Addendum No. 4 Town of Wallace Wallace Regional Sewage Collection System Hurricane Florence Pump Station Mitigation June 25, 2020

- 1. Replace HVAC units Bard W30A1-B09VP4X3J with the unit listed in Attachment
- 2. Change breaker show on schedule for MCCE on Sheet E1 to 35A, 3-pole.

STROUD ENGINEERING, P.A. 3302-C BRIDGES ST. MOREHEAD CITY, NC 28577 252-247-7479 LICENSE NO. C-0647



Date

ATTACHMENT 1



Submittal Data

Stroud Engineering - Bard Equivalent

Location:	Morehead City, NC
Engineer:	William Braxton - Stroud Engineering
Date:	June 25, 2020
Prepared By:	Matt Garrett - Loman Garrett



Plan-ID	Qty	Model No	Description	Page
WM-01	1	W30AB-B09VP4X3J	Wall-Mount™ Air Conditioner 208/230-3 ph	3
		Coil Coatings		6



AHRI Rated Coolin	g Perforr	mance		Supply Air
AHRI Certified Reference # AHRI Rated Cooling	2027334 29,200	04 Btuh		Total Supply Air Blower Motor
EER Rated Airflow	11.00 950	cfm		Non-Ducted Air flow is based on Wet Coil
Cooling Performance @	Project	Parameters		Electri
Cooling Capacity Sensible Capacity Latent Capacity	29,200 21,600 7,600	Btuh Btuh Btuh	'	Power Supply
Efficiency (at AHRI) Outdoor DB Temp Entering DB Temp Entering WB Temp Leaving DB Temp Leaving WB Temp	11.00 95.0 80.0 67.0 58.9 57.4	EER °F °F °F °F		Minimum Circuit Ampacit Maximum External Fuse Circuit Breaker Field Power Wire Size Ground Wire
Electric Resist	ance He	at		Based on 75C copper wire, All wir Electrical Code and all local codes
Nominal Heat Size Electric Heat Voltage Heat Output Heating Entering Air Heating Leaving Temp	9 208 23,038 70.0	kW Volts Btuh °F		Caution: When more than one field conduit, the conductors must be d 8 of Table 310 regarding Ampacity than three (3) current carrying con Balanced Climate ^T
Heating Leaving Temp	92.5	-F		Cooling Capacity Sensible Capacity Latent Capacity Latent Increase Water removal per hour Outdoor DB Temp Entering DB Temp Entering WB Temp
				Approximate
				Unit Weight Option Weight Total Weight

Factory Options Selected

- B 208/240 Volt 3 phase
- 09 9 kW with Circuit Breaker
- V Commercial Ventilator Modulating Spring Return P 2-Inch Pleated Filter MERV 8
- 4 Buckeye Gray
- 3 Technicoat Coated Evaporator & Condenser
- J Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, Low Ambient Control, Alarm Relay

Supply Air Performance						
Total Supply Air Blower Motor Low Blower Speed Non-Ducted	950 1/2	cfm hp				

Electrical Data						
Power Supply	208/230 3 60	Volts Phase Hertz				
Minimum Circuit Ampacity	32	Amps				
Maximum External Fuse or Circuit Breaker	35	Amps				
Field Power Wire Size	8					
Ground Wire	10					

ing must conform to the National

d power circuit is run through one derated. Pay special attention to note / Adjustment Factors when more ductors are in a raceway.

[™] Mode Performance

Cooling Capacity	28,000	Btuh
Sensible Capacity	18,700	Btuh
Latent Capacity	9,300	Btuh
Latent Increase	18	%
Water removal per hour	8.77	Ib/ hr
Outdoor DB Temp	95.0	°F
Entering DB Temp	80.0	°F
Entering WB Temp	67.0	°F

Installed Weight

Unit Weight	350	lb
Option Weight	35	lb
Total Weight	385	lb



Standard Product Features

Right Side Control Panel

Non-Fiberglass Foil Faced Insulation: Environmentally friendly high "R" value non-fiberglass insulation that is made with recycled denim and cotton materials used with a FSK foil face that is both durable and cleanable
Durable Cabinet Construction: Multiple cabinet construction options are available for different outdoor conditions. Optional cabinet coatings may be ordered for extreme outdoor environments.

Easy Filter Access: A separate filter door is provided for ease of filter access during routine unit maintenance.
Electric Strip Heat: Reliable, comfortable heater packages feature an automatic limit and thermal cut-off

• Electric Strip Heat: Reliable, comfortable heater packages feature an automatic limit and thermal cut-off safety control.

Green Fin Hydrophilic Evaporator Coil: Green fin stock is used to help prevent mold growth, aid with condensate drainage, and provide a limited amount of protection to corrosive particulates in the airstream.
ECM Indoor Motor Technology: 5 speed dual shaft motor provides quiet airflow operation when used with a twin blower assembly. Motor overload protection standard on all models.

• Enclosed Condenser Motor: An enclosed casing condenser motor with ball bearings is used for reliable operation and extended motor life. Enclosed condenser motors are standard on all units.

• High Efficiency Cooling: Scroll compressors for quiet, efficient cooling. Designed with R-410A (HFC) nonozone depleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements. A liquid line filter-drier to protect the system from moisture is standard on all units.

• Cooling Operation: Single stage cooling operation using R410A refrigerant. Copper tube/Aluminum fin coils are used to provide high efficiency and easy serviceability. Scroll compressor technology delivers years of quiet, reliable operation.

• Heating Operation: Single or two stage heating operation using resistance heaters. Circuit breaker disconnect protection is standard in all units equipped with electric heat.

Balanced Climate[™]

- Patent pending
- (Optional Configuration)
- Increases humidity removal by up to 35%
- Can improve efficiency by allowing occupant to set thermostat higher in cooling mode
- Comes standard on all models
- Remove the Y1/Y2 jumper and use a 2 stage thermostat to activate Balanced Climate[™]

• Complies with efficiency requirements of ANSI/ASHRAE/IESNA 90.1-2016.

• Certified to ANSI/AHRI Standard 390-2003 for SPVU (Single Package Vertical Units)

• Intertek ETL Listed to Standard for Safety Heating and Cooling Equipment ANSI/UL 1995/CSA 22.2 No. 236-05, Fourth Edition.



Dimensions of Basic Unit for Architectural and Installation Requirements (Inches)

Width	Depth	Height	Sup	oply	Ret	turn				
(W)	(D)	(H)	А	В	С	D	E	F	G	
38.2	17.125	74.563	7.88	27.88	13.88	27.88	40	10.88	29.75	17.93
J	К	L	М	N	0	Р	Q	R	S	Т
30.75	32.75	33.25	31	2.75	39.13	26.75	9.14	4.19	12	9





////// STANDARD GREEN FIN COATED EVAPORATOR COIL

Green Fin Protective Evaporator Coil Coating: A hydrophilic fin coating is provided that aids with the condensate drainage of the coil. By shedding water from the coil fin surface, it allows moisture to be removed and minimizes moisture re-introduction into the space being conditioned. Moisture removal aids with the reduction of bacteria and growth. It also provides moderate resistance to corrosive agents including the following:

- Acidic Brine
- Salt Spray
- Boiling Water
- Ammonia 26 Baume
- Gasoline
- Kerosene
- 1 N Sodium Hydroxide
- Glacial Acetic Acid
- 70% IPA
- Spray cleaners
- Bleach

////// OPTIONAL DIP COATED EVAPORATOR AND CONDENSER COIL

Bard now offers TECHNICOAT AA, a robust dipped coating option for the evaporator and condenser coil. TECHNICOAT AA has passed all HVAC accelerated tests like salt spray, flexibility and SWAAT 3,000+ hours. It has been tested in the field in the most severe industrial exposure conditions, such as a coastal refinery in Saudi Arabia, mining facilities in central Africa, and various Pacific islands. TECHNI-COAT AA did not show any deterioration after multiple years of function with coils directly exposed to such harsh environmental conditions. The TECHNICOAT AA coating system is based on modified acrylic waterborne binders with high elongation properties. Aluminum pigmentation has been added to establish exceptional heat transfer, chemical resistance, and UV blocking properties. Corrosion resistance reaches >10,000+ hours in ASTM B-117 and >3.120 hours in SWAAT testing. Coating is gray in color.

TEMPERATURE RESISTANCE:

- Maximum up to 248°F (120°C), 480°F (250°C) peak exposure
- Minimum -40°F (-40°C)

CHEMICAL RESISTANCE:

- Alkalines including Ammonaic solution, Potassium Hydroxide, Calcium Hydroxide, and Magnesium Hydroxide.
- Alcohols including Isopropanol, Butanol, Amyl Alcohol, Benzyl Alcohol, Diaceton Alcohol, Glycerine, Propanol, and Pentanol
- Aliphatic Hydrocarbons including White Spirit, Shellsol, Bitumen, Isopar G, and Paraffin.
- Amines including Triethanolamine, Aniline Sulphate, Hexamethylenetetraamine, Phenyldiamine, Triethylamine, and Methylamine.
- Inorganic Compounds including Hydrogen Carbonate, Hydrogen Sulfide, Nitrous Acid, Sulphuric Acid, and Selenic Acid.
- Aromatic Hydrocarbons including Xylene, Toluene, Asphalt, Anthracene, Benzapherene, Gumlac, Benzine, and Naphtha.
- Fuels and Oils including Diesel, Fuel Oil, Petrol, Super Petrol, Lubricating Oils, Kerosene, Spheric Oils, LPG, and Mineral Oil.
- Ethers including Enthric Oils, Vegetable Oils, Butane, Acetylene, and Methane.
- Halogenated Hydrocarbons including Amyl Acetate, Propyl Acetate, Ethyl Oxalate, Butyl Acetate, and Butyl Propionate.
- Softeners including Palatinol C, Chloraparaffine 5XX, Dioctylphosphate, Desavin, Mesamol, and Dibutylphosphate.
- Organic Compounds including Benzoic Acid, Lactic Acid, Phenols, Fatty Acids, Malic Acid, and Picric Acid.
- Salts and water solutions including Sodium, Potassium, Calcium, Aluminum, Ammonium, Barium, Copper, Lead, and Lithium.
- · Many other agents including Phosphor, Zinc, Glucose Syrup, Sulfur, Urea, Menthol, Antimony, Hydrogen, Rubber, and Shellac.

Contact your local Bard distributor or representative for a list of all chemicals and chemical resistance information.

SPECIAL PROPERTIES:

- Anti-Odor
- Hydrophilic / Hydrophobic
- Anti-Corrosive

EXPOSURE CONDITIONS INCLUDE:

Food Processing & Storage, Airports, Office Buildings, Hotels, Schools, Warehouses, Water Treatment, Breweries, Paper Mills, Refineries, Power Plants, Meat Processing Industries, Automotive Industries and other locations near shorelines and salt water.



