APPENDIX E:

CAPITAL NEEDS SUMMARY

ı	Building A	Foundation Hall	
Comments:	Building to be replaced		
ARCHITECTURAL	Roof Repair Flooring Repairs Lighting Repairs	North Structural Wall Repair Ceiling Repairs Lighting Repairs Flooring Repairs Interior Wall Repairs	
HVAC	Air Handling Unit Replacement Ductwork Replacement w/ Original VAV Terminals Exhaust System Replacement Heating Equipment/Piping Replacement Chilled Water Equipment/Piping Replacement Temperature Control System Replacement	Air Handling Unit Replacement Ductwork / Distribution System Replacement Exhaust System Replacement Heating Equipment/Piping Replacement Chilled Water Equipment/Piping Replacement Temperature Control System Replacement	
PLUMBING	Water/Waste Plumbing Replacement Water Heater System Replacement	Water/Waste Plumbing Replacement Water Heater System Replacement	
	Fire Sprinkler Installation Service Sink Replacement Sanitary/Sewer System (Backup during rain)	Fire Sprinkler Installation Plumbing Fixture Replacement	
ELECTRICAL	Surge protection devices installation (at panel boards)	Surge protection devices installation (at panelboards)	
	Emergency generator installation (for non-life safety loads) and related exit and emergency lighting	Branch circuit wiring replacement	
	T8 lamp and electric ballast replacement	Emergency power generator installation w/ related exit and emergency lighting	

Building C	Building F	Blue Hole - Transfer
	Interested in selling due to ADA - move services elsewhere	
Window Replacement	Ceiling Repairs Lighting Repairs Flooring Repairs	No major capital project
Air Handling Unit Replacement Ductwork Replacement Exhaust System Replacement Heating Equipment/Piping Replacement Unit Ventilator Equipment Temperature Control System Replacement	Air Handling Unit Replacement Unit Ventilator Replacement Ductwork Replacement Exhaust System Replacement Heating Equipment/Piping Replacement Temperature Control System Replacement	No major capital project
Water Heater System Replacement	Water Heater System Replacement	No major capital project
Surge protection devices installation (at panelboards) Partial panelboards replacement	Surge protection devices installation (at panelboards) Branch Distribution System Replacement	Surge Protection device installation at panelboards
Partial branch circuit wiring replacement Emergency power generator replacement (2 generators) w/ related exit and emergency lighting	Emergency power generator installation w/ related exit and emergency lighting Fire Alarm System Replacement T8 lamp and electric ballast replacement	
	Partial Roof Replacement Partial Coping/Flashing/Sealant Replacement Window Replacement Air Handling Unit Replacement Ductwork Replacement Exhaust System Replacement Heating Equipment/Piping Replacement Unit Ventilator Equipment Temperature Control System Replacement Water/Waste Plumbing Replacement Water Heater System Replacement Fire Sprinkler Installation Service Sink Replacement Surge protection devices installation (at panelboards) Partial panelboards replacement Partial branch circuit wiring replacement Emergency power generator replacement (2	Partial Roof Replacement Partial Coping/Flashing/Sealant Replacement Window Replacement Window Replacement Window Replacement Air Handling Unit Replacement Ductwork Replacement Exhaust System Replacement Unit Ventilator Replacement Heating Equipment/Piping Replacement Unit Ventilator Equipment Temperature Control System Replacement Water/Waste Plumbing Replacement Water Heater System Replacement Water Heater System Replacement Water Replacement Water Replacement Water Heater System Replacement Water Heater System Replacement Water Heater System Replacement Water Replacement Water Plumbing Replacement Water Heater System Replacement Water Heater System Replacement Water Replacement Eric Sprinkler Installation Service Sink Replacement Plumbing Fixture Replacement Surge protection devices installation (at panelboards) Partial panelboards replacement Branch Distribution System Replacement Emergency power generator installation w/ related exit and emergency lighting Fire Alarm System Replacement

·	Building H Building M		Building T	
Comments:				
ARCHITECTURAL	No major capital project	Roof Replacement Partial Coping/Flashing/Sealant Replacement Window Repair/Replacement Building Settlement (west and east side of building) Prevention	Roof Repair/Replacement Parapet/Flashing/Sealant Replacement Exterior wall repair Some exterior window replacement Door Replacement Ceiling Replacement Flooring Replacement Lighting Replacement	
HVAC	Temperature Control System Replacement	Air Handling Unit Replacement Ductwork Replacement Exhaust System Replacement Heating Equipment/Piping Replacement	Air Handling Unit Replacement (Partial) VAV terminal unit replacement Ductwork Replacement Exhaust System Replacement Heating Equipment/Piping Replacement Air cooled condensing unit replacement Temperature control system replacement	
PLUMBING	No capital projects	Water/Waste Plumbing Replacement Sanitary/Sewer System (Backup during rain up to 1st floor, sub-basement flooding) Water Heater System Replacement Fire Sprinkler Installation	Domestic Water System Replacement Water Heater/Piping Replacement Fire Sprinkler Installation	
ELECTRICAL	Surge protection devices installation (at panelboards) Fire Alarm System ADA upgrade / repair	Panelboards replacement (locally) Surge protection devices installation (at panelboards) Ground fault/surge protection devices installation (at switchboards) Branch circuit wiring replacement Emergency power system upgrades (new natural gas generator) Limited substation replacement (to correct ADA violations) T8 lamp and electric ballast replacement Exit and emergency lighting replacement (connect to generator) Fire alarm system ADA upgrades / repairs	Surge protection devices installation (at panelboards) Branch circuit wiring replacement Emergency power system upgrades (new natural gas generator) Fire Alarm System Upgrades Limited substation replacement (to correct code violations) Partial panelboards replacement T8 lamp and electric ballast replacement	

•	Building S	MEC - South	Storage Building	
Comments:				
ARCHITECTURAL	Roof Repair Façade Repair (Masonry & Stone) Building Envelope / Curtain wall leaks Ceiling Repairs Replace exterior glazing w/ more energy efficient	Flooring Replacement Lighting Replacement	Partial Roof Repair Window Replacement Lighting Repairs Interior Wall Repair Partial Door Replacement	
HVAC	Steam and hot water system replacement Temperature control system replacement	Steam propeller unit replacement Ductwork Replacement (Partial) Exhaust System Replacement Heating Equipment/Piping Replacement Temperature control system replacement	No capital projects	
PLUMBING	Waste Water Piping Replacement	Domestic Water Piping Replacement Plumbing Fixture Replacement	No capital projects	
ELECTRICAL	Surge protection devices installation (at panelboards)	Ground fault/surge protection devices installation (at switchboards)	Fire Alarm System Installation	
	Emergency power system upgrades (new natural gas generator)	Panelboards Replacement	Building Security System Installation	
	Fire alarm system upgrades	Fire Alarm System Replacement	Panelboards replacement	
		Limited switchboard replacement (to correct ADA violations)	Surge protection installation at panelboards	
		Emergency power replacement including new generator T8 lamp and electric ballast replacement	Exit and emergency lighting installation Lighting system replacement	

Commonto	Student Annex Bookstore	Union 212 Building	Auction Building
Comments: ARCHITECTURAL	No capital projects	Partial Roof Repair Ramp and Stair Repair	Exterior CMU Wall Repairs Window Replacement
HVAC	No capital projects	No capital projects	No assessment performed
PLUMBING	No capital projects	No capital projects	No assessment performed
ELECTRICAL	Switchboard Replacement Surge protection devices installation (at panelboards) Second-floor panelboards replacement Emergency generator installation w/ related exit and emergency lighting	Surge protection devices installation (at panelboards) Fire Alarm System Installation (to replace existing)	No assessment performed

	Main Building	Barn/Shed
Comments:		Can be used for storage only
ARCHITECTURAL	Roof Repair	Roof Replacement
	Parapet/Flashing/Sealant Repair	Façade Repairs
	Ceiling Repairs	Exterior Door Replacement
	Window Replacement	Window Repairs
	Façade Repairs	Interior Door Repairs
		Wall Repairs
		Ceiling Repairs
		Flooring Repairs
		Lighting Repairs
HVAC	Air Handling Unit Replacement	
	Ductwork Replacement including original VAV terminals	
	Exhaust System Replacement	
	Boiler Equipment/Piping Replacament	
	Cooling Plant/Piping Repairs (Replacement of oversized	
	chiller)	
	Temperature Control System Replacement	
PLUMBING	Fire Sprinkler Installation	
	Domestic Hot Water Circulating Pump Replacement	
	Service Sink Replacement	
ELECTRICAL	Switchboard/Substation Replacement	Electric Panelboard
		Replacement
	Surge protection devices installation (at panelboards)	Fire Alarm System
		Installation
	Fire Alarm system upgrade	Exit and Emergency Lighting
		Installation

Milwaukee Area Technical College Facilty Master Plan Oak Creek Campus

	Building A/B/C (Main Building)	E-CAM	Aviation Center
Comments:			
ARCHITECTURAL	Partial Roof Repair/Replacement	No major capital project	Local Foundation Repairs
	Parapet/Flashing/Sealant Repair		
	Partial Ceiling Repairs		
	Partial Window Replacement		
HVAC	Air Handling Unit Replacement	No major capital project	Air Handling Unit Replacement
	Ductwork Replacement		Ductwork Replacement
	VAV Terminal Unit Replacement		Temperature Control System Replacement
	Exhaust System Replacement		Exhaust System Replacement
	Heating Water Pumps/Piping Replacement		Heating Water Piping Replacement
	Chilled Water Piping Replacement		Outdoor Condensing Unit Replacement
	Outdoor Condensing Unit Replacement		
	Temperature Control System Replacement		
PLUMBING	Domestic Water System Replacement	Water Heater System	Domestic Water System Replacement
	Water Heater Replacement	Replacement	Plumbing Fixture Replacement
	Service Sink Replacement		Fire Sprinkler Installation
			Water Heater System Replacement
ELECTRICAL	Switchboard/Substation Replacement	Surge Protection	Main Distribution Panel Replacement
	Surge protection devices installation (at	Installation	Surge protection devices installation (at
	panelboards)		panelboards)
	Building B - Branch Circuit Wiring		Emergency Power Generator Installation w/
	Replacement		Related Exit and Emergency Lighting
	Building B - Exit and Emergency Lighting		Fire Alarm System Replacement
	Upgrades to Generator		
	Fire Alarm ADA Upgrades		Electronic Access Control System
			Installation
			T8 lamp and electric ballast installation

Milwaukee Area Technical College Facilty Master Plan West Allis Campus

West Allis Campus	Main Building	Building A	Children's Center	Funeral Services
Comments:	-			
ARCHITECTURAL	Partial Roof Replacement Parapet/Flashing/Sealant Repair Façade Repairs Window Replacement Partial Ceiling Repairs	Roof Repairs Flashing Repair Façade Repairs Partial Ceiling Repairs Interior Wall Repairs	Local Foundation Repairs	All new / recently constructed
		Lighting System Replacement		, .
HVAC	Air Handling Unit Replacement (Except for Building Addition) Ductwork Replacement (Except for Building Addition)	Air Handling Unit Replacement Ductwork Replacement	No major capital projects	All new / recently constructed
	VAV Terminal Unit Replacement (Except for Exhaust System Replacement (Except for Building Addition)	Exhaust System Replacement Heating Equipment/Piping Replacement		
	Heating Equipment/Piping Replacement Chilled Water Piping Replacement Outdoor Condensing Unit Replacement Staging Tank for Cooling Tower - Replacement Temperature Control System Replacement	Chilled Water Piping Replacement Outdoor Condensing Unit Replacement Temperature Control System Replacement		
PLUMBING	Domestic Water System Replacement (Except for Building Addition) Water Heater System Replacement Service Sink Replacement	Domestic Water System Replacement Sanitary/Sewer System (Backup during rain) Plumbing Fixture Replacement Fire Sprinkler Installation Water Heater Replacement	No major capital projects	All new / recently constructed
ELECTRICAL	120/240 V Single-Phase Panelboard Replacement Partial Substation Replacement Fire Alarm System ADA Upgrade	Surge protection devices installation (at panelboards) T8 lamp and electric ballast installation Fire Alarm System ADA Upgrade	Surge protection devices installation (at panelboards)	Surge protection devices installation (at panelboards)