

GI

SERVICE

ESTABLISHED 1964



Class A Contractor

Providing Quality Service Since 1964

CERTIFIED

SWaM Small,
Women and
Minority-Owned

Supplier Diversity Strengthens the Commonwealth

by the Virginia Department of Minority Business Enterprise



**SERVICE
ESTABLISHED 1964**

Service Locations

Serving all of Virginia and the Piedmont area of North Carolina

Virginia

Headquarters 804.272.7585
Hampton Roads 757.424.2112
Williamsburg 800.768.2545
Richmond 804.320.1405
Fredericksburg 540.361.4328
Roanoke 540.362.3959
Charlottesville 434.977.5626
Harrisonburg 800.553.8569

North Carolina

Greensboro 336.226.2666
Raleigh 800.277.5622
Winston-Salem 800.277.5622

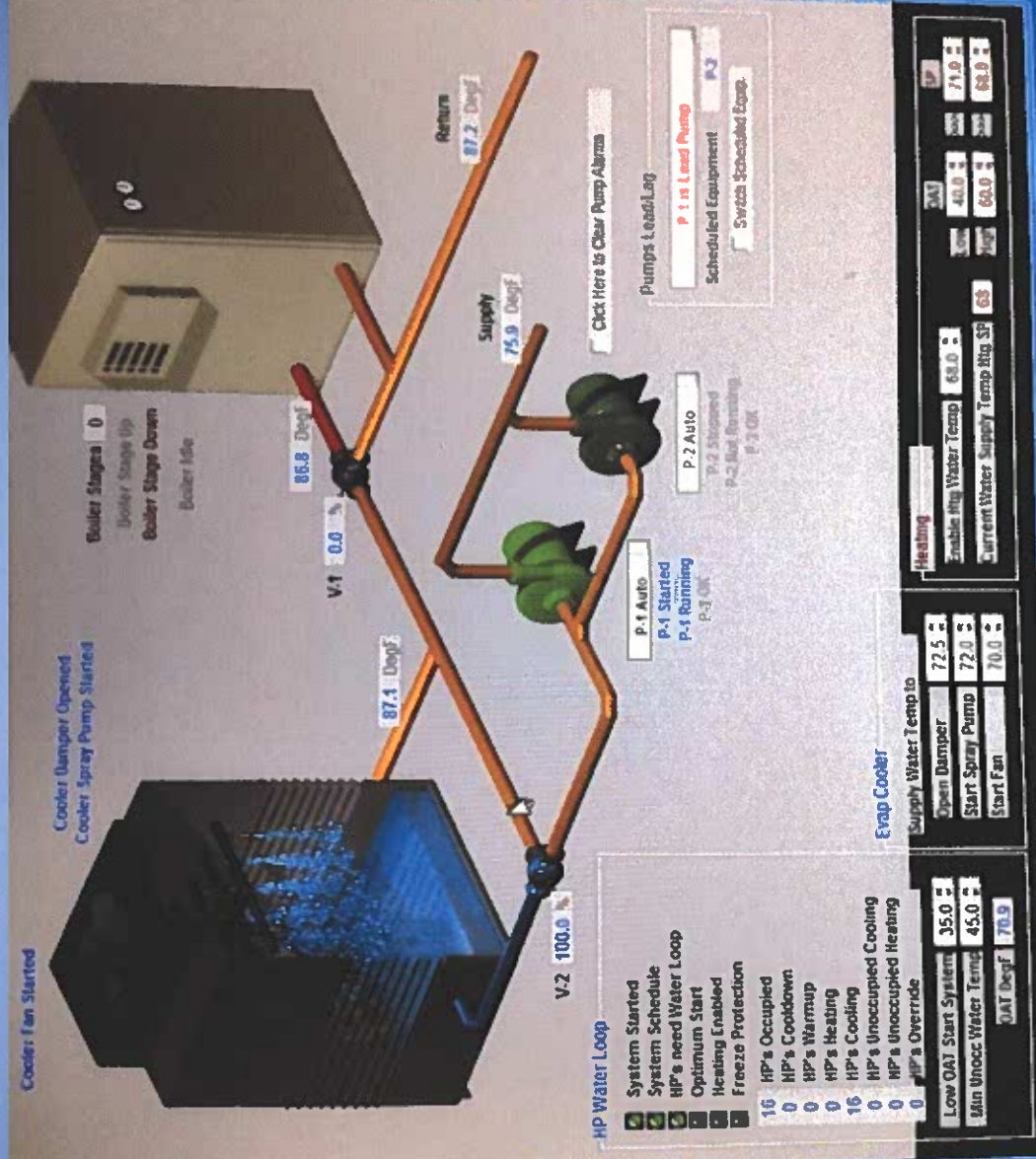


*Prince George County
Human Services Bldg.*

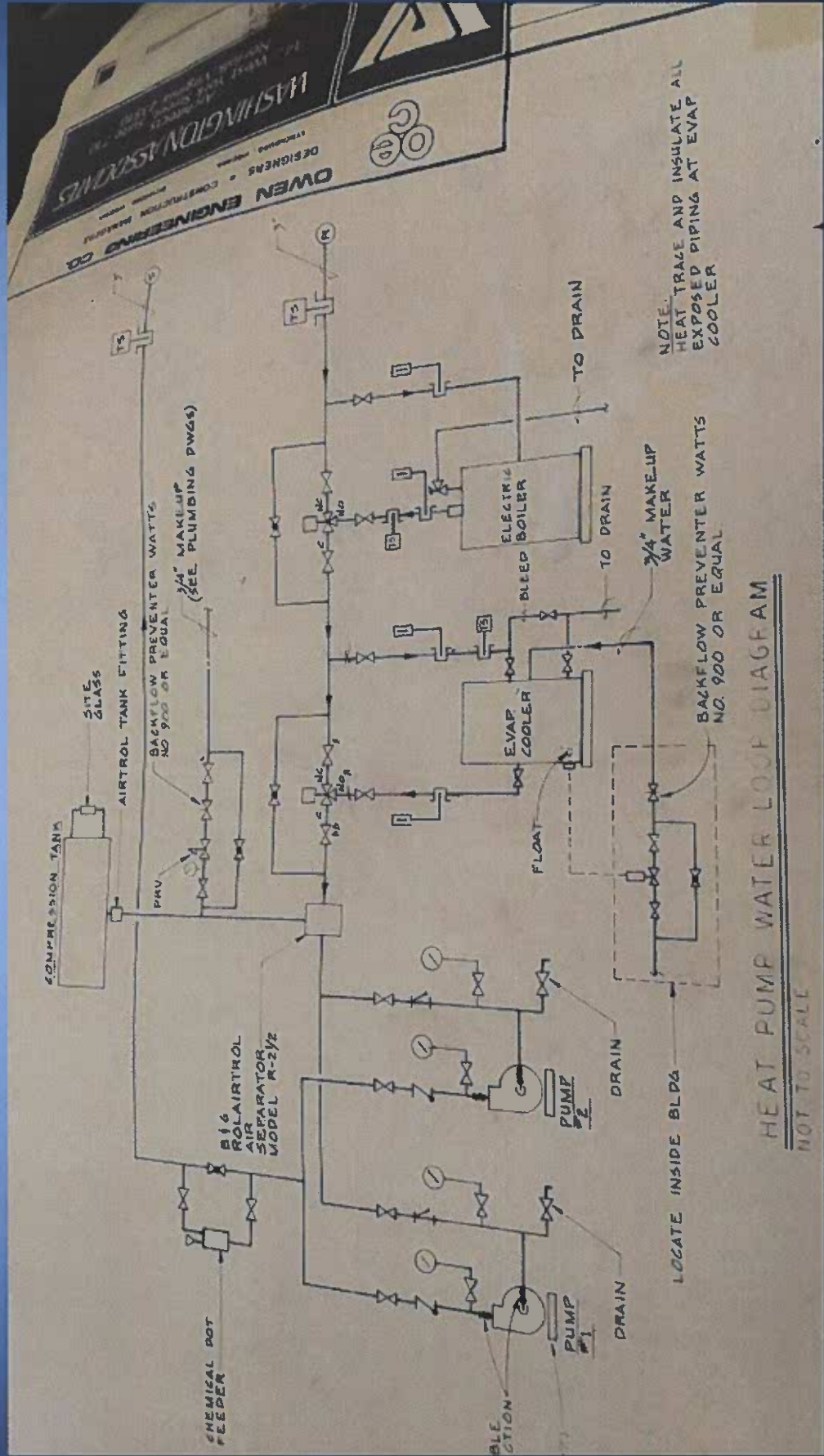


Prince George County Human Services Bldg.

(HVAC System) Total Tons 46



Water Piping Diagram



Heat Pump Equipment Age

Dates: 1997 to 2005

Refrigerant R-22 (Phased Out)

14-A

Model No.	285362500	Date of Mfg.	MAR/2004
Part No.		Min Volts	197
Unit		Hz	60
Compressor No 1	208/230	Ph	1
Compressor No 2	208/230	RLA	7.8
		LRA	38.0
Fan Motor	208/230	FLA	9
		LRA	43
Ckt No 1	22.5	Ckt No 2	15
Max Ckt Bkr Amps	15	Type Ckt Bkr	W.G.
Ckt No 2	15		

Goodman

#4

Volts	208/230	FLA	1.9
LRA	7.1	Hz	60
Ckt No 1	57.0	Ckt No 2	30
Max Ckt Breaker Amps	30	Type Ckt Bkr	W.G.
Ckt No 2	25	DATE OF MANUFACTURE	JULY 1997
50 PSI Low Side		300 PSI HI Side	

ACCEPTED FOR USE
CITY OF NEW YORK

17 Total Heat Pump Units

TUESDAY, 5/20/2017 10:09:54AM

75

Stat	Disable Unit	Space Temp	Setpoint Htg/Clg	Supply Temp	Mode Clg/Htg	Percent Heating	Percent Cooling	Comp Status
VSHP-1	<input type="checkbox"/>	73	71 73	67	Clg	0	36	
VSHP-2	<input type="checkbox"/>	72	70 72	60	Clg	0	36	
VSHP-3	<input type="checkbox"/>	72	70 72	63	Clg	0	98	
VSHP-4	<input type="checkbox"/>	73	70 72	67	Clg	0	100	
VSHP-5	<input type="checkbox"/>	74	72 74	59	Clg	0	100	
VSHP-6	<input type="checkbox"/>	76	70 72	75	Clg	0	100	
VSHP-7	<input type="checkbox"/>	75	67 69	73	Clg	0	100	
VSHP-8	<input type="checkbox"/>	75	69 71	66	Clg	0	100	
VSHP-9	<input type="checkbox"/>	72	69 71	51	Clg	0	100	
VSHP-10	<input type="checkbox"/>	83	70 72	79	Clg	0	100	
VSHP-11	<input type="checkbox"/>	82	71 73	82	Clg	0	100	
VSHP-12	<input type="checkbox"/>	79	70 72	68	Clg	0	100	
VSHP-13	<input type="checkbox"/>	80	73 75	65	Clg	0	100	
VSHP-14	<input type="checkbox"/>	78	71 73	66	Clg	0	100	
VSHP-15	<input type="checkbox"/>	78	72 74	62	Clg	0	100	
VSHP-16	<input type="checkbox"/>	77	71 73	69	Clg	0	100	
VSHP-17	<input type="checkbox"/>	NR	NR NR NR	NR	NR	NR	NR	

Fire Alarm Low HP Water Temp
 Min Water Temp to Enable HPs

Phase 1 Units to be replaced Problem Units

TAG	Qty	Model	Capacity Modulation	Airflow (CFM)	External Static Pressure (inH ₂ O)	Fluid Flow (gpm)	Fluid Pressure Drop (ft H ₂ O)	Fluid Type	Antifreeze (%)
HP-01	1	WCCH5048	FULL	1400.00	0.6	7.00	5.23	Water	0.00
HP-02	1	WCCH5036		980.00	0.65	5.50	3.06	Water	0.00
HP-03	1	WCCH5036		1000.00	0.62	5.50	3.06	Water	0.00
HP-04	1	WCCH5036		980.00	0.65	5.50	3.06	Water	0.00
HP-05	1	WVFC1015		480.00	0.67	2.00	1.53	Water	0.00
HP-06	1	WVFC1030		1100.00	0.75	5.00	3.01	Water	0.00
HP-07	1	WVFC1019		600.00	0.6	2.50	2.07	Water	0.00
HP-08	1	WCCH5030		870.00	0.57	4.50	2.03	Water	0.00
HP-09	1	WCCH5030		870.00	0.57	4.50	2.03	Water	0.00
HP-10	1	WCCH4015		480.00	0.45	2.50	2.02	Water	0.00
HP-11	1	WCCH4015		480.00	0.45	2.50	2.02	Water	0.00
HP-12	1	WCCH5060		1730.00	0.62	10.50	8.65	Water	0.00
HP-13	1	WCCH5036		980.00	0.65	5.50	3.06	Water	0.00
HP-14	1	WCCH5030		870.00	0.57	4.50	2.03	Water	0.00
HP-15	1	WCCH5036		980.00	0.65	5.50	3.06	Water	0.00
HP-16	1	WCCH4024		700.00	0.72	3.50	3.53	Water	0.00
HP-17	1	WCCH5048		1400.00	0.6	7.00	5.23	Water	0.00



Daikin Enfinity® water source heat pumps incorporate the best of our past and the best of what's new. Using feedback from building owners, consulting engineers, contractors and service engineers, we designed Enfinity products to give you maximum flexibility to design, install, operate and maintain the ideal water source heat pump system for your building project.

Non-CFC, R-410A refrigerant

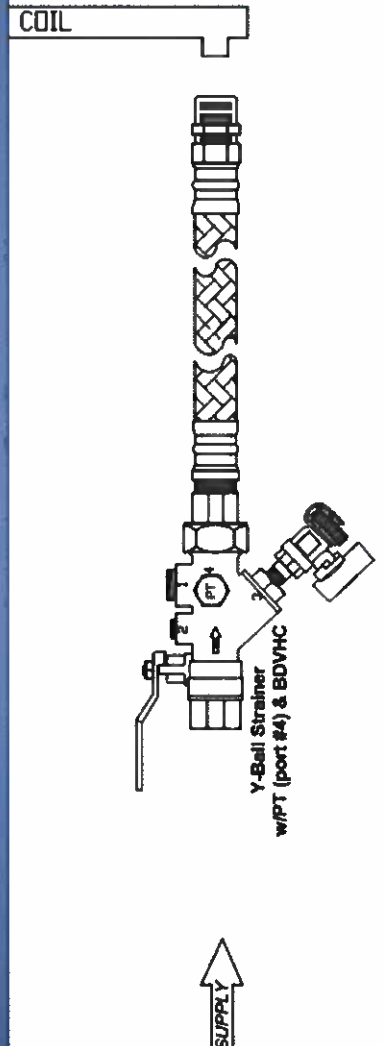
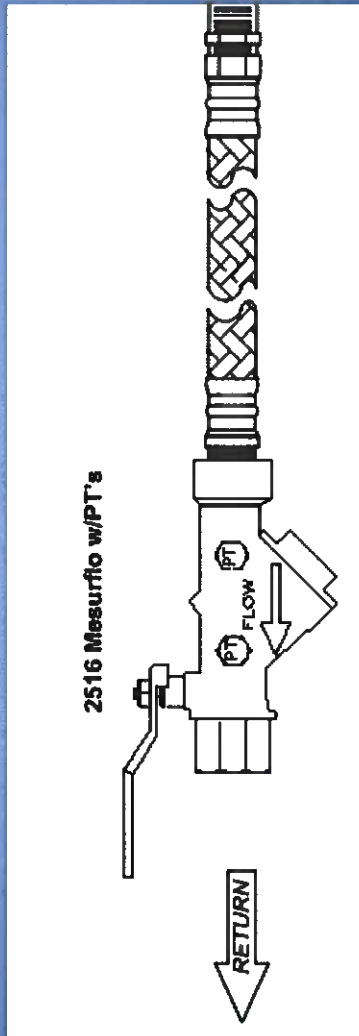
Standard or geothermal application flexibility
Easy, low cost design and installation

High efficiency reduces energy consumption/operating
Superior indoor air quality and quiet operation
Easy, low cost maintenance and service

MicroTech® III unit controls with Open Choices® feature
allows standalone or network operation using LonWorks®
or BACnet® communication options
Performance rated with ISO Standard 13256-1



New Fire Rated Supply & Return Hoses



Warranty

Manufacturer

shall warranty equipment for a period of 12 months from start-up or 18 months from shipping (whichever occurs first).

Labor warranty from contractor for a period of the 12 months from start-up

Phase Out Plan for HVAC equipment

Phase 1: Replace (5) water source Heat Pumps. (Problem Units)
Cost: \$29,600

Phase 2: Replace (1) cooling Tower,
(1) Water loop pump replace (Larger pump)
(2) Repack 3-way water valves
Cost: \$49,500

Phase 3: Replace (12) water source Heat Pumps,
(1) Water loop pump (Larger Pump)
Cost: \$84,050

Phase 4: Replace (1) Reheat Boiler
Cost: \$25,542

Total Budget Costs \$188,692

Notes: Reconnect to the existing water piping, duct work, controls & electrical service.

Pricing is subject to change based on time of approval

Recommendations for HVAC equipment

(1) Phase 1: Replace (5) water source Heat Pumps. (Problem Units)

Cost: \$29,600

(2) Evaluate the (12) other Heat Pumps Report Heat Pump Condition & System Operation.

Make final recommendations for replacement based on the report findings.

Cost: \$3,875



June 29, 2017

Prince George County
 Attn: George
 P O Box 68
 Prince George, VA 23875
 Phone 804-722-0775 Email: gpoulson@princegeorgecountyva.gov

Re Human Service Bldg. (HVAC System) **Recommendations:**

1. **Phase 1:**

Replace (5) water source heat pumps to include new hose connections.
 Reconnect to existing duct work, electrical and controls.

Our price for the above work is.....\$29,600.00

2. **Evaluate** the (12) other Heat Pumps and Report Heat Pump Condition & System Operation.
 Make final recommendations for replacement based on the report findings.

Our price for the above work is.....\$3,875.00

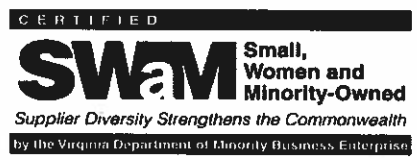
Note: Cii **does not** include relocation of sprinkler piping or electrical conduits.

All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner at normal work hours. Any deviation from the above specifications involving extra cost will be executed only upon your orders and will become an additional charge to estimate. If not accepted, this proposal may be withdrawn by Cii Service after 60 days.

We appreciate the opportunity to quote this project and look forward to working with you.

Sincerely,

Mark Woodcock
 V P Operations





SERVICE OF VIRGINIA

COMMERCIAL AIR CONDITIONING & HEATING SERVICE

ENGINEERED SYSTEMS, INC.

24 HOURS SERVICE • (804) 320-1405

6767 Forest Hill Ave • Suite 101 • Richmond, VA 23225 • (800)-768-2545 • Fax (804)-320-1081

June 29, 2017

Prince George County

Attn: George

P O Box 68

Prince George, VA 23875

Phone 804-722-0775 Email: gpoulson@princegeorgecountyva.gov

Re Human Service Bldg. (HVAC System) Proposal Scope of Work:

Phase 1:

Replace (5) water source heat pumps to include new hose connections.

Reconnect to existing duct work, electrical and controls.

Our total price for **Phase 1** is.....\$29,600.00

Phase 2:

Replace cooling tower & (1) water loop pump.

Our total price for **Phase 2** is.....\$49,500.00

Phase 3:

Replace (12) water source heat pumps to include new hose connections.

Reconnect to existing duct work, electrical and controls.

Replace (1) water loop pump.

Our total price for **Phase 3** is.....\$84,050.00

Phase 4:

Replace electric hot water boiler.

Our total price for **Phase 4** is.....\$25,542.00

Note: Cii **does not** include relocation of sprinkler piping or electrical conduits.

All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner at normal work hours. Any deviation from the above specifications involving extra cost will be executed only upon your orders and will become an additional charge to estimate. If not accepted, this proposal may be withdrawn by Cii Service after 60 days.

We appreciate the opportunity to quote this project and look forward to working with you.

Sincerely,

Mark Woodcock

V P Operations

