

**Maryland Port Administration EPC PROJECT -Equipment list 1**

SUMMARY OF ALL COST ITEMS

ENERGY PERFORMANCE CONTRACT

DGS PROJECT #

Building	Energy Conservation Measures	Equipment	Total Cost \$
World Trade Center	ECM 1 - Lighting Upgrades	348 x Retrofit 1L fixture w/ (1) 1L Low Power HE universal voltage electronic ballast and (1)F28T8 lamp	405,955.00
		229 x Retrofit 2 existing 1L fixtures tandem wire fixtures with a new 2L Low Power HE universal voltage electronic ballast and (2)F25/T8 22 watt energy saver lamps (originally 2 1-lamp 3' fixtures converted into 1 2-lamp 6' fixture at 42 watts in previous lig	
		7 x Retrofit 2L 1x3 fixture w/ 2L Low Power HE universal voltage electronic ballast and (2)F25/T8 22 watt energy saver lamps)	
		10 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F17/T8 lamps	
		6 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F25/T8 lamps	
		445 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		61 x Retrofit 3L fixture w/ (1) 3L Low Power HE universal voltage electronic ballast and (3)F28T8 lamps	
		3820 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F25/T8 22 watt energy saver lamps (originally 2 2-lamp 3' fixtures converted into 1 4-lamp 6' fixture at 79 watts in previous lighting project)	
		4 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps	
		20 x 35 watt MR16 lamp	
		2 x custom design fixture using either screw-in LED or compact fluorescent lamps. Design to be completed during construction phase (watts & fixture cost estimated)	
		40 x fixture type or wattage not identified; to be identified	
		43 x Relamp w/(2) New F28/T8 lamps on existing NP electronic ballast	
		15 x Replace 2 existing lamps w/ 2 new 27w compact fluorescent triple tube 4 pin plug-in lamps	
		314 x Replace existing exit sign w/ new LED universal SFDF sign with battery back up	
		10 x Replace existing lamp w/ new 13w compact fluorescent medium based screw-in lamp	
		315 x Replace existing lamp w/ new 23w compact fluorescent medium based screw-in lamp	
		217 x Replace existing lamp w/ new 23w PAR sized compact fluorescent medium based screw in lamp with reflector	
		9 x Replace existing lamp w/ new 23w R40 compact fluorescent medium based screw-in lamp	
		5 x Replace existing lamp w/ new 23w R50 compact fluorescent medium based screw-in lamp	
4 x Replace existing lamp w/ new 27w compact fluorescent triple tube 4 pin plug-in lamp			
4 x Replace existing lamp w/ new 32w compact fluorescent medium based screw-in lamp			
Cruise Passenger Building	ECM 1 - Lighting Upgrades	181 x Retrofit 1L fixture w/ (1) 1L Low Power HE universal voltage electronic ballast and (1)F28T8 lamp	62,974.00
		151 x Retrofit 2L fixture w/ (1) 2L Low Power HE universal voltage electronic ballast and (2)F28T8 lamps	
		18 x Retrofit 4L fixture w/ (1) 4L Low Power HE universal voltage electronic ballast and (4)F28T8 lamps	
		50 x New 4 lamp F28/T8 wall/ceiling vapor tight with high power ballast	
		25 x New 4 lamp F32/T8 28 watt lamps high bay fixture HP ballast	
		3 x New 4 lamp F32/T8 high bay fixture HP ballast	
		28 x no retrofit existing 150 watt metal halide fixture	
		149 x Tandem wire (2) 1-lamp fixtures w/ F28T8 lamps and (1) 2L Low Power HE/unv ballast	
		73 x Tandem wire (4) 1-lamp fixtures w/ F28T8 lamps and (1) 4L Low Power HE/unv ballast	
		19 x Occupancy Sensors	
Cruise Passenger Building	ECM 2 - Occupancy Sensors		
World Trade Center	ECM 3 - Daylight Harvesting	2 x Sensors	470.00
Various DMT Locations	Photocell Replacement Allowance	Allowance for repairing photocells on building exteriors	4,993.00
World Trade Center	ECM 4 - Water Conservation	92 x Install 1.28 gpf HET Toilet China and Sensor Valve	85,619.00
		34 x Exposed sensor valve only retrofit on existing china	
		178 x Install 0.5/1.5 gpm flow control on existing faucet	
		5 x Install 2.0 gpm Showerhead or low flow restrictor	
		10 x Install 1.6 Piston Manual valve on existing china	
Cruise Passenger Building	ECM 4 - Water Conservation	6 x Install 1.1 gpf HET pressure tank toilet	5,756.00
		3 x Exposed piston valve only retrofit on existing china	
		19 x Install 0.5/1.5 gpm flow control on existing faucet	
Cruise Passenger Building	ECM 5 - Building Envelope	1. Inspect and adjust each exterior, fire, hatch and mechanical door weatherstripping and/or replace as required (12 doors, 8 garage doors) 2. Seal approx 1,250 linear feet of roof/wall intersection 3. Install 60,000 square feet of thermal ceiling between "C" Channel in roof structure	14,500.00

				Exhibit 1	
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Building	Energy Conservation Measures	Equipment			Total Cost \$
Fire Valve Rooms	ECM 7 - Programmable Thermostats	3	x	thermostats in Shed 500	8,500.00
		6	x	thermostats in Shed 6	
		4	x	thermostats in Shed 4	
		2	x	thermostats in Shed 8	
		1	x	thermostat in Shed 11	
		1	x	thermostat in Shed 12	
World Trade Center	ECM 8 - EMCS Optimization	EMCS Points			845,879.00
World Trade Center	ECM 9 - AHU 5 Air Economizer and VFD	1	x	20 HP VFD	85,319.00
World Trade Center	ECM 10 - Chiller Replacement	2	x	600 ton chillers	1,693,080.00
		2	x	2400 GPM pumps	
		1	x	1800 GPM pump	
World Trade Center	ECM 11 - Harbor Heat Sink	3	x	SS Heat Exchangers (1800 GPM each)	2,227,184.34
		4	x	1800 GPM Pumps	
		4	x	30 HP VFDs	
		2	x	75 HP VFDs	
		2	x	50 HP VFDs	
		2	x	25 HP VFDs	
		1	x	20 HP VFDs	
		3	x	Solid Separator (Filter - media or sand) (1800 GPM each)	
		8	x	150 GPM in-line circulating pumps	
World Trade Center	ECM 14 - Heating Plant Upgrades	8	x	1700 MBH gas hot water boilers	937,848.66
		1	x	3000 CFM refrigerant exhaust fan	
		1	x	2403 MBH gas steam boiler	
		2	x	60 HP VFDs	
		1	x	75 HP VFDs	
		1	x	package water softner for steam boiler (4 GPM)	
		1	x	300 Gal/hr gas-fired condensing tankless water heater	
		1	x		
World Trade Center	ECM 32 - ADA Renovations	ADA renovations on restrooms on 4 floors			380,000.00
World Trade Center	ECM 35 - Energy Awareness	Energy Awareness Program			45,000.00
Project Management				279,879.00	
Pepco Energy Contingency				295,639.51	
MPA Owners Contingency				145,613.49	
Commissioning			Included in Project Cost		
Bonding/insurance				64,185.00	
Design Engineering/PM				813,493.00	
Training			Included in Project Cost		
Two Year Warranty			Included in Project Cost		
M & V Installation				167,606.00	
G&A & Profit				2,142,721.00	
Phase 1 Audit			Included in Project Cost		
			Project Subtotal	10,713,606.00	
			Natural Gas Allowance	40,000.00	
			Rebates	(129,915.00)	
			SALP Funding	(1,500,000.00)	
			Capital Funds	(2,540,000.00)	
			Lease Financing Amount	<b>6,583,691.00</b>	
			Lease financing amount		
			Tax-Exempt (Non - AMT)	3,500,000.00	
			Taxable Private Use	3,083,691.00	
				6,583,691.00	