areas.	

3

major

0

minor

2

moderate

1

Mold/Mildew	Have there been any leaks or pressure problems with HVAC supply/return lines?	No		Minor - There are small seepage leaks or drips in areas that do not affect students or staff. Low pressure in some areas may be experienced during peak times. Moderate - There may be persistent leaks in certain locations and/or pressure issues during routine use. Major - There are pervasive leaks throughout the systems and/or insufficient pressure to maintain proper operations.	
	Are there any areas of visible mold/mildew growth?	No		Minor - Mold may be observed in some areas, particularly in basement, storage rooms or mechanical spaces. Moderate - Mold is observed in areas that can become damp during humidity or rain cycles, typically near windows or door areas. Major - Mold is observed in other locations in various areas of the building.	
	Are there complaints of musty odors?	No		Minor - Infrequent complaints from few individuals. Moderate - Frequent complaints during high humidity or after rains. Major - Constant complaints and routinely perceptible odors.	
	Are there areas of the facility that are regularly damp and/or humid?	No		Minor - Some unoccupied areas of the building are damp and humid during periods of high humidity. Moderate - Some occupied areas of the building are damp and humid during periods of high humidity. Major - More than half of the building experiences dampness and humidity	
Plumbing Systems	Are there any clogging/back-up problems?	No		Minor - Occasional clogging or backup due to design or condition issues (not misuse). Moderate - Repeated clogging or backup in specific areas - known issues. Major - Poor or inadequate system design resulting in significant ongoing issues.	
	Are there any plumbing leaks?	No		Minor - There are small seepage leaks or drips in areas that do not affect students or staff. Moderate - There may be persistent leaks in certain locations. Major - There are pervasive leaks throughout the system.	
	Are there any plumbing water pressure issues?	No		Minor - Low pressure in some areas may be experienced during peak times. Moderate - There may be persistent pressure issues during routine use. Major - There is insufficient pressure to maintain proper operations.	
	Have there been any leaks or pressure problems with steam service?	N/A		Minor - There are small seepage leaks or drips in areas that do not affect students or staff. Low pressure in some areas may be experienced during peak times. Moderate - There may be persistent leaks in certain locations and/or pressure issues during routine use. Major - There are pervasive leaks throughout the systems and/or insufficient pressure to maintain proper operations. NOTE: <u>ANY</u> high pressure steam leaks should be considered an emergency and reported to the fire department immediately.	
	Are there any roof leaks?	No		Minor - Seepage or occasional dripping. Moderate - Small but persistent leak(s) that are localized. Major - Significant large or widespread leaks, may affect other systems or finishes.	

Roofs	Are there any problems with roofing systems?	No		Minor - Roof is generally sound but there are areas of ponding, poor drainage or damaged flashing - no leaks or only minor infrequent leaks. Moderate - Roof is serviceable but there are softareas when walking on the roof and there are minor but ongoing leaks. Major - Roof has persistent leaks and is known to have issues with ponding, flashing and/or drainage.	
Site	Is site/parking drainage inadequate, with excessive ponding or other problems?	No		Minor - Occasional ponding a certain areas during or after heavy rainfall. Moderate - Ponding in some areas during normal rainfall, that resolves in a day or so. Major - Excessive ponding and standing water in several areas during normal rains, insufficient overall drainage.	
Skin	Are there any wall leaks?	No		Minor - Occasional dripping during windy conditions Moderate - ocasional leaks during normal rain and heavy leaks during windy conditions, may cause finish damage Major - Always leaks during rain, visible interior damage to walls and flooring.	
	Are there any window leaks?	No		Minor - Occasional dripping during windy conditions Moderate - ocasional leaks during normal rain and heavy leaks during windy conditions, may cause finish damage Major - Always leaks during rain, visible interior damage to walls and flooring.	
Structural	Are there any basement leaks?	No		Minor - The basement has minor leaks during times of heavy rain - occurences are occasional and happen infrequently. Moderate - During heavy rains, basement will leak and require water abatement. Occasional small leaks during prolonger periods of rain. Major - Frequently leaks even during modest or small rains or melting.	
	Are there any problems with foundations or structures, like excessive settlement?	No		Minor - Visible cracks of 1/8" wide or more or surface spalling. Moderate - cracks of 1/4" or more or visible shedding of concrete material. Major - Cracks 1/2" or wider, or visible settling of the structure or walls, significant and worsening cracking, known issues identified by structural engineer.	
Gas Leaks	Have there been any gas leaks observed or reported in the facility?	No		Minor - Occasionally, an odor of gas is noticed or reported on the exterior of the building near gas meters or regulators - not a persistent issue. Moderate - Odors on the exterior of the building are routinely noted or reported near gas meters or regulators. Major - Any other reports of ongoing gas odors, <u>OR ANY INSIDE THE BUILDING</u>. Note that this should be considered an emergency situation and reported to the fire department immediately.	
Building Envelope	Are there any significant cracks or defects in the building exterior walls?	No		Minor - Visible cracks of 1/8" wide or more or surface spalling. Moderate - cracks of 1/4" or more or visible shedding of concrete material. Major - Cracks 1/2" or wider, or visible settling of the walls, significant and worsening cracking.	
	Are there areas with evidence of water intrusion, not associated with known leaks?	No		Minor - Occasional staining of walls or ceilings or near windows. Moderate - Visible staining on walls or ceilings that tend to become worse after heavy rains. Major - walls that become soft or wet after rains.	

Water Quality	Are there reports of complaints related to water color, clarity, odor or taste?	No		Minor - Infrequent complaints from few individuals. Moderate - Routine complaints from numerous individuals. Major - Constant complaints and routinely perceptible odor and taste issues.	
	Has the water from each consumption point in the school been tested for lead in the last three years?	Yes	Minor	Minor - Single or limited number of hazards that don't impact building use or occupant safety. Moderate – Multiple fixtures with exceedances or localized area with main or supply piping contamination. Major – Widespread exceedances suggest multiple sources or indicate main or source piping may contain lead.	
	Are the fixtures at consumption points greater than 10 years old?	No		Minor - Less than 10% Moderate - 10-50% Major - Over 50%	
	Are water filters present at all consumption points?	Yes	Major	Minor - Less than 10% Moderate - 10-50% Major - Over 50%	
	Is there a written filter replacement/maintenance plan in place for all consumption points?	Yes	N/A		
Interior Surfaces	Are interior surfaces (built-in counters, casework, display cases, shelving, etc) in good condition?	Yes		Minor - Some minor chipping or discoloration of surfaces or finishes, but generally presentable and in good to fair condition. Moderate - General wear/tear an aging of surfaces and finishes, serviceable but somewhat worn. Major - Aged, unsightly and/or lots of chipped sufaces, non-functional doors or loose shelving throughout much of the building.	
	Are there areas of deterioriated paint, wood, wallpaper or other surfaces in need of repair?	No		Minor - Generally in good to fair condition, some areas may need repair or repainting but otherwise ok. Moderate - Finsihes are aged, dull, smudged or peeling in some areas of the building, generally servicable but somewhat unsightly. Major - Significant deterioration of wall finishes, unsightly appearance, peeling wallpaper and/or chipped or damaged finishes of other surfaces in much of the building.	
	Are floors generally in good repair and free of cracks, gaps, etc.?	Yes		Minor - Occasional chipping or cracking in flooring but otherwise in good servicable condition. Moderate - cracking or chpiing in a few areas, cracks may be large enough to be felt underfoot. Major - excessive cracking or chipping with some areas presenting potential tripping hazards.	
Hazardous Materials	Are any hazardous materials present improperly stored and labeled?	No	N/A		
	Is there an asbestos management plan in place, if applicable?	N/A	N/A		
Fire Safety	Has the fire alarm system been inspected as required?	Yes	N/A		
	Are fire exits clearly marked?	Yes	N/A		
	Is there an up to date emergency evacuation plan?	Yes	N/A		
ADA	Has an accessibility study been performed at the site? If so, when? - Enter in Comments	Yes	N/A		
	If an ADA study has occurred, have the associated recommendations been addressed? In full or in part? - Enter in Comments	Yes	N/A		In Full
	Have there been regular complaints about accessibility issues, or previous or pending litigation?	No	N/A		

Modernization Questions						
Type	Class	Category	System	Comments (Optional)	Achievement Level (Required)	
Energy	Building	Appliances /Vending	Energy Star Refrigerators in Breakrooms / Community Rooms		Full (100%)	
			Install Energy Savers on Vending, Snack Machines		Full (100%)	
			Install Front Load Commercial / Residential Washers		Mostly (75%)	
			Replace Existing Freezers With High Efficiency Freezers		Full (100%)	
		Envelope	Add Reflective Coating To Exterior Windows		Minimally(25%)	
			Air seal Bldg. Control External Air Leakage		Minimally(25%)	
			Install Rapid Closing Overhead Doors - Warehouse/loading dock		N/A	
			Install Reflective Insulation Between Radiators And External Wall		Full (100%)	
			Upgrade Attic Insulation - R60 Attic Insulation		N/A	
			Upgrade Exterior Windows - Double pane windows with thermal breaks Low-e		Full (100%)	
		Utility Metering	Upgrade Wall Insulation - R30 Wall Insulation		N/A	
			Disconnect & Reconcile Multiple Utility Meters (Central Supply)		Full (100%)	
	Electrical	Install Sub-meters For Electric / Water		Full (100%)		
		Electrical Distribution System Upgrade (Within Past 10 years)		Minimally(25%)		
	HVAC	Lighting	Convert "EXIT" Signs to LED		Full (100%)	
			Convert Exterior Lights to LED		Full (100%)	
			Install Automatic Lighting Controls		Full (100%)	
			Interior LED lighting and occupancy with daylight controls		Partially (50%)	
		Air Handling	Energy Recovery Ventilation (ERV) and air handling units with heat recovery wheels		Full (100%)	
			High Efficiency Motors - AHU		Full (100%)	
			Insulate Air Ducts		Full (100%)	
			Minimum Efficiency Reporting Value (MERV) 13 filters, MERV 11 minimum if higher-rated filters		Full (100%)	
			New ductwork system adequate for heating and cooling demand (Within Past 10 years)		Full (100%)	
			Outside Air Control Through Co2 Sensors in AHU		Full (100%)	
			Steam Clean AHU Fan Coils (Annually)		Full (100%)	
			DDC Controls throughout the building		Full (100%)	
		Controls	Independent temperature control in rooms, offices, classrooms		Full (100%)	
			Install Building Energy Management System		Full (100%)	
			Install Self Learning Programmable Thermostats		N/A	
			Install Thermostatic Radiator Valve (TRV) controls for Steam Radiators		N/A	
			Re-Commission The Building & Control Systems (Within past five years)		Full (100%)	
			Timers on Manual Exhaust Fans		N/A	
			Upgrade Pneumatic to DDC for Building Controls		N/A	
			Dehumidification systems for summer use		Full (100%)	
		Cooling	Install high SEER Split Heat Pump Air Conditioning Systems		N/A	
			Install SEER 10+ Through the Window AC Units		N/A	
			Install SEER 16+ Split Air Conditioning Systems		N/A	
			Install SEER 18+ Ductless Split Air Conditioning System		Full (100%)	
	Insulate Refrigerant Lines			Full (100%)		
	Replace Rooftop Package Units (Within Past 10 years)			Full (100%)		
	Upgrade Chillers /Cooling Systems (Within Past 10 years)			Full (100%)		
	Install High Efficiency Boilers			Full (100%)		
	Heating	Repair / Install Hot Water Pipe Insulation (Annually)		Full (100%)		
		Repair /Install Insulation on Hot Surfaces And Tanks		Full (100%)		
		Replace Defective Steam Traps		N/A		
		Electric baseboard heat		Full (100%)		
		Replace Unit Heaters (Within Past 10 years)		Full (100%)		
		Upgrade Electric Heating System To Heat Pumps		Full (100%)		
		Hydronic and piping	Install Hydronic Piping 4 pipe system		Full (100%)	
		Make-up air units (MUA)	Install MUA units in kitchens		Full (100%)	
	Pump /Fan Motors	High Efficiency Motors - Cooling Towers		Full (100%)		
		VFD on AHU and Pump Motors		Full (100%)		
Plumbing	DWH	Lower DWH Setpoint to 122F - (Not for Commercial Kitchen)		Full (100%)		
		Setback loop on Circulation Pump		Full (100%)		
		Upgrade Domestic Water heaters (Within Past 10 years)		Full (100%)		
	HVAC	Repair / Install Hot Water Pipe Insulation (HVAC Piping)		Full (100%)		
		Repair /Install Insulation on Hot Surfaces And Tanks (HVAC Systems)		Full (100%)		
	Irrigation	Install Smart Irrigation System		Full (100%)		
		Central Domestic Hot Water separate from full heating system?		Full (100%)		
		Install 0.125GPF Urinals		Full (100%)		
		Install 0.5 Low Flow Faucet Aerators in Restrooms		Full (100%)		
		Install 1.0GPM Low Flow Flush Tank Toilets		Full (100%)		
		Install 1.5GPM Aerator in Kitchen/ Break Rm. Faucets		Full (100%)		
		Install 1.5GPM Low Flow Shower Heads		Full (100%)		
Retrofit Commercial Toilets to Dual Flush			Full (100%)			
Pump /Fan Motors	High Efficiency Motors - Circulation Pumps		Full (100%)			
Modernization	Building	Fire Alarm	Upgrade Fire alarm system with addressable panel		Full (100%)	
		Fire Suppression	Full-coverage fire suppression		Full (100%)	
		Flooring	Are floors durable with low maintenance? (Durable rubber, terrazzo, high quality VCT, etc)		Full (100%)	
		Generator	Is backup generator system on site providing full backup?		Not Compliant	
		Interior upgrades	Casework upgrade		Minimally(25%)	
			Install suspended ceiling in areas of no finish		Full (100%)	
			Is elevator available to staff and students.		Full (100%)	
		Security	Card access system		Full (100%)	
		Site	Sufficient parking available		Full (100%)	
		Plumbing	Plumbing	Upgrade plumbing system supply and sanitary water system (Within Past 10 years)		Full (100%)
			Comm upgrade	Ethernet and high bandwidth Wi-Fi		Full (100%)
		Sufficiency	Interior upgrades	Electronic Whiteboards in classrooms		Full (100%)
Security	PA systems and Visual displays for classrooms and Hallways			Full (100%)		
	Site	Artificial turf playing fields and courts		N/A		
Non-idling bus lanes			Full (100%)			

Asset Lifecycle Analysis (Enter Values Where Applicable)

System Type	System Group	Asset Name	EUL	New Unit Cost	UoM	Comments (Optional)	Quantity	Total Cost	RUL	Percent Used
Building Equipment & Systems	Conveyances	Hydraulic Elevator/Controller/Cab	25	\$ 50,000.00	Stops		-	\$ -		
		Traction Elevator/Controller/Cab	25	\$ 75,000.00	Stops		-	\$ -		
		Wheelchair Lift	25	\$ 28,000.00	EA		-	\$ -		
	Electrical Distribution	Electrical Service - MDP - High Density	40	\$ 20.00	GSF		-	\$ -		
		Electrical Service - MDP - Standard Density	40	\$ 16.00	GSF		46,480	\$ 743,680	19	53%
		Electrical Service - MDP/Gen/UPS - High Density	40	\$ 24.00	GSF		-	\$ -		
		Electrical Service - MDP/Gen/UPS - Standard Density	40	\$ 20.00	GSF		-	\$ -		
		Lighting - High Density and/or High End Fixtures	20	\$ 13.00	SF		-	\$ -		
		Lighting - Standard Density & Standard Fixtures	20	\$ 8.00	SF		46,480	\$ 371,840	15	25%
		Security & Low Voltage Systems - Standard Density	15	\$ 9.00	GSF		46,480	\$ 418,320	10	33%
		Security & Low Voltage Systems - High Density	15	\$ 12.00	GSF		-	\$ -		
		Solar PV Panel w/Inverter	20	\$ 2,000.00	EA		-	\$ -		
		Switchgear w/Sub Panels - High Density	40	\$ 22.00	GSF		-	\$ -		
		Switchgear w/Sub Panels - Standard Density	40	\$ 18.00	GSF		46,480	\$ 836,640	15	63%
		Switchgear w/Sub Panels/Gen/UPS - High Density	40	\$ 27.00	GSF		-	\$ -		
		Switchgear w/Sub Panels/Gen/UPS -Standard Density	40	\$ 23.00	GSF		-	\$ -		
	HVAC	Boiler(s)/System - Coal	30	\$ 62.00	MBH		-	\$ -		
		Boiler(s)/System - Dual Fuel	30	\$ 62.00	MBH		-	\$ -		
		Boiler(s)/System - Electric	30	\$ 57.00	MBH		-	\$ -		
		Boiler(s)/System - Condensing	30	\$ 90.00	MBH		1,540	\$ 138,600	25	17%
		Boiler(s)/System - Fuel Oil	30	\$ 60.00	MBH		-	\$ -		
		Boiler(s)/System - Gas	30	\$ 62.00	MBH		-	\$ -		
		Chiller(s) / Cooling Tower(s) - Air Sourced	25	\$ 1,200.00	TON		-	\$ -		
		Chiller(s) / Cooling Tower(s) - Water Sourced	25	\$ 1,500.00	TON		-	\$ -		
		Electrical Heat (NOT part of Central System)	35	\$ 50.00	MBH		-	\$ -		
		Even Mix of Package Units & Split Systems	18	\$ 1,900.00	TON		600	\$ 1,140,000	13	28%
		Forced Air System, 2-Pipe System	30	\$ 18.00	GSF		-	\$ -		
		Forced Air System, 4-Pipe System	30	\$ 22.00	GSF		-	\$ -		
		Geothermal System (Heating and/or Cooling)	20	\$ 145.00	MBH		-	\$ -		
		Off-Site Chilled Water Plant (Distribution ONLY)	25	\$ 420.00	TON		-	\$ -		
		Off-Site Steam Plant (Distribution ONLY)	30	\$ 35.00	MBH		-	\$ -		
		Package Units (RTUs)	20	\$ 7,000.00	TON		57	\$ 399,000	15	25%
		Piped System - Unit Ventilators/Fan Coils, 2-Pipe	30	\$ 10.00	GSF		-	\$ -		
		Split Systems	15	\$ 2,000.00	TON		20	\$ 40,000		-7%
	Life Safety	Fire Alarm System, Advanced Addressable	20	\$ 6.00	SF		-	\$ -		
		Fire Alarm System, Basic/Zoned	20	\$ 1.50	SF		-	\$ -		
		Fire Alarm System, Standard Addressable	20	\$ 3.00	SF		46,480	\$ 139,440	15	25%
		Sprinkler System, High Density/Complexity	40	\$ 8.76	SF		46,480	\$ 407,165	19	53%
		Sprinkler System, Standard Density/Complexity	40	\$ 3.40	SF		-	\$ -		
	Plumbing Fixtures	Supply & Sanitary, High Density (w/Fixtures)	40	\$ 20.00	GSF		2,232	\$ 44,640	15	63%
		Supply & Sanitary, Low Density (w/Fixtures)	40	\$ 7.00	GSF		-	\$ -		
		Supply & Sanitary, Standard Density (w/Fixtures)	40	\$ 15.00	GSF		-	\$ -		
	Program Support Equipment	Casework - Premium Quality	22	\$ 510.00	LF		350	\$ 178,500	0	100%
		Casework - Standard Quality	20	\$ 421.00	LF		-	\$ -		
		Commercial Kitchen Equipment - Cooking	15	\$ 40,000.00	LS		48	\$ 1,920,000	9	40%
		Commercial Kitchen Equipment - Serving Only	15	\$ 15,000.00	LS		-	\$ -		
		Commercial Kitchen Equipment - Warming Only	15	\$ 25,000.00	LS		-	\$ -		
		Swimming pool	20	\$ 80.00	SF		-	\$ -		
Building Exterior	Roofs	Asphalt Shingle Roof	20	\$ 8.00	SF		4,000	\$ 32,000	0	100%
		Built-Up Roof	20	\$ 28.00	SF		-	\$ -		
		Clay Tile Roof	50	\$ 29.00	SF		-	\$ -		
		Green w/Hot-Applied Rubberized Asphalt Roof	20	\$ 35.00	SF		-	\$ -		
		Inverted Roof Membrane Assembly (IRMA)	20	\$ 10.00	SF		-	\$ -		

Building Exterior	Roofs	Metal Roof	50	\$	39.00	SF		-	\$	-		
		Modified Bituminous Roof	20	\$	26.00	SF		-	\$	-		
		Roof Skylight	30	\$	50.00	SF		64	\$	3,200	9	70%
		Roof Structure/Framing	75	\$	30.00	SF		-	\$	-		
		Single-Ply EPDM Membrane Roof	20	\$	25.00	SF		42,480	\$	1,062,000	0	100%
		Single-Ply TPO/PVC Membrane Roof	20	\$	25.00	SF		-	\$	-		
		Slate Roof	75	\$	49.00	SF		-	\$	-		
	Skin	Brick - Exterior Wall	50	\$	39.80	SF		6,000	\$	238,800	29	42%
		Concrete Block (CMU) - Exterior Wall	50	\$	26.00	SF		-	\$	-		
		Concrete Cast-in-Place - Exterior Wall	50	\$	31.00	SF		-	\$	-		
		Concrete Tilt-Up - Exterior Wall	50	\$	18.00	SF		-	\$	-		
		Curtain Wall - Exterior Wall	50	\$	110.00	SF		-	\$	-		
		Exterior Door, Aluminum-Framed Fully-Glazed	40	\$	4,500.00	EA		-	\$	-		
		Exterior Door, FRP (Fiber Reinforced Plastic)	35	\$	4,200.00	EA		36	\$	151,200	31	11%
		Exterior Door, Steel	40	\$	3,735.00	EA		-	\$	-		
		Exterior Door, Wood	25	\$	2,865.00	EA		-	\$	-		
		Exterior Overhead Door, Aluminum	30	\$	5,000.00	EA		-	\$	-		
		Exterior Overhead Door, Steel	30	\$	3,200.00	EA		-	\$	-		
		Exterior Overhead Door, Wood	30	\$	3,000.00	EA		-	\$	-		
		Exterior Service Door, Steel	40	\$	3,400.00	EA		-	\$	-		
		Exterior Siding, Aluminum	40	\$	11.00	SF		2,000	\$	22,000	35	13%
		Exterior Siding, Fiber Cement	45	\$	9.00	SF		-	\$	-		
		Exterior Siding, Vinyl	30	\$	10.00	SF		-	\$	-		
		Exterior Siding, Wood Clapboard	30	\$	16.00	SF		-	\$	-		
		Glass Block - Exterior Wall	40	\$	50.00	SF		-	\$	-		
		Metal/Insulated Panels - Exterior Wall	45	\$	22.00	SF		-	\$	-		
		Stone - Exterior Wall	50	\$	60.00	SF		-	\$	-		
		Storefront, Metal-Framed w/Door(s)	30	\$	55.00	SF		-	\$	-		
		Stucco - Exterior Wall	50	\$	20.00	SF		-	\$	-		
		Window, Metal-Frame	30	\$	60.00	SF		2,000	\$	120,000		-20%
		Window, Ribbon Metal-Framed	30	\$	55.00	SF		-	\$	-		
		Window, Wood-Frame	30	\$	70.00	SF		-	\$	-		
	Structural	Basement Wall, Concrete	100	\$	36.48	SF		-	\$	-		
		Basement Wall, Masonry	100	\$	26.17	SF		-	\$	-		
		Basement Wall, Stone	100	\$	72.17	SF		-	\$	-		
		Concrete Cast-in-Place Structural Framing	100	\$	40.00	SF		-	\$	-		
		Concrete Pre-Cast Structural Framing	100	\$	40.00	SF		-	\$	-		
		Concrete Slab-on-Grade	100	\$	8.00	SF		46,480	\$	371,840	26	74%
		Masonry Bearing Walls Structural Framing	100	\$	30.00	SF		15,516	\$	465,480	26	74%
		Shallow Foundation - Concrete Footings	100	\$	120.00	LF		1,300	\$	156,000	26	74%
		Shallow Foundation - Concrete Footings 3+ Stories	100	\$	140.00	LF		-	\$	-		
		Shallow Foundation - Concrete Slab-on-Grade	100	\$	16.00	SF		-	\$	-		
		Steel Columns & Beams Structural Framing	100	\$	45.00	SF		46,480	\$	2,091,600	26	74%
		Steel, Light Gauge Structural Framing	100	\$	26.00	SF		15,516	\$	403,416	26	74%
		Wood, Conventional Stud Structural Framing	100	\$	14.68	SF		-	\$	-		
		Wood, Heavy Timber Structural Framing	100	\$	31.95	SF		-	\$	-		
Building Exterior	Ceilings	Fiberglass Panel Ceiling	25	\$	8.05	SF		-	\$	-		
		Gypsum Board/Plaster Ceiling	30	\$	4.84	SF		-	\$	-		
		Splined Acoustical Tile (ACT) Ceiling	25	\$	6.75	SF		-	\$	-		
		Suspended Acoustical Tile (ACT) Ceiling	25	\$	7.60	SF		27,214	\$	206,826	20	20%
		Textured Spray Coating Ceiling	20	\$	8.45	SF		-	\$	-		
		Wood Ceiling	30	\$	30.50	SF		-	\$	-		
	Flooring	Carpet	12	\$	4.00	SF		1,925	\$	7,700	7	42%
		Ceramic Tile Floor	40	\$	17.30	SF		2,000	\$	34,600	35	13%
		Concrete - Painted Floor	10	\$	1.96	SF		1,000	\$	1,960	5	50%
		Quarry Tile Floor	50	\$	19.55	SF		-	\$	-		
		Terrazzo Floor	50	\$	28.00	SF		-	\$	-		

Building Interior		Vinyl Composition Tile (VCT) Floor	20	\$ 2.73	SF		29,400	\$ 80,262	15	25%
		Vinyl Composition Tile (VCT) Floor - Suspect ACM	15	\$ 5.39	SF		-	\$ -		
		Vinyl Sheeting Floor	15	\$ 3.80	SF		2,900	\$ 11,020	10	33%
		Wood Sports Floor	30	\$ 23.00	SF		-	\$ -		
	Interior Construction	Brick Interior Wall	50	\$ 35.70	SF		-	\$ -		
		Concrete Block (CMU) Interior Wall	50	\$ 11.00	SF		2,280	\$ 25,080	9	82%
		Concrete Block (CMU), Glazed Interior Wall	50	\$ 32.08	SF		-	\$ -		
		Concrete Interior Wall	50	\$ 28.30	SF		-	\$ -		
		Gypsum Board/Plaster Interior Wall	20	\$ 7.14	SF		11,200	\$ 79,968	0	100%
		Storefront/Glazing System - Interior Wall	30	\$ 58.00	SF		-	\$ -		
	Interior Doors and Hardware	Aluminum-Framed Fully-Glazed - Interior Door	40	\$ 2,104.00	EA		-	\$ -		
		Steel - Interior Door	40	\$ 1,166.00	EA		8	\$ 9,328	0	100%
		Steel w/Glazing - Interior Door	40	\$ 1,854.00	EA		-	\$ -		
		Wood Solid-Core - Interior Door	40	\$ 1,214.00	EA		112	\$ 135,968	0	100%
		Wood Solid-Core w/Glazing - Interior Door	40	\$ 1,554.00	EA		-	\$ -		
	Wall Finishes	Acoustical Paneling Interior Wall	25	\$ 12.00	SF		-	\$ -		
		Ceramic Tile Interior Wall	40	\$ 18.00	SF		-	\$ -		
		Fiberglass Panel Interior Wall	50	\$ 12.00	SF		-	\$ -		
		Quarry Tile Interior Wall	50	\$ 26.00	SF		-	\$ -		
		Vinyl Interior Wall Covering	15	\$ 2.50	SF		-	\$ -		
		Wood Interior Wall Paneling	30	\$ 12.00	SF		-	\$ -		
Site	Modulars	Modular Bldg. - Classroom/Office - Basic	20	\$ 115.00	SF		-	\$ -		
		Modular Bldg. - Classroom/Office - Standard	20	\$ 225.00	SF		-	\$ -		
	Relocatables	Relocatable Bldg. - Classroom/Office - Basic	15	\$ 110.00	SF		-	\$ -		
		Relocatable Bldg. - Classroom/Office - Standard	15	\$ 125.00	SF		-	\$ -		
	Site	Asphalt Pavement - Pedestrian	30	\$ 6.00	SF		-	\$ -		
		Asphalt Pavement - Vehicular	25	\$ 6.50	SF		69,350	\$ 450,775	0	100%
		Athletic Surface - Artificial Turf	20	\$ 13.38	SF		-	\$ -		
		Athletic Surface - Lawn Area	15	\$ 0.48	SF		-	\$ -		
		Concrete Pavement - Pedestrian	50	\$ 8.00	SF		10,250	\$ 82,000	22	56%
		Concrete Pavement - Vehicular	50	\$ 9.00	SF		-	\$ -		
		Gravel Parking Lot	7	\$ 1.40	SF		-	\$ -		
		Pavers - Pedestrian	35	\$ 33.00	SF		-	\$ -		
		Pavers - Vehicular	30	\$ 33.00	SF		-	\$ -		
		Playground Surface - Packed Sand	20	\$ 1.20	SF		-	\$ -		
		Playground Surface - Rubber	20	\$ 21.00	SF		-	\$ -		
		Playground Surface - Rubber Chips	20	\$ 4.98	SF		-	\$ -		
		Playground Surface - Wood Chips	15	\$ 0.90	SF		17,100	\$ 15,390	10	33%
		Sports Courts, Asphalt	15	\$ 6.50	SF		-	\$ -		
		Sports Courts, Concrete	30	\$ 12.00	SF		-	\$ -		

Cell: E114

Comment: [Threaded comment]

Your version of Excel allows you to read this threaded comment; however, any edits to it will get removed if the file is opened in a newer version of Excel. Learn more: <https://go.microsoft.com/fwlink/?linkid=870924>

Comment:

Includes abatement and replacement

System Group	System
Electrical Distribution	Electrical Service - MDP - High Density
Electrical Distribution	Electrical Service - MDP - Low Density
Electrical Distribution	Electrical Service - MDP - Medium Density
Electrical Distribution	Electrical Service - MDP/Gen/UPS - High Density
Electrical Distribution	Electrical Service - MDP/Gen/UPS - Low Density
Electrical Distribution	Electrical Service - MDP/Gen/UPS - Medium Density
Electrical Distribution	Lighting - High Density & Standard Fixtures
Electrical Distribution	Lighting - Low Density & Standard Fixtures
Electrical Distribution	Lighting - Medium Density & Standard Fixtures
Electrical Distribution	Lighting - Very High Density or High-End Fixtures
Electrical Distribution	Security & Low Voltage Systems - Average Density

Electrical Distribution	Security & Low Voltage Systems - High Density
Electrical Distribution	Switchgear w/Sub Panels - High Density
Electrical Distribution	Switchgear w/Sub Panels - Low Density
Electrical Distribution	Switchgear w/Sub Panels - Medium Density
Electrical Distribution	Switchgear w/Sub Panels/Gen/UPS - High Density
Electrical Distribution	Switchgear w/Sub Panels/Gen/UPS - Low Density
Electrical Distribution	Switchgear w/Sub Panels/Gen/UPS - Medium Density
Life Safety	Sprinkler System, High Density/Complexity
Life Safety	Sprinkler System, Low Density/Complexity
Life Safety	Sprinkler System, Medium Density/Complexity
Plumbing Fixtures	Supply & Sanitary, High Density (w/Fixtures)
Plumbing Fixtures	Supply & Sanitary, Low Density (w/Fixtures)
Plumbing Fixtures	Supply & Sanitary, Medium Density (w/Fixtures)

Plumbing Fixtures	Supply & Sanitary, Very Low Density (w/Fixtures)
Program Support Equipment	Commercial Kitchen Equipment - Cooking
Program Support Equipment	Commercial Kitchen Equipment - Serving Only
Program Support Equipment	Commercial Kitchen Equipment - Warming Only
Program Support Equipment	Casework - Premium Quality
Program Support Equipment	Casework - Standard Quality
Program Support Equipment	Casework - Sub-Standard Quality
Modulars	Modular Bldg. - Classroom/Office - Basic
Modulars	Modular Bldg. - Classroom/Office - Standard
Relocatables	Relocatable Bldg. - Classroom/Office - Basic
Relocatables	Relocatable Bldg. - Classroom/Office - Standard

t Density Guidance

Guidance Text

Technical high schools with dense laboratory configurations *could be* **High Density**, Assessor Discretion.

Outbuildings, pavilions, etc with light electrical systems (like a handful of outlets) should be low density.

Most schools will be **Medium Density**

If the building has *both* a UPS system and a large generator, consider **High Density**, especially if a technical high school with labs.

Outbuildings, pavilions, etc with light electrical systems (like a handful of outlets) but also have a small generator or UPS should be low density.

Most schools will be **Medium Density**, use this selection if they also have a generator and/or ups.

Schools with primarily LED lighting fixtures should be considered **High Density**.

Schools with typical surface mounted fluorescent lighting and incandescent type bulb fixtures (even with LED or CF retrofits) can be considered **Low Density**.

Schools with primarily suspended ceiling mounted fluorescent lighting fixtures (even with LED or CF retrofits) can be considered **Low Density**.

Schools with premium quality fixtures and higher lighting density should be classified as **Very High Density**

Most schools will be **Average Density**

Schools with sophisticated security systems or other Low Voltage systems may be **High Density**

Technical high schools with dense laboratory configurations *could be* **High Density**, Assessor Discretion.

Outbuildings, pavilions, etc with light electrical systems (like a handful of outlets) should be low density.

Most schools will be **Medium Density**

If the building has *both* a UPS system and a large generator, consider **High Density**, especially if a technical high school with labs.

Outbuildings, pavilions, etc with light electrical systems (like a handful of outlets) but also have a small generator or UPS should be low density.

Most schools will be **Medium Density**, use this selection if they also have a generator and/or ups.

Generally, schools that have complete sprinkler coverage should be **High Density**.

Schools with primarily stand-pipe systems and few sprinkler heads should be considered **Low Density**

Schools with partial sprinkler systems (like an addition that is fully sprinklered, while the original is not) should be **Medium Density**

Technical high schools with dense laboratory configurations *could be* **High Density**, Assessor Discretion.

Most schools will be **Low Density**

Schools with Locker Rooms/Showers and science labs should be **Medium Density**.

Outbuildings, pavilions, etc with light plumbing (like hose connections/and or drinking fountains) should be very low density.

A Cooking kitchen will be a “full kitchen” where food is stored, prepared, cooked and served.

A Serving Only kitchen is where food is brought in from the outside and immediately served. There are no cooking or rewarming equipment.

A Warming kitchen is where previously prepared and cooked food is brought in from the outside and where the food is then rewarmed and served on-site.

Premium quality casework is typically constructed of 100% solid $\frac{3}{4}$ ” wood or metal materials. It is durable and stout, sometimes with glass front cabinets and stone or synthetic stone counters, if equipped.

Standard quality Casework is typically MDF type materials of $\frac{3}{4}$ ” construction and may contain durable synthetic counters.

Sub-standard casework is constructed of materials $\frac{1}{2}$ ” or less in thickness and may feature non-durable laminate or wood counters.

Modulars that are stand-alone, have “trailer” style finishes and lack typical building/classroom finishes will be considered Basic.

Most Modulars will be considered Standard if they feature typical building, finishes and are fairly indistinguishable from a typical building to the untrained eye.

Relocatables that are stand-alone, have “trailer” style finishes and lack platform access and/or heating/cooling will be considered Basic.

Most relocatables will be considered Standard if they feature skirting, platform access and typical building/classroom-type finishes.