Exhibit A

CLIMATE CONTROLS

COLTON JOINT UNIFIED SCHOOL DISTRICT
SYCAMORE HILLS ES
11036 MAHOGANY DRIVE
FONTANA, CA 92337

NETWORK COMMUNICATION

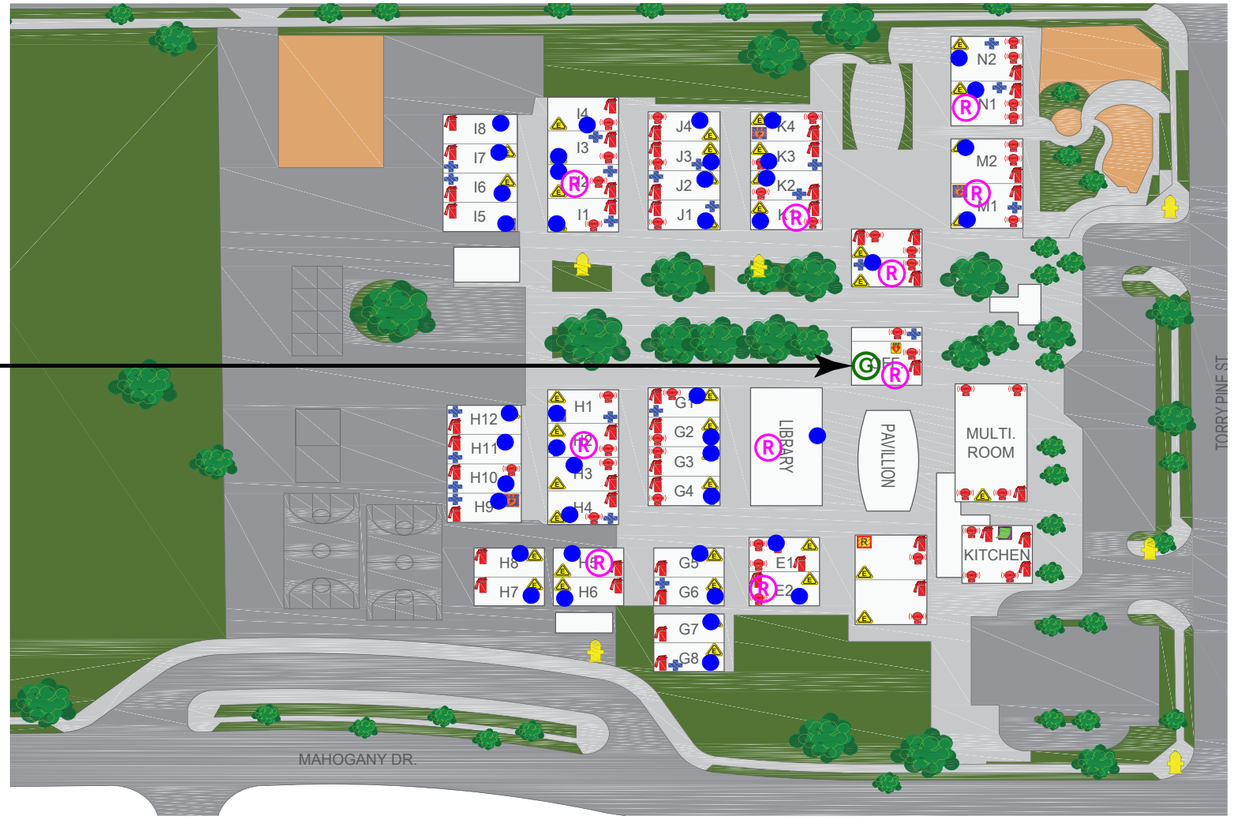
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

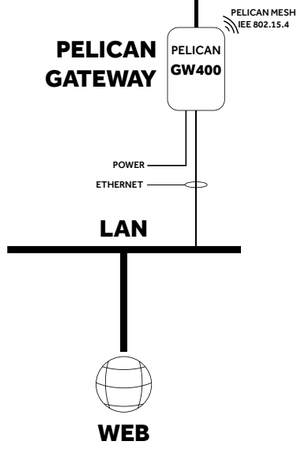
(G) A SINGLE (1)PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS ILLUSTRATED TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. IF DISTRICT ALREADY HAS A GATEWAY INSTALLED AT CAMPUS, GATEWAY SHALL BE RE-LOCATED TO NEW LOCATION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) PELICAN REPEATER(S) SHALL BE INSTALLED AT THE CAMPUS AS ILLUSTRATED IN THE DIAGRAM TO THE RIGHT, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN THE ILLUSTRATED GENERAL VISCINITY TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR TO COORDINATE WITH FACILITY FOR THE PROVISION OF SECURE AND STABLE 120VAC POWER CONNECTIONS FOR EACH REPEATER. REPEATER(S) SHALL BE INSTALLED IN A LOCATION ONLY ACCESSIBLE TO AUTHORIZED PERSONNEL. DO NOT INSTALL REPEATER(S) ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

NOTE: ALL PELICAN DEVICES EQUIPPED WITH WIRELESS ANTENNAS ACT AS WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT). PELICAN REPEATER(S) (PART#:WR400) UTILIZED FOR GREATER WIRELESS RANGE.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	PELICAN REPEATER	10

PELICAN

PROJECT NUMBER:
P-25061907

CLIMATE CONTROLS UPGRADES

REV02: 10/13/2025
REV01: 06/09/2025

NOTES

NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

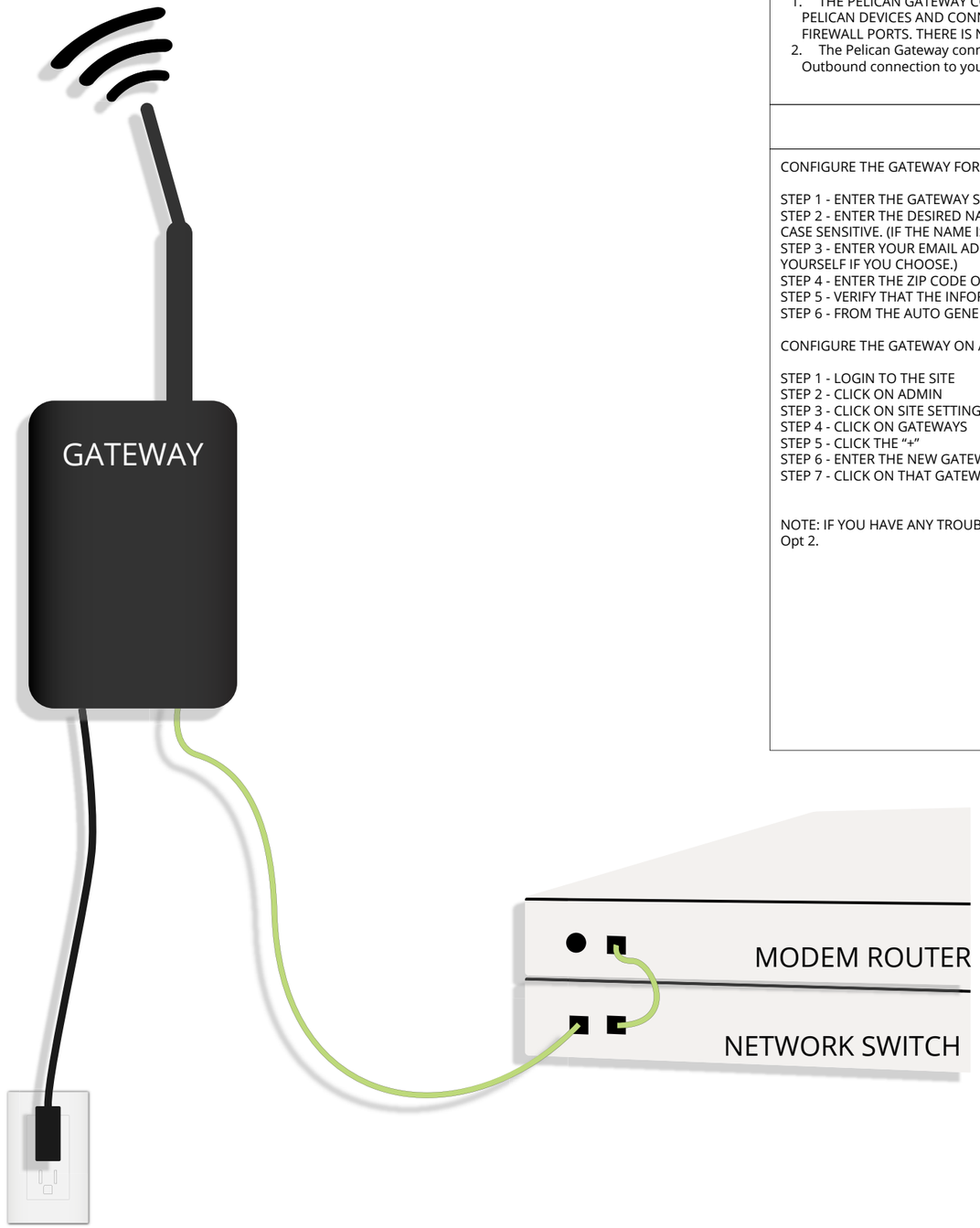
NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING.

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: PLUG CAT5 CABLE INTO CUSTOMERS INTERNET SWITCH FOR OUTBOUND ACCESS TO THE INTERNET.

NOTE 6: FOR ASSISTANCE WITH CONFIGURING THE GATEWAY FOR STATIC IP CONTACT PELICAN TECHNICAL SUPPORT.



OPERATING CHARACTERISTICS

1. THE PELICAN GATEWAY COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. The Pelican Gateway connects to your network router or switch. It recieves a DHCP IP address (static IP is optional) and will establish an Outbound connection to your Pelican App.

CONFIGURATIONS

CONFIGURE THE GATEWAY FOR A NEW SITE: GO TO WWW.PELICANWIRELESS.COM > NEW SITE SETUP

STEP 1 - ENTER THE GATEWAY SERIAL NUMBER
STEP 2 - ENTER THE DESIRED NAME OF THE SITE WITH NO SPACES. LETTERS, NUMBERS, DASH, AND UNDERSCORE ARE ACCEPTABLE. THE NAME IS NOT CASE SENSITIVE. (IF THE NAME IS ALREADY IN USED YOU WILL BE NOTIFIED.)
STEP 3 - ENTER YOUR EMAIL ADDRESS AS THE ADMINISTRATOR. (YOU CAN ADD AS MANY ADMINISTRATORS AND USERS LATER AS WELL AS REMOVE YOURSELF IF YOU CHOOSE.)
STEP 4 - ENTER THE ZIP CODE OF THE LOCATION WHERE YOU ARE INSTALLING.
STEP 5 - VERIFY THAT THE INFORMATION, ESPECIALLY THE EMAIL ADDRESS, IS CORRECT AND CLICK SUBMIT.
STEP 6 - FROM THE AUTO GENERATED EMAIL (POSSIBLY IN YOUR SPAM FOLDER) LOGIN TO THE SITE.

CONFIGURE THE GATEWAY ON AN EXISTING SITE: GO TO THE SITE NAME OF THE EXISTING SITE.

STEP 1 - LOGIN TO THE SITE
STEP 2 - CLICK ON ADMIN
STEP 3 - CLICK ON SITE SETTINGS
STEP 4 - CLICK ON GATEWAYS
STEP 5 - CLICK THE “+”
STEP 6 - ENTER THE NEW GATEWAY SERIAL NUMBER.
STEP 7 - CLICK ON THAT GATEWAY AND ENTER THE NAME OF THE ROOM IT IS LOCATED IN.

NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25061907	D-25061907-1	REV02		PELICAN GATEWAY	CM	06/09/2025	COLTON JUSD SYCAMORE HILLS ES	PELICAN	2 of 4

NOTES

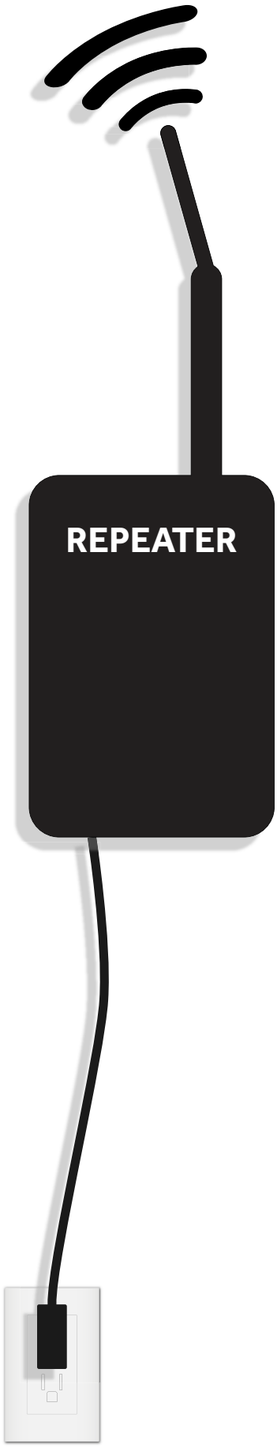
NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING..

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: LOCATE IN SUCH A LOCATION THAT IT CAN REACH THE LTE NETWORK OUTSIDE THE STRUCTURE..



OPERATING CHARACTERISTICS

1. THE PELICAN REPEATER COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. THE PELICAN REPEATER EXTENDS THE PELICAN NETWORK SIGNAL AS NEEDED.

CONFIGURATIONS

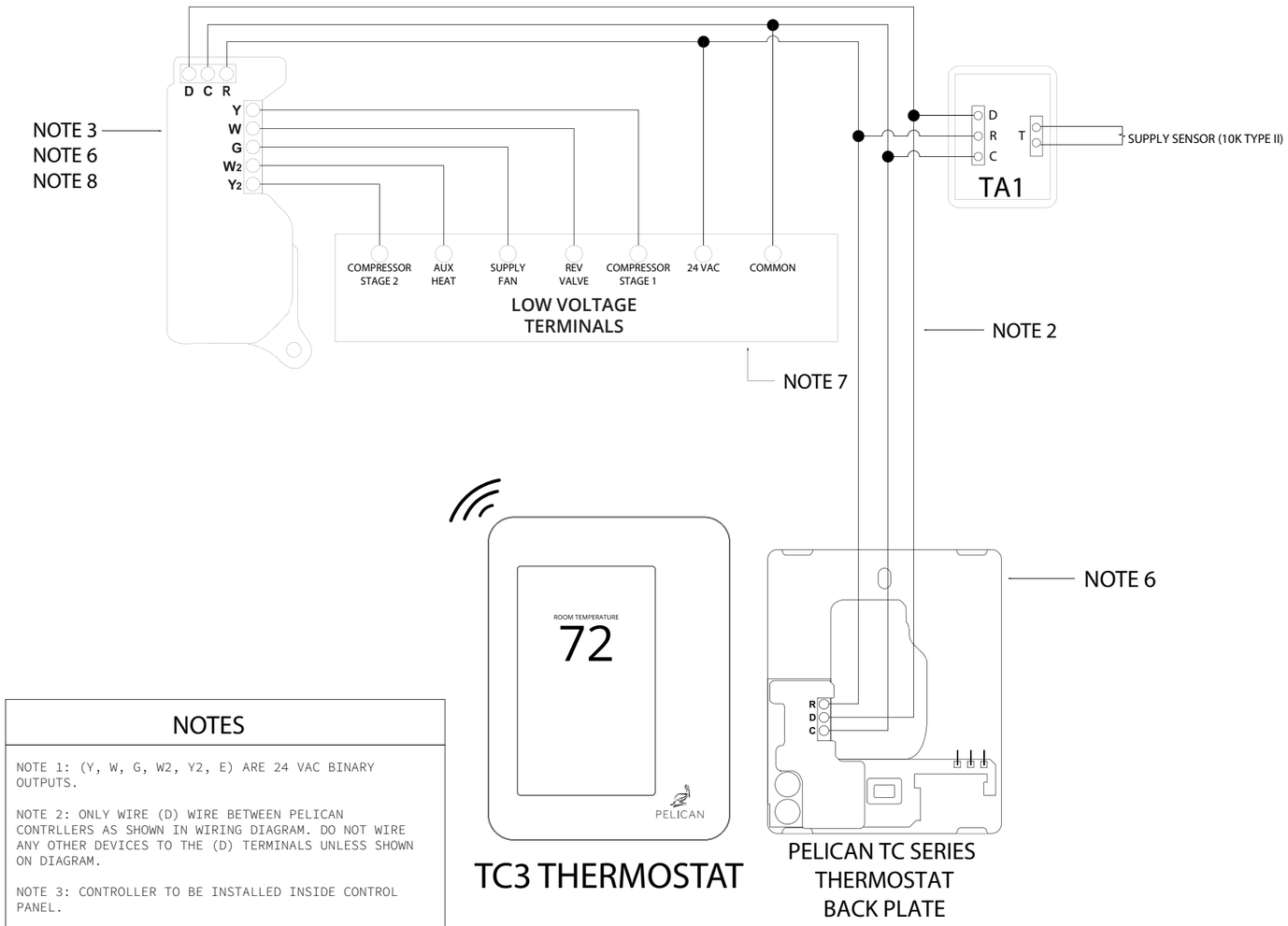
Configuration with Pelican WebApp: Go to - ADMIN > NETWORK MAP> and select the correct serial number.

Put the building and room number as the name. e.g. BLDG1RM201, or BLDG76RM400

NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25061907	D-25061907-2	REV02		PELICAN REPEATER	CM	06/09/2025	COLTON JUSD SYCAMORE HILLS ES	PELICAN	3 of 4

HEAT PUMP
(TYPICAL OF 41)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

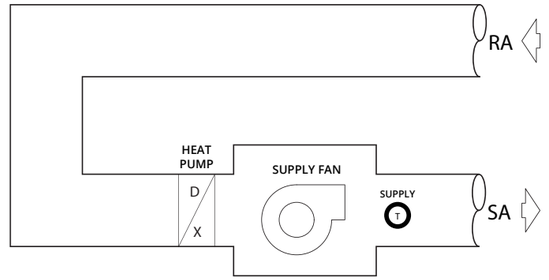
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	41
PELICAN	TA1	TEMP & ALARM SENSOR	41
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	41

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25061907	P-25061907-3	REV02		HEAT PUMP CONTROL	CM	06/09/2025	COLTON JUSD SYCAMORE HILLS ES	PELICAN	4 of 4

CLIMATE CONTROLS

BLOOMINGTON HIGH SCHOOL
10750 LAUREL AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

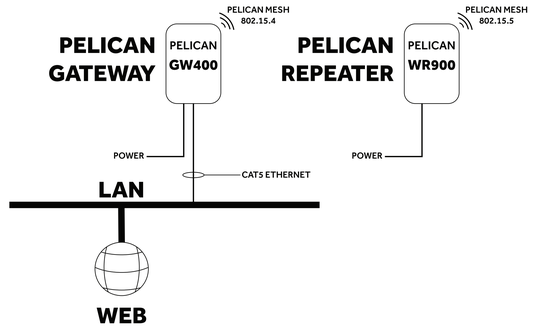
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	14

PELICAN

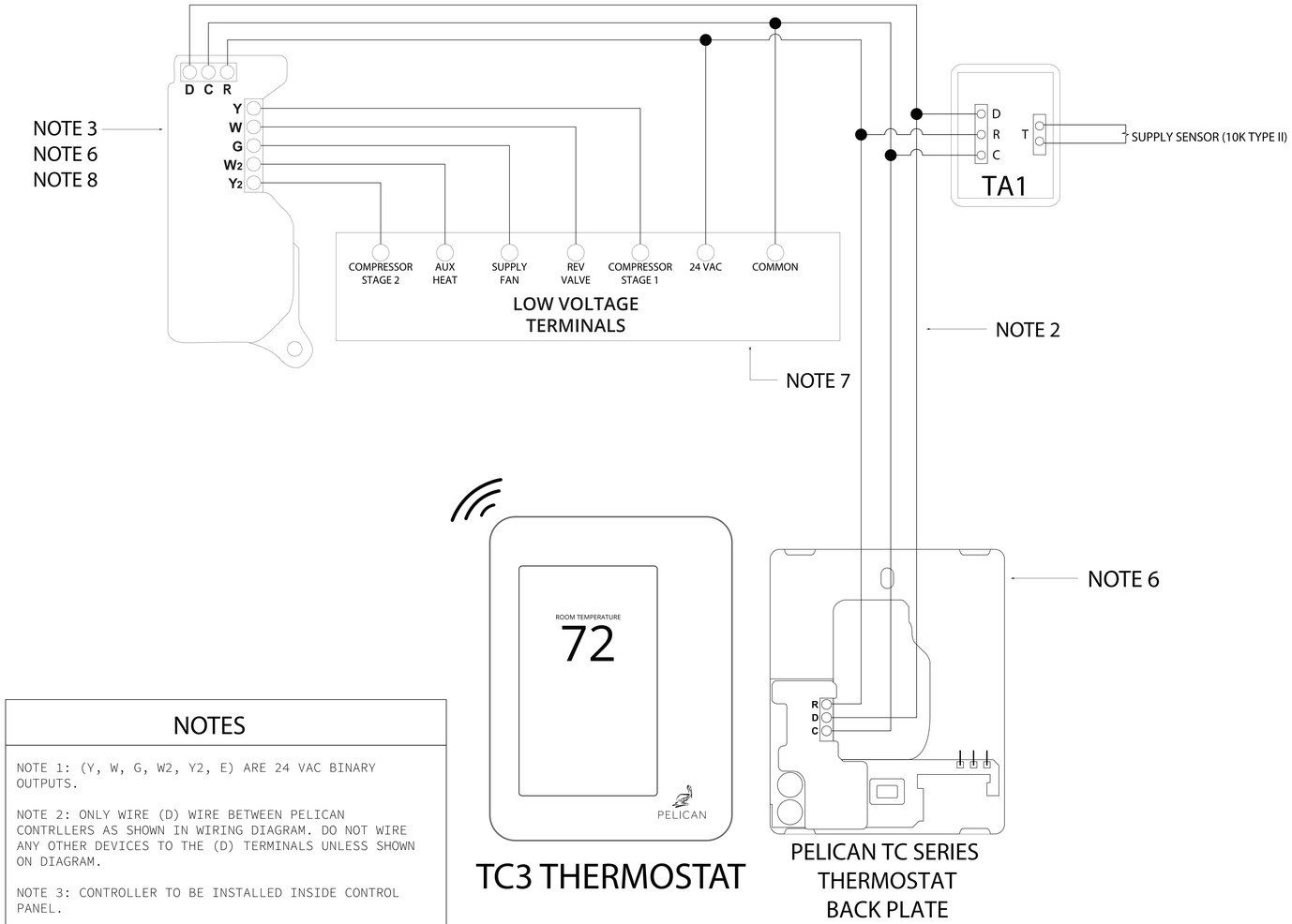
PROJECT NUMBER:
P-25092616

CLIMATE CONTROLS UPGRADES

REV03: 10/20/2025
REV02: 10/16/2025
REV01: 09/29/2025

TYPICAL OF:
WP-125 WP-609
WP-126 WP-800
WP-127 WP-802
WP-128 WP-803
WP-601 WP-804
WP-602 WP-805
WP-603 WP-807
WP-604 WP-808
WP-605 WP-809
WP-606 WP-813
WP-607 WP-814
WP-608 WP-815

BARD PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 24)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

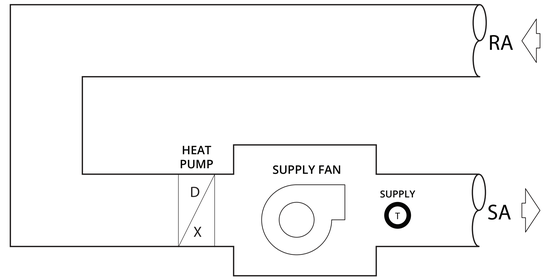
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	24
PELICAN	TA1	TEMP & ALARM SENSOR	24
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	24

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

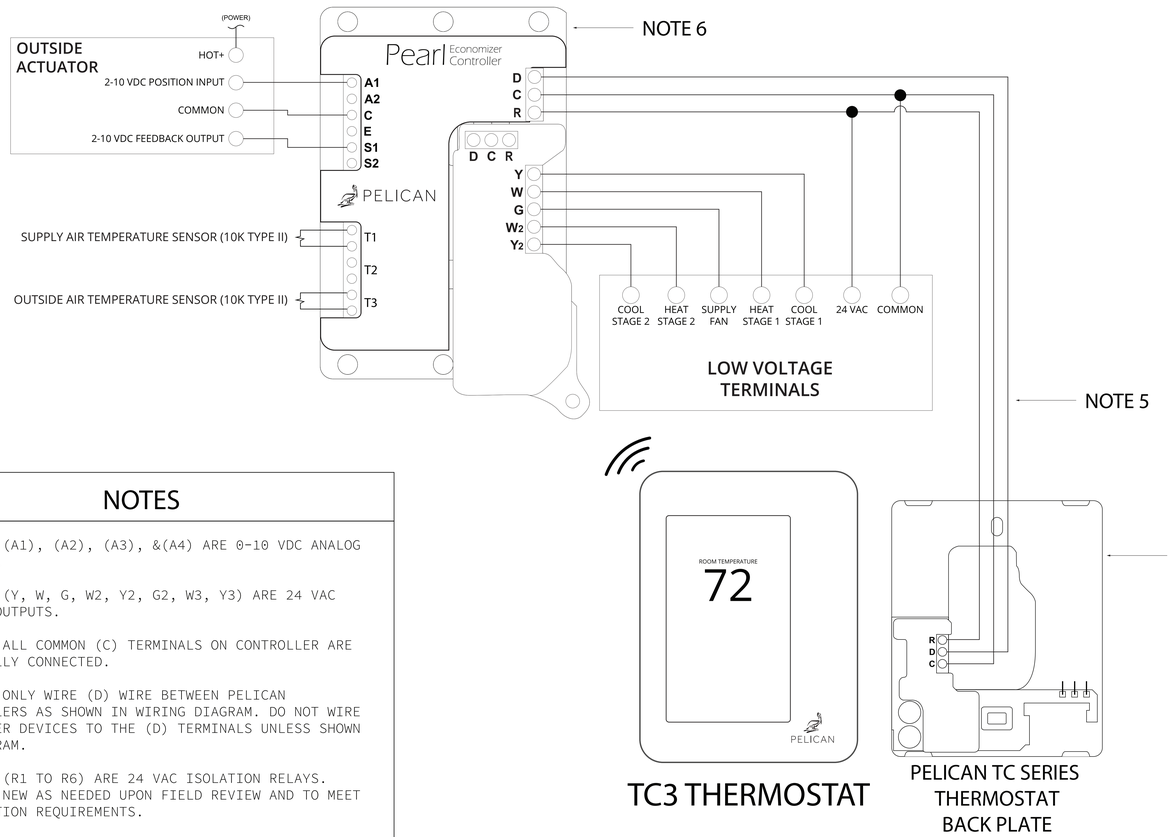
WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25092616	D-25092616-1	REV03		BARD HP CONTROL	KLR	10/20/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	2 of 10

TYPICAL OF:

AC-50	AC-131	AC-404
AC-60	AC-132	AC-405
AC-63	AC-135	AC-406
AC-65	AC-141	AC-407
AC-76	AC-150	
AC-78	AC-151	
AC-81	AC-152A	
AC-90	AC-152B	
AC-91	AC-280	
AC-93	AC-401	
AC-94	AC-402	
AC-103	AC-403	

CARRIER GH/EC W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 28)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

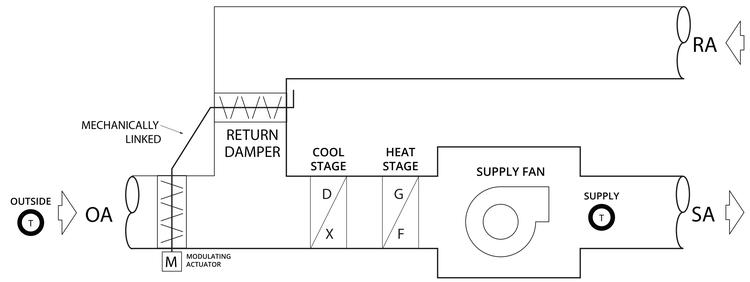
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	28
PELICAN	PEARL	ADVANCED CONTROLLER	28

AC UNIT (TYPICAL OF 1) AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO
VARIABLE DAMPER: YES

DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

INPUT SENSOR T2: OFF

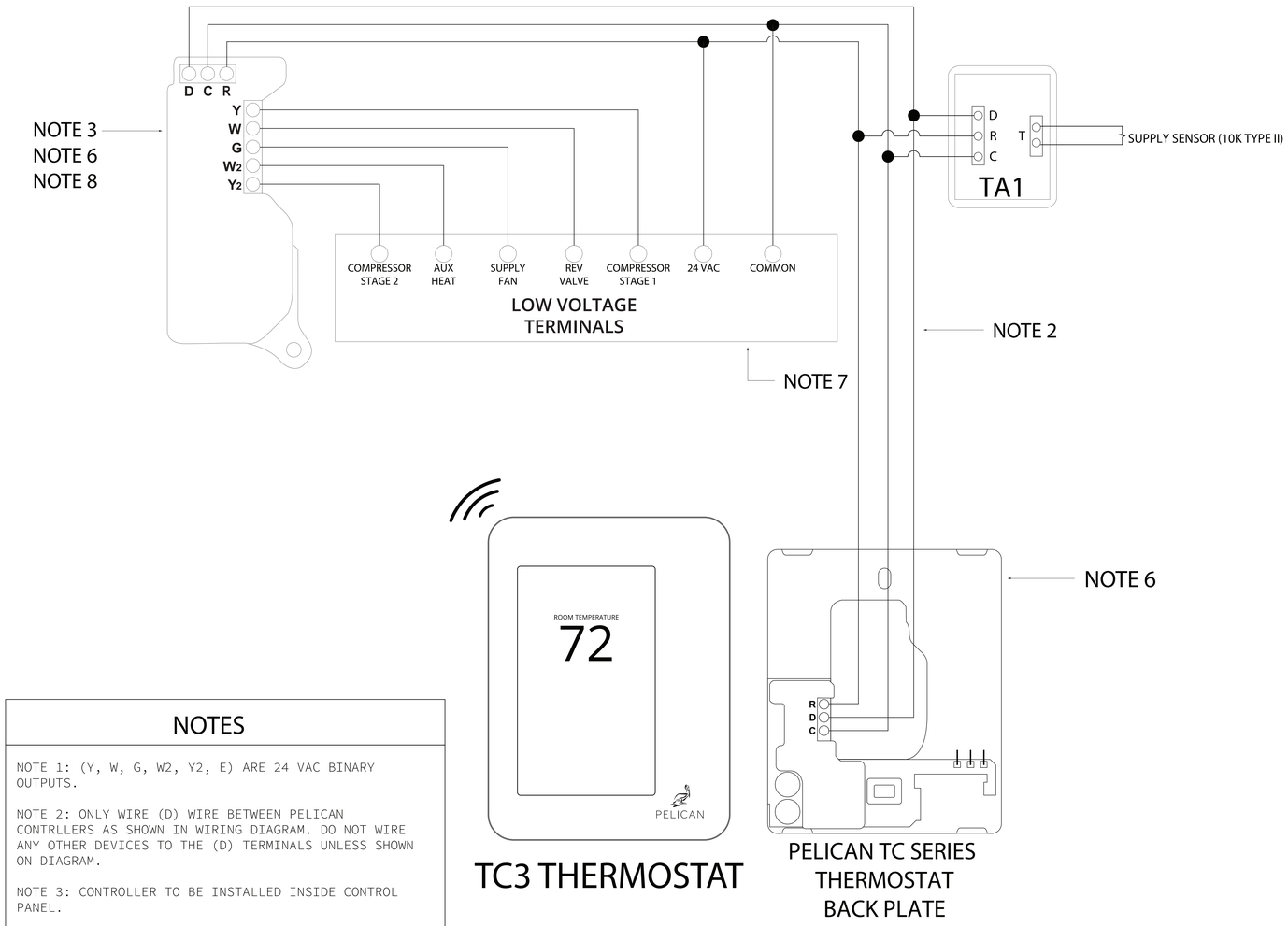
INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25092616	D-25092616-2	REV02		CARRIER GHEC W ECON CONTROL	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	3 of 10

PELICAN

TYPICAL OF:
586
587
588
589
590

EUBANK WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 5)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

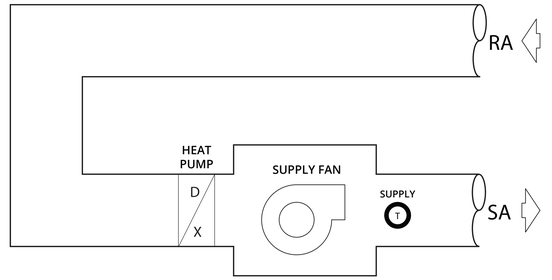
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	5
PELICAN	TA1	TEMP & ALARM SENSOR	5
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	5

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

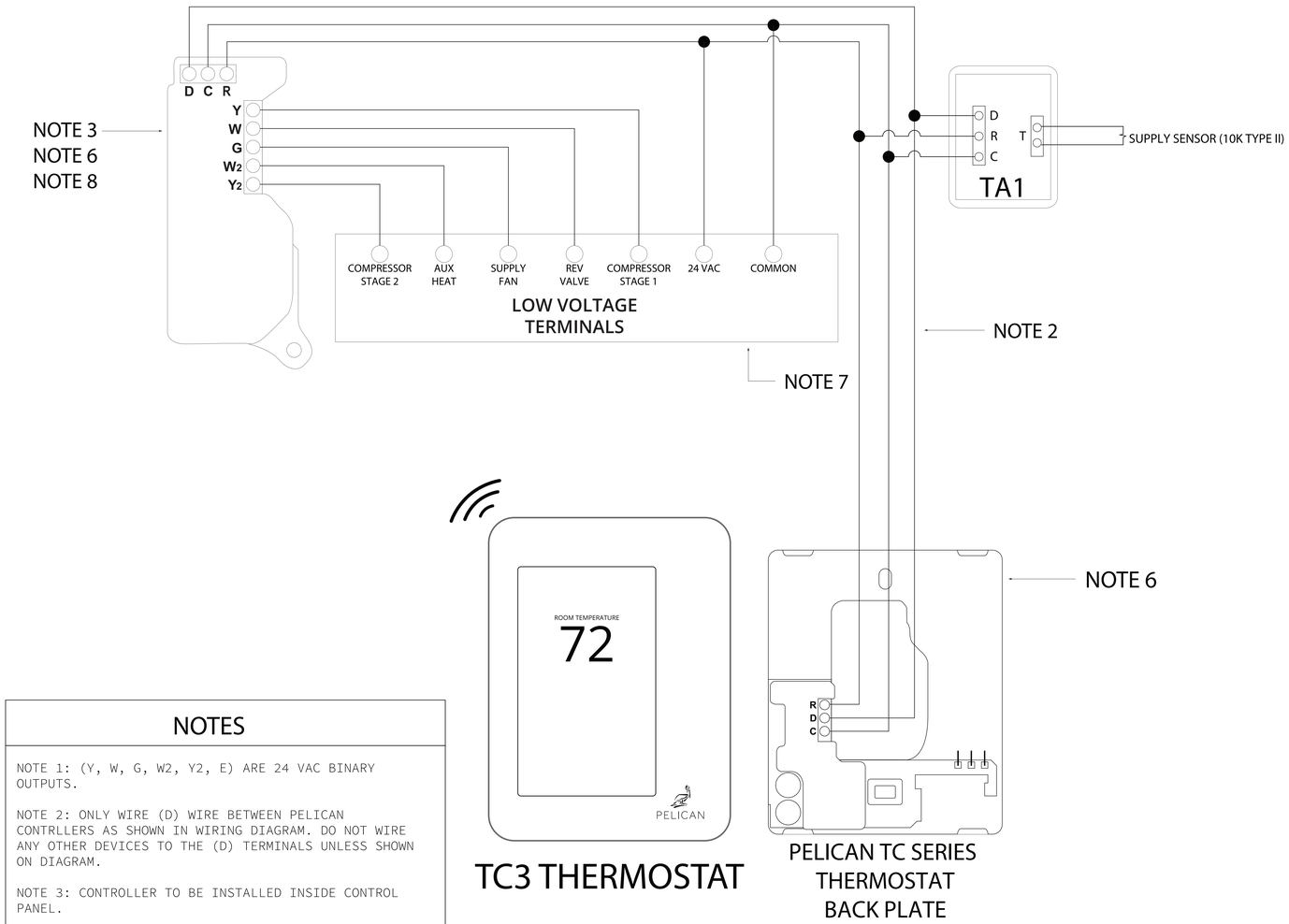
SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-3	REV02		EUBANK WALL HP CONTROL	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	4 of 10

TYPICAL OF:
WP-582 WP-708
WP-583 WP-709
WP-584 WP-801
WP-585 WP-806
WP-700 WP-816
WP-701 WP-817
WP-702 WP-818
WP-703 WP-819
WP-704
WP-705
WP-706
WP-707

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 20)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

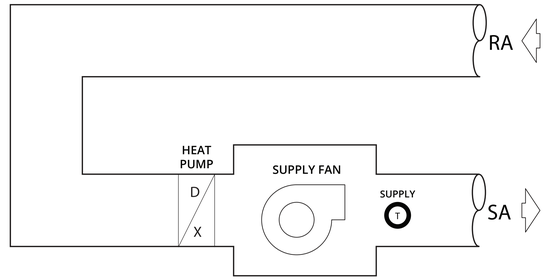
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	20
PELICAN	TA1	TEMP & ALARM SENSOR	20
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	20

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

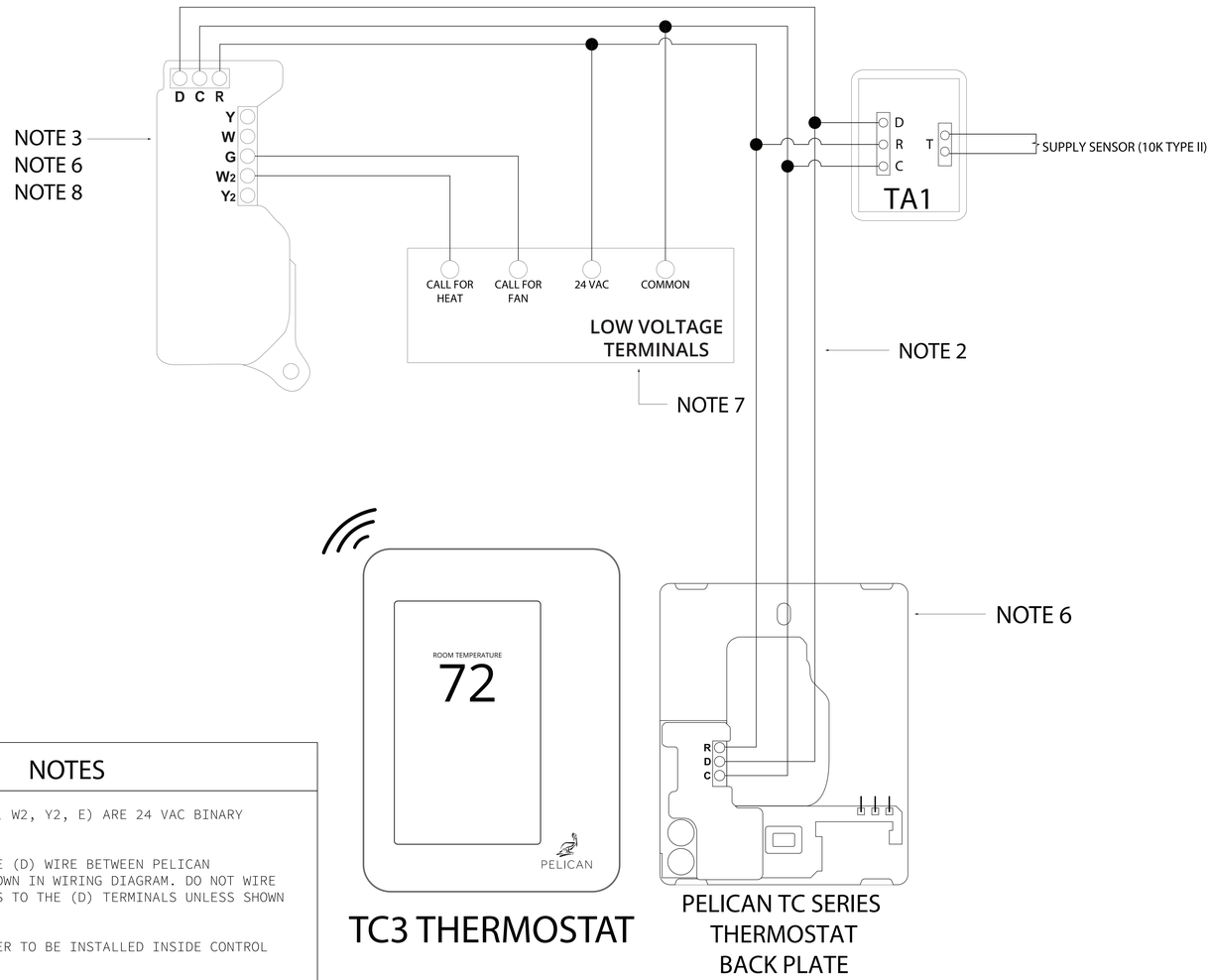
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-4	REV03		ROOFTOP UNIT CONTROL	KLR	10/20/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	5 of 10

TYPICAL OF:
120
121

MODINE UNIT HEATER CONTROLS (TYPICAL TO 2)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

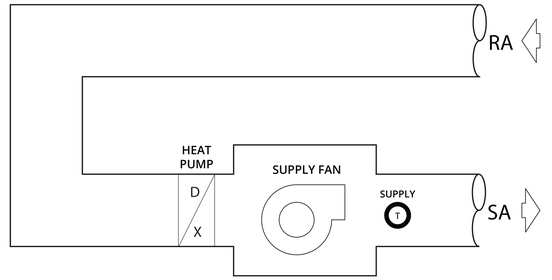
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 1
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

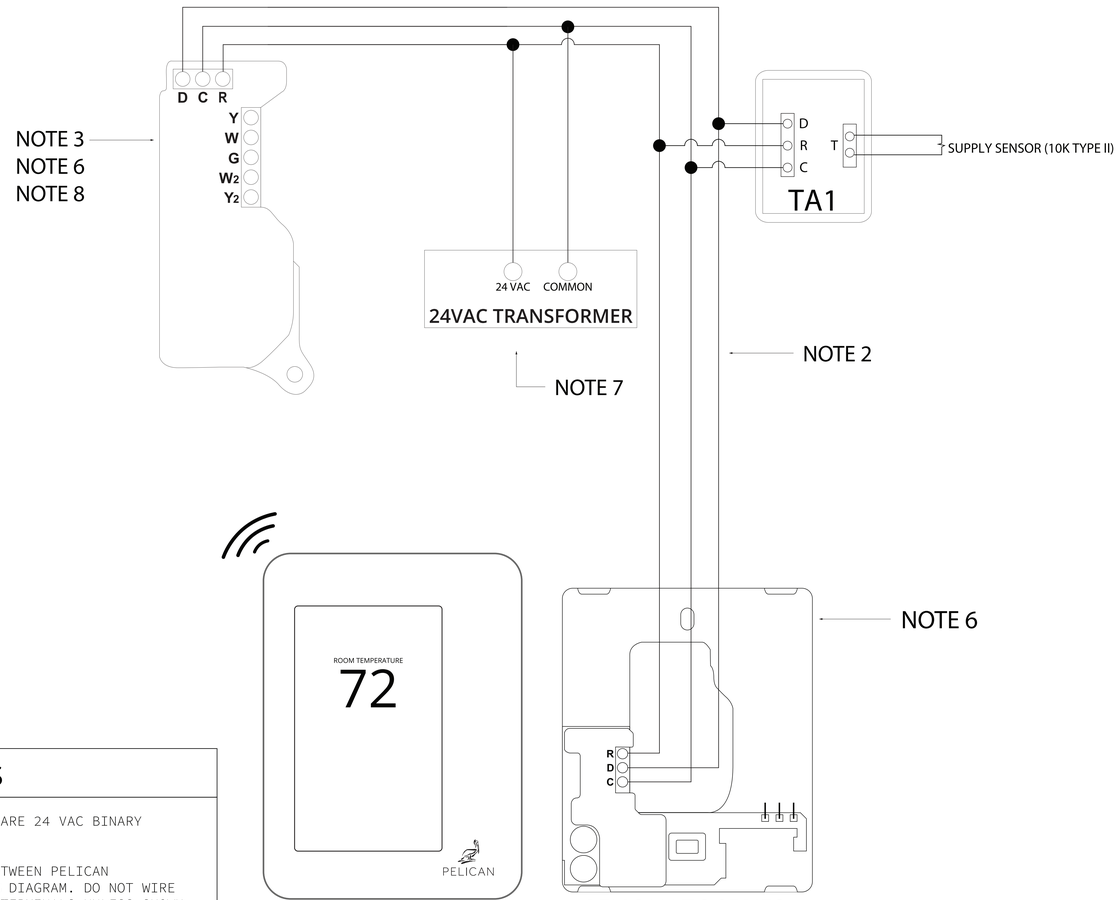
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-5	REV02		UNIT HEATER CONTROL	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	6 of 10

TYPICAL OF:
143

SANYO MINISPLIT HEAT PUMP (MONITOR ONLY) (TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

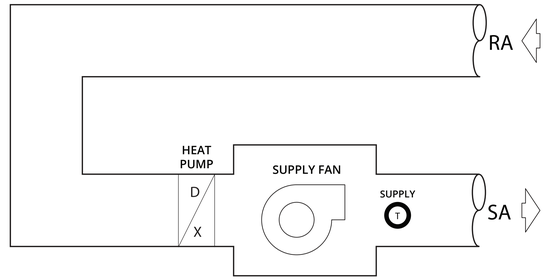
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	1
PELICAN	TA1	TEMP & ALARM SENSOR	1
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	1

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 0
AUX HEAT: (SET)
COOL STAGES: 0
FAN STAGES: 0

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

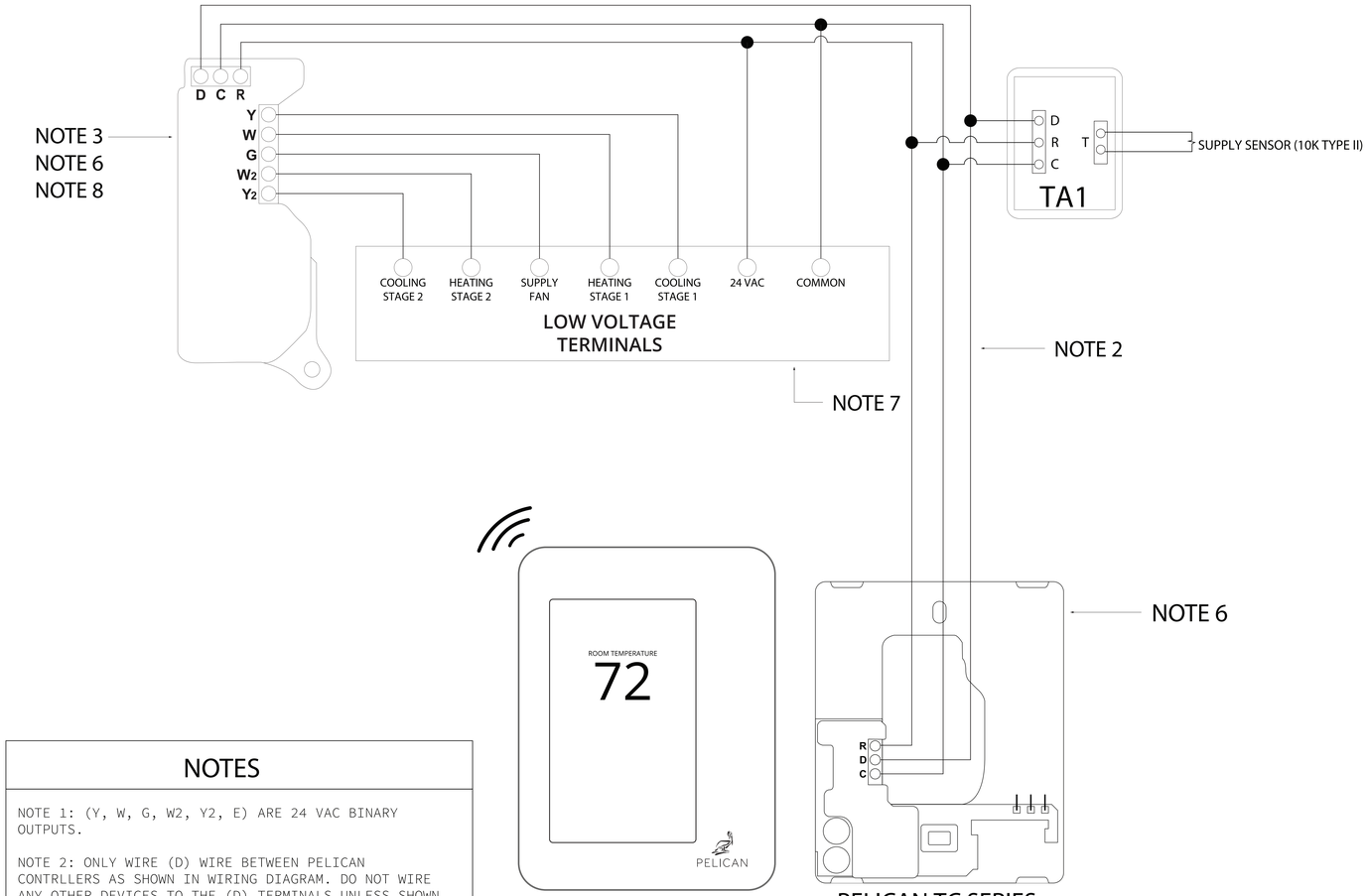
WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25092616	D-25092616-6	REV02		SANYO UNIT CONTROL	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	7 of 10

TYPICAL OF:

300	320 (FC-6)	337 (FC-19)
301 (FC-15)	321 (FC-1)	339 (FC-20)
302	322 (FC-7)	
303	323 (FC-2)	
304 (FC-11)	324 (FC-8)	
305	327 (FC-4)	
310	329 (FC-5)	
311 (FC-30)	330 (FC-21)	
312 (FC-28)	331 (FC-16)	
313 (FC-27)	332 (FC-22)	
314 (FC-25)	333 (CFC-17)	
315 (FC-26)	334 (FC-23)	

YORK EH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 25)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

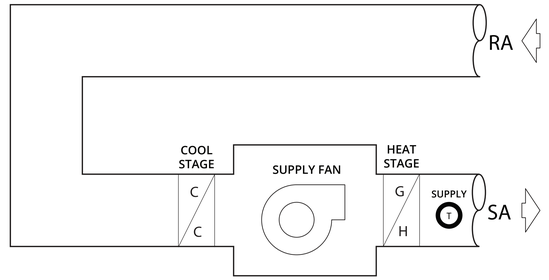
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	25
PELICAN	TA1	TEMP & ALARM SENSOR	25
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	25

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

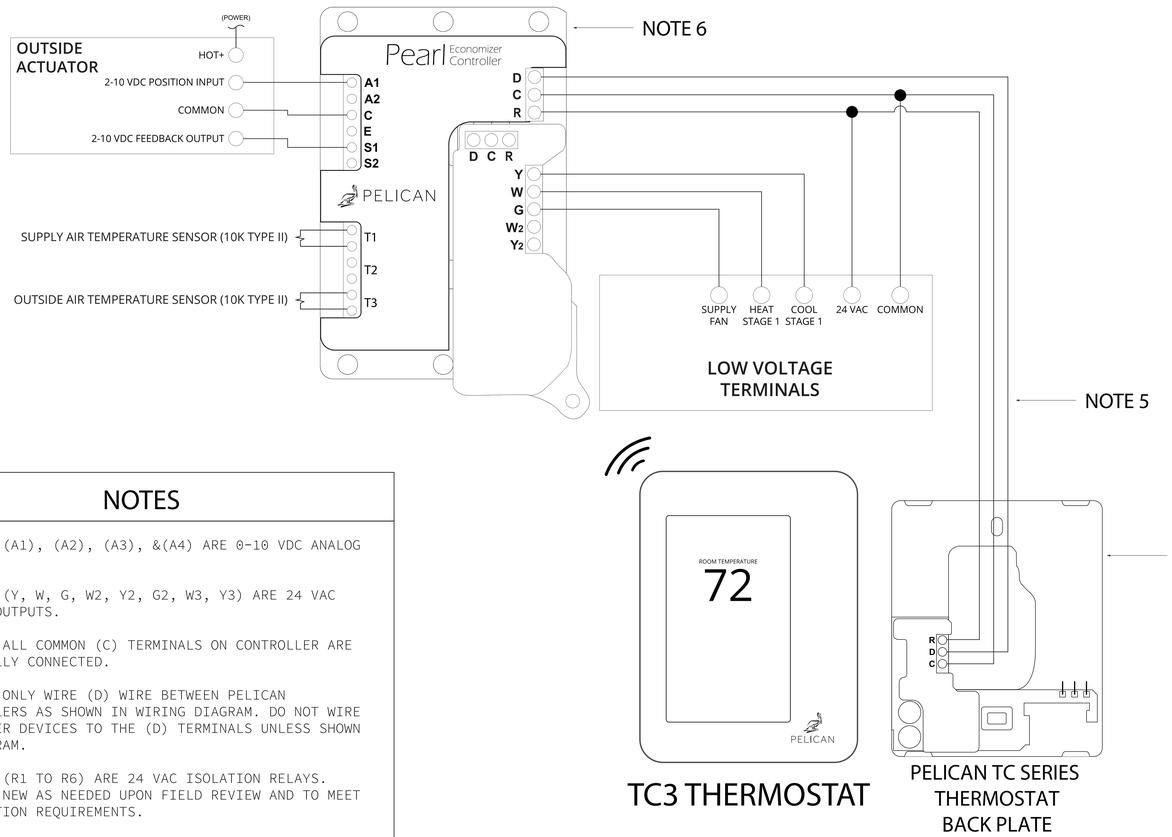
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-7	REV02		YORK EH/EC CONTROLS	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	8 of 10

TYPICAL OF:
AC-53
AC-73
AC-79
AC-102
AC-110
AC-111
AC-140
AC-143
AC-270
AC-271
AC-273
AC-274
AC-285
AC-287
AC-325
ACP-2

YORK GH/EC W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 16)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

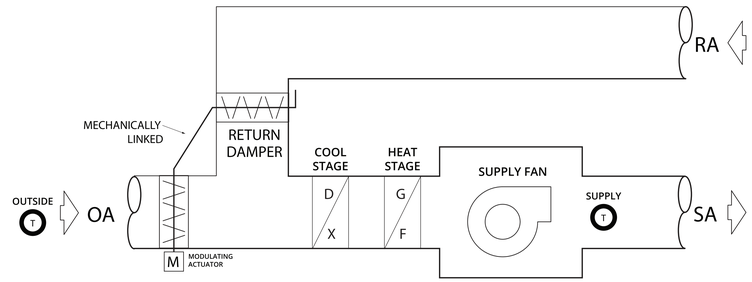
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	16
PELICAN	PEARL	ADVANCED CONTROLLER	16

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO
VARIABLE DAMPER: YES

DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

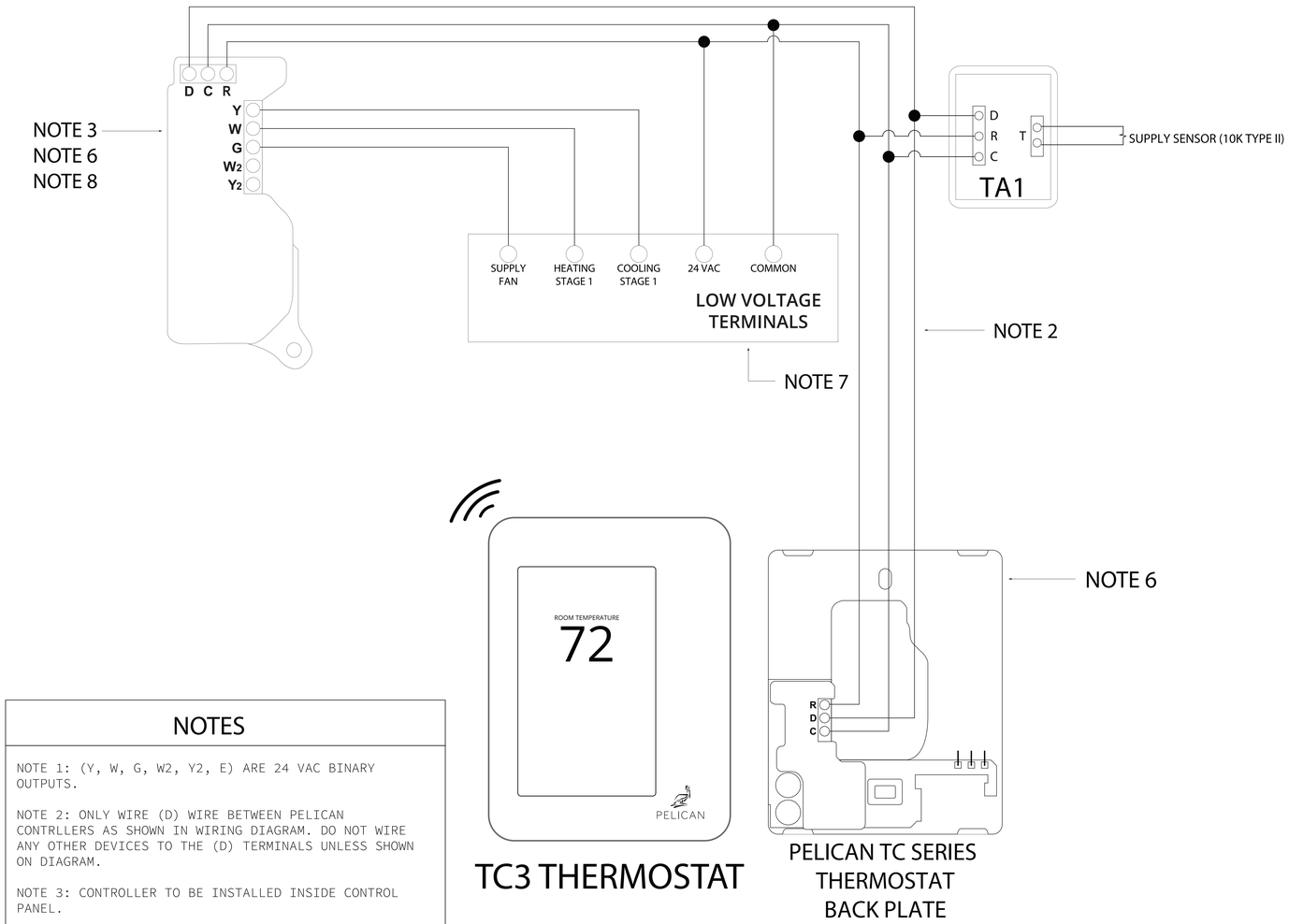
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-8	REV03		YORK GH/EC W/ ECON CONTROL	KLR	10/20/2025	COLTON JUSD BLOOMINGTON HS	PELICAN	9 of 10

TYPICAL OF:
LIBRARY

YORK GH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 5)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

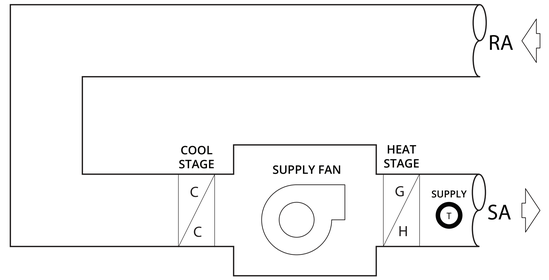
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	5
PELICAN	TA1	TEMP & ALARM SENSOR	5
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	5

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 1
COOL STAGES: 1
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25092616	D-25092616-9	REV02		YORK GH/EC CONTROLS	KLR	10/16/2025	COLTON JUSD BLOOMINGTON HS	10 of 10

CLIMATE CONTROLS

CRESTMORE ELEMENTARY SCHOOL
18870 JURUPA AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

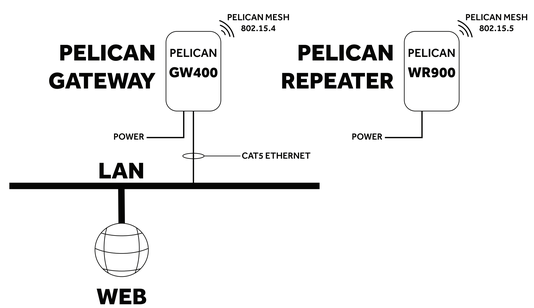
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	4

PELICAN

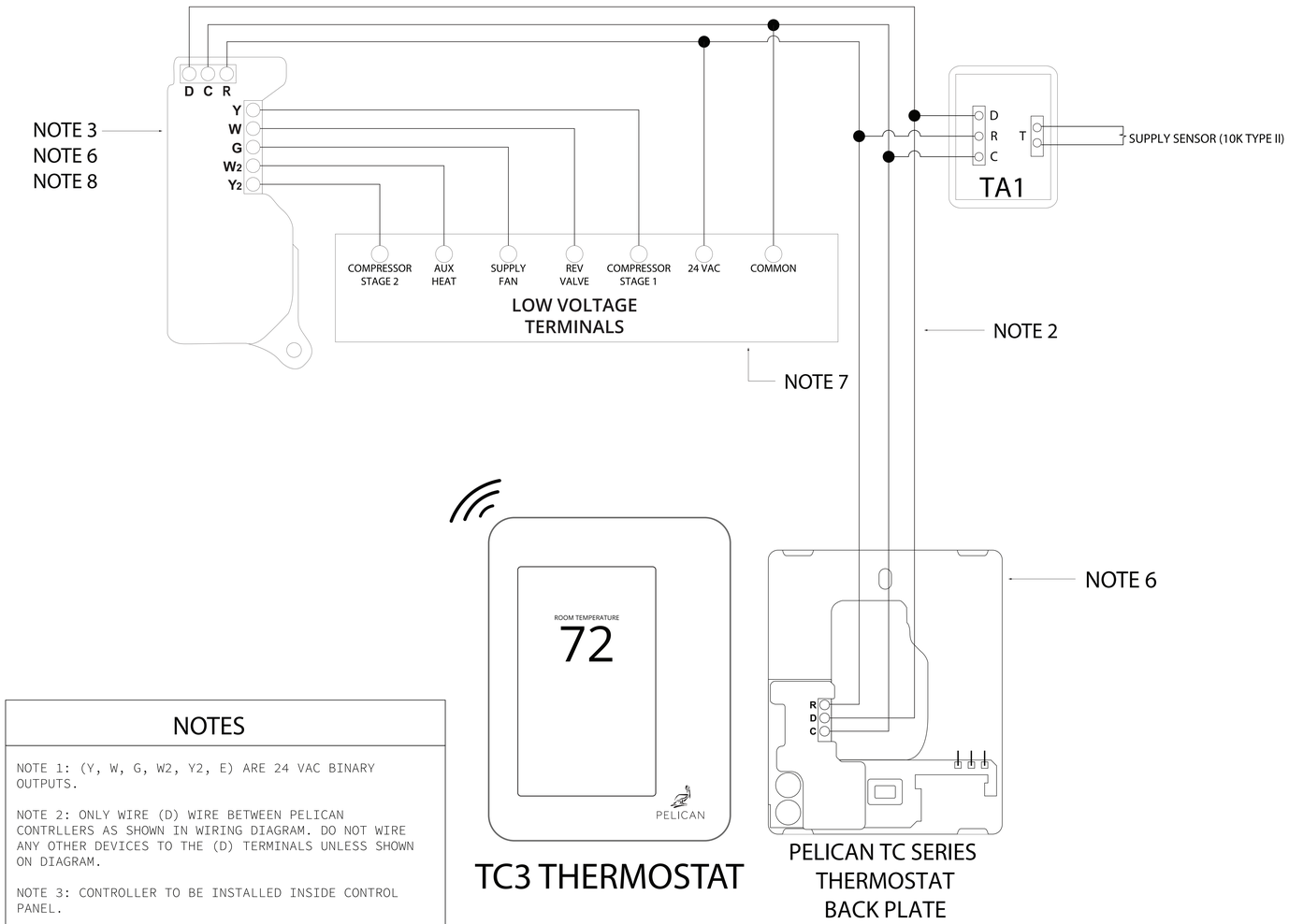
PROJECT NUMBER:
P-25100215

CLIMATE CONTROLS UPGRADES

REV03: 10/15/2025
REV02: 10/09/2025
REV01: 09/29/2025

TYPICAL OF:
WP-31
WP-32
WP-33
WP-K3

BARD PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 4)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

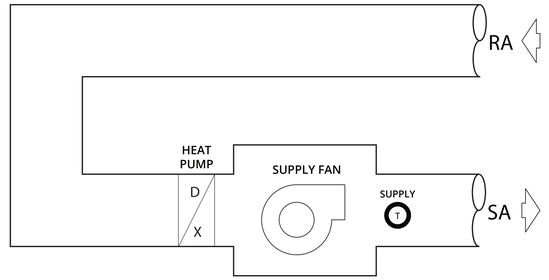
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	4
PELICAN	TA1	TEMP & ALARM SENSOR	4
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	4

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: FCU-#

SYSTEM TYPE: HEAT PUMP
HEAT STAGES: 2
REVERSING VALVE: (SET)
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

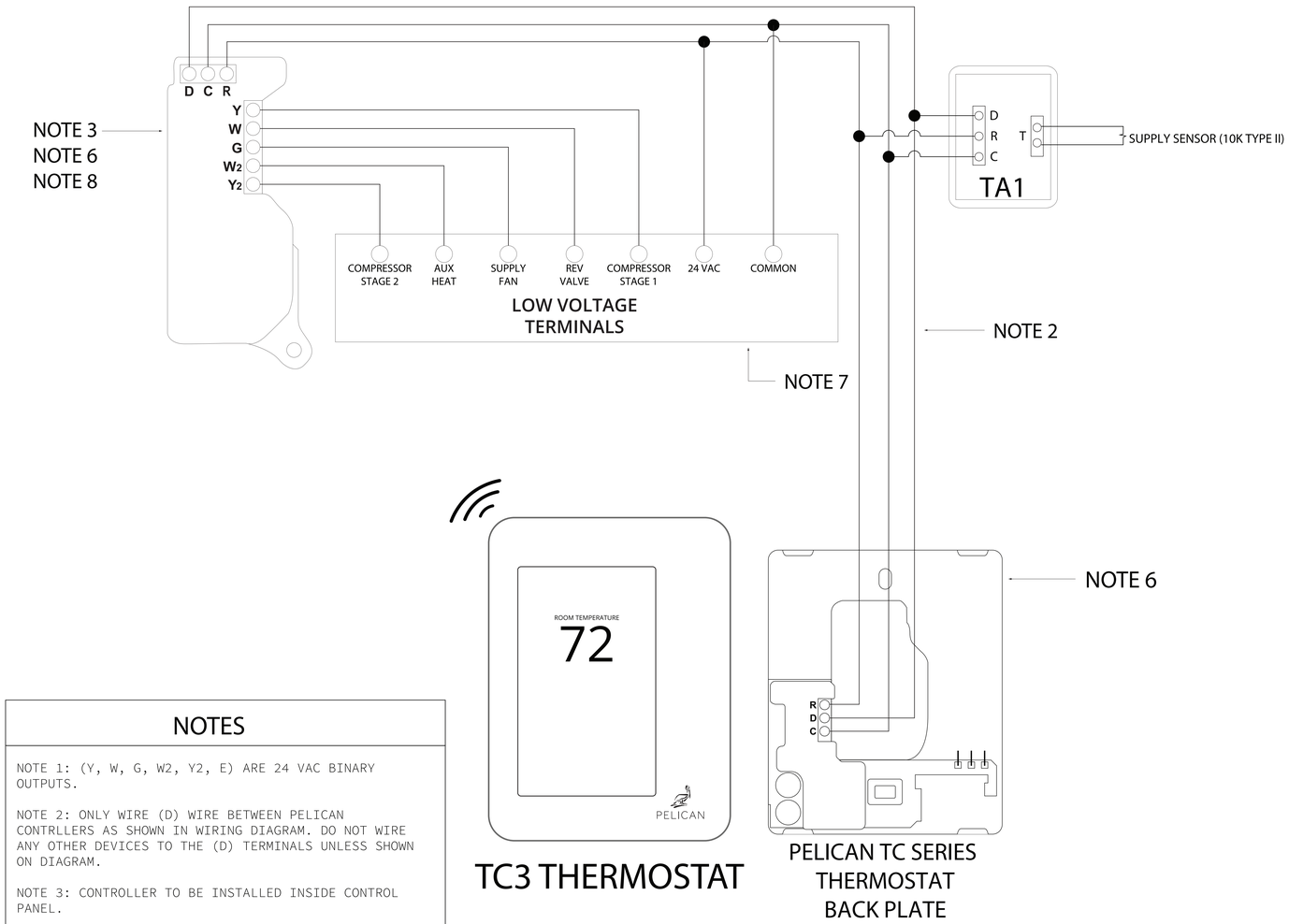
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25100215	D-25100215-1	REV03		BARD HP CONTROL	KLR	10/15/2025	COLTON JUSD CRESTMORE ES	PELICAN	2 of 8

TYPICAL OF:
AC-PS1
AC-PS2
AC-PS3

CARRIER HEAT PUMP UNIT CONTROLS (TYPICAL TO 3)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

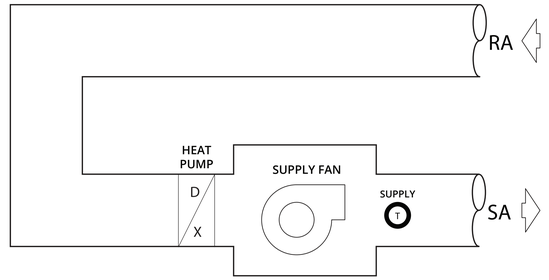
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	3
PELICAN	TA1	TEMP & ALARM SENSOR	3
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: FCU-#

SYSTEM TYPE: HEAT PUMP
HEAT STAGES: 2
REVERSING VALVE: (SET)
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

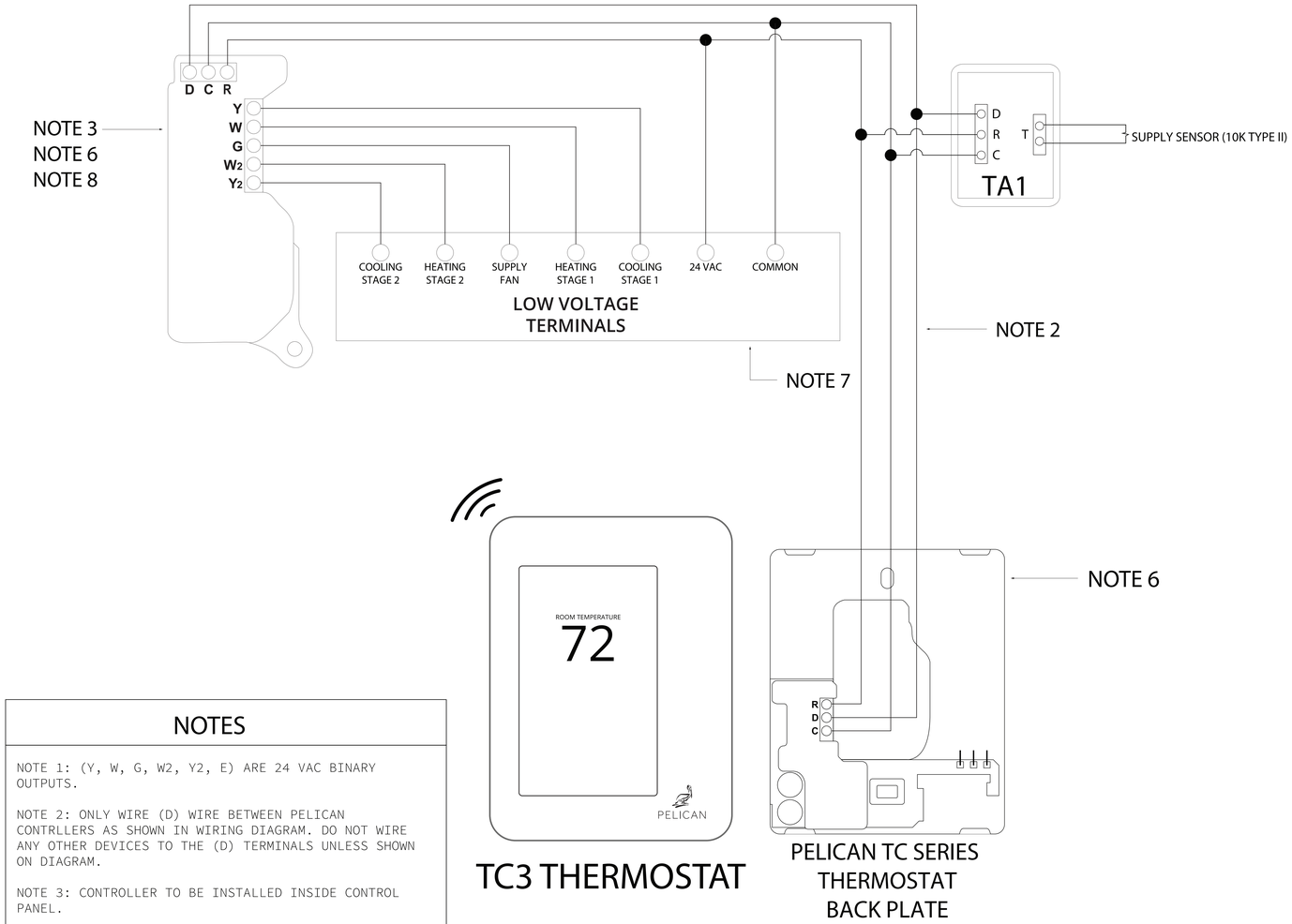
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25100215	D-25100215-7	REV03		CARRIER HP CONTROL	KLR	10/15/2025	COLTON JUSD CRESTMORE ES	PELICAN	8 of 8

TYPICAL OF:
F-34A
F-34B
F-35A
F-35B
F-40A
F-40B
F-41A
F-41B
F-42A
F-42B
F-43A
F-43B

CARRIER GH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 12)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

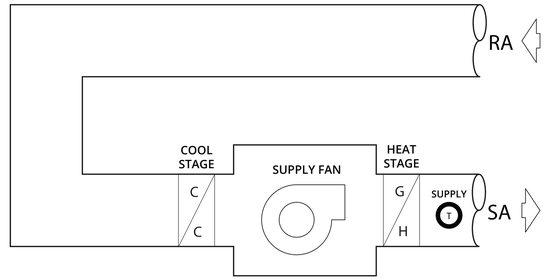
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	12
PELICAN	TA1	TEMP & ALARM SENSOR	12
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	12

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

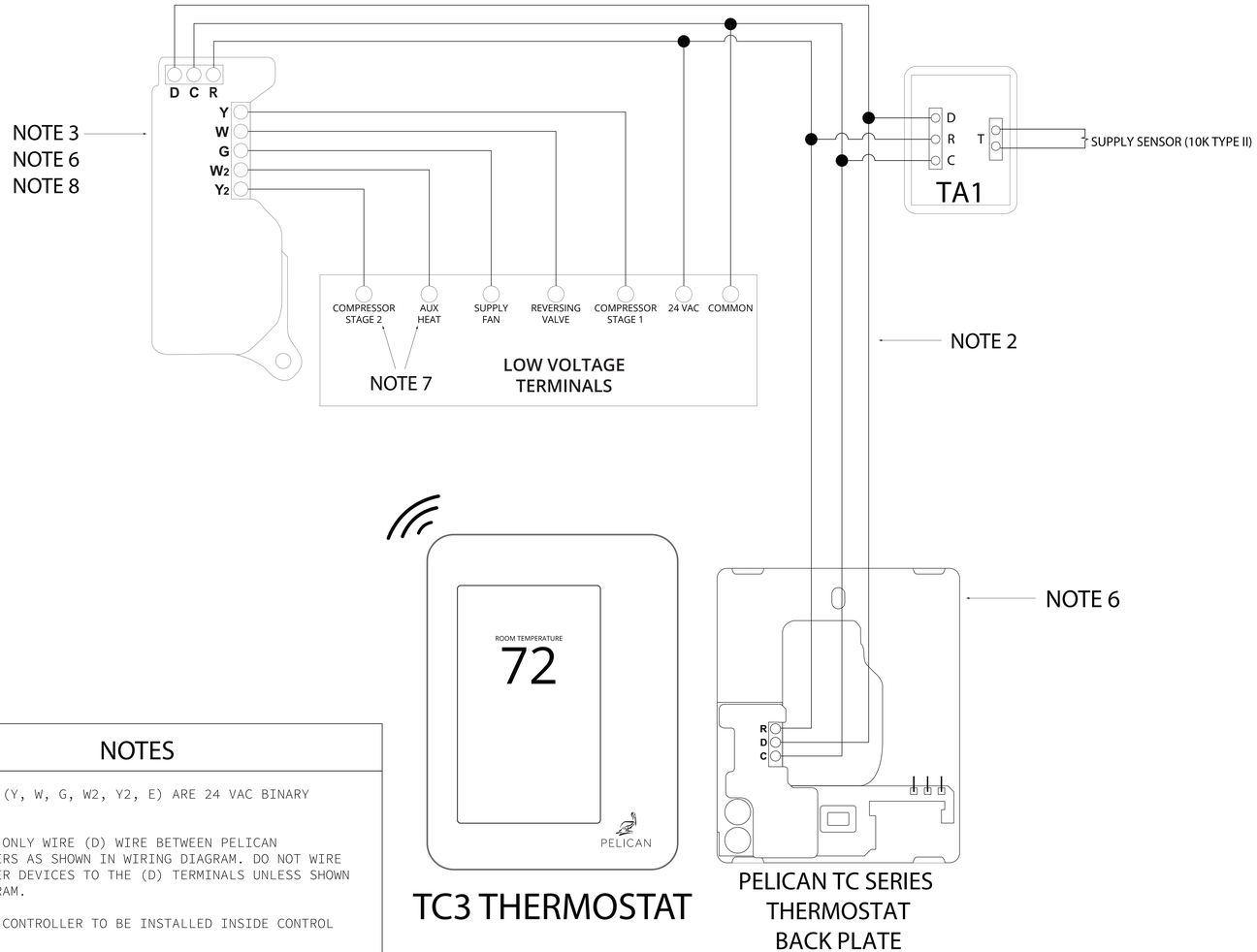
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100215	D-25100215-2	REV02		CARRIER GHEC CONTROLS	KLR	10/09/2025	CRESTMORE	COLTON JUSD CRESTMORE ES	PELICAN	3 of 8

TYPICAL OF:
AC-18

ICP HEAT PUMP UNIT CONTROLLER (TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

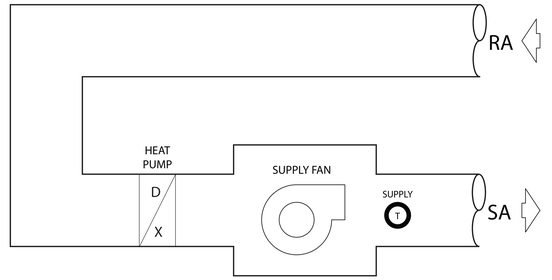
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: TWO STAGE CONTROL & AUXILIARY HEAT TO BE WIRED AS REQUIRED PER ENGINEERED EQUIPMENT SCHEDULE AND APPLICATION NEEDS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	1
PELICAN	TA1	TEMP & ALARM SENSOR	1
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	1

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE THE COMPRESSOR AND REVERSING VALVE TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE THE COMPRESSOR AND REVERSING VALVE TO PROPERLY COOL THE SPACE.
2. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: FCU-#

SYSTEM TYPE: HEAT PUMP
HEAT STAGES: 2
REVERSING VALVE: (SET)
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

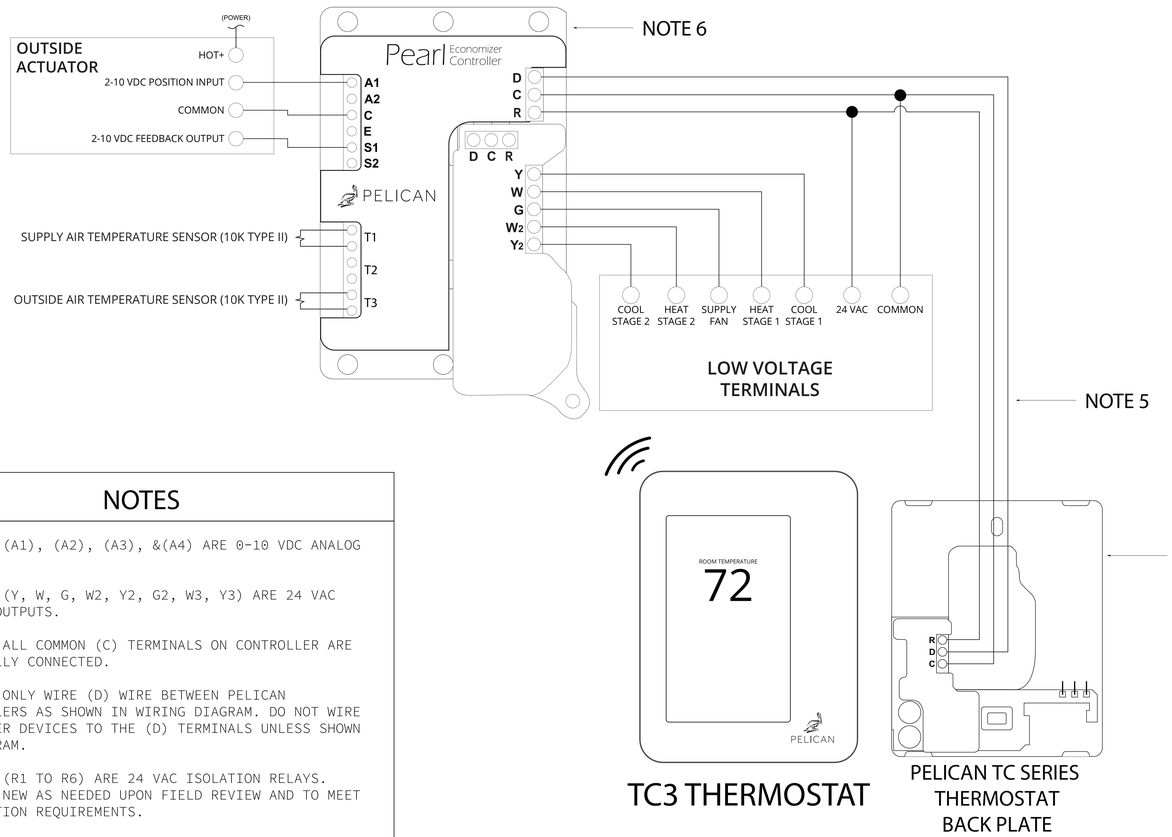
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100215	D-25100215-3	REV02		CARRIER GHEC CONTROLS	KLR	10/09/2025	CRESTMORE	COLTON JUSD CRESTMORE ES	PELICAN	4 of 8

TYPICAL OF:
AC-Lib

LENNOX GH/EC W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

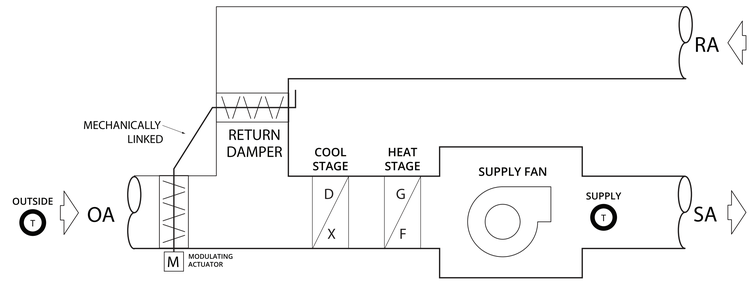
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	1
PELICAN	PEARL	ADVANCED CONTROLLER	1

AC UNIT (TYPICAL OF 1) AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO
VARIABLE DAMPER: YES

DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

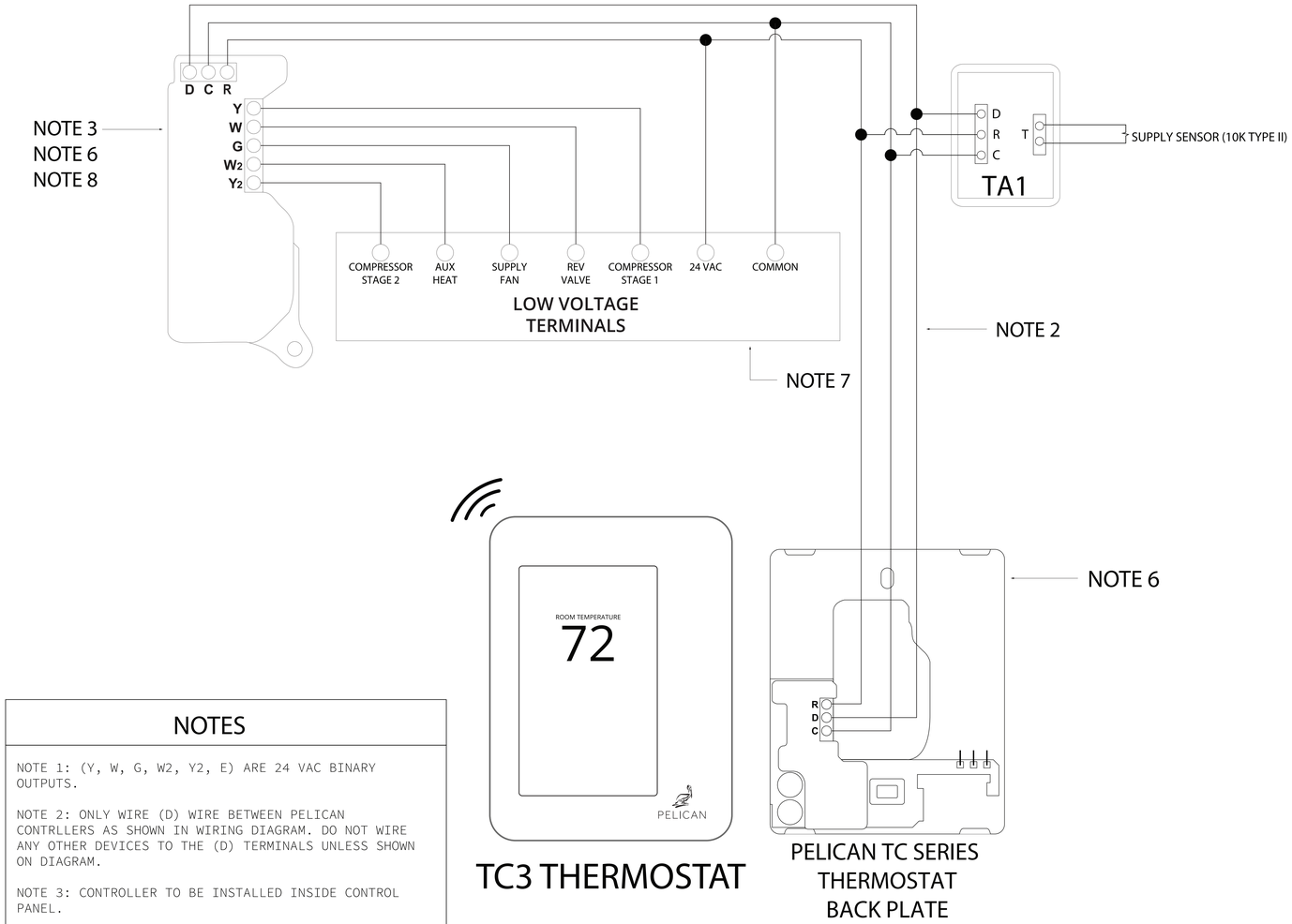
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25100215	D-25100215-4	REV02		LENNOX GHEC W ECON CONTROLS	KLR	10/09/2025	COLTON JUSD CRESTMORE ES	PELICAN	5 of 8

TYPICAL OF:
WP-22
WP-23
WP-24
WP-25
WP-26
WP-27
WP-28
WP-29
WP-30
WP-38
WP-39

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 11)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

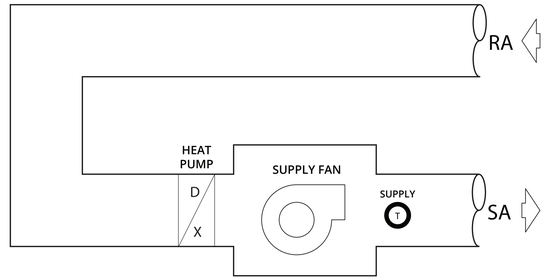
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	10
PELICAN	TA1	TEMP & ALARM SENSOR	10
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	10

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

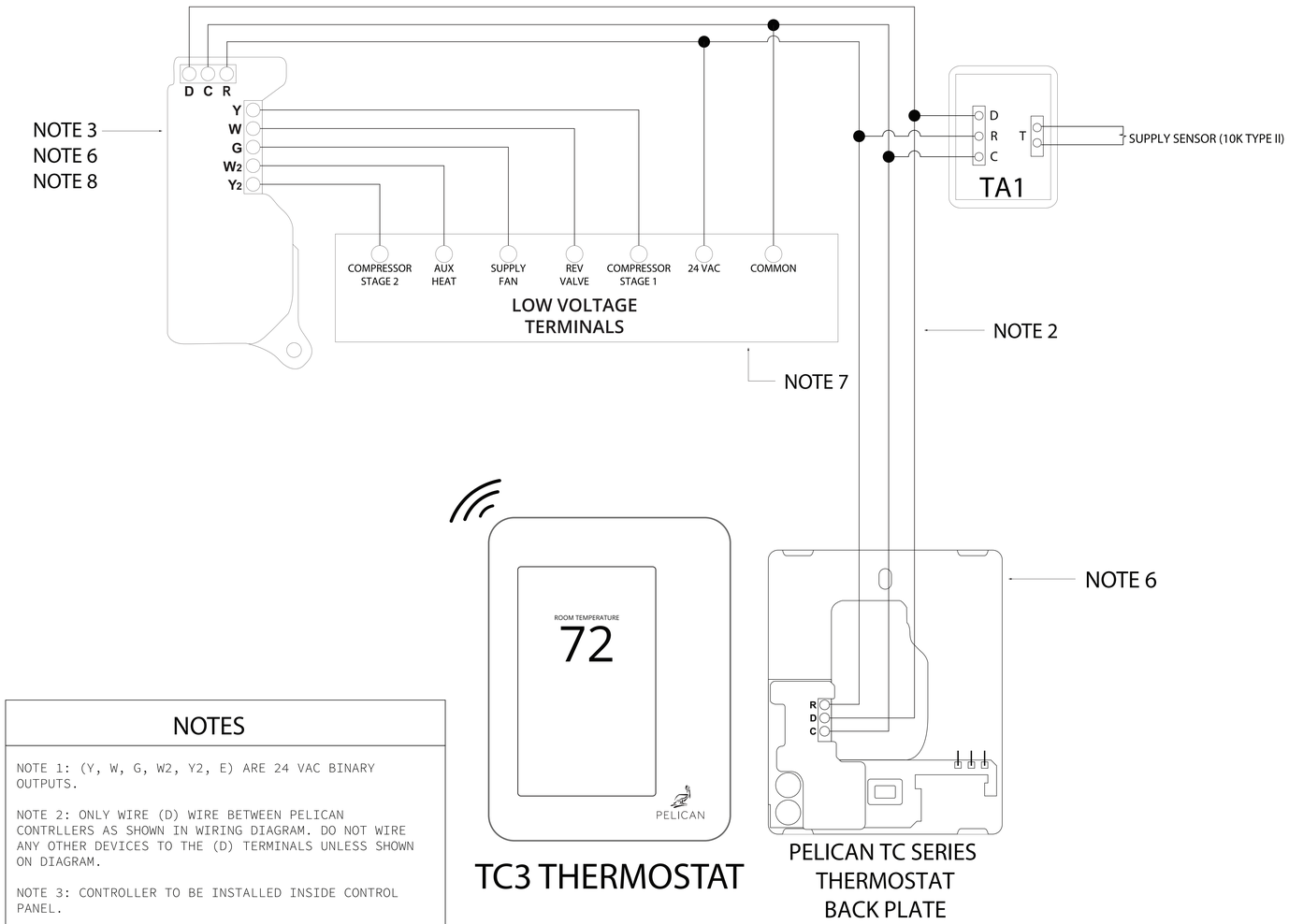
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25100215	D-25100215-5	REV02		MARVAIR PACKAGE HP CONTROLS	KLR	10/09/2025	COLTON JUSD CRESTMORE ES	6 of 8

TYPICAL OF:
AC-19
AC-20

PAYNE PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 2)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

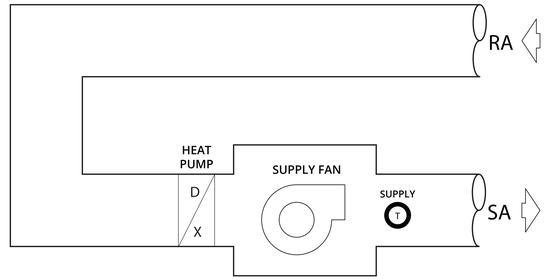
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100215	D-25100215-6	REV02		PAYNE PACKAGE HP CONTROLS	KLR	09/29/2025	COLTON JUSD CRESTMORE ES	PELICAN	7 of 8

CLIMATE CONTROLS

GERALD A. SMITH ELEMENTARY
9551 LINDEN AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

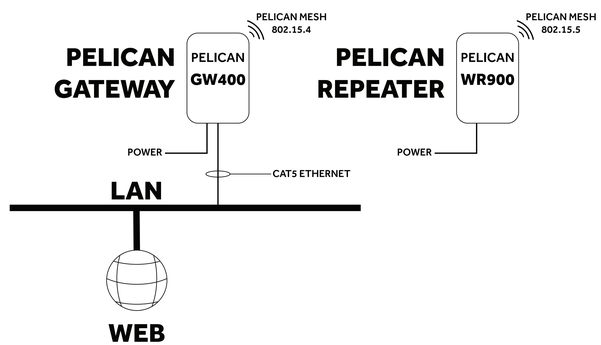
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH (R) DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	4

PELICAN

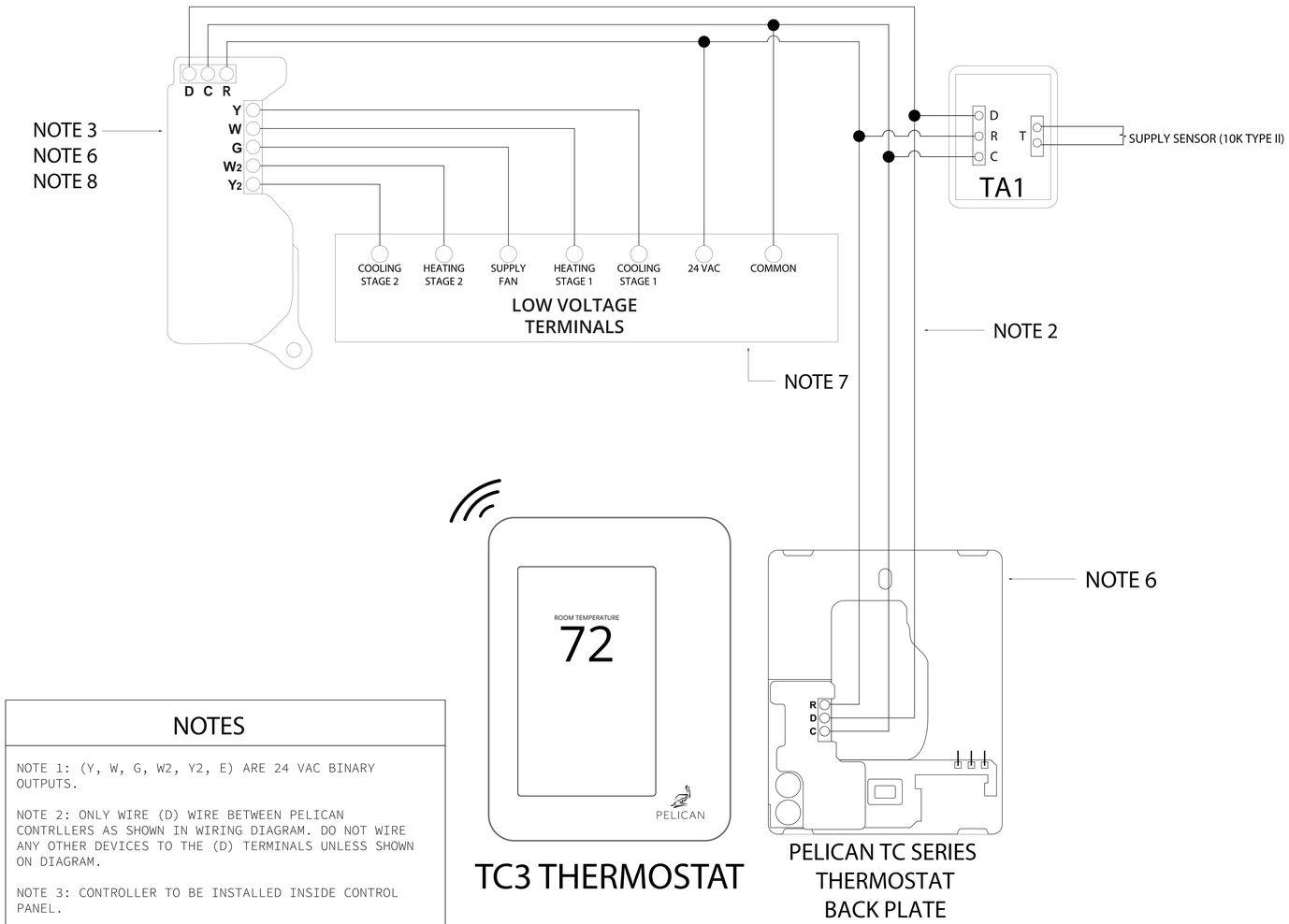
PROJECT NUMBER:
P-25100310

CLIMATE CONTROLS UPGRADES

REV03: 10/16/2025
REV02: 10/10/2025
REV01: 10/03/2025

TYPICAL OF:
AC-05
AC-06
AC-07
AC-08
AC-09
AC-10
AC-11
AC-12
AC-13
AC-14
AC-15
AC-16

YORK GH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 12)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

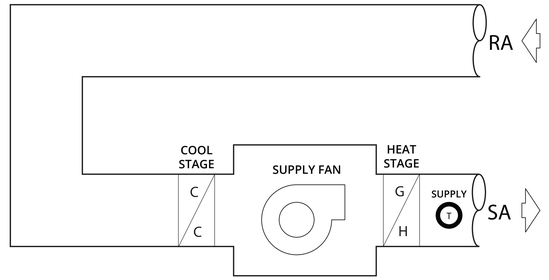
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	12
PELICAN	TA1	TEMP & ALARM SENSOR	12
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	12

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

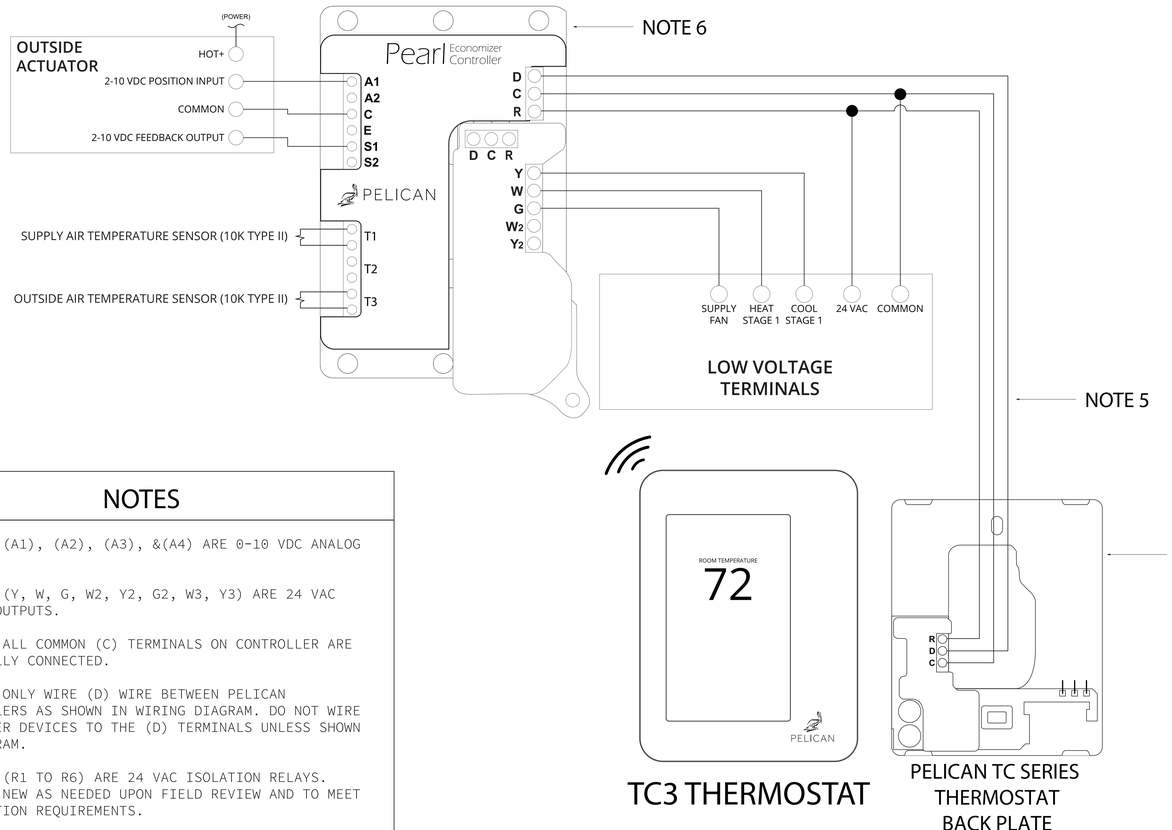
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100310	D-25100310-1	REV03		YORK GH/EC CONTROLS	KLR	10/16/2025	COLTON JUSD GERALD A SMITH ES	PELICAN	2 of 3

TYPICAL OF:
AC-K-1
AC-K-2

YORK GH/EC W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 2)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

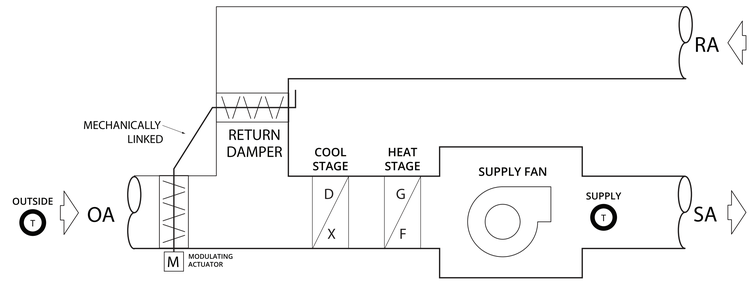
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	2
PELICAN	PEARL	ADVANCED CONTROLLER	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO
VARIABLE DAMPER: YES

DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100310	D-25100310-2	REV03		YORK GH/EC W/ ECON CONTROLS	KLR	10/16/2025	COLTON JUSD GERALD A SMITH ES	PELICAN	3 of 3

CLIMATE CONTROLS

GRAND TERRACE ELEMENTARY SCHOOL
12066 VIVIENDA AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

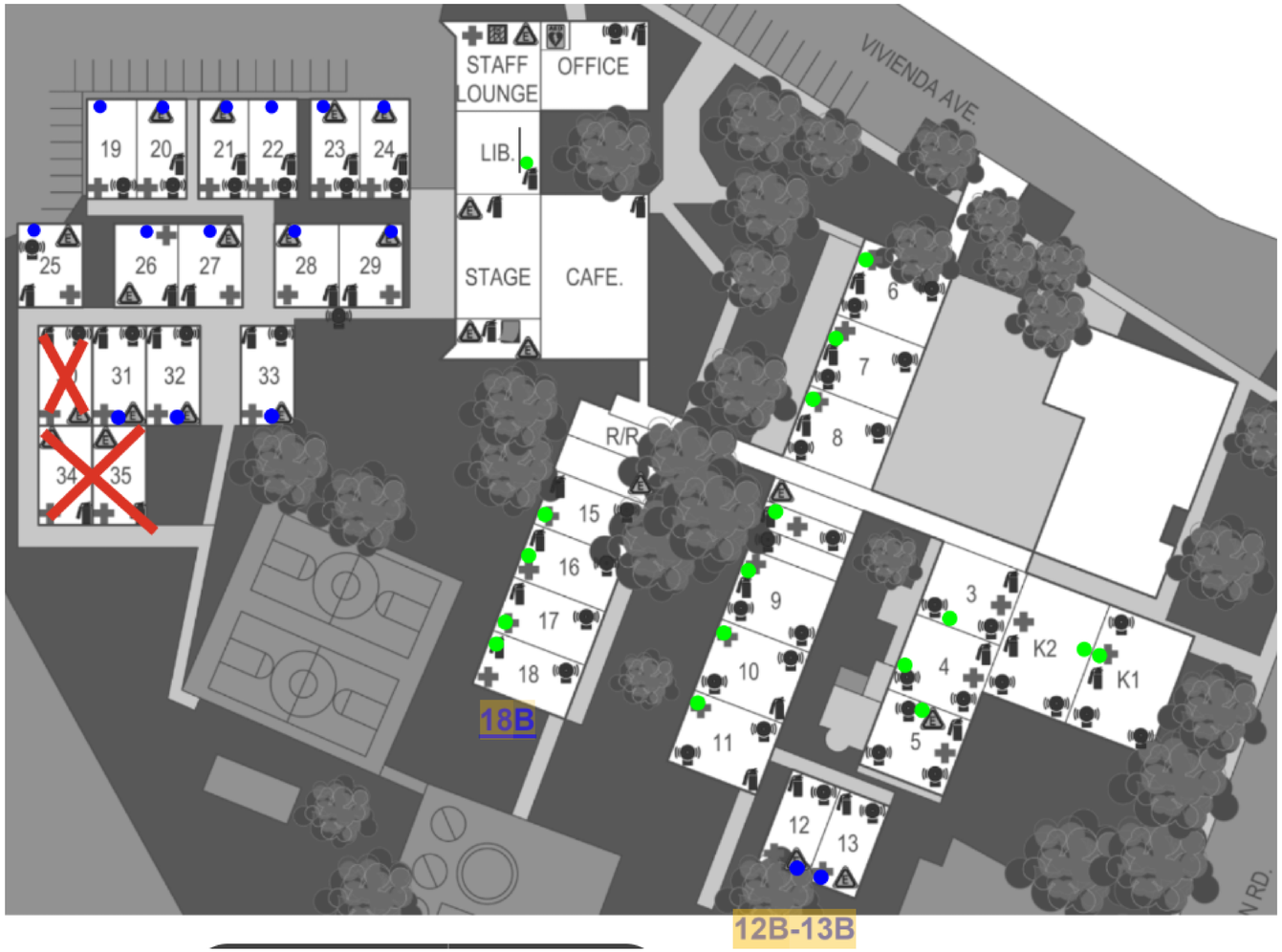
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

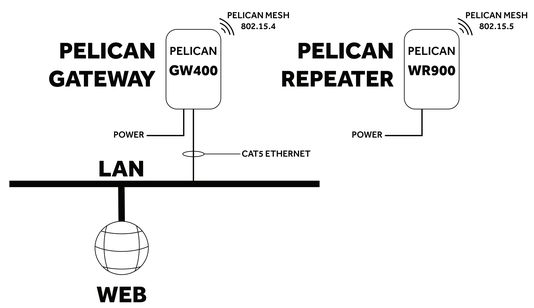
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	4

PELICAN

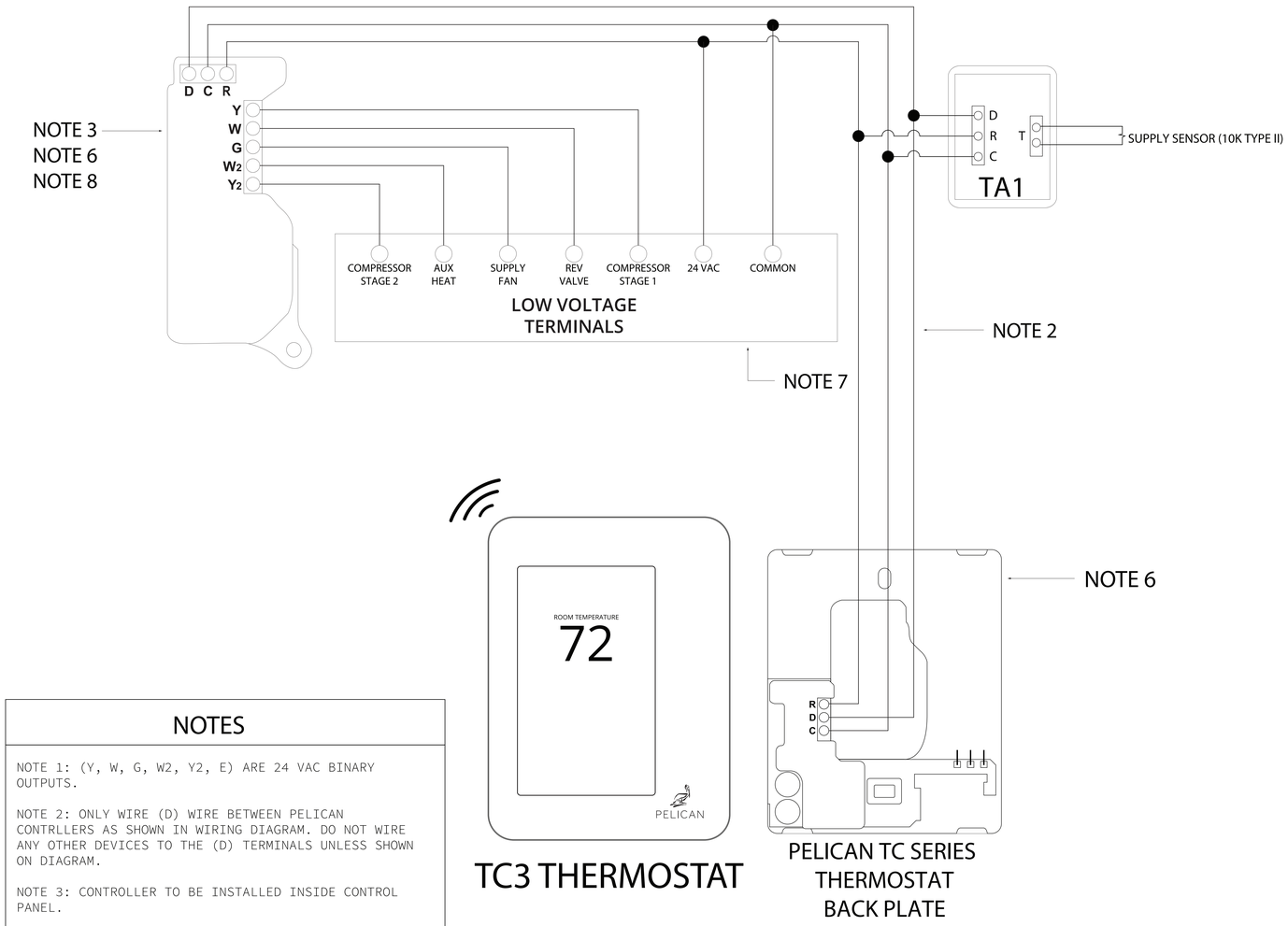
PROJECT NUMBER:
P-25100314

CLIMATE CONTROLS UPGRADES

REV03: 10/16/2025
REV02: 10/10/2025
REV01: 10/03/2025

TYPICAL OF:
12B
13B
18B

WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 3)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

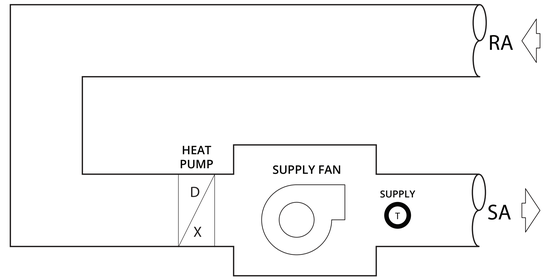
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	3
PELICAN	TA1	TEMP & ALARM SENSOR	3
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	3

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

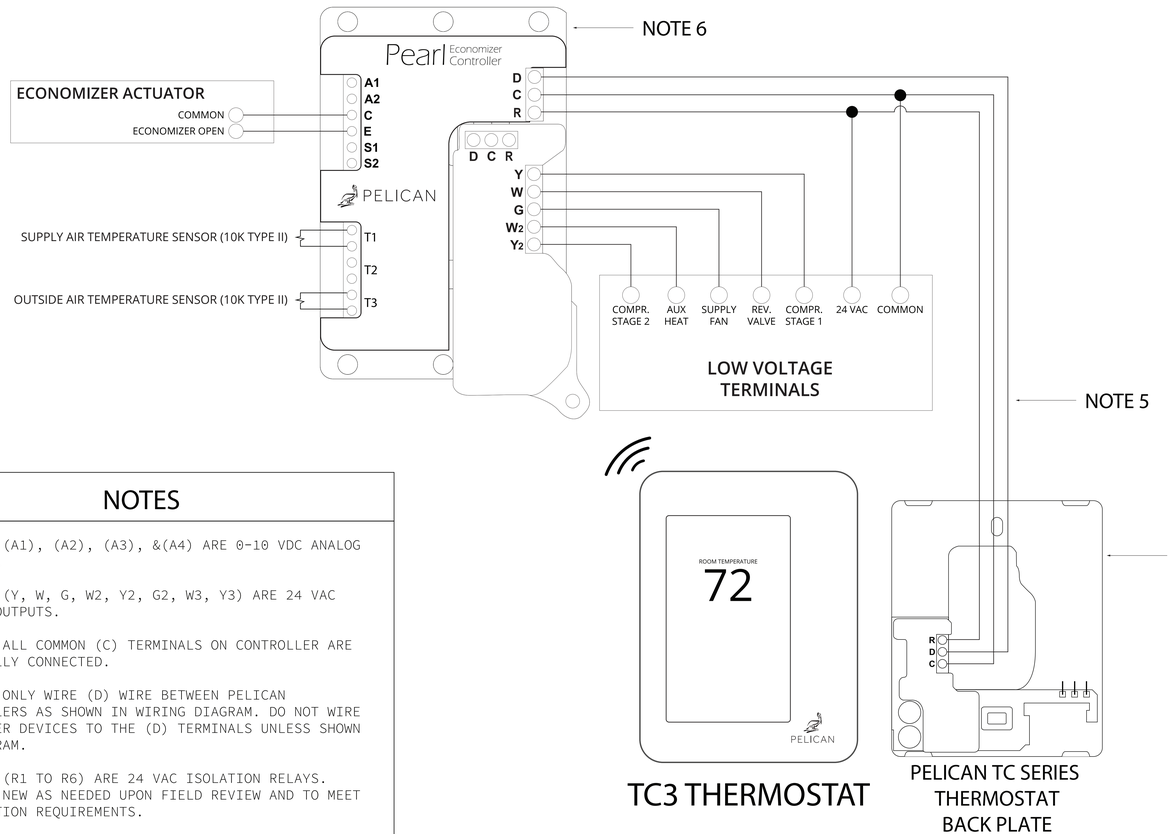
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-7	REV03		WALL HP CONTROL	KLR	10/16/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	8 of 8

TYPICAL OF:
WP-12
WP-13
WP-19
WP-20
WP-21
WP-22
WP-23

BARD HEAT PUMP W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 7)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

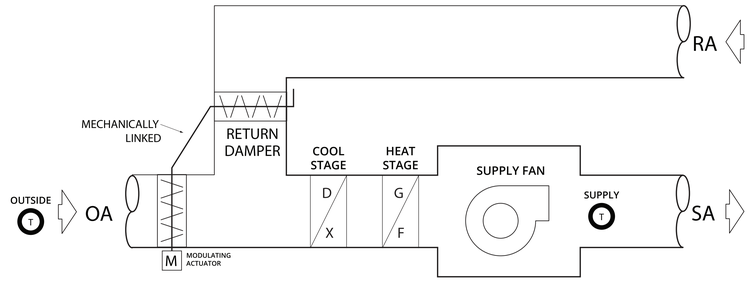
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	7
PELICAN	PEARL	ADVANCED CONTROLLER	7

AC UNIT (TYPICAL OF 1) AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO

VARIABLE DAMPER: YES
DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

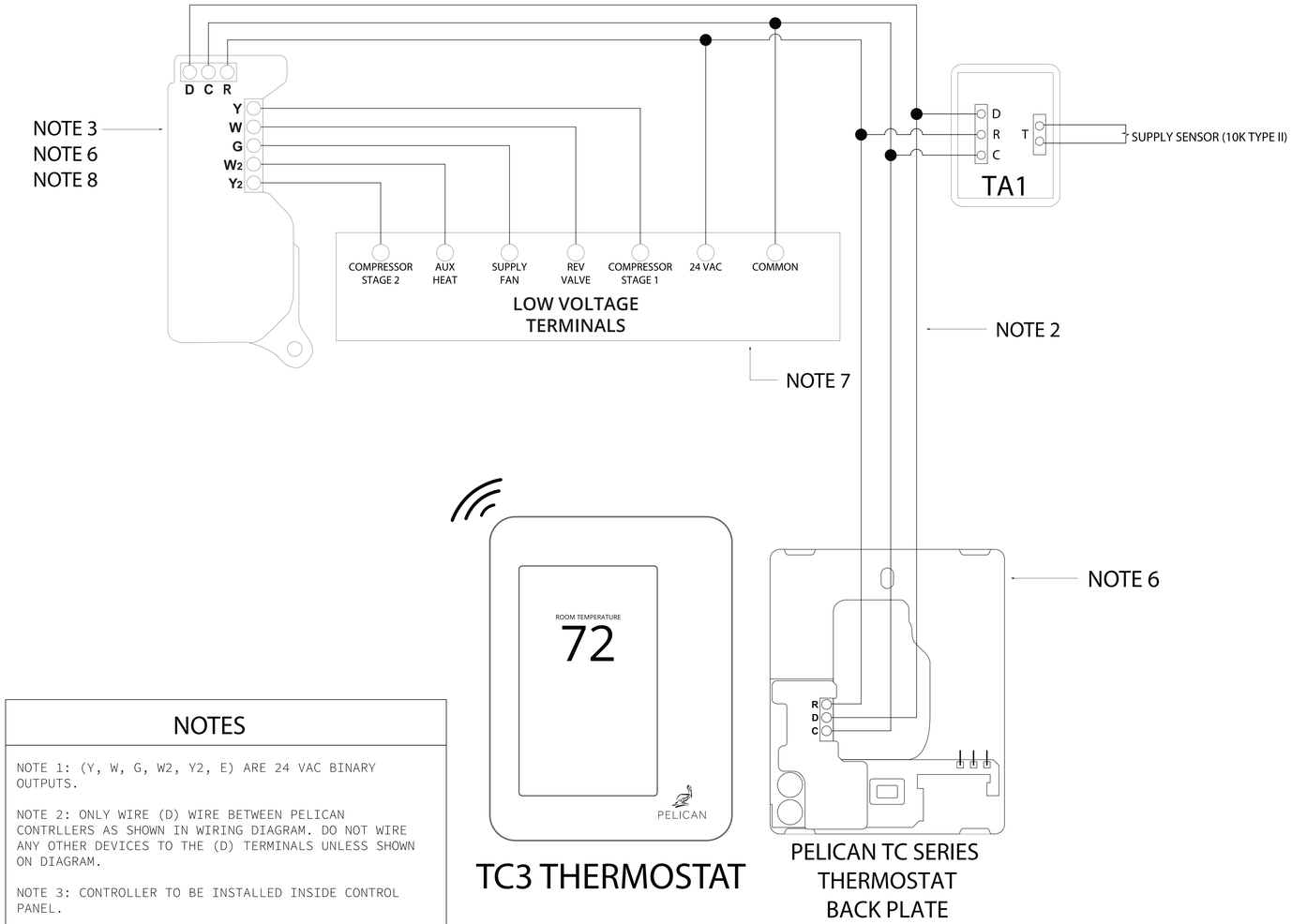
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-1	REV02		BARD HP W/ ECON CONTROL	KLR	10/10/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	2 of 8

TYPICAL OF:
AC-25

CARRIER HEAT PUMP W/ WATERSIDE ECONOMIZER UNIT CONTROLS (TYPICAL TO 1)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

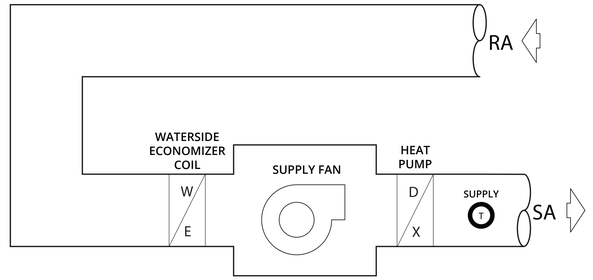
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

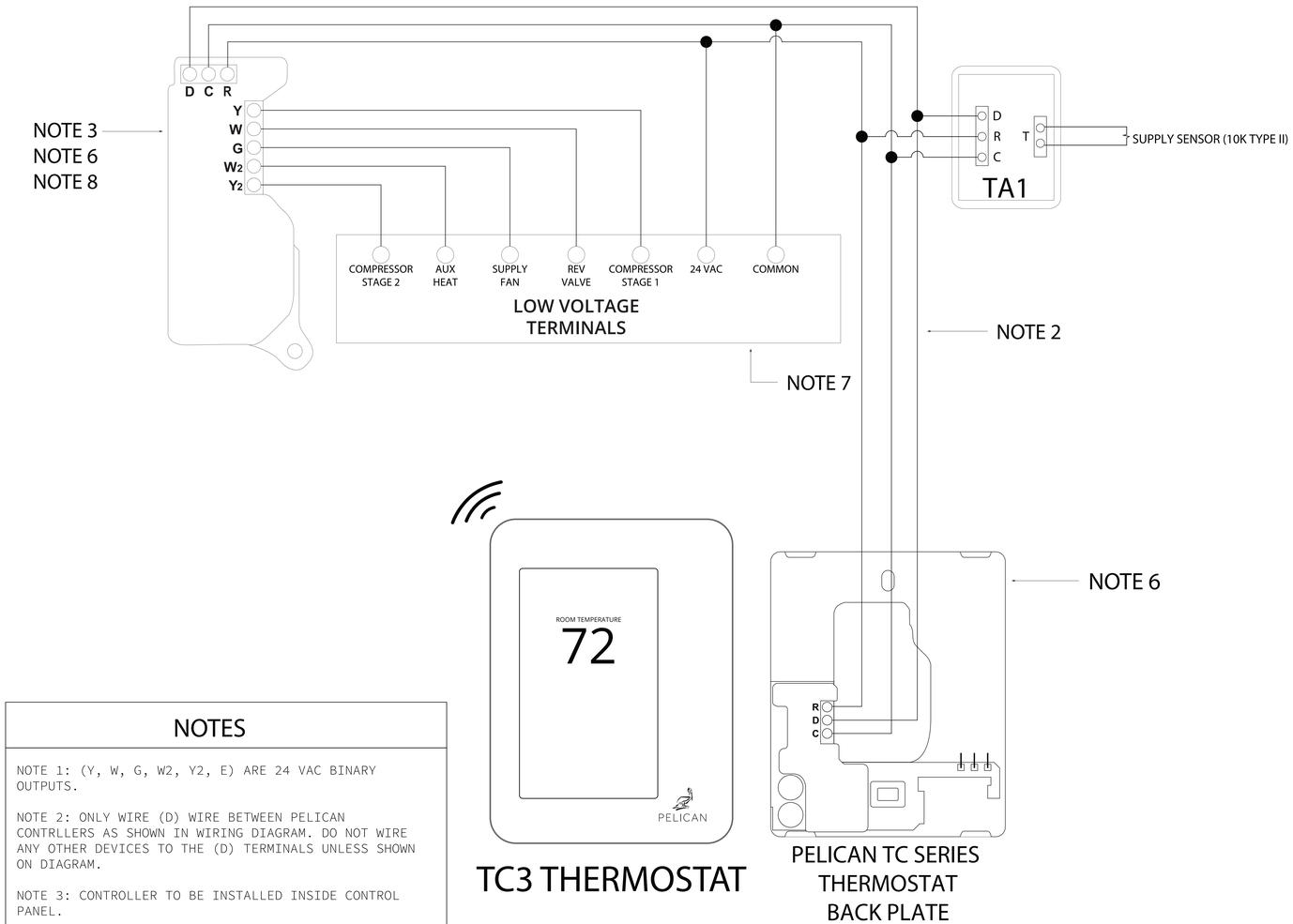
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-2	REV02		CARRIER HP W/ ECON CONTROLS	KLR	10/10/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	3 of 8

TYPICAL OF:
WP-24
WP-32
WP-33

EUBANK WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 3)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

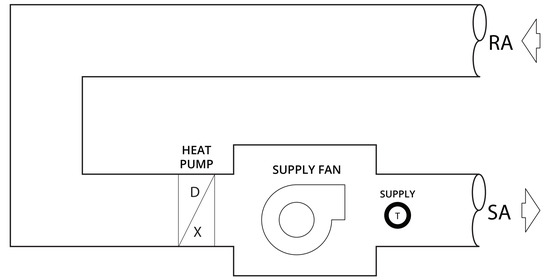
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	3
PELICAN	TA1	TEMP & ALARM SENSOR	3
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

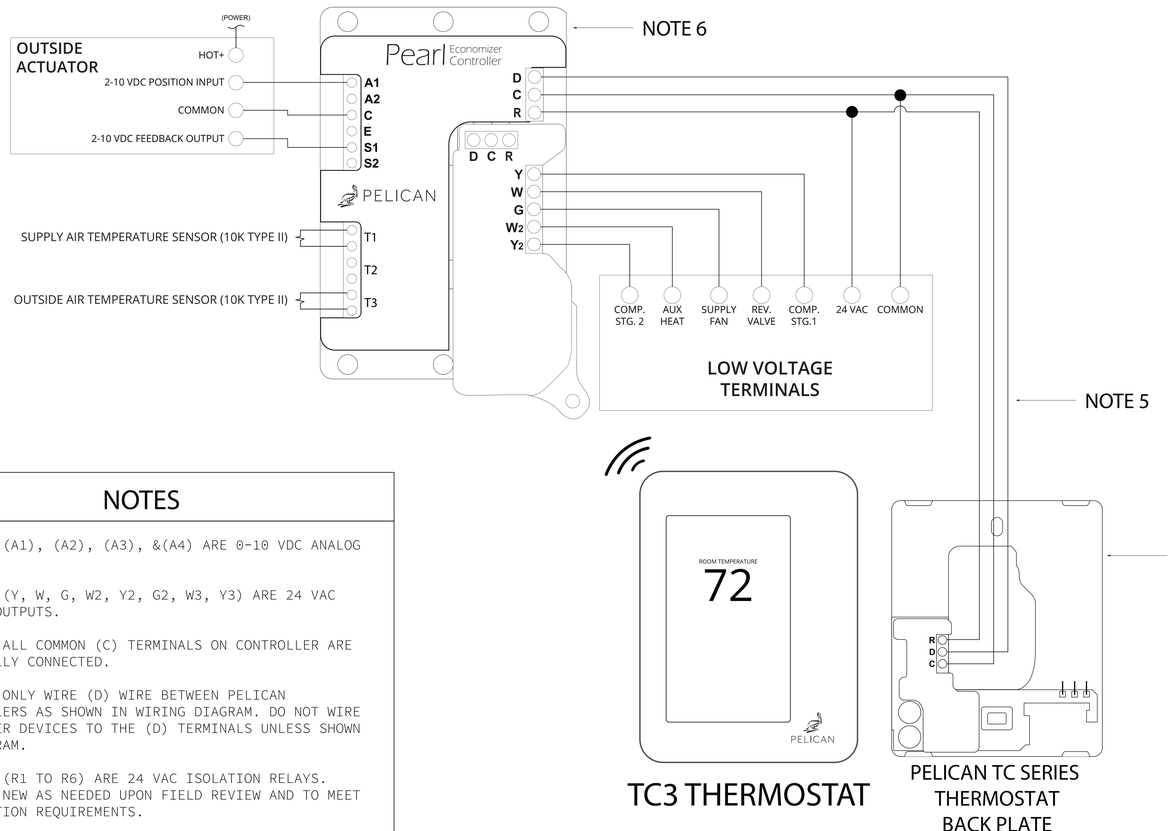
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-3	REV02		EUBANK HP CONTROLS	KLR	10/10/2025	COLTON JUSD GERALD A SMITH ES	PELICAN	4 of 8

TYPICAL OF:
AC-27
AC-28
AC-29

ICP HEAT PUMP W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 3)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

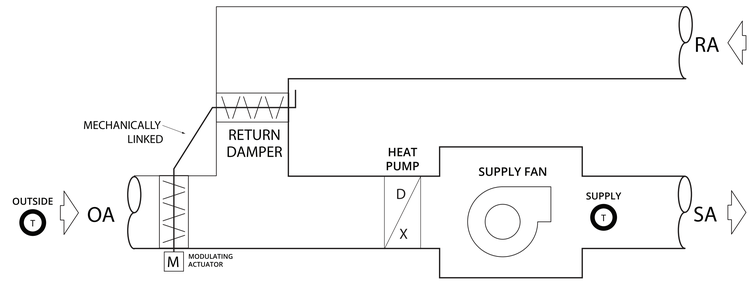
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	3
PELICAN	PEARL	ADVANCED CONTROLLER	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO

VARIABLE DAMPER: YES
DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

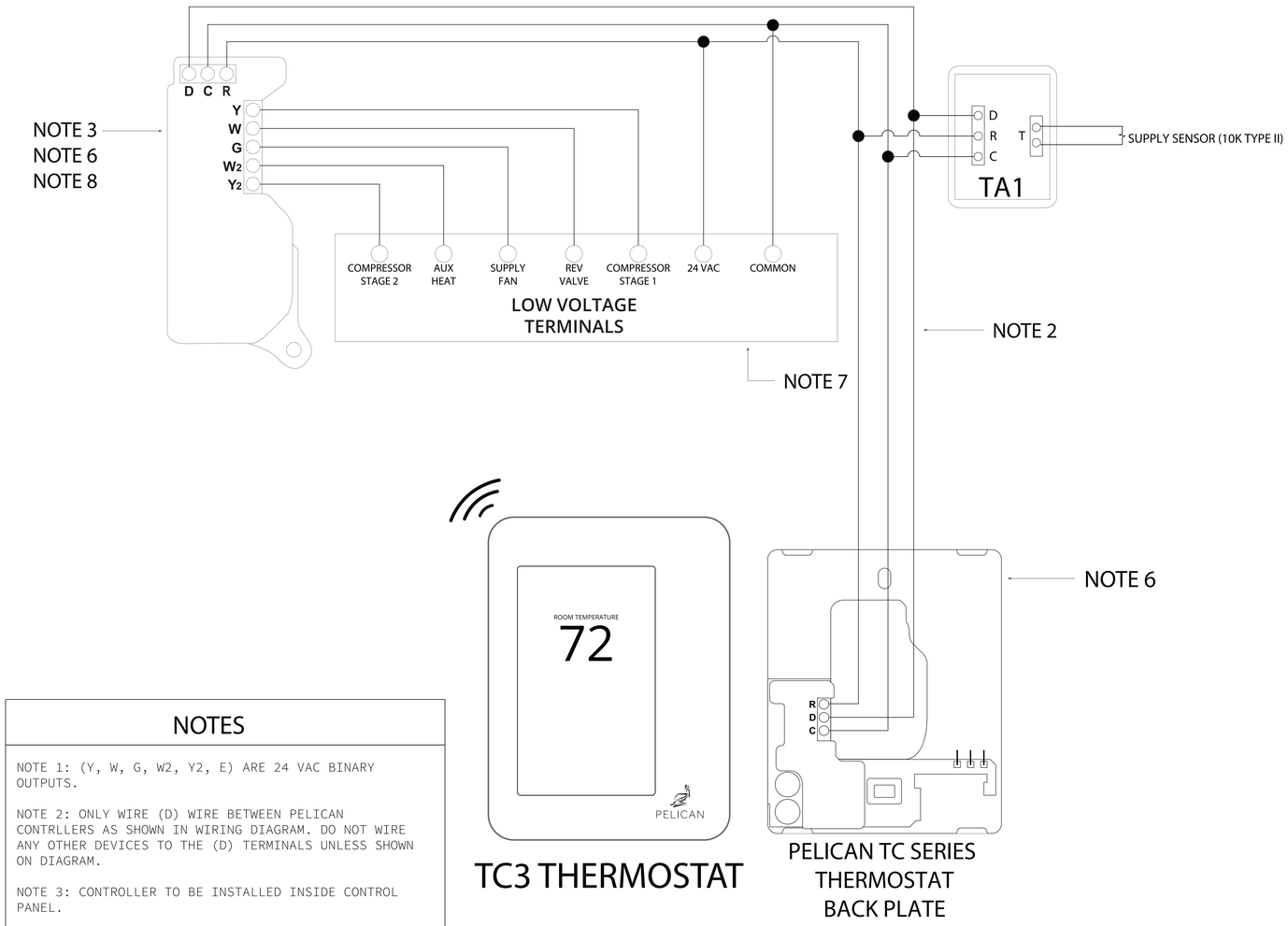
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-4	REV02		ICP PACKAGE HP CONTROLS	KLR	10/10/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	5 of 8

TYPICAL OF:
WP-31

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

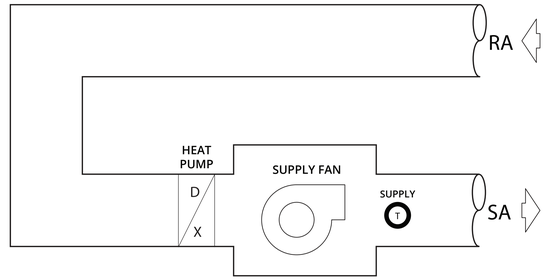
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

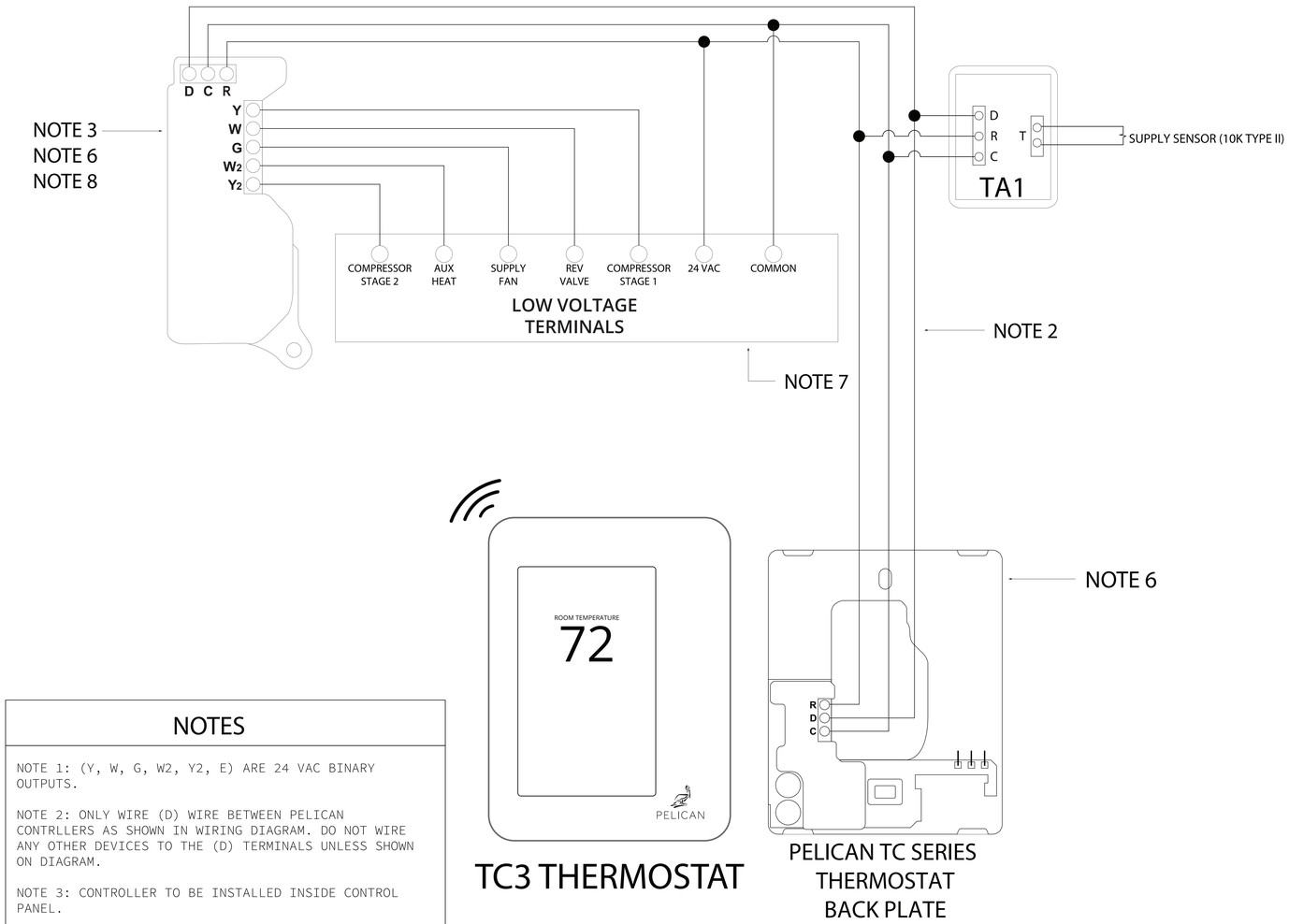
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100314	D-25100314-5	REV02		MARVAIR PACKAGE HP CONTROLS	KLR	10/10/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	6 of 8

TYPICAL OF:
AC-26

YORK PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

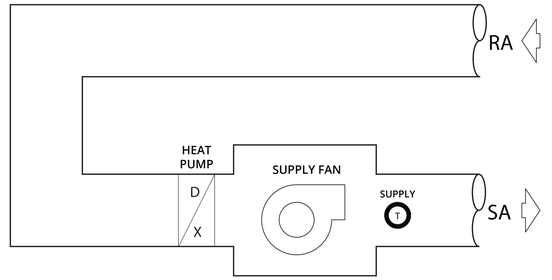
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	1
PELICAN	TA1	TEMP & ALARM SENSOR	1
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	1

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25100314	D-25100314-6	REV02		YORK PACKAGE HP CONTROLS	KLR	10/10/2025	COLTON JUSD GRAND TERRACE ES	PELICAN	7 of 8

CLIMATE CONTROLS

GRAND TERRACE HIGH SCHOOL
21810 MAIN STREET
GRAND TERRACE, CA 92313

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

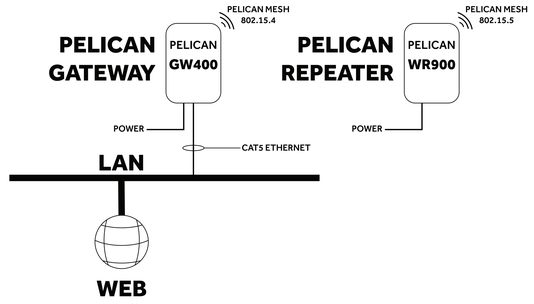
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	3

PELICAN

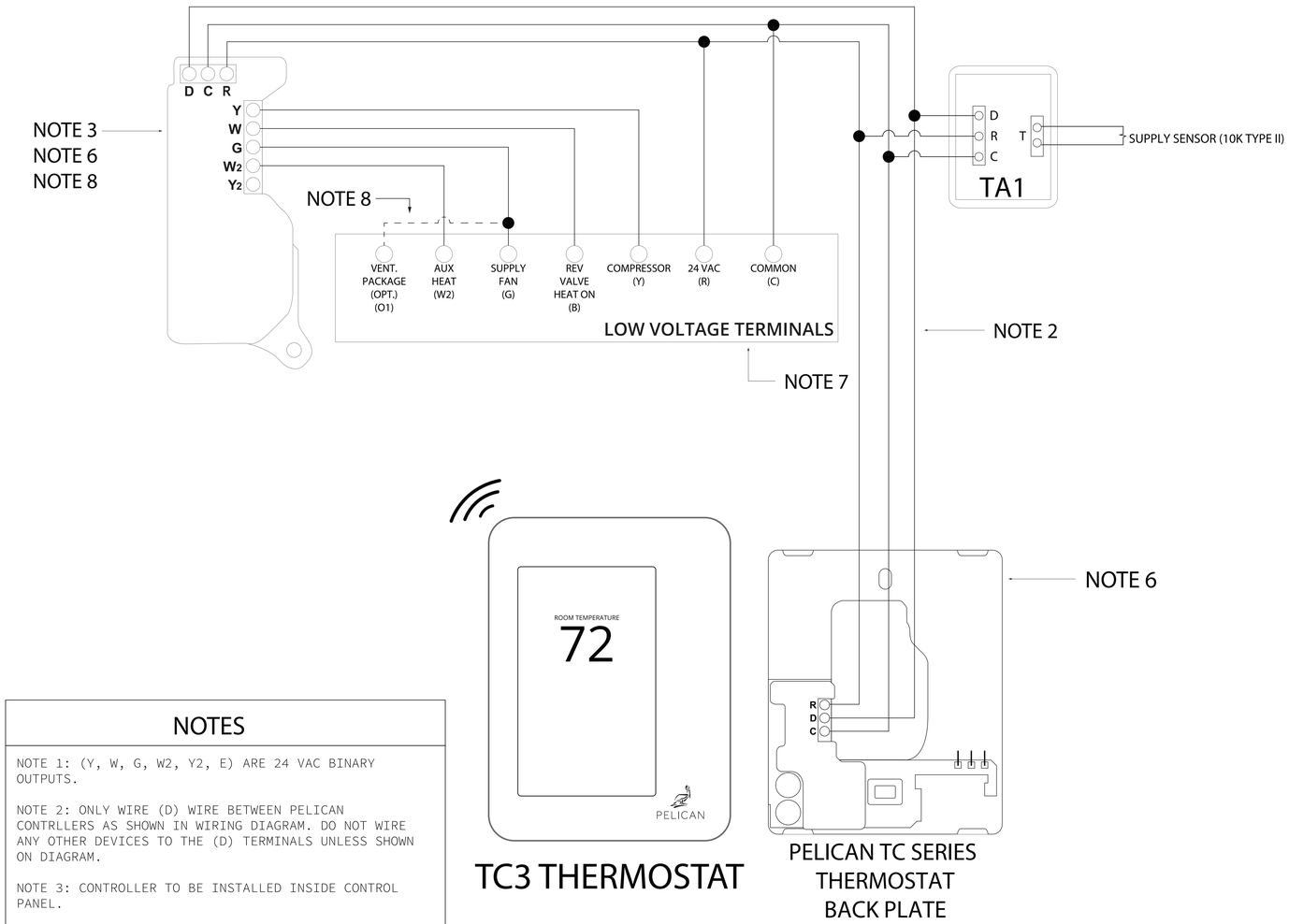
PROJECT NUMBER:
P-25100315

CLIMATE CONTROLS UPGRADES

REV02: 10/10/2025
REV01: 10/03/2025

TYPICAL OF:
WP-801
WP-802
WP-803
WP-804
WP-805
WP-806
WP-807
WP-808
WP-809
WP-810
WP-811
WP-812

BARD WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 12)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

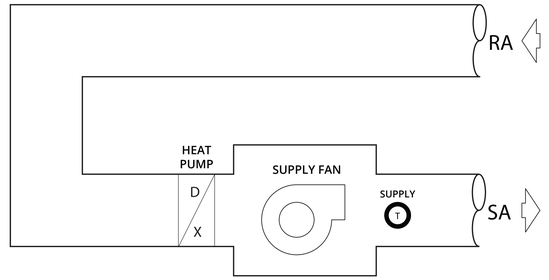
NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

NOTE 8: ADD JUMPER WHEN VENTILATION PACKAGE IS INSTALLED.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	12
PELICAN	TA1	TEMP & ALARM SENSOR	12
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	12

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 1
AUX HEAT: (SET)
COOL STAGES: 1
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100315	D-25100315-1	REV02		BARD HP CONTROLS	KLR	10/10/2025	COLTON JUSD GERALD A SMITH ES	PELICAN	2 of 2

CLIMATE CONTROLS

MARY B. LEWIS ELEMENTARY SCHOOL
18040 SAN BERNARDINO AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

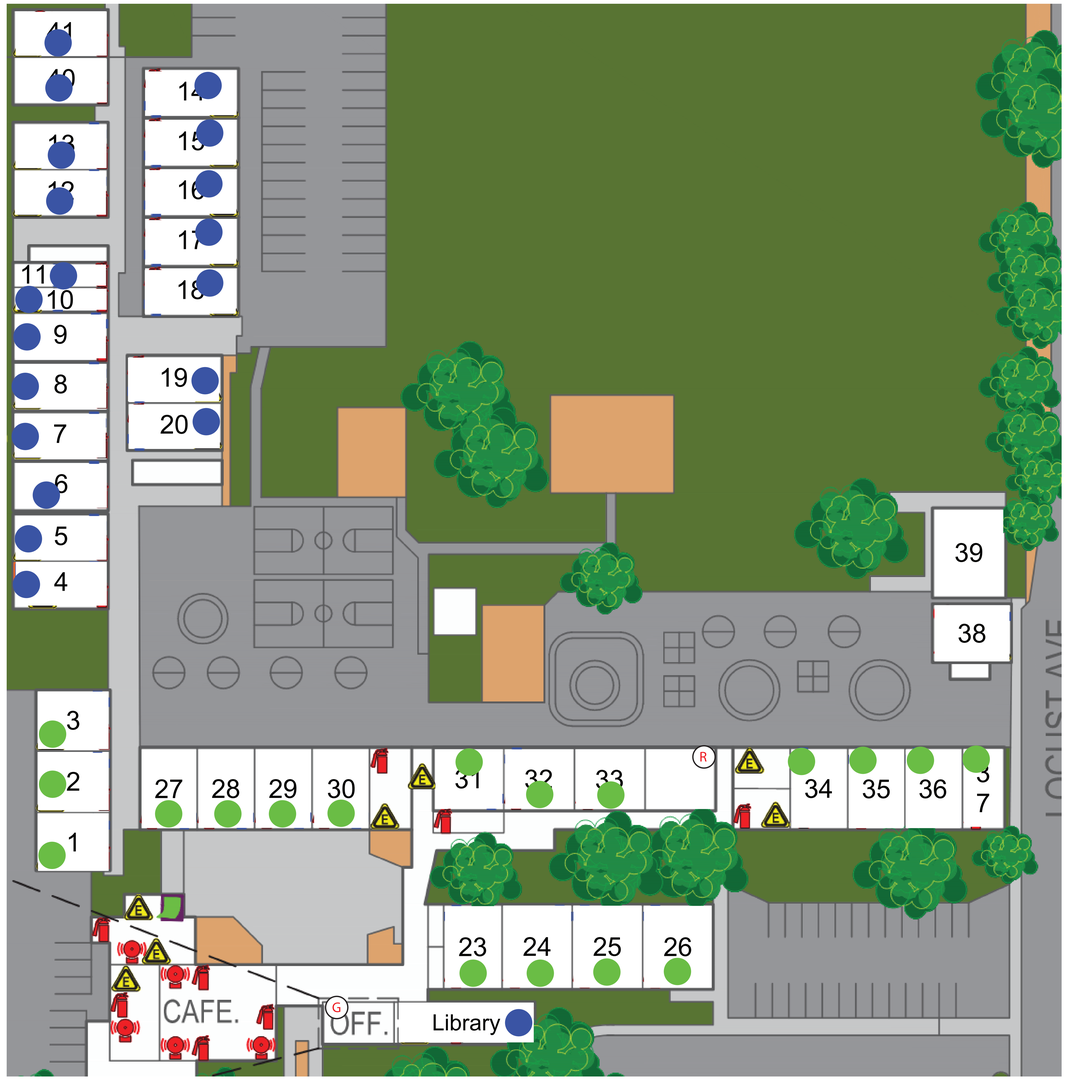
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

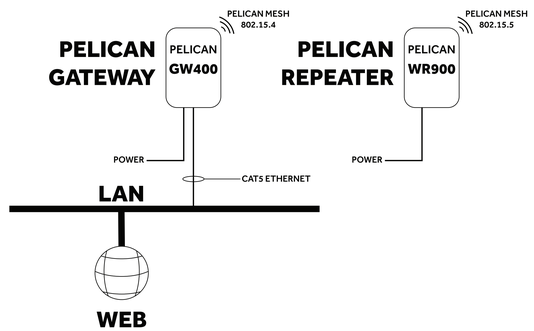
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	2

PELICAN

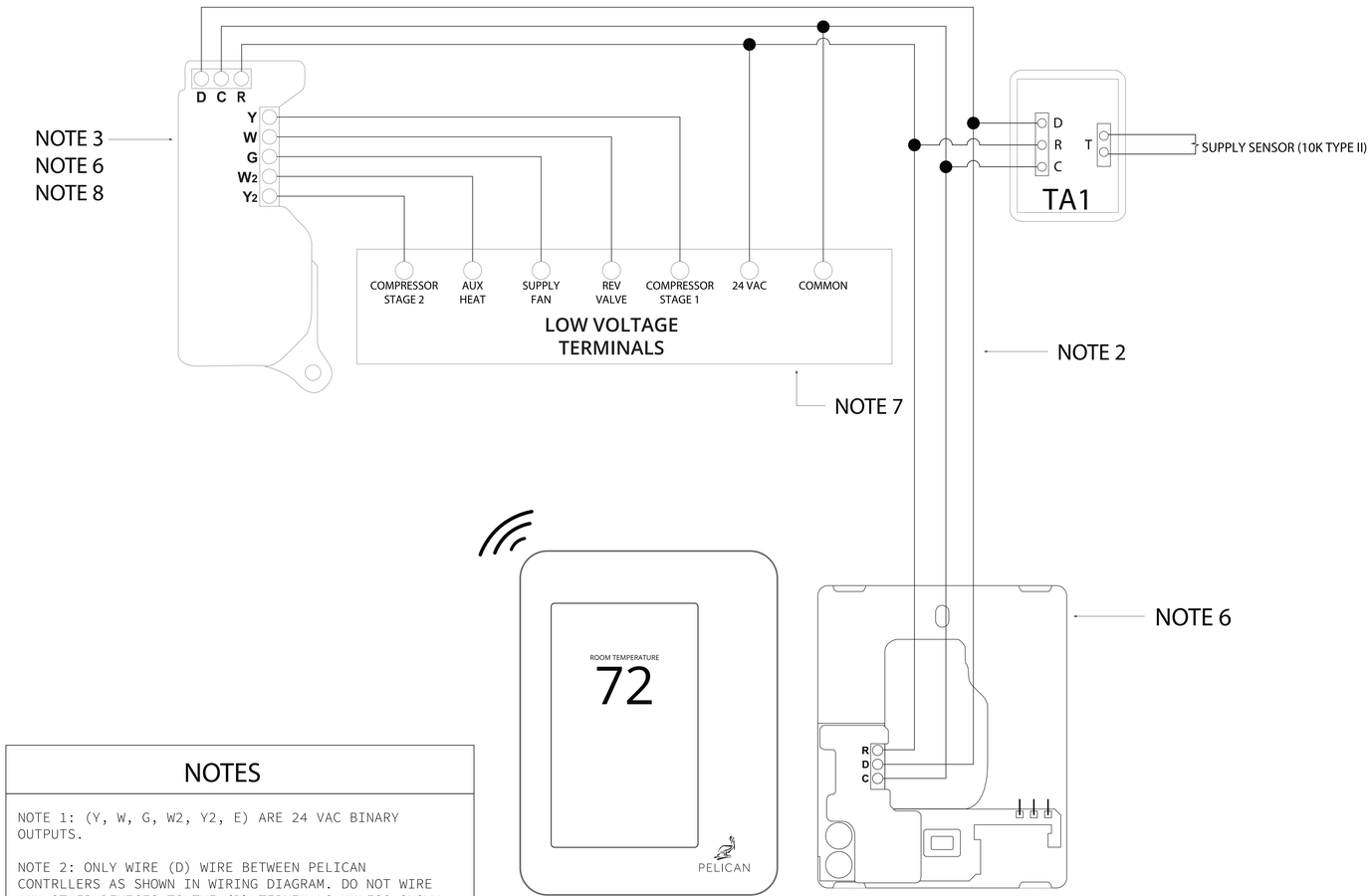
PROJECT NUMBER:
P-25100321

CLIMATE CONTROLS UPGRADES

REV02: 10/10/2025
REV01: 10/04/2025

TYPICAL OF:
WP-14
WP-16
WP-17
WP-18
WP-19
WP-20

BARD PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 6)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

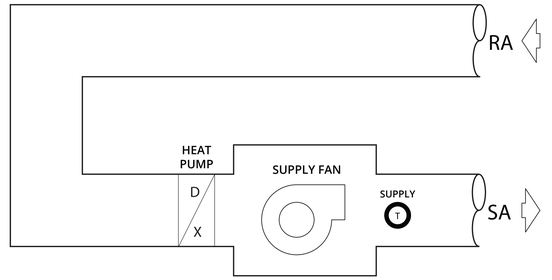
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	15
PELICAN	TA1	TEMP & ALARM SENSOR	15
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	15

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

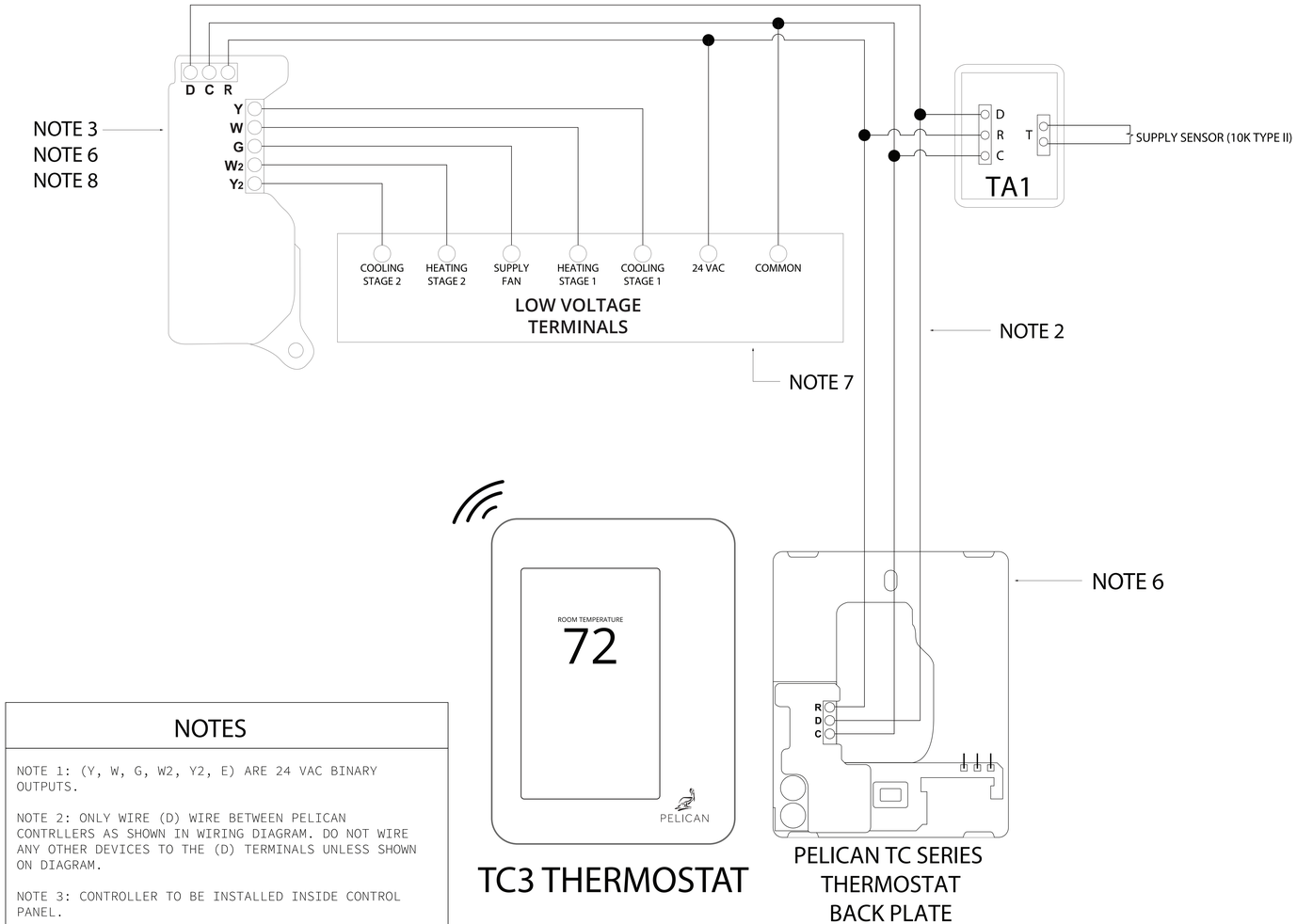
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100321	D-25100321-1	REV02		BARD HP CONTROL	KLR	10/10/2025	COLTON JUSD MARY B. LEWIS ES	PELICAN	2 of 5

TYPICAL OF:
FCU-12
FCU-13

CARRIER EH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 2)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

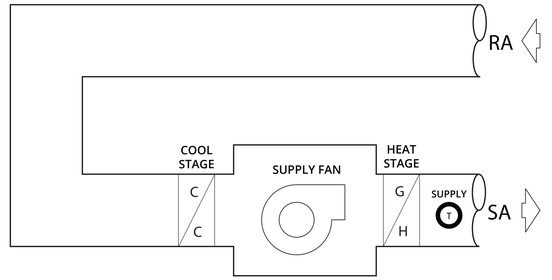
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

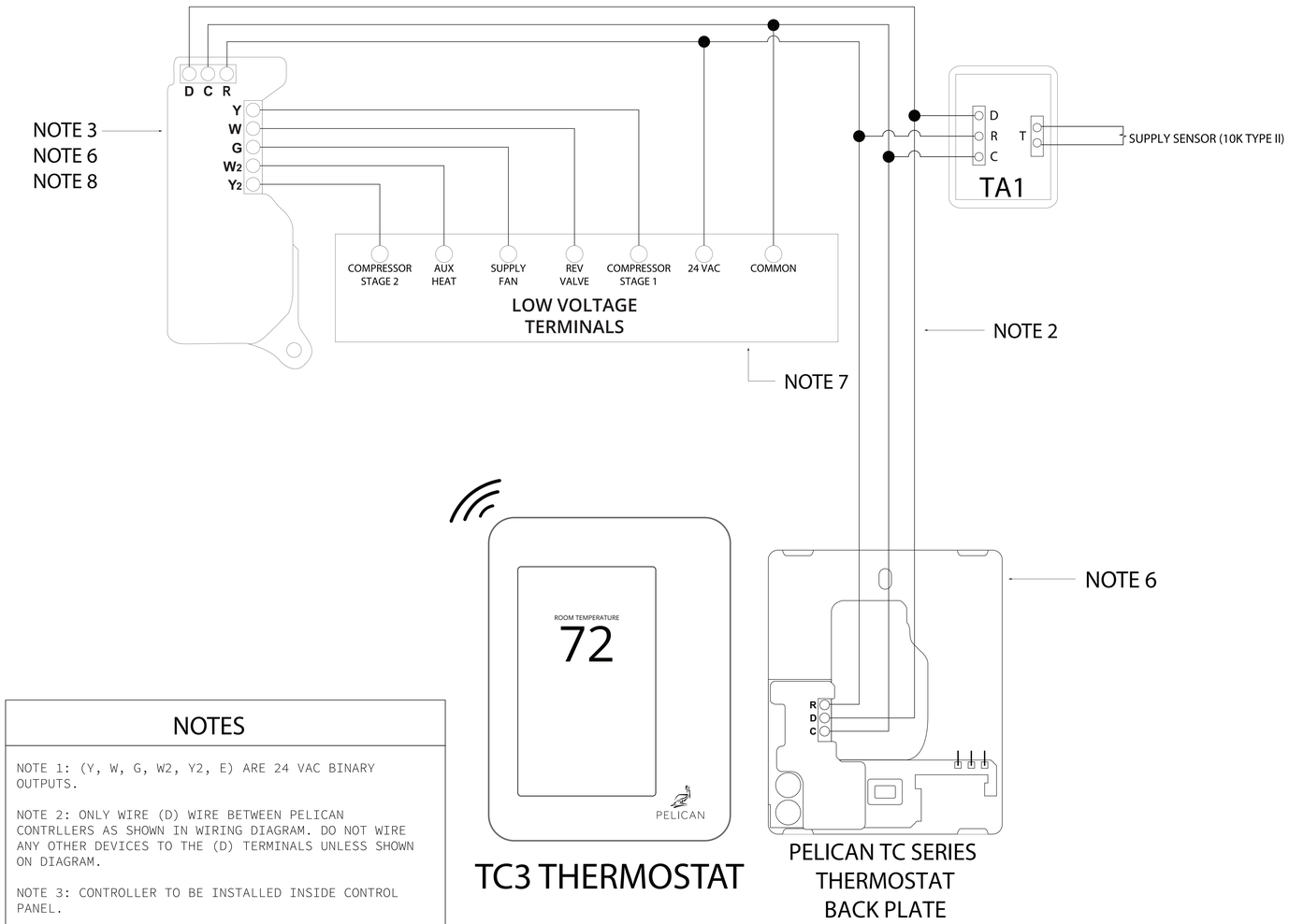
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100321	D-25100321-2	REV02		CARRIER EH/EC CONTROL	KLR	10/10/2025	COLTON JUSD MARY B. LEWIS ES	PELICAN	3 of 5

TYPICAL OF:
WP-40
WP-41

EUBANK WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 2)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

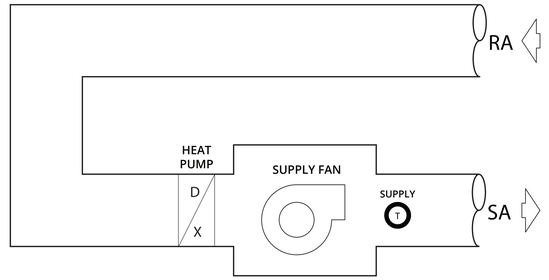
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

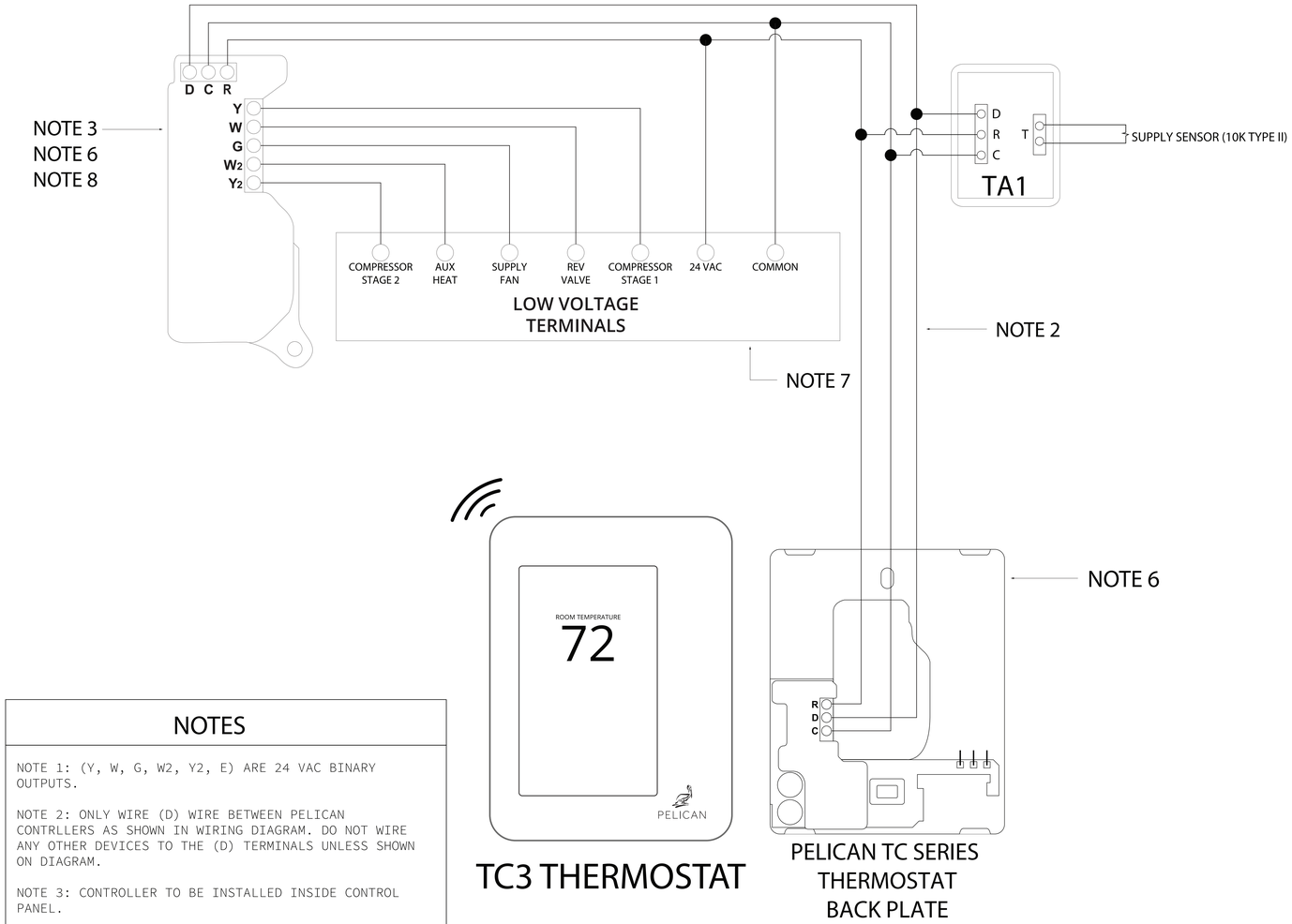
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25092616	D-25092616-3	REV02		EUBANK HP CONTROLS	KLR	10/10/2025	COLTON JUSD MARY B. LEWIS ES	PELICAN	4 of 5

TYPICAL OF:
WP-04
WP-05
WP-06
WP-07
WP-08
WP-09
WP-10
WP-11
WP-15
WP -21
WP -22

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 11)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

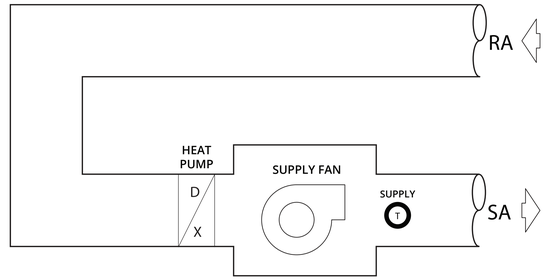
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	9
PELICAN	TA1	TEMP & ALARM SENSOR	9
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	9

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100321	D-25100321-4	REV02		MARVAIR PACKAGE HP CONTROLS	KLR	10/10/2025	COLTON JUSD MARY B. LEWIS ES	PELICAN	5 of 5

CLIMATE CONTROLS

RUTH GRIMES ELEMENTARY SCHOOL
1609 SPRUCE AVENUE
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

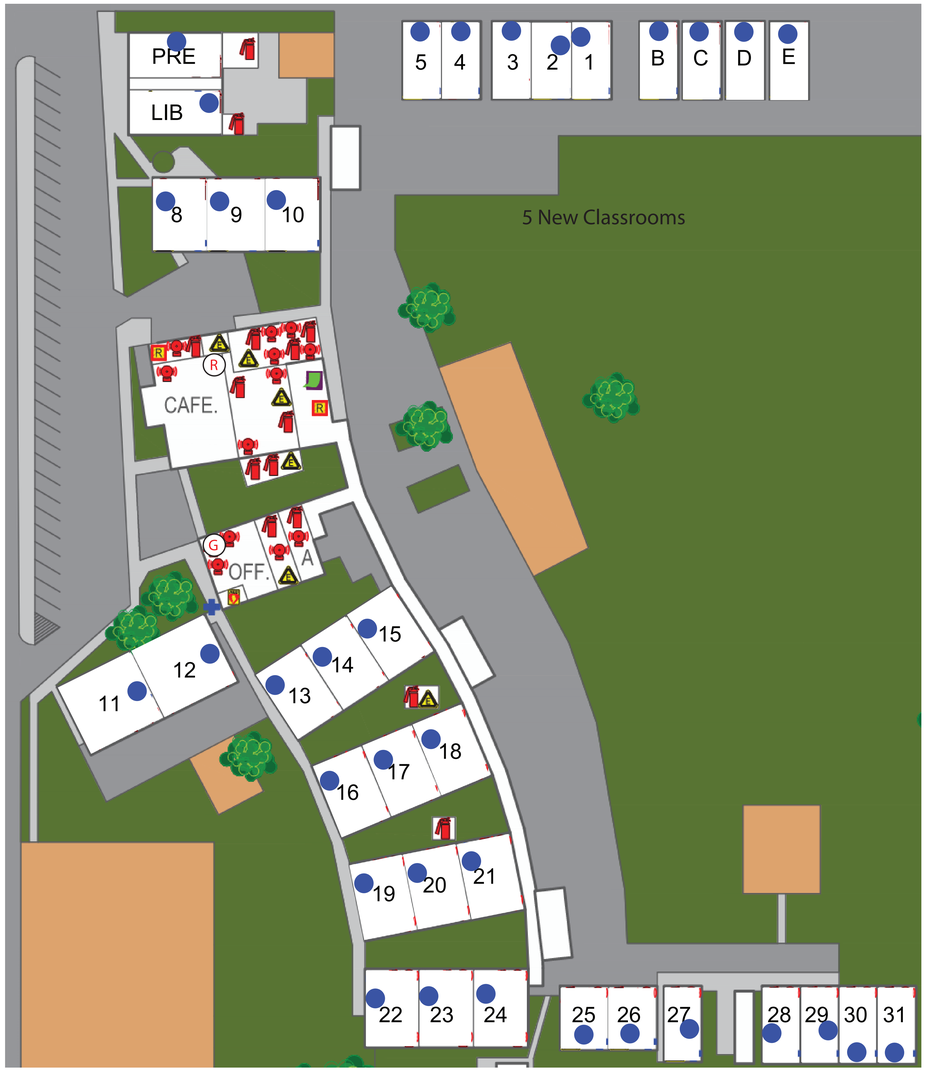
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

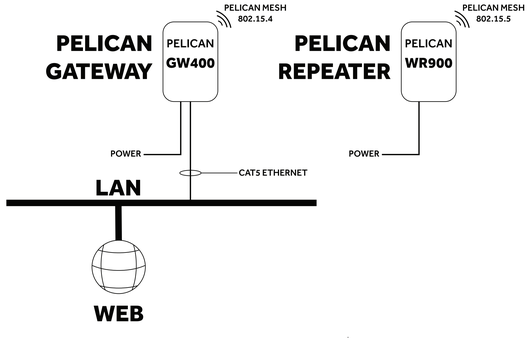
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	1

PELICAN

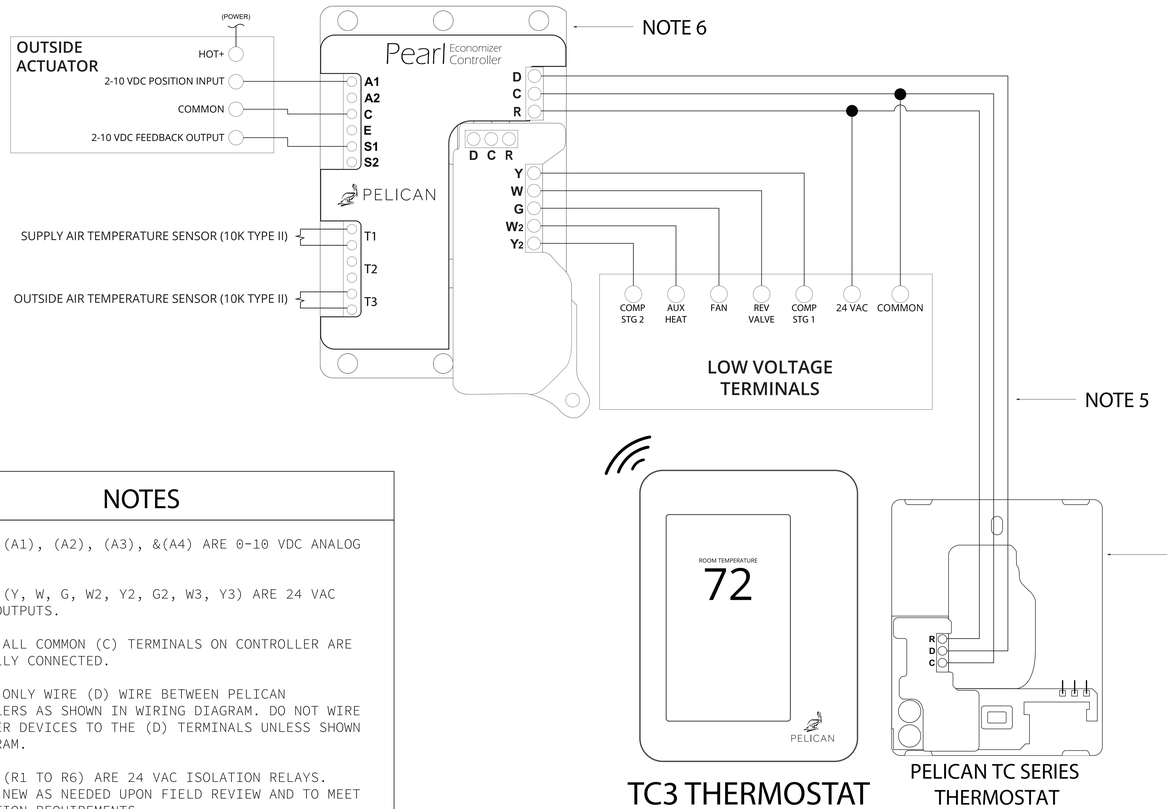
PROJECT NUMBER:
P-25100412

CLIMATE CONTROLS UPGRADES

REV03: 10/15/2025
REV02: 10/13/2025
REV01: 10/05/2025

TYPICAL OF:
NEW CLASSROOMS

MARVAIR HEAT PUMP W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 5)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

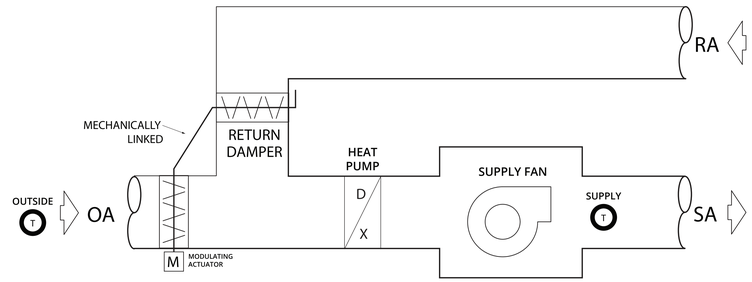
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	5
PELICAN	PEARL	ADVANCED CONTROLLER	5

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO

VARIABLE DAMPER: YES
DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100412	D-25100412-2	REV02		MARVAIR HP W/ ECON CONTROL	KLR	10/15/2025	COLTON JUSD RUTH GRIMES ES	PELICAN	2 of 2

CLIMATE CONTROLS

TERRACE HILLS MIDDLE SCHOOL
22579 DEBERRY STREET
GRAND TERRACE, CA 92313

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

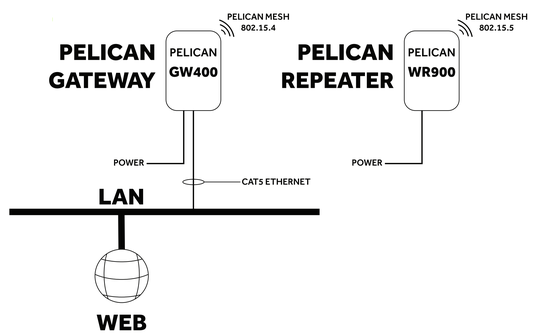
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	4

PELICAN

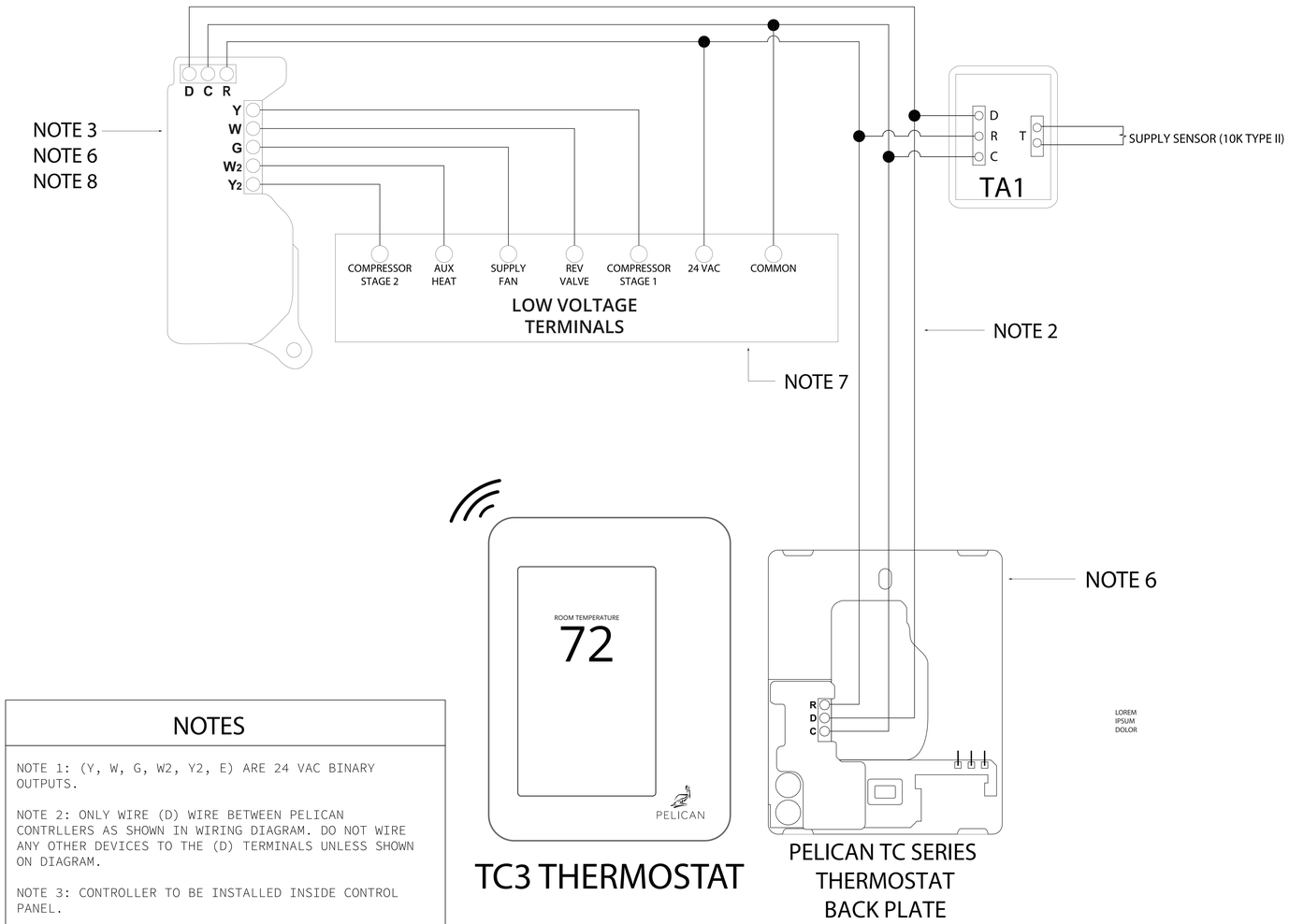
PROJECT NUMBER:
P-25100516

CLIMATE CONTROLS UPGRADES

REV03: 10/15/2025
REV02: 10/13/2025
REV01: 10/05/2025

TYPICAL OF:
WP-H3
WP-H6

BARD PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 2)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

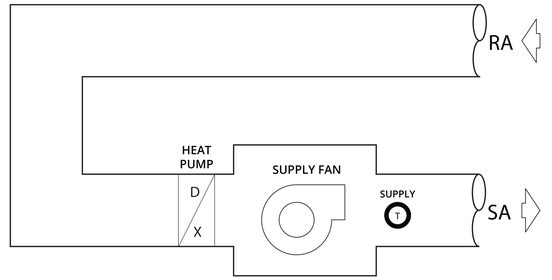
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

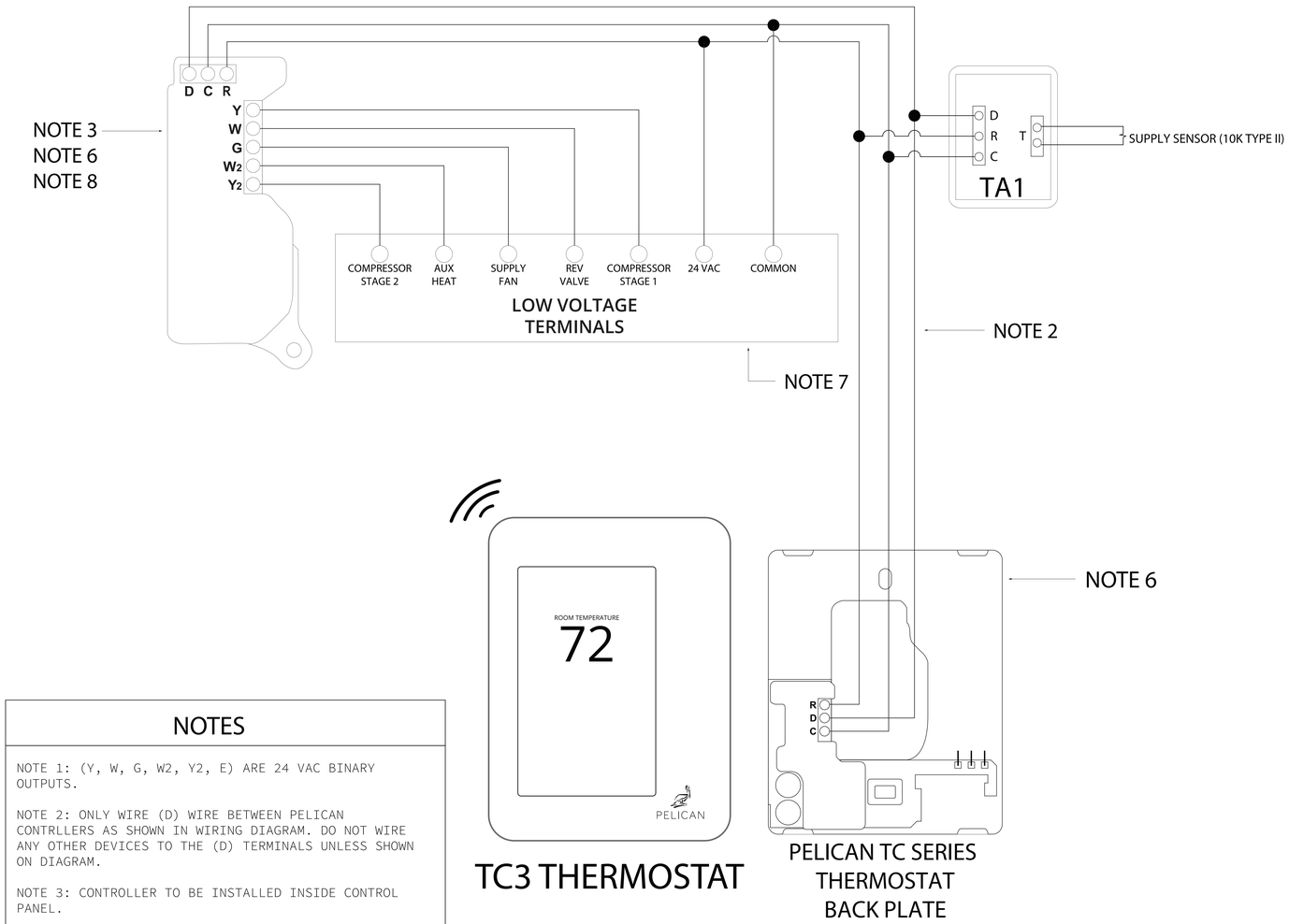
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100516	D-25100516-1	REV03		BARD HP CONTROL	KLR	10/15/2025	COLTON JUSD TERRACE HILLS MS	PELICAN	2 of 5

TYPICAL OF:
WP-H1
WP-H2
WP-H5

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 3)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

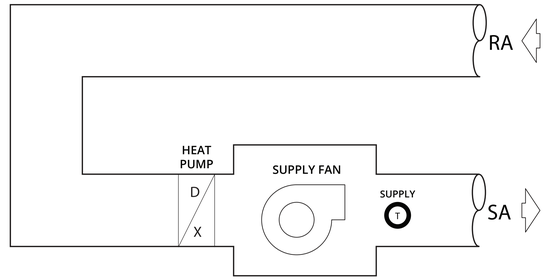
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	4
PELICAN	TA1	TEMP & ALARM SENSOR	4
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	4

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

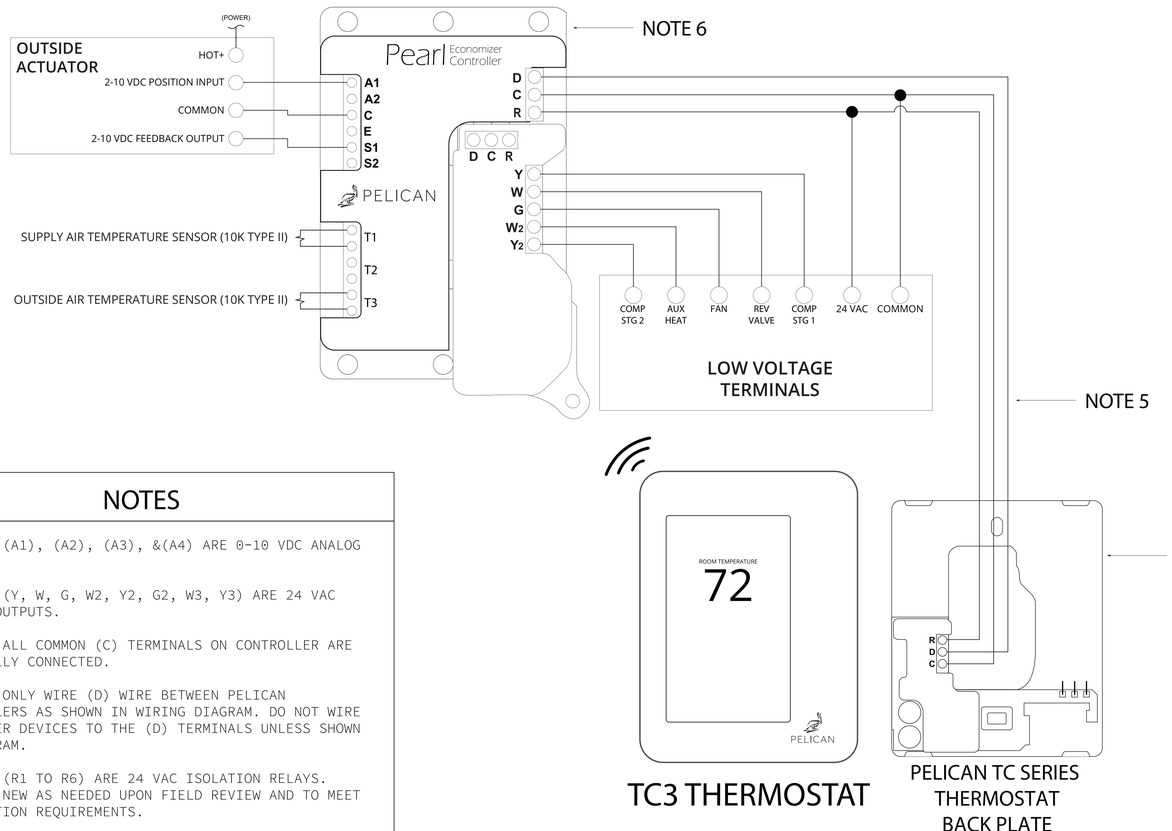
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100516	D-25100516-2	REV03		MARVAIR CONTROL	KLR	10/15/2025	COLTON JUSD TERRACE HILLS MS	PELICAN	3 of 5

TYPICAL OF:
WP-H4

MARVAIR HEAT PUMP W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 1)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

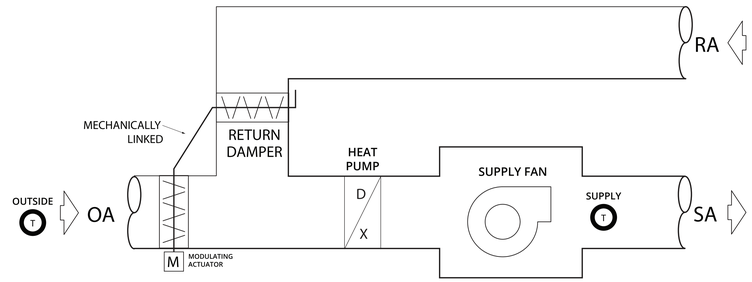
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	1
PELICAN	PEARL	ADVANCED CONTROLLER	1

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO

VARIABLE DAMPER: YES
DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

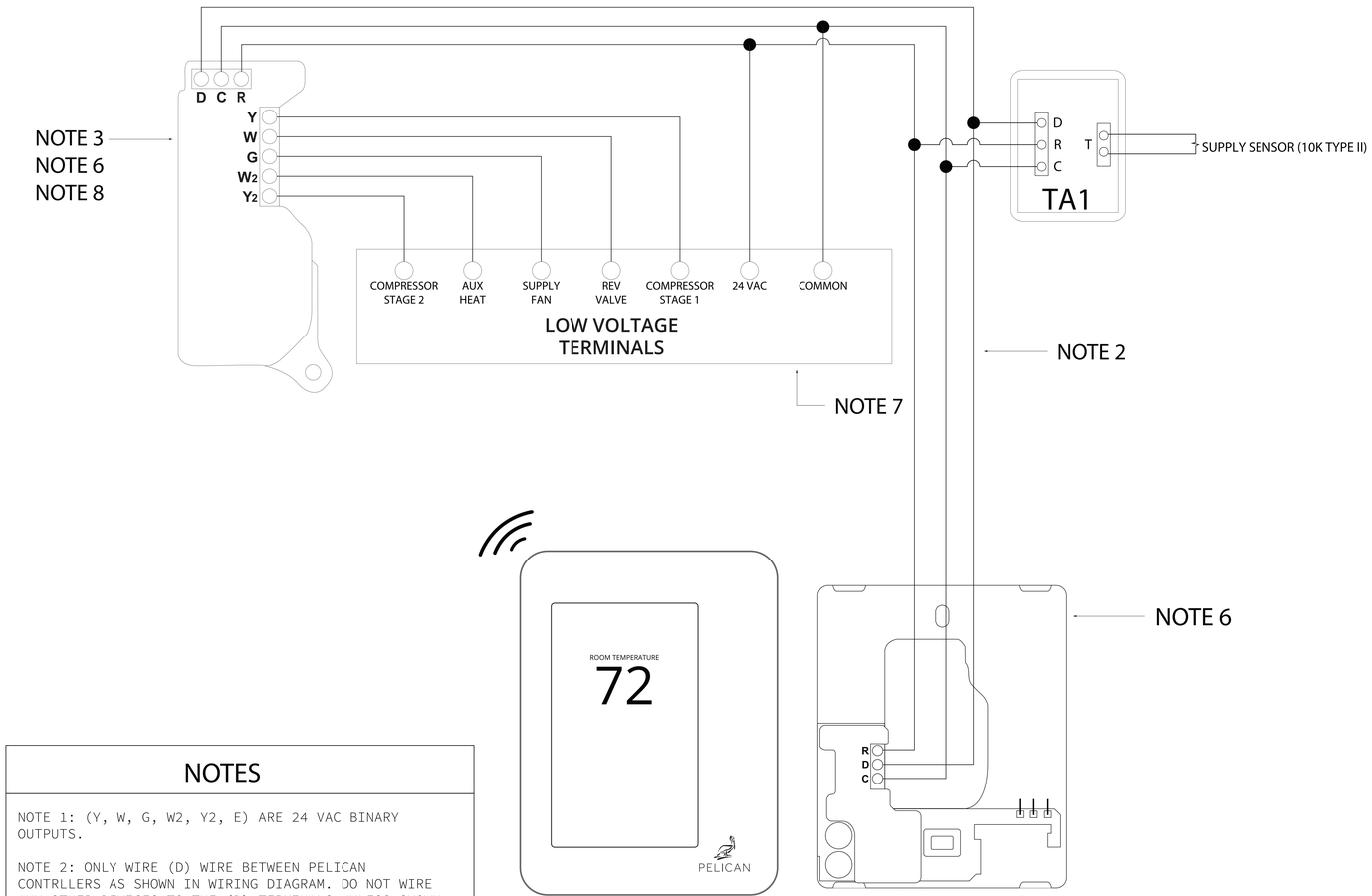
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100516	D-25100516-3	REV03		MARVAIR HP W/ ECON CONTROL	KLR	10/15/2025	COLTON JUSD TERRACE HILLS MS	PELICAN	4 of 5

TYPICAL OF:
WP-J1
WP-J2
WP-J3
WP-J4
WP-J5

WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 5)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

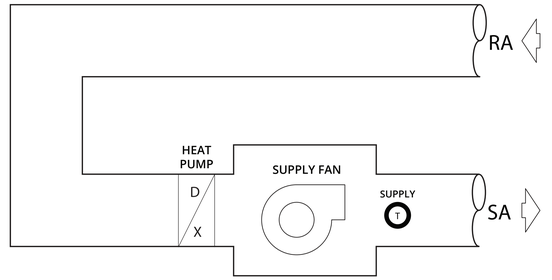
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	5
PELICAN	TA1	TEMP & ALARM SENSOR	5
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	5

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100516	D-25100516-4	REV03		WALL HP CONTROL	KLR	10/15/2025	COLTON JUSD TERRACE HILLS MS	PELICAN	5 of 5

CLIMATE CONTROLS

TERRACE VIEW ELEMENTARY SCHOOL
22731 GRAND TERRACE ROAD
GRAND TERRACE, CA 92313

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

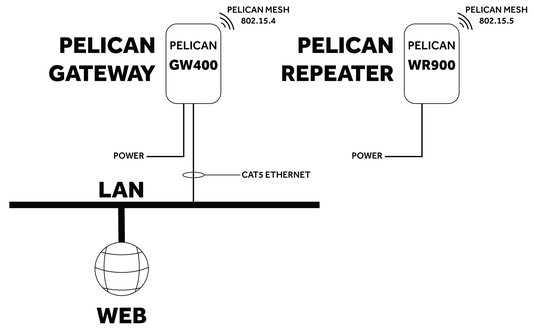
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	3

PELICAN

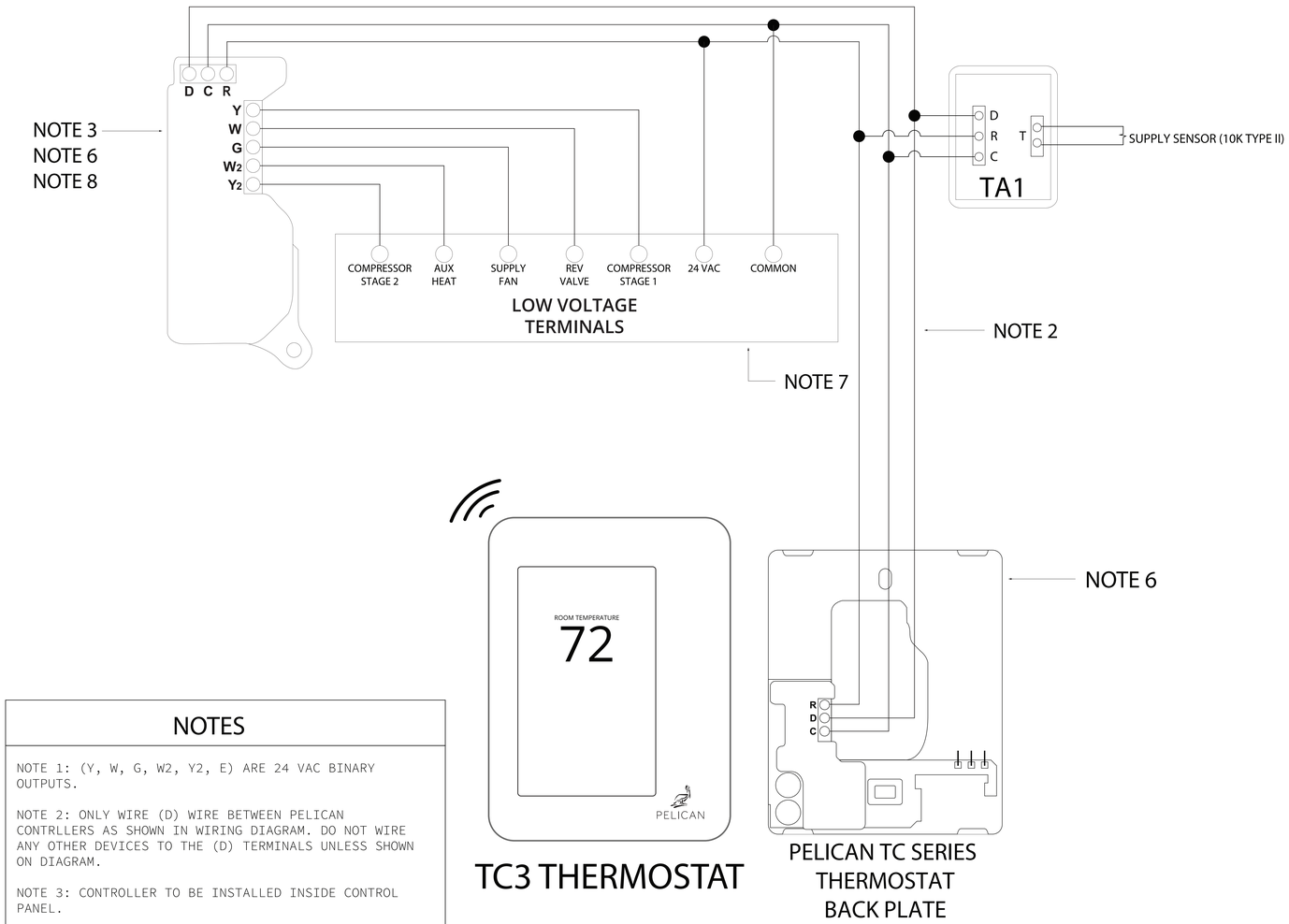
PROJECT NUMBER:
P-25100615

CLIMATE CONTROLS UPGRADES

REV03: 10/16/2025
REV02: 10/13/2025
REV01: 10/06/2025

TYPICAL OF:
WP-26
WP-27
WP-28

BARD HEAT PUMP UNIT CONTROLS (TYPICAL TO 3)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

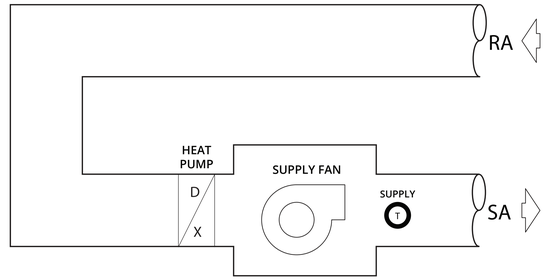
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	3
PELICAN	TA1	TEMP & ALARM SENSOR	3
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

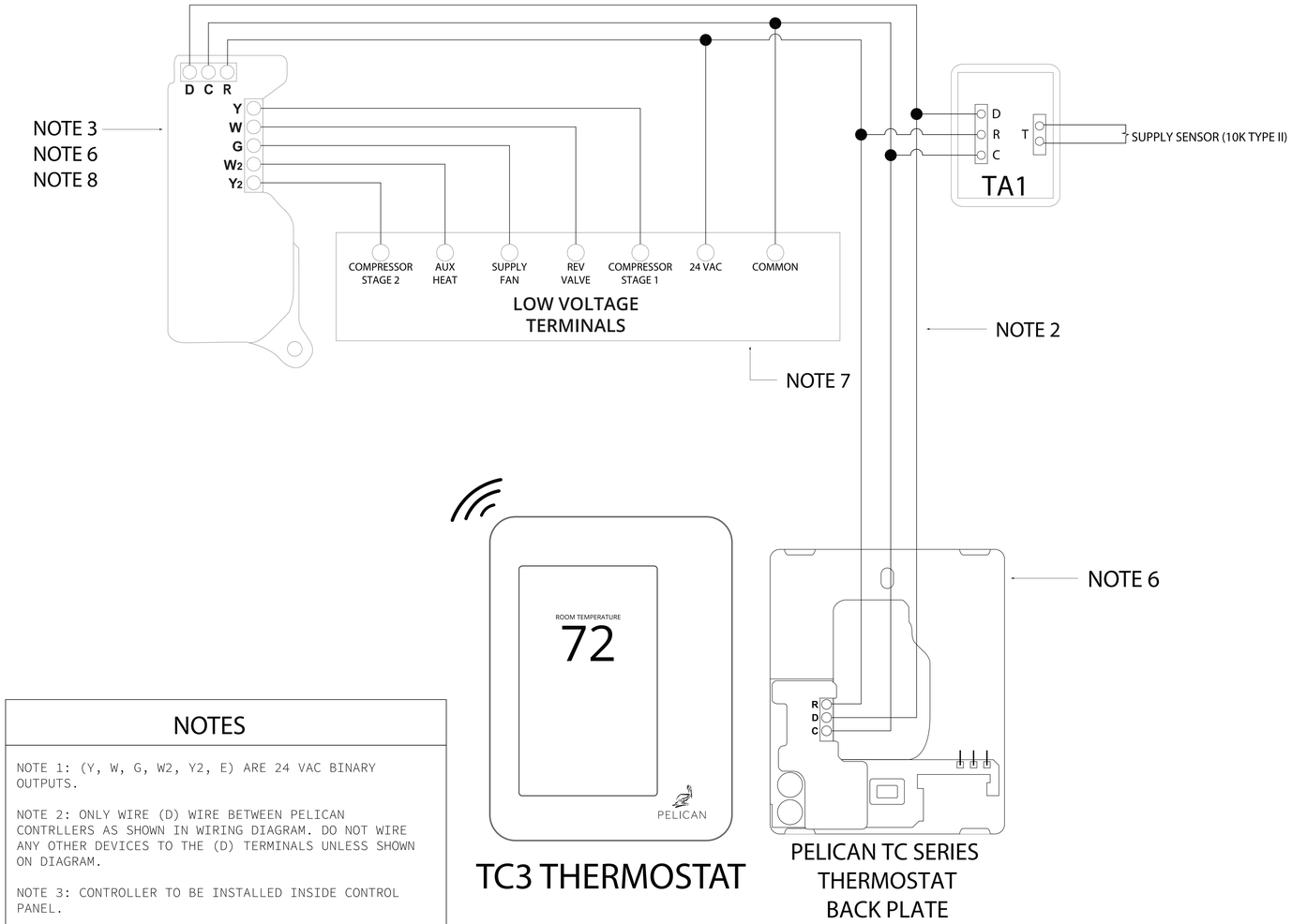
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100615	D-25100615-1	REV03		BARD HP CONTROL	KLR	10/16/2025	COLTON JUSD TERRACE VIEW ES	PELICAN	2 of 3

TYPICAL OF:
WP-11A
WP-11B
WP-16
WP-17
WP-18
WP-21
WP-22
WP-23
WP-24
WP-25

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 10)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

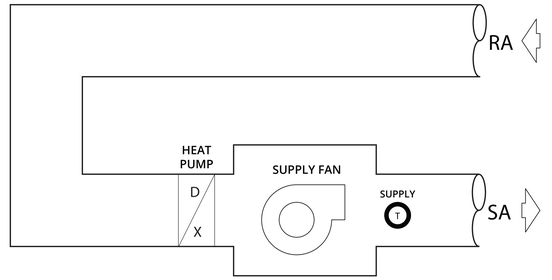
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	10
PELICAN	TA1	TEMP & ALARM SENSOR	10
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	10

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100615	D-25100615-2	REV03		MARVAIR HP CONTROL	KLR	10/16/2025	COLTON JUSD TERRACE VIEW ES	PELICAN	3 of 3

CLIMATE CONTROLS

WALTER ZIMMERMAN ELEMENTARY SCHOOL
11050 LINDEN AVENUE
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

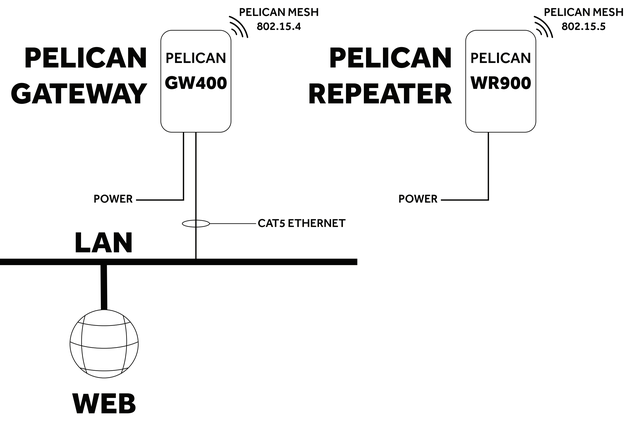
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.



MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	3



PELICAN

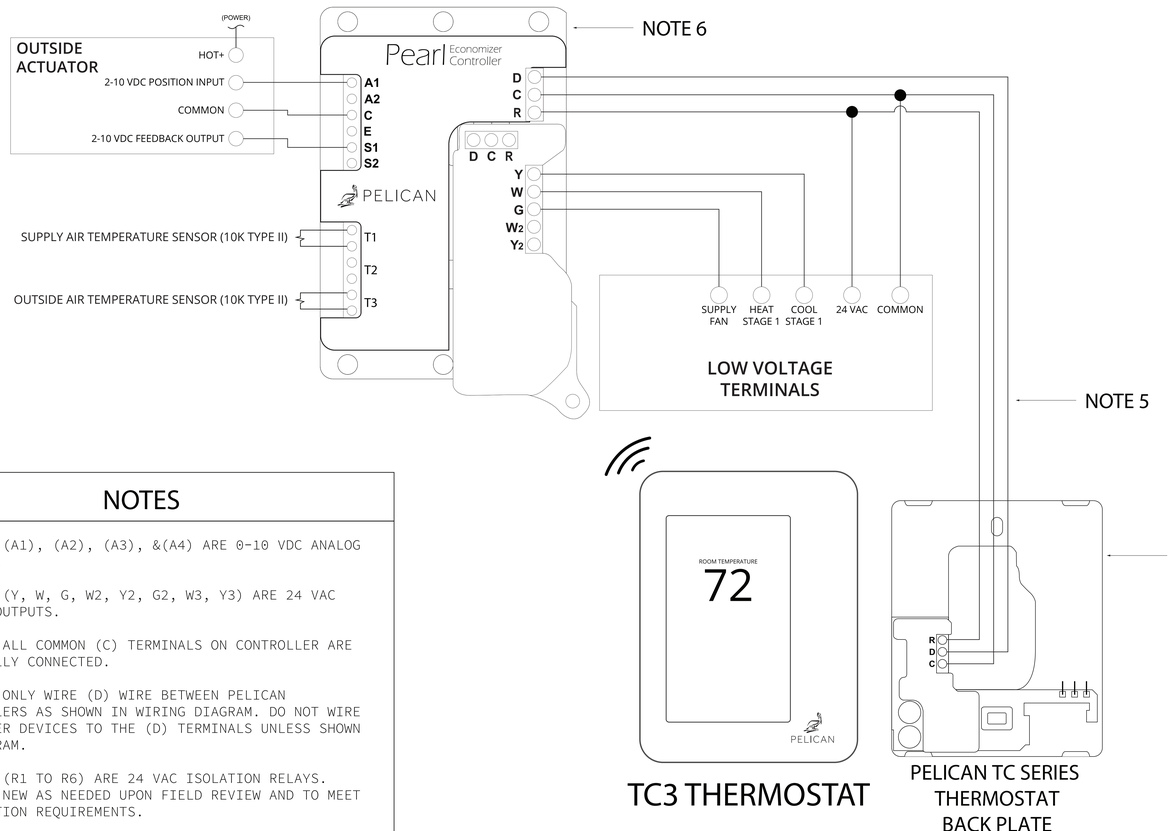
PROJECT NUMBER:
P-25100709

CLIMATE CONTROLS UPGRADES

REV03: 10/16/2025
REV02: 10/10/2025
REV01: 10/07/2025

TYPICAL OF:
AC-25
AC-26
AC-F1
AC-F2

YORK GH/EC W/ ECONOMIZER UNIT CONTROLS (TYPICAL TO 4)



NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: (R1 TO R6) ARE 24 VAC ISOLATION RELAYS. INSTALL NEW AS NEEDED UPON FIELD REVIEW AND TO MEET APPLICATION REQUIREMENTS.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: ANTENNA AND THERMOSTAT TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

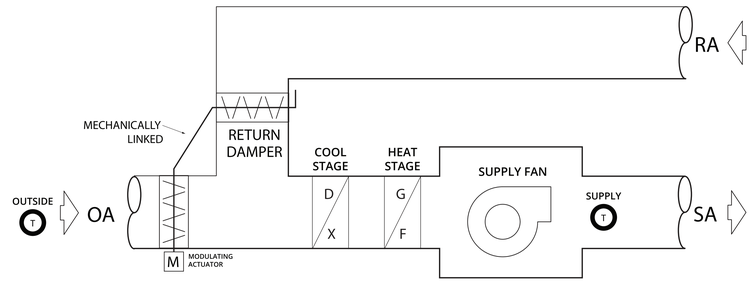
NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 TOUCH STAT	4
PELICAN	PEARL	ADVANCED CONTROLLER	4

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: AC-E1

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

ECONOMIZER: ON
AUTO CONFIGURE: NO
HIGH LIMIT: AUTO
ACTIVE DIFFERENTIAL: 2°F
FIXED ENTHALPY: NO
VARIABLE DAMPER: YES

DAMPER VOLTAGES:
OPEN: 10.0
CLOSED: 2.0
MINIMUM POSITION: (SET BY TAB)
TRACK DAMPER POSITION: YES
DEMAND VENTILATION: YES
MAXIMUM VENT POSITION: (SET BY TAB)

VARIABLE SPEED FAN: OFF

INPUT SENSOR T1: ON
FUNCTION: SUPPLY TEMPERATURE

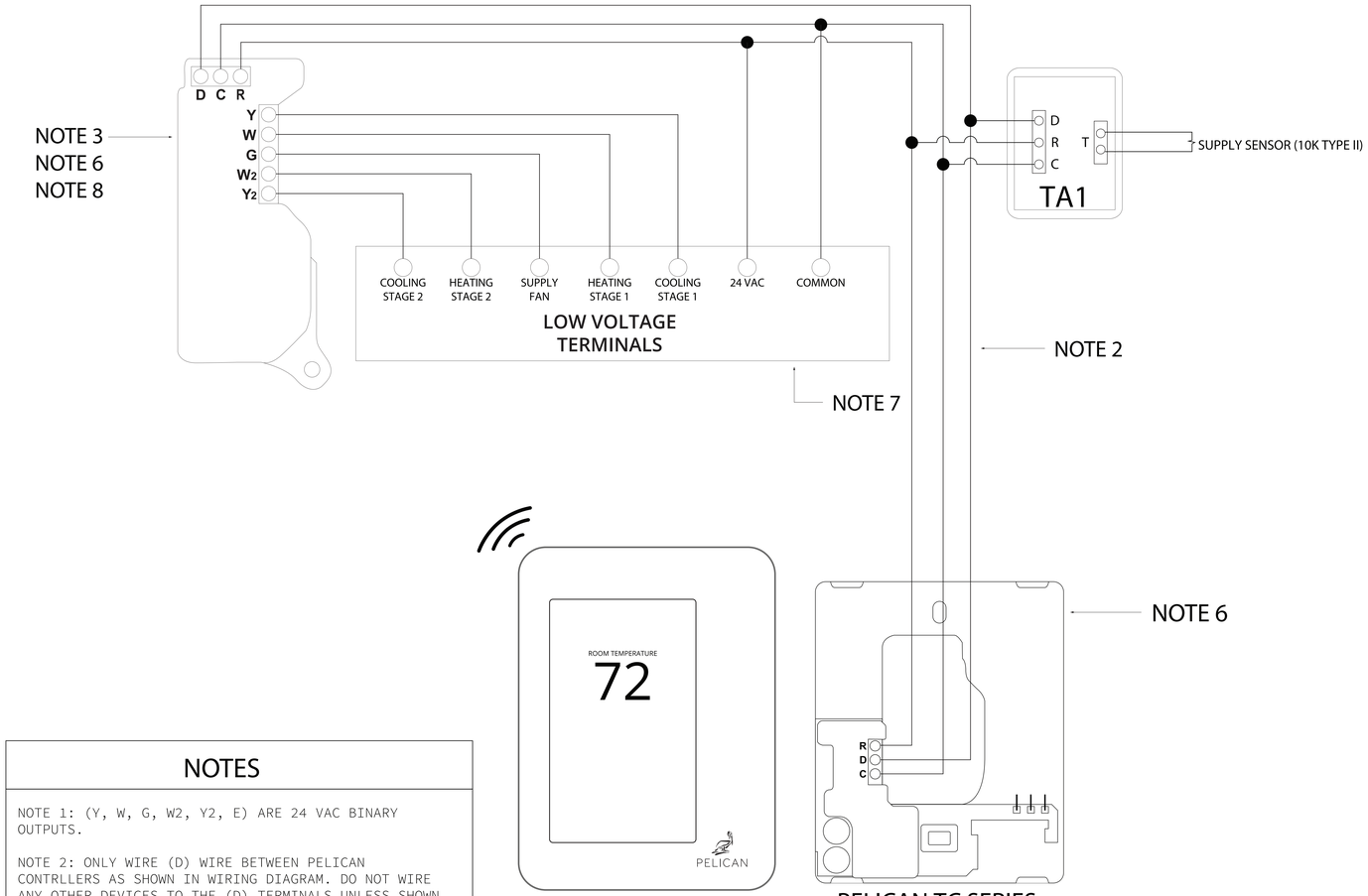
INPUT SENSOR T2: OFF

INPUT SENSOR T3: ON
FUNCTION: OUTSIDE TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100709	D-25100709-1	REV03		YORK GH/EC W/ ECON CONTROLS	KLR	10/16/2025	COLTON JUSD	WALTER ZIMMERMAN ES	PELICAN	2 of 4

TYPICAL OF:
WP-20
WP-32
WP-33
WP-34
WP-35
WP-36
WP-37

BARD GH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 7)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

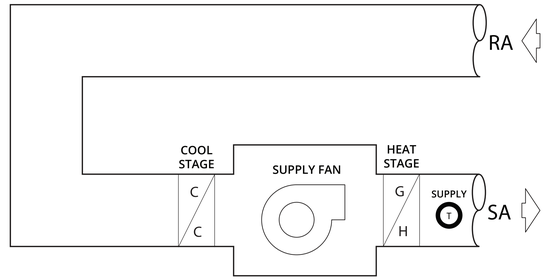
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	7
PELICAN	TA1	TEMP & ALARM SENSOR	7
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	7

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

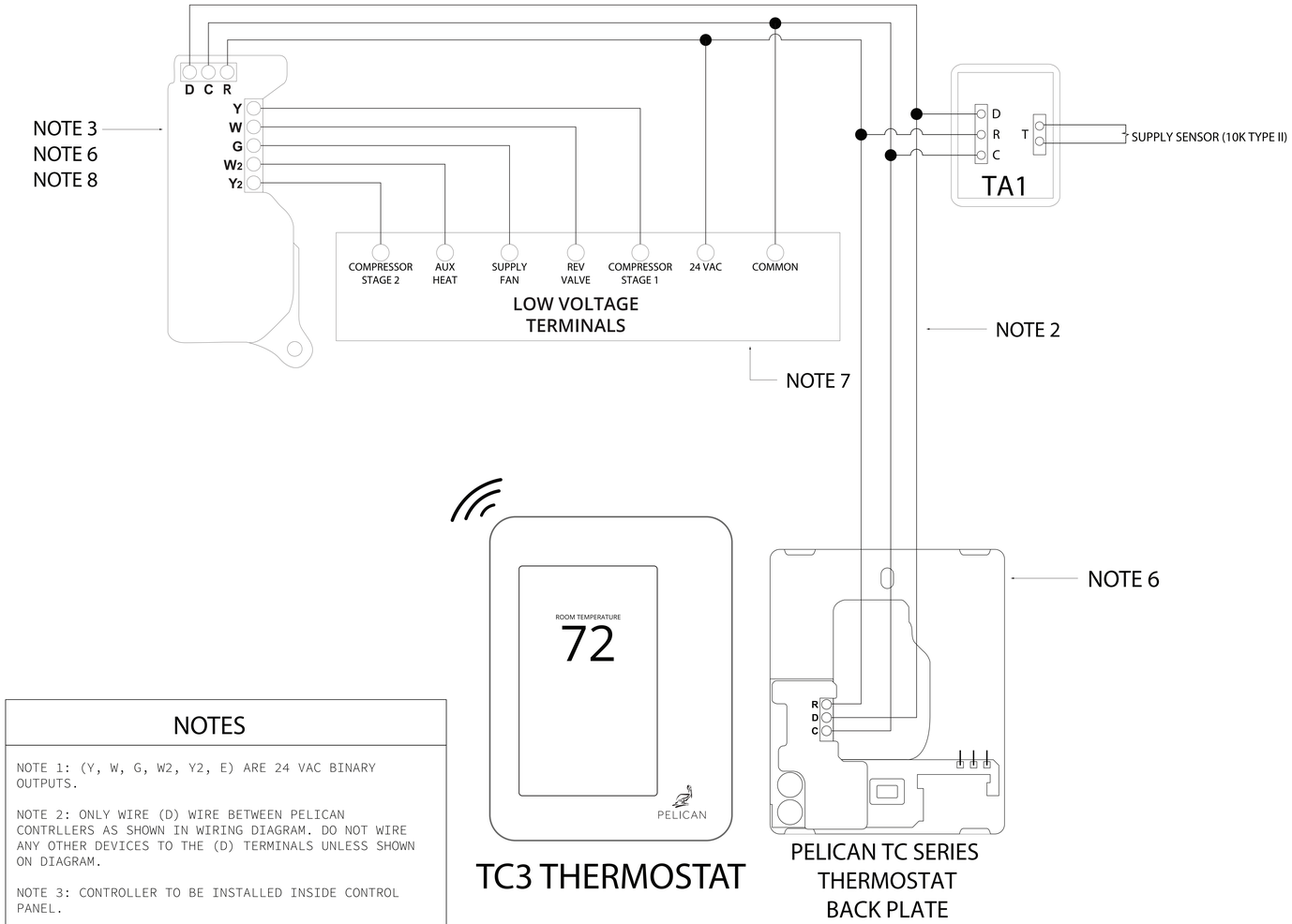
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100709	D-25100709-2	REV03		BARD GH/EC CONTROLS	KLR	10/16/2025	COLTON JUSD WALTER ZIMMERMAN ES	PELICAN	3 of 4

TYPICAL OF:
WP-6
WP-19
WP-21
WP-22
WP-23
WP-24
WP-27
WP-28
WP-29
WP-30
WP-31

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 11)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

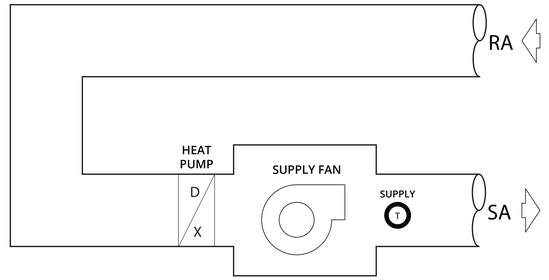
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	10
PELICAN	TA1	TEMP & ALARM SENSOR	10
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	10

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100709	D-25100709-3	REV03		MARVAIR PACKAGE HP CONTROLS	KLR	10/16/2025	COLTON JUSD WALTER ZIMMERMAN ES	PELICAN	4 of 4

CLIMATE CONTROLS

JURUPA VISTA ELEMENTARY SCHOOL
15920 VILLAGE DRIVE EAST
FONTANA, CA 92337

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

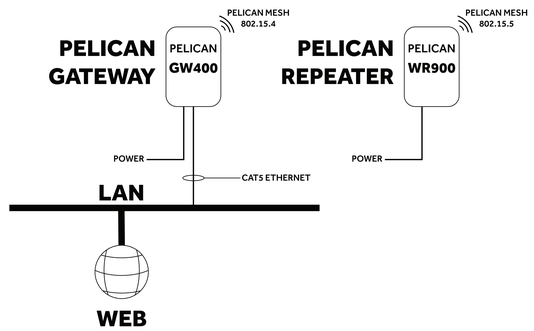
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	5

PELICAN

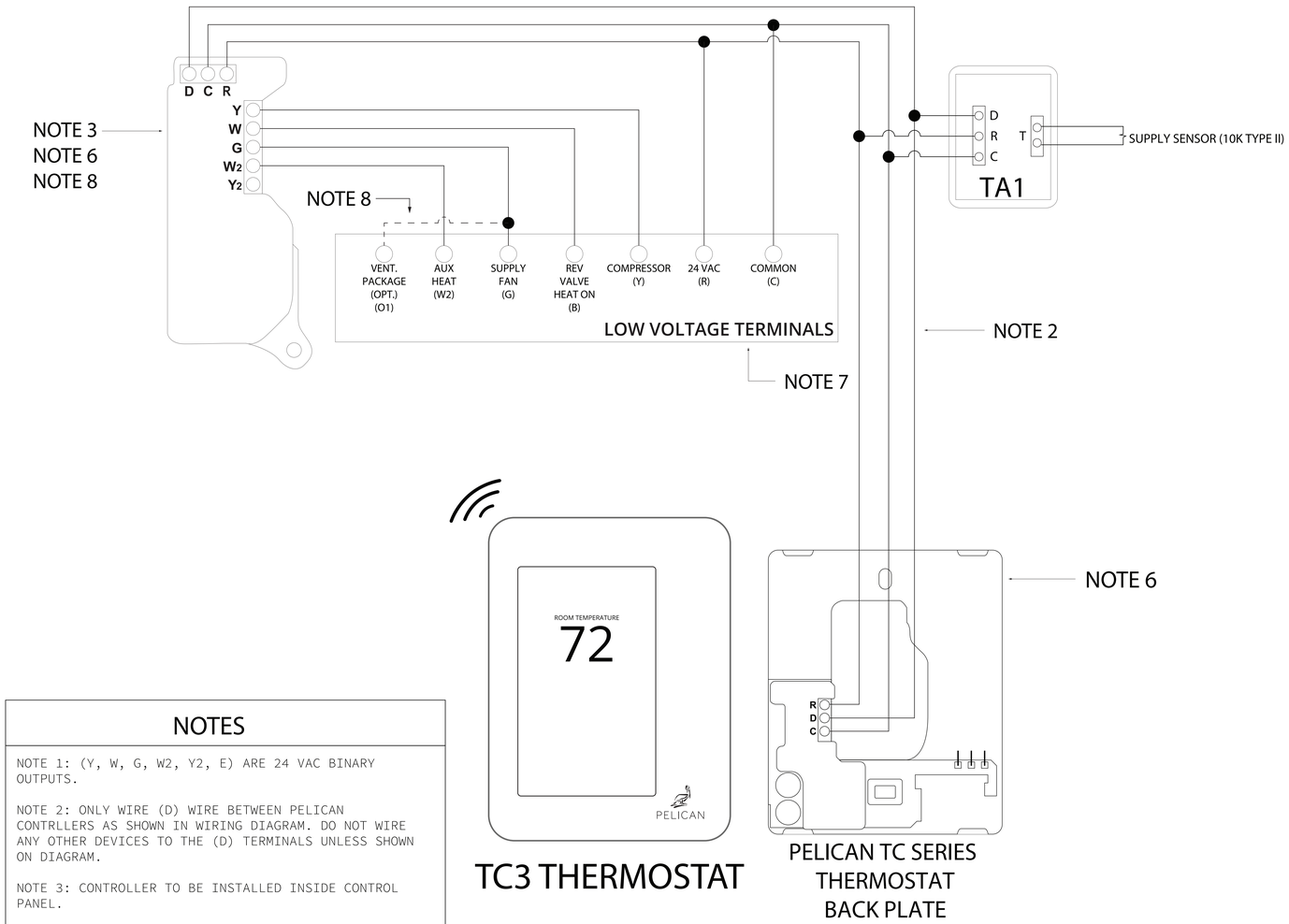
PROJECT NUMBER:
P-25100711

CLIMATE CONTROLS UPGRADES

REV02: 10/10/2025
REV01: 10/07/2025

TYPICAL OF:
WP-21
WP-23
WP-24
WP-25
WP-26
WP-27
WP-28
WP-29
WP-32

BARD WALL HEAT PUMP UNIT CONTROLS (TYPICAL TO 9)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

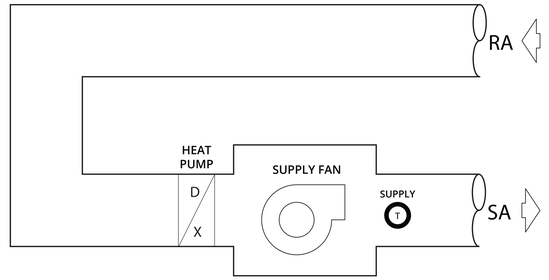
NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

NOTE 8: ADD JUMPER WHEN VENTILATION PACKAGE IS INSTALLED.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	9
PELICAN	TA1	TEMP & ALARM SENSOR	9
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	9

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 1
AUX HEAT: (SET)
COOL STAGES: 1
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 1
AUX HEAT: (SET)
COOL STAGES: 1
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

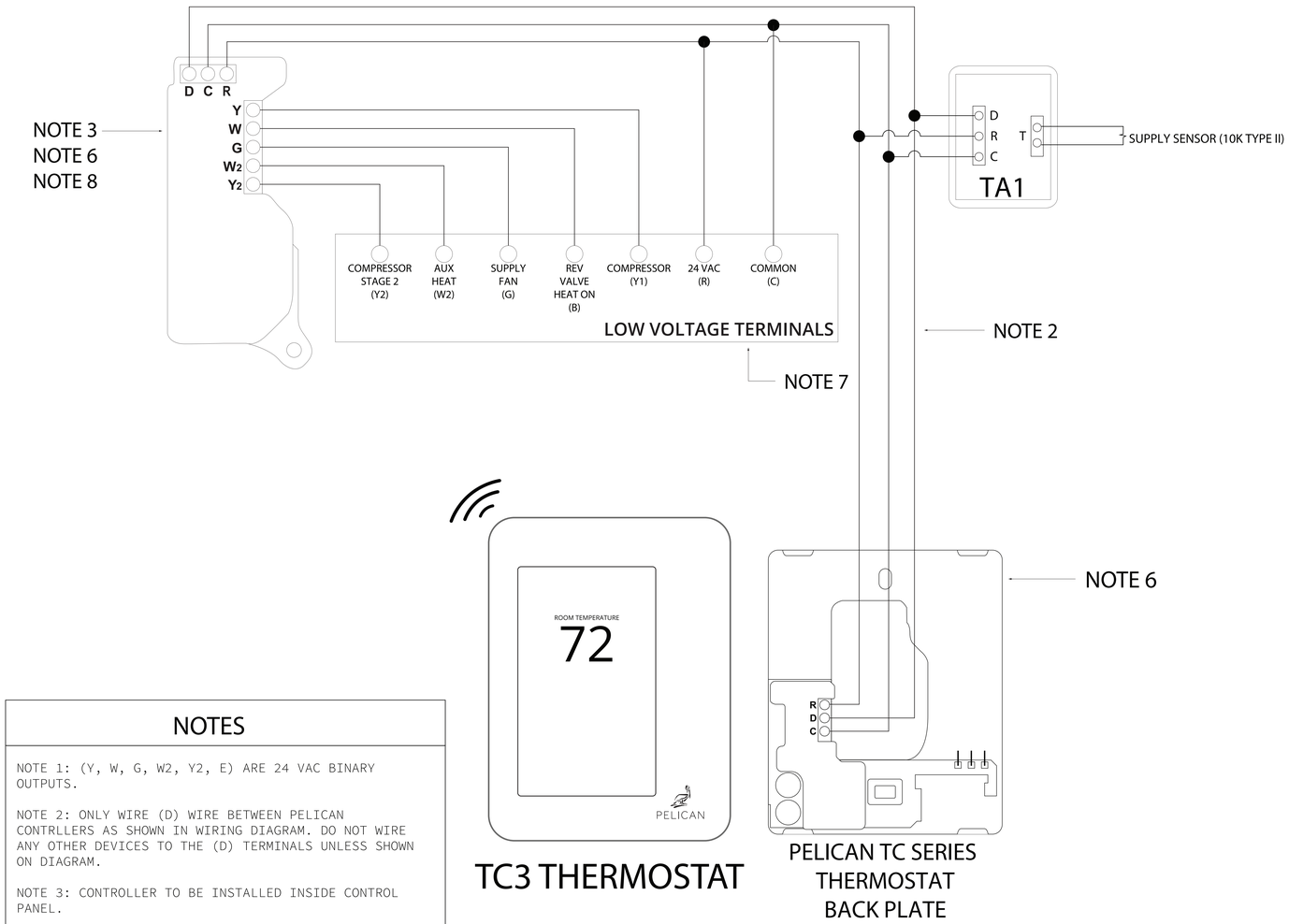
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100711	D-25100711-1	REV02		BARD HP CONTROLS	KLR	10/10/2025	COLTON JUSD JURUPA VISTA ES	PELICAN	2 of 6

TYPICAL OF:
AC-1
AC-2
AC-3
AC-4
AC-5
AC-6
AC-7
AC-9
AC-10
AC-11
AC-13
AC-14
AC-15
AC-16
AC-17
AC-18
AC-K1
AC-Lib-B

CARRIER PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 18)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

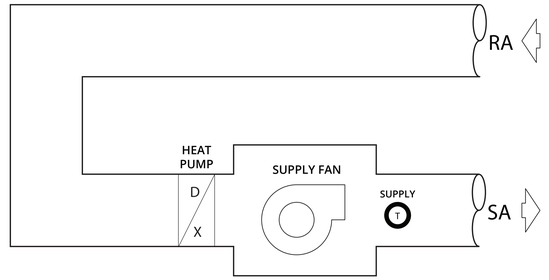
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	18
PELICAN	TA1	TEMP & ALARM SENSOR	18
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	18

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 1
AUX HEAT: (SET)
COOL STAGES: 1
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

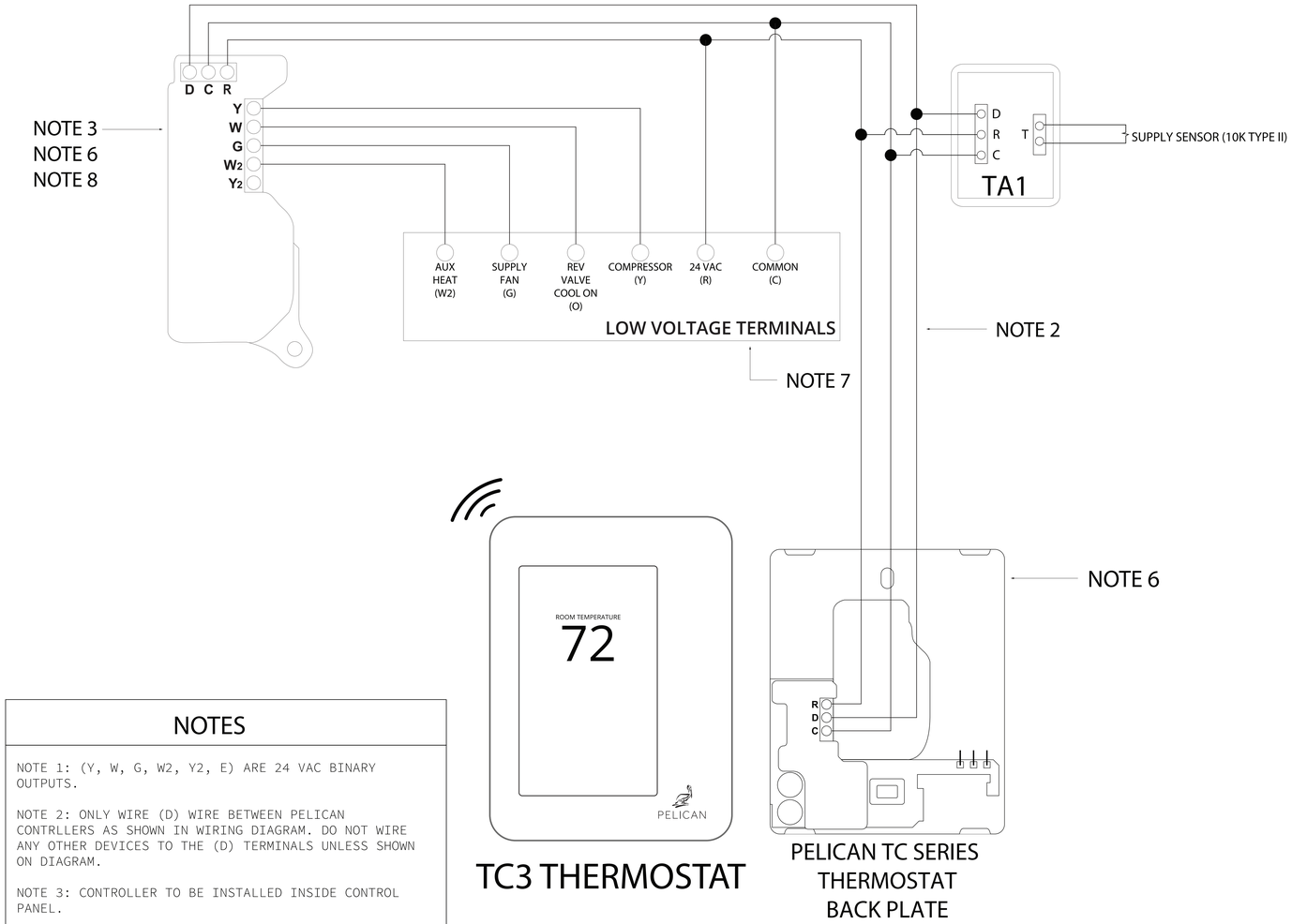
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100711	D-25100711-2	REV02		CARRIER HP CONTROL	KLR	10/10/2025	COLTON JUSD JURUPA VISTA ES	PELICAN	3 of 6

TYPICAL OF:
FC-33
FC-34

CARRIER FAN COIL UNIT CONTROLS (TYPICAL TO 2)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

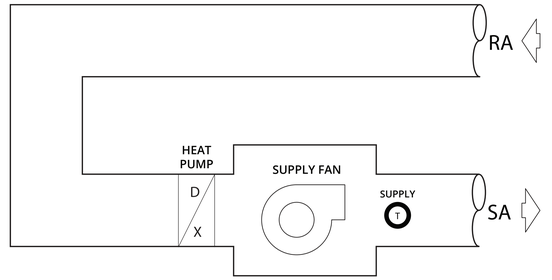
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	2
PELICAN	TA1	TEMP & ALARM SENSOR	2
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	2

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 1
AUX HEAT: (SET)
COOL STAGES: 1
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

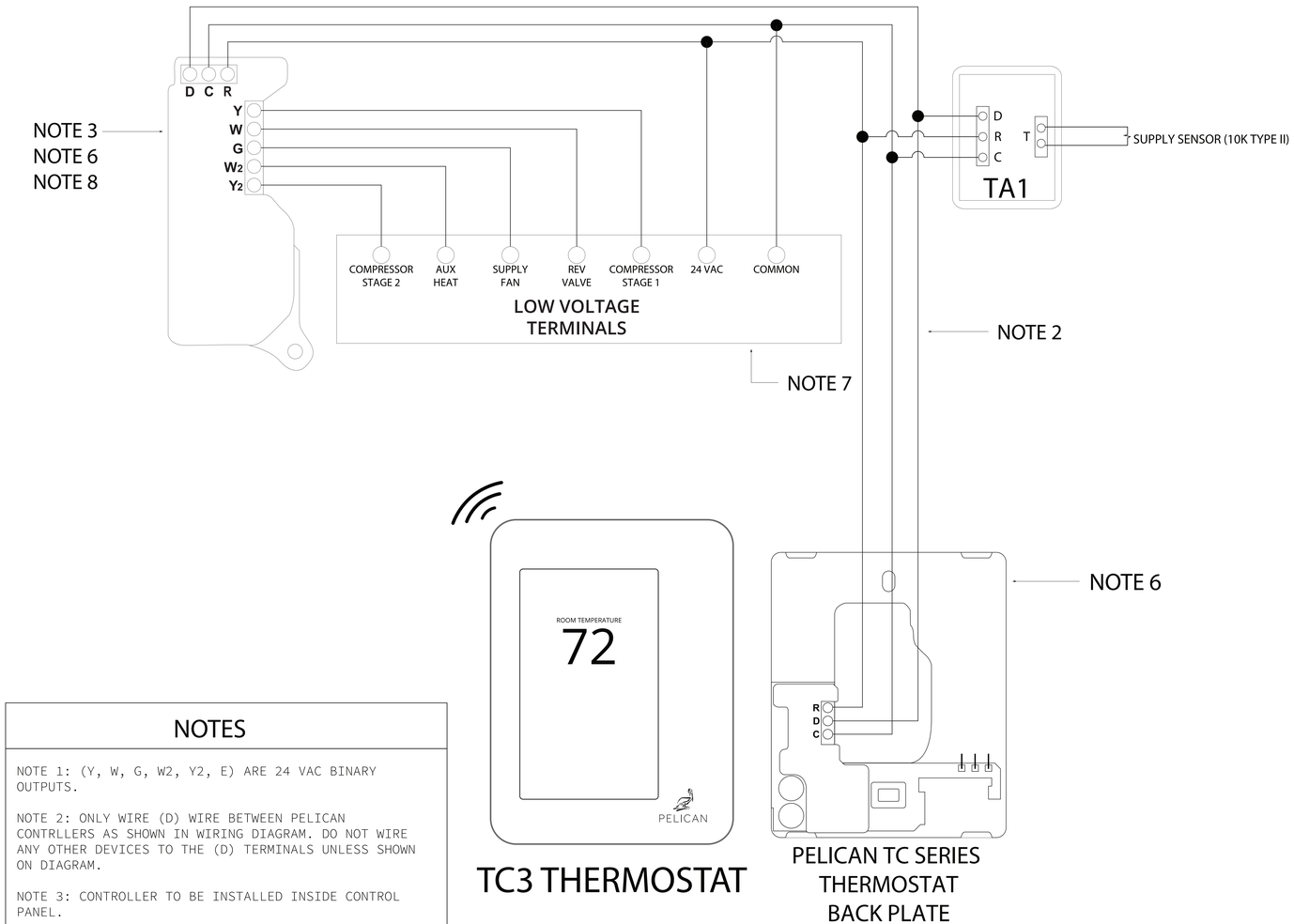
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100711	D-25100711-3	REV02		CARRIER GH/EC W/ ECON CONTROLS	KLR	10/10/2025	COLTON JUSD	JURUPA VISTA ES	4 of 6

TYPICAL OF:
WP-19
WP-20
WP-22
WP-30
WP-31

MARVAIR PACKAGE HEAT PUMP UNIT CONTROLS (TYPICAL TO 5)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

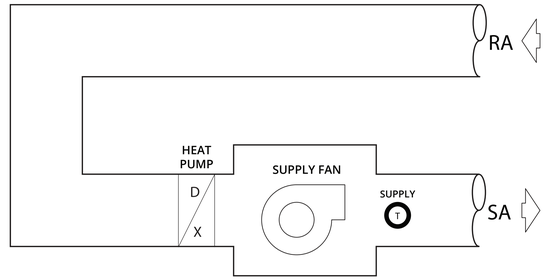
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	5
PELICAN	TA1	TEMP & ALARM SENSOR	5
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	5

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: HEAT PUMP
REVERSING VALVE: (SET)
HEAT STAGES: 2
AUX HEAT: (SET)
COOL STAGES: 2
FAN STAGES: 1

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

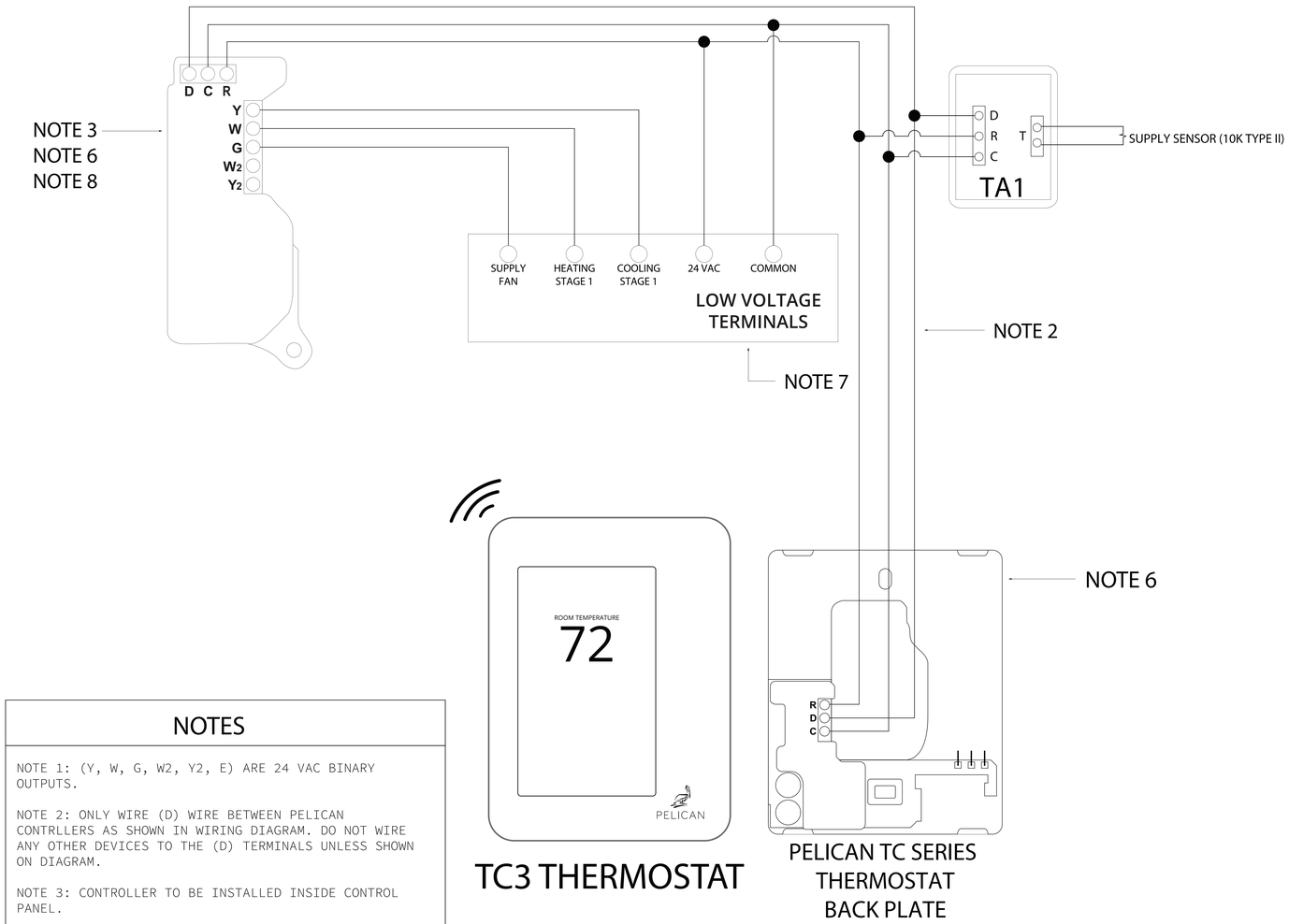
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100711	D-25100711-4	REV02		MARVAIR PACKAGE HP CONTROLS	KLR	10/10/2025	COLTON JUSD JURUPA VISTA ES	PELICAN	5 of 6

TYPICAL OF:
AC-8
AC-12
AC-TK

YORK GH/EC UNIT (NO ECON) CONTROLS (TYPICAL TO 3)



NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

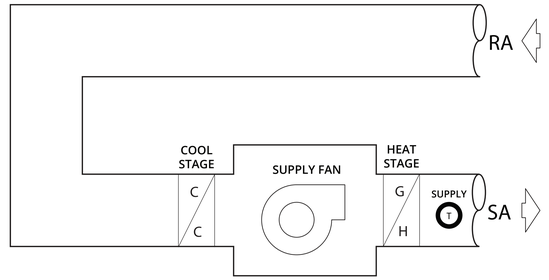
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	3
PELICAN	TA1	TEMP & ALARM SENSOR	3
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.
2. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ)

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 1
COOL STAGES: 1
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25100711	D-25100711-4	REV02		YORK GH/EC CONTROLS	KLR	10/10/2025	COLTON JUSD	JURUPA VISTA ES	6 of 6

CLIMATE CONTROLS

MICHAEL D' ARCY
ELEMENTARY SCHOOL
11645 ELM AVE.
FONTANA, CA 92337

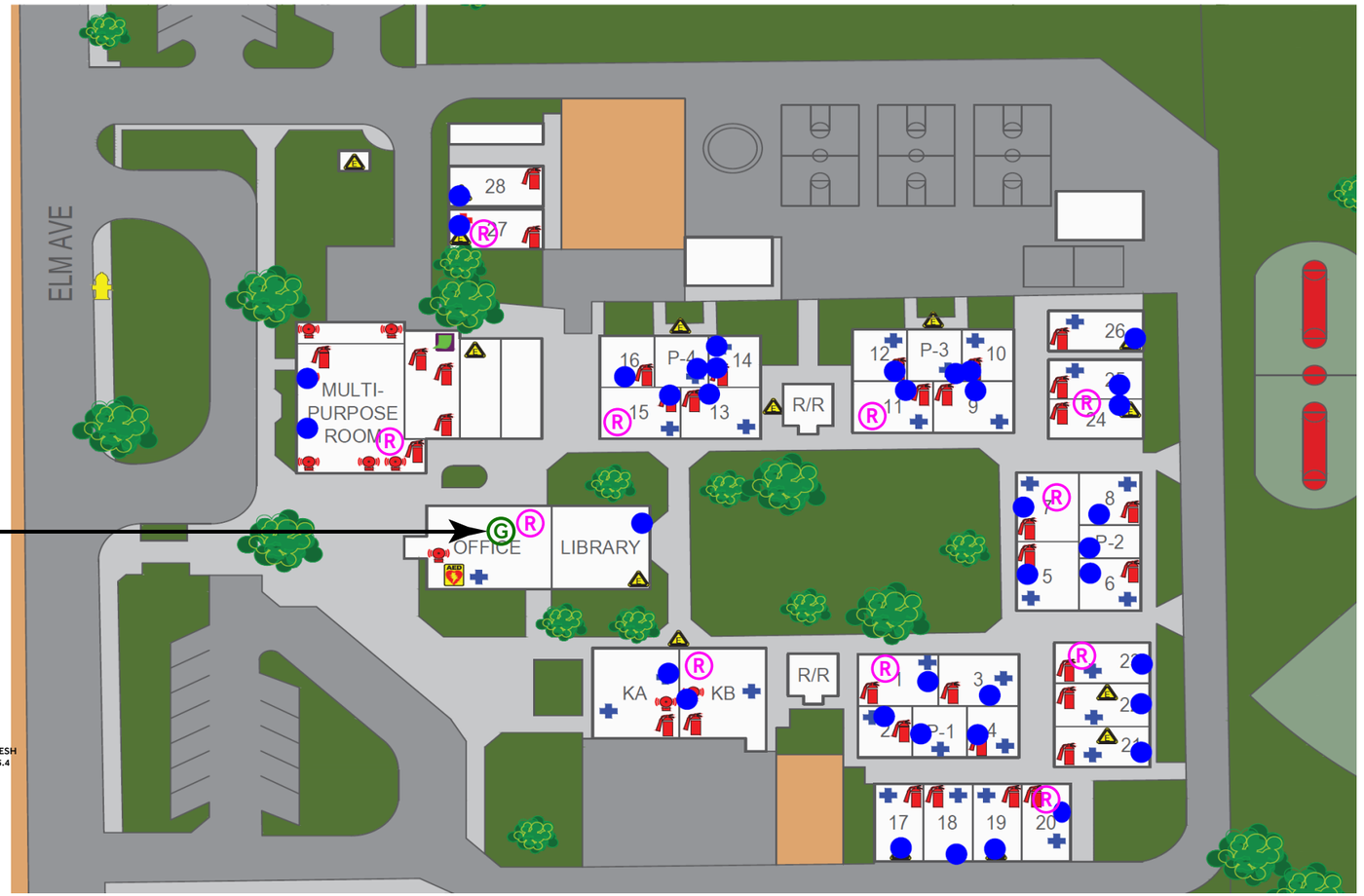
NETWORK COMMUNICATION

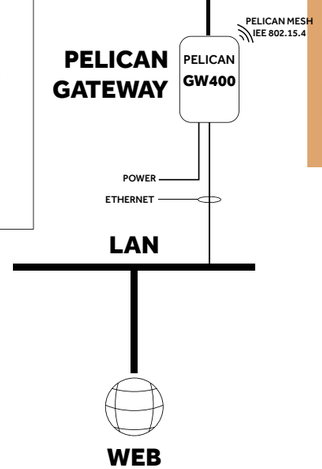
COMMUNICATION SHALL BE ESTABLISHED ACROSS THE BUILDING OVER PELICAN'S WIRELESS MESH NETWORK.

A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED THE BUILDING. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH CUSTOMER INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH CUSTOMER TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON OR INSIDE NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

REPEATERS MAY BE NEEDED TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. THIS WILL BE ASSESSED AFTER ALL PELICAN DEVICES ARE INSTALLED, A NETWORK MAP OF THE FACILITY LOADED, AND THE DEVICES LOCATED CORRECTLY ON THE MAP. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH CUSTOMER TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR400/WR900	PELICAN REPEATERS	11

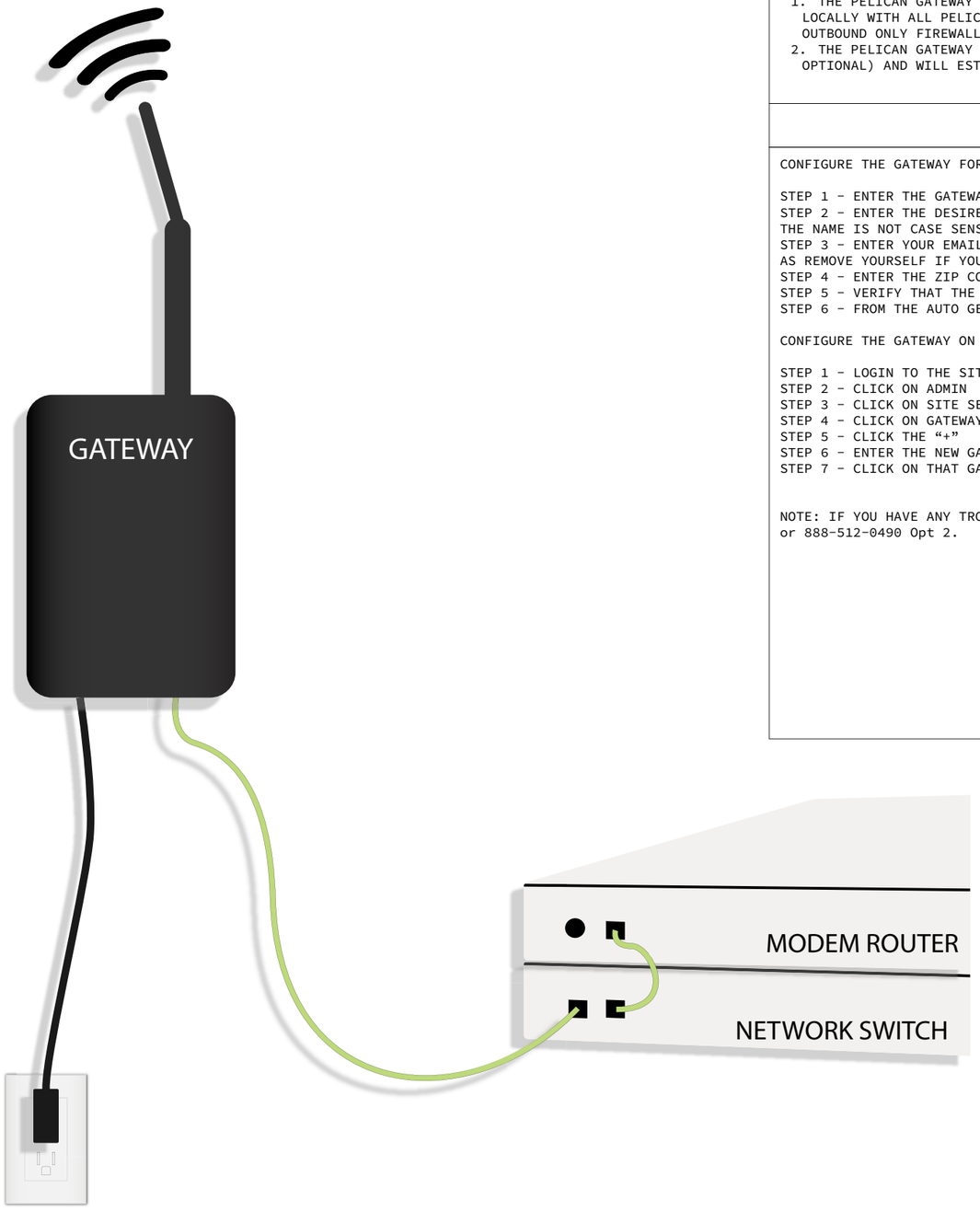
PELICAN

PROJECT NUMBER:
P-25101013

CLIMATE CONTROLS UPGRADES

REV02: 10/21/2025
REV02: 10/10/2025

GW400



NOTES

NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING.

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: PLUG CAT-V CABLE INTO CUSTOMERS INTERNET SWITCH FOR OUTBOUND ACCESS TO THE INTERNET.

NOTE 6: FOR ASSISTANCE WITH CONFIGURING THE GATEWAY FOR STATIC IP CONTACT PELICAN TECHNICAL SUPPORT.

OPERATING CHARACTERISTICS

1. THE PELICAN GATEWAY COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. THE PELICAN GATEWAY CONNECTS TO YOUR NETWORK ROUTER OR SWITCH. IT RECEIVES A DHCP IP ADDRESS (STATIC IP IS OPTIONAL) AND WILL ESTABLISH AN OUTBOUND CONNECTION TO YOUR PELICAN WEB APP.

CONFIGURATIONS

CONFIGURE THE GATEWAY FOR A NEW SITE: GO TO WWW.PELICANWIRELESS.COM > NEW SITE SETUP

STEP 1 - ENTER THE GATEWAY SERIAL NUMBER
STEP 2 - ENTER THE DESIRED NAME OF THE SITE WITH NO SPACES. LETTERS, NUMBERS, DASH, AND UNDERSCORE ARE ACCEPTABLE. THE NAME IS NOT CASE SENSITIVE. (IF THE NAME IS ALREADY IN USED YOU WILL BE NOTIFIED.)
STEP 3 - ENTER YOUR EMAIL ADDRESS AS THE ADMINISTRATOR. (YOU CAN ADD AS MANY ADMINISTRATORS AND USERS LATER AS WELL AS REMOVE YOURSELF IF YOU CHOOSE.)
STEP 4 - ENTER THE ZIP CODE OF THE LOCATION WHERE YOU ARE INSTALLING.
STEP 5 - VERIFY THAT THE INFORMATION, ESPECIALLY THE EMAIL ADDRESS, IS CORRECT AND CLICK SUBMIT.
STEP 6 - FROM THE AUTO GENERATED EMAIL (POSSIBLY IN YOUR SPAM FOLDER) LOGIN TO THE SITE.

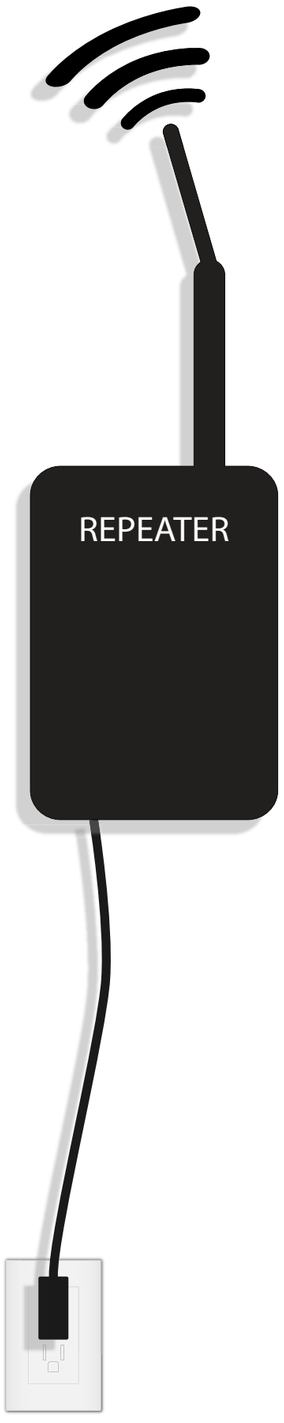
CONFIGURE THE GATEWAY ON AN EXISTING SITE: GO TO THE SITE NAME OF THE EXISTING SITE.

STEP 1 - LOGIN TO THE SITE
STEP 2 - CLICK ON ADMIN
STEP 3 - CLICK ON SITE SETTINGS
STEP 4 - CLICK ON GATEWAYS
STEP 5 - CLICK THE “+”
STEP 6 - ENTER THE NEW GATEWAY SERIAL NUMBER.
STEP 7 - CLICK ON THAT GATEWAY AND ENTER THE NAME OF THE ROOM IT IS LOCATED IN.

NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25101013	D-25101013-GW	REV02		GATEWAY	JBE	09/16/2025		PELICAN	2 of 7

WR900



NOTES

NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING..

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: LOCATE NEAR ENOUGH TO THE GATEWAY SO THAT IT CAN BRIDGE THE NETWORK. WORK WITH PELICAN TECHNICAL SUPPORT TO VERIFY PROPER PLACEMENT.

OPERATING CHARACTERISTICS

1. THE PELICAN REPEATER COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ AND 900MHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. THE PELICAN REPEATER EXTENDS THE PELICAN NETWORK SIGNAL AS NEEDED.

CONFIGURATIONS

Configuration with Pelican WebApp: Go to - ADMIN > NETWORK MAP> and select the correct serial number.

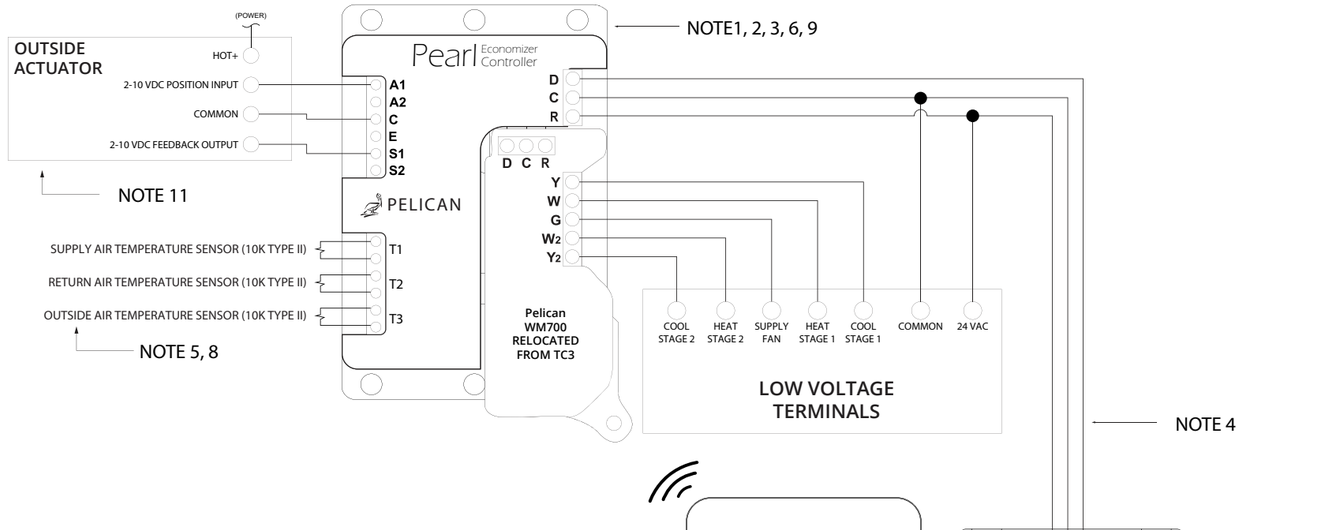
Put the building and room number as the name. e.g. BLDG1RM201, or BLDG76RM400

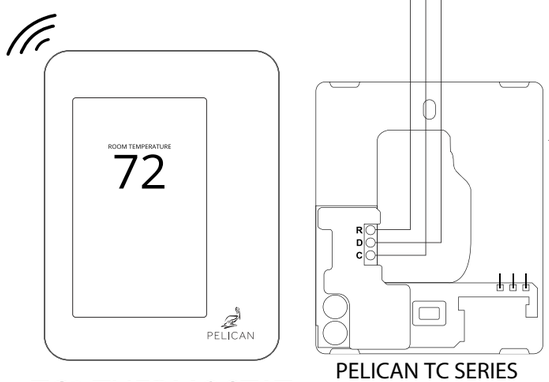
NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25101013	D-25101013-WR	REV02		REPEATERS (UP TO 7 REQUIRED)	JBE	10/10/2025		PELICAN	3 of 7

THIS DRAWING IS FOR THE UNIT TAG NUMBERS AS FOLLOWS:
A/C-LIBRARY A, A/C-MPR B, A/C-MPR C

AC UNIT CONTROLLER (TYPICAL TO 3)





TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (A1, & A2) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, E`) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: PLEASE STILL INSTALL THESE SENSORS WHERE APPROPRIATE.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: THERMOSTAT TO BE INSTALLED IN THE CONDITOINED SPACE AND OUTSIDE OF ALL METAL ENCLOSURE AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

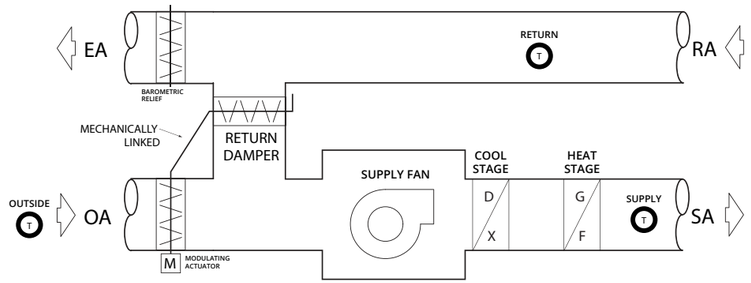
NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

NOTE 11: IF THERE ARE MULTIPLE ACTUATORS FOR OUTDOOR, RETURN, AND EXHAUST. THE SIGNAL AND CONMMON CAN BE WIRED IN PARALLED BUT ONLY CONNECT THE FEEDBACK SIGNAL TO THE OUTDOOR DAMPER.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TOUCH THERMOSTAT CO2	4
PELICAN	PEARL	ADVANCED CONTROLLER	4

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO AUTO.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to - ADMIN > THERMOSTAT CONFIGURATION > and select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the RTU Number. e.g., RTU1, or RTU-5

Thermostat Settings
System Type: Conventional
Heat Stages: 2
Cool Stages: 2
Fan Stages: 1
Heat Needs Fan: No*
CO2 Ventilation: 800ppm

Temperature Settings
Heat Range: 56° to 72°
Cool Range: 68° to 86°

Thermostat Operation
Please leave these as shown

Economizer = On
Note that you should run the “Economizer test and calibration” function first to verify operation of the economizer damper. Damper open and closed positions will be recorded automatically.
Auto Configure: No

High Limit Shut Off: 65°F
Activation Differential: 4°F
Fixed Enthalpy Limit: YeS
Variable Damper: Yes
Damper Voltages:
Open 10.0 / Closed 2.0
Minimum Damper Position: 10%*
Track Damper Position: Yes
Demand Ventilation: On
Maximum Ventilation Position: 100%*

Variable Speed Fan = On
Cooling Fan Speed: 67%*
Cooling Fan Speed Stage-2: 100%*
Heating Fan Speed: 67%*
Heating Fan Speed Stage-2: 100%*
Ventilation Fan Speed: 67%*

Input Sensor T1 = On
Function: Supply Temperature
Cool Safe Range: 40° to 80°
Heat Safe Range: 50° to 165°

Input Sensor T2 = On
Function: Return Temperature
Input Sensor T3 = On
Function: Outside Temperature

Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

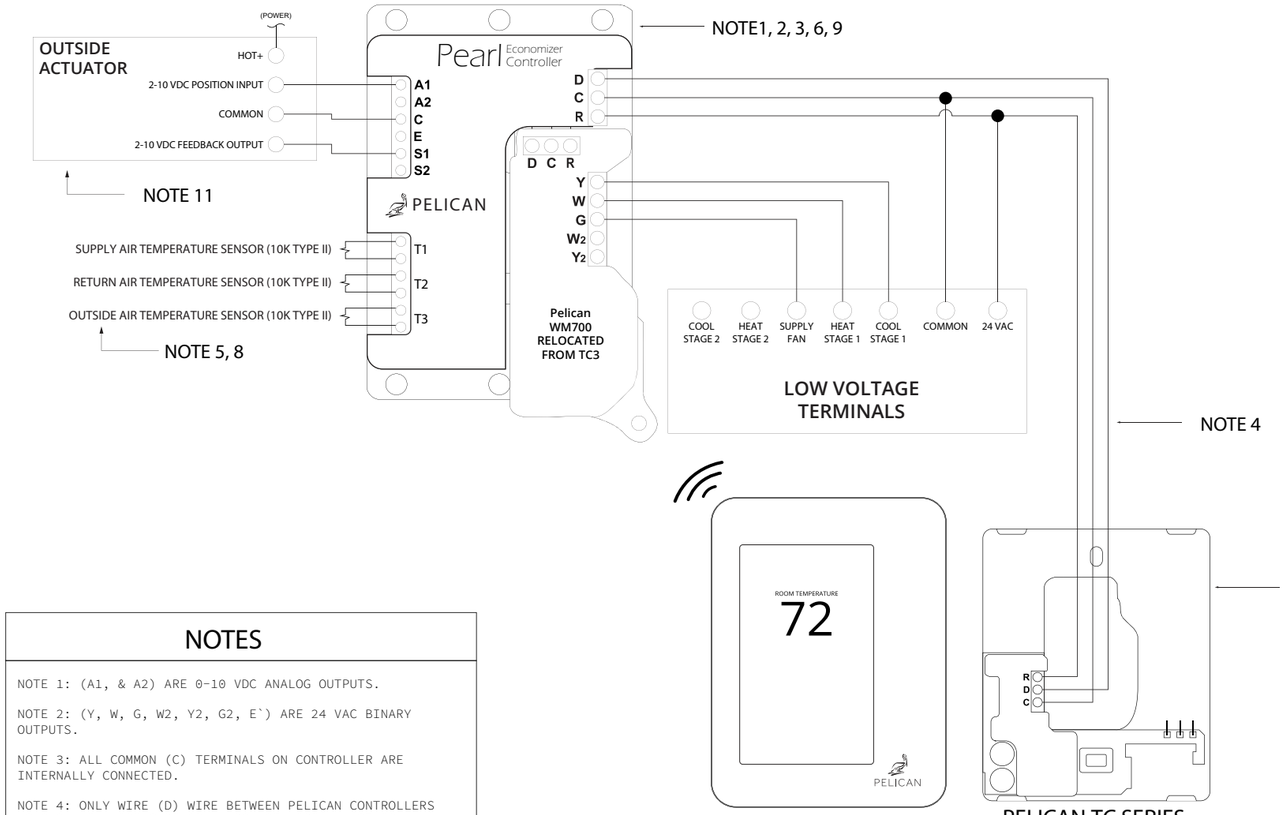
Critical note on 2-Speed indoor fan units. Regardless of whether Pelican is controlling the fan directly or not, the percentage of the total fan speed for each mode must be set to ensure proper outdoor air flow.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25101013	D-25101013-A1	REV02	SEE LIST AT TOP OF PAGE	RTU 2H 2C ECON SEER2	JBE	10/10/2025	PELICAN	4 of 7

THIS DRAWING IS FOR THE UNIT TAG NUMBERS AS FOLLOWS:
A/C KA, A/C KB

AC UNIT CONTROLLER (TYPICAL TO 2)



NOTES

NOTE 1: (A1, & A2) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, E`) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: PLEASE STILL INSTALL THESE SENSORS WHERE APPROPRIATE.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: THERMOSTAT TO BE INSTALLED IN THE CONDITOINED SPACE AND OUTSIDE OF ALL METAL ENCLOSURE AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

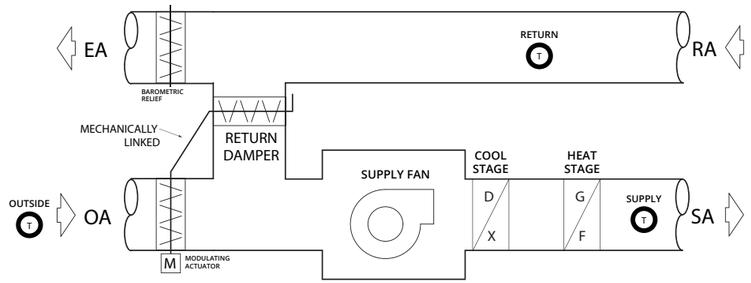
NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

NOTE 11: IF THERE ARE MULTIPLE ACTUATORS FOR OUTDOOR, RETURN, AND EXHAUST. THE SIGNAL AND CONMMON CAN BE WIRED IN PARALLED BUT ONLY CONNECT THE FEEDBACK SIGNAL TO THE OUTDOOR DAMPER.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TOUCH THERMOSTAT CO2	3
PELICAN	PEARL	ADVANCED CONTROLLER	3

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO AUTO.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to - ADMIN > THERMOSTAT CONFIGURATION > and select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the RTU Number. e.g., RTU1, or RTU-5

Thermostat Settings
System Type: Conventional
Heat Stages: 2
Cool Stages: 2
Fan Stages: 1
Heat Needs Fan: No*
CO2 Ventilation: 800ppm

Temperature Settings
Heat Range: 56° to 72°
Cool Range: 68° to 86°

Thermostat Operation
Please leave these as shown

Economizer = On
Note that you should run the “Economizer test and calibration” function first to verify operation of the economizer damper. Damper open and closed positions will be recorded automatically.
Auto Configure: No

High Limit Shut Off: 65°F
Activation Differential: 4°F
Fixed Enthalpy Limit: YeS
Variable Damper: Yes
Damper Voltages:
Open 10.0 / Closed 2.0
Minimum Damper Position: 10%*
Track Damper Position: Yes
Demand Ventilation: On
Maximum Ventilation Position: 100%*

Variable Speed Fan = On
Cooling Fan Speed: 67%*
Cooling Fan Speed Stage-2: 100%*
Heating Fan Speed: 67%*
Heating Fan Speed Stage-2: 100%*
Ventilation Fan Speed: 67%*

Input Sensor T1 = On
Function: Supply Temperature
Cool Safe Range: 40° to 80°
Heat Safe Range: 50° to 165°

Input Sensor T2 = On
Function: Return Temperature
Input Sensor T3 = On
Function: Outside Temperature

Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

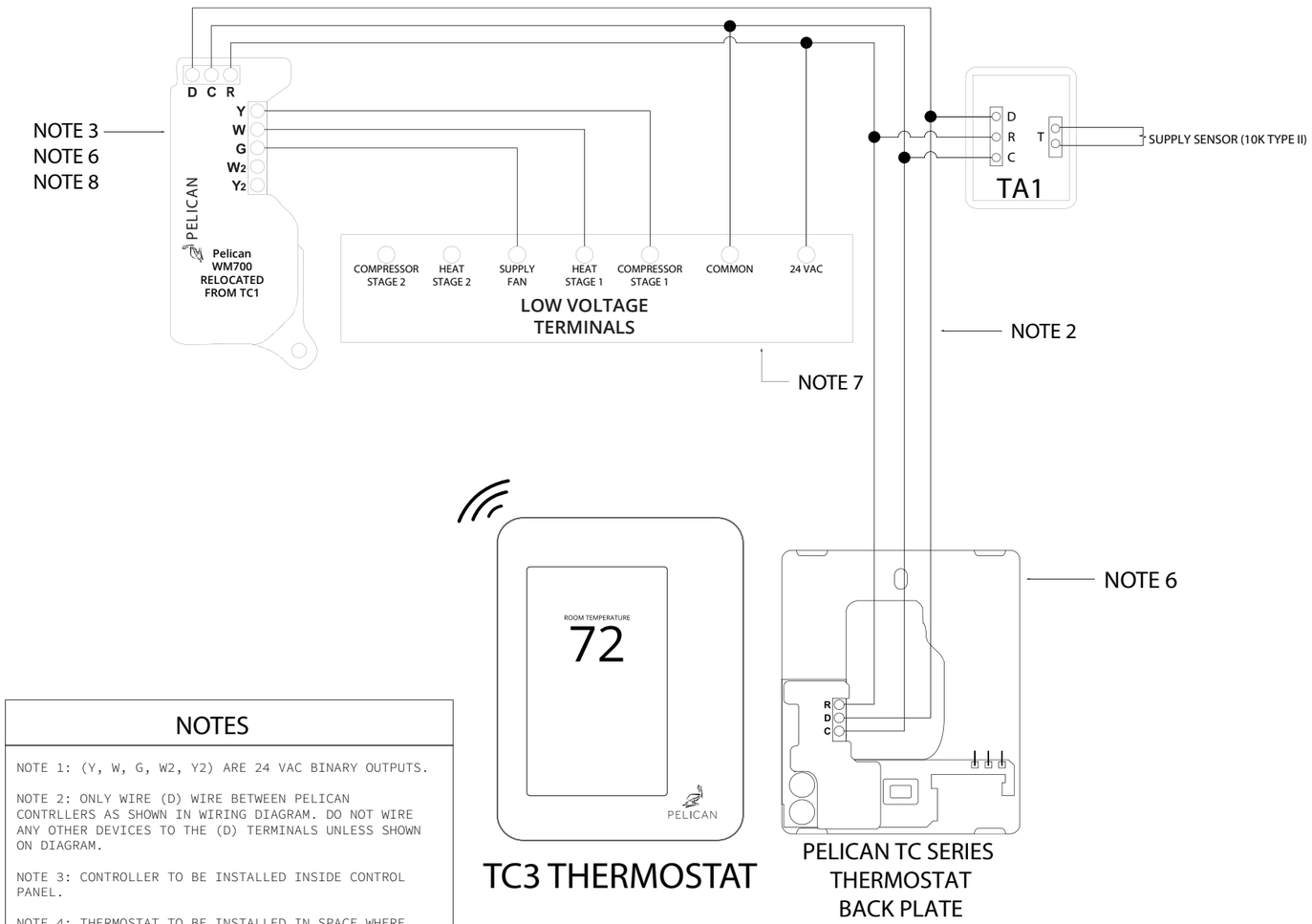
Critical note on 2-Speed indoor fan units. Regardless of whether Pelican is controlling the fan directly or not, the percentage of the total fan speed for each mode must be set to ensure proper outdoor air flow.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PAGE:
P-25101013	D-25101013-A2	REV02	SEE LIST AT TOP OF PAGE	RTU 1H 1C ECON SEER2	JBE	10/10/2025	PELICAN	5 of 7

THIS DRAWING IS FOR THE UNIT TAG NUMBERS AS FOLLOWS:
A/C 1 THRU 16, A/C P1 THRU P4, A/C LIBARY B, A/C MPR A, MPR MUA,

RTU
(TYPICAL OF 23)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

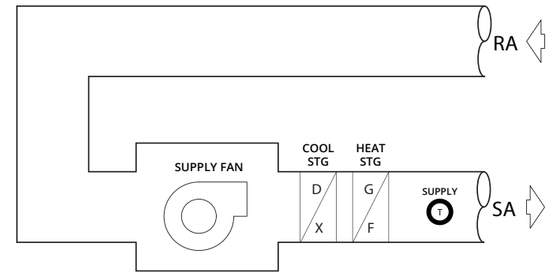
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TOUCH THERMOSTAT	12
PELICAN	TA1	TEMP & ALARM SENSOR	12
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	12

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ENABLED BY THE UNITS INTERNAL CONTROLS.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to -
ADMIN > THERMOSTAT CONFIGURATION > and
select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or
descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the
UNIT Number. e.g., RTU1, or RTU-5

Thermostat Settings
System Type: Conventional
Heat Stages: 2
Cool Stages: 2
Fan Stages: 1
Heat Needs Fan: No

Thermostat Operation
Please leave these as shown

Wired Sensor
Function: Supply Temperature
Label: Supply
Probe Type: External

Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

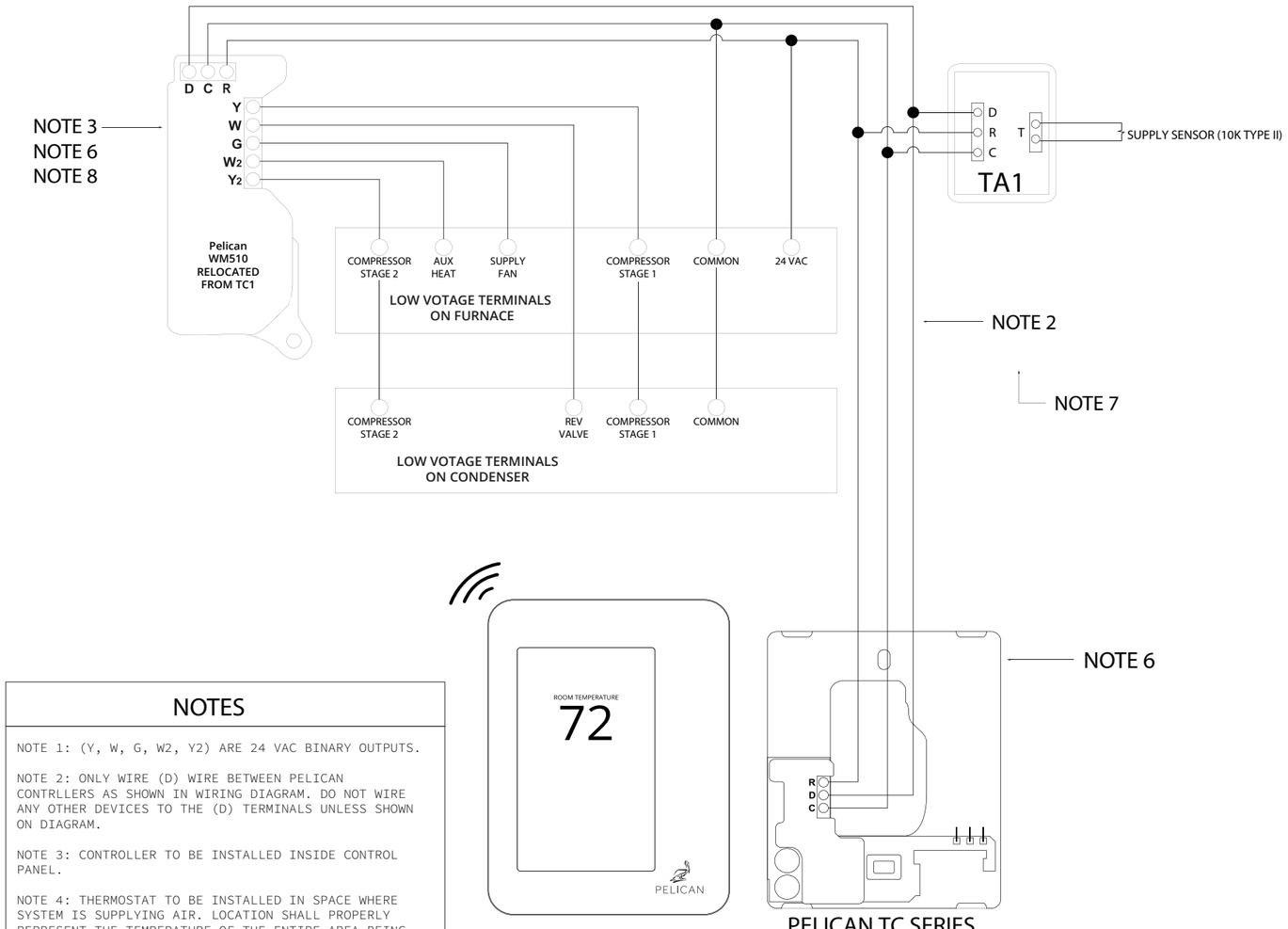
NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PELICAN	PAGE:
P-25101013	D-25101013-A3	REV02	SEE LIST AT TOP OF PAGE	1C 1H WITH SAT	JBE	10/10/2025			6 of 7

THIS DRAWING IS FOR THE UNIT TAG NUMBERS AS FOLLOWS:
W/P 17 THRU 28

WALL MOUNT HEAT PUMP
(TYPICAL OF 12)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

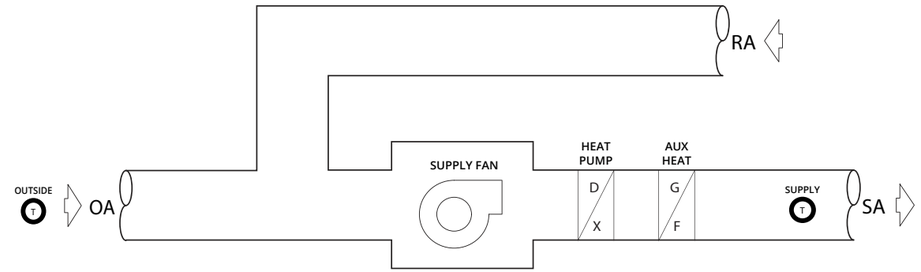
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC1	TOUCH THERMOSTAT	12
PELICAN	TA1	TEMP & ALARM SENSOR	12
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	12

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. IF THE UNIT DOES NOT HEAT THE SPACE AT A RATE OF 5°F PER HOUR AUX HEAT WILL BE ADDED.
3. COMPRESSOR WILL BE LOCKED OUT AT AN OUTDOOR AMBIENT TEMPERATURE OF 35°F AND AUX HEAT WILL BECOME PRIMARY HEATING SOURCE.
4. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to -
ADMIN > THERMOSTAT CONFIGURATION > and
select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or
descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the
unit Number. e.g., HP1, HP-5

Thermostat Settings
System Type: Heat pump
Reversing Valve: Cooling On
Heat Stages: 1
Aux Heat: Emergency
Cool Stages: 1
Fan Stages: 1
Heat Needs Fan: Yes
Compressor lockout: 35°F

Temperature Settings
Heat Range: 56° to 72°
Cool Range: 68° to 86°
CO2 Ventilation: 800ppm

Thermostat Operation
Please leave these as shown

Wired Sensor
Function: Supply Temperature
Label: Supply
Probe Type: External

Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PELICAN	PAGE:
P-25101013	D-25101013-A4	REV02	SEE LIST AT TOP OF PAGE	HEAT PUMP	JBE	10/10/2025			7 of 7

CLIMATE CONTROLS

RUTH O. HARRIS
MIDDLE SCHOOL
11150 ALDER AVE.
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

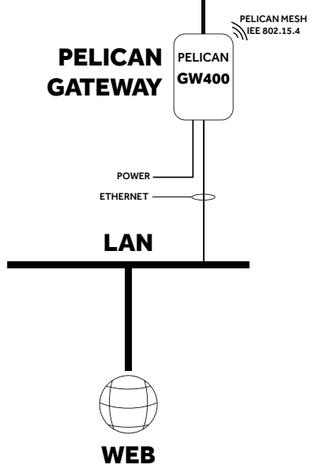
(G) A SINGLE (1)PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS ILLUSTRATED TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. IF DISTRICT ALREADY HAS A GATEWAY INSTALLED AT CAMPUS, GATEWAY SHALL BE RE-LOCATED TO NEW LOCATION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) PELICAN REPEATER(S) SHALL BE INSTALLED AT THE CAMPUS AS ILLUSTRATED IN THE DIAGRAM TO THE RIGHT, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN THE ILLUSTRATED GENERAL VISCINITY TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR TO COORDINATE WITH FACILITY FOR THE PROVISION OF SECURE AND STABLE 120VAC POWER CONNECTIONS FOR EACH REPEATER. REPEATER(S) SHALL BE INSTALLED IN A LOCATION ONLY ACCESSIBLE TO AUTHORIZED PERSONNEL. DO NOT INSTALL REPEATER(S) ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

NOTE: ALL PELICAN DEVICES EQUIPPED WITH WIRELESS ANTENNAS ACT AS WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT). PELICAN REPEATER(S) (PART#:WR900) UTILIZED FOR GREATER WIRELESS RANGE.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	PELICAN REPEATERS	6

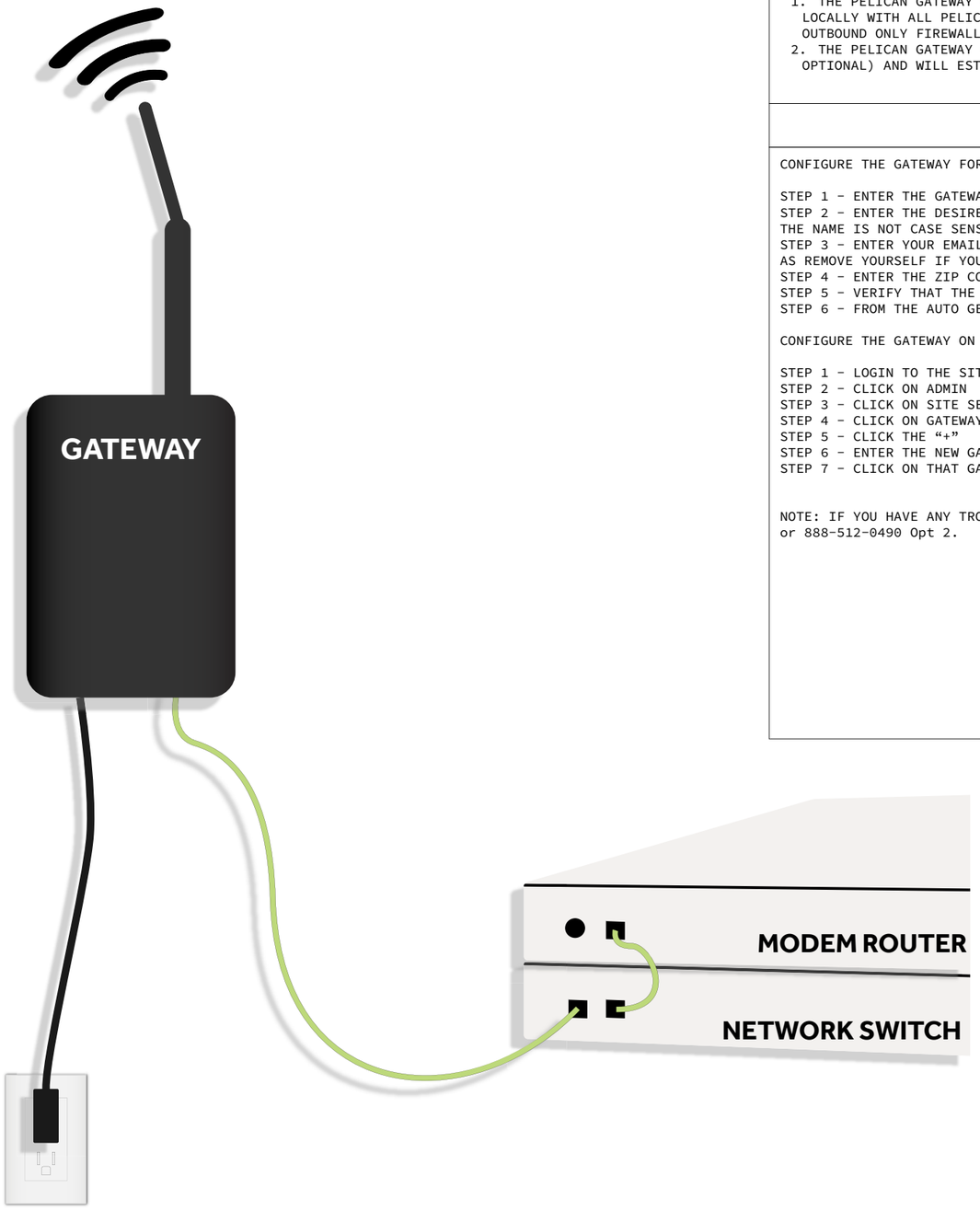
PELICAN

PROJECT NUMBER:
P-25101014

CLIMATE CONTROLS UPGRADES

REV01: 10/10/2025

GW400



NOTES

NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING.

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: PLUG CAT-V CABLE INTO CUSTOMERS INTERNET SWITCH FOR OUTBOUND ACCESS TO THE INTERNET.

NOTE 6: FOR ASSISTANCE WITH CONFIGURING THE GATEWAY FOR STATIC IP CONTACT PELICAN TECHNICAL SUPPORT.

OPERATING CHARACTERISTICS

1. THE PELICAN GATEWAY COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. THE PELICAN GATEWAY CONNECTS TO YOUR NETWORK ROUTER OR SWITCH. IT RECEIVES A DHCP IP ADDRESS (STATIC IP IS OPTIONAL) AND WILL ESTABLISH AN OUTBOUND CONNECTION TO YOUR PELICAN WEB APP.

CONFIGURATIONS

CONFIGURE THE GATEWAY FOR A NEW SITE: GO TO WWW.PELICANWIRELESS.COM > NEW SITE SETUP

STEP 1 - ENTER THE GATEWAY SERIAL NUMBER
STEP 2 - ENTER THE DESIRED NAME OF THE SITE WITH NO SPACES. LETTERS, NUMBERS, DASH, AND UNDERSCORE ARE ACCEPTABLE. THE NAME IS NOT CASE SENSITIVE. (IF THE NAME IS ALREADY IN USED YOU WILL BE NOTIFIED.)
STEP 3 - ENTER YOUR EMAIL ADDRESS AS THE ADMINISTRATOR. (YOU CAN ADD AS MANY ADMINISTRATORS AND USERS LATER AS WELL AS REMOVE YOURSELF IF YOU CHOOSE.)
STEP 4 - ENTER THE ZIP CODE OF THE LOCATION WHERE YOU ARE INSTALLING.
STEP 5 - VERIFY THAT THE INFORMATION, ESPECIALLY THE EMAIL ADDRESS, IS CORRECT AND CLICK SUBMIT.
STEP 6 - FROM THE AUTO GENERATED EMAIL (POSSIBLY IN YOUR SPAM FOLDER) LOGIN TO THE SITE.

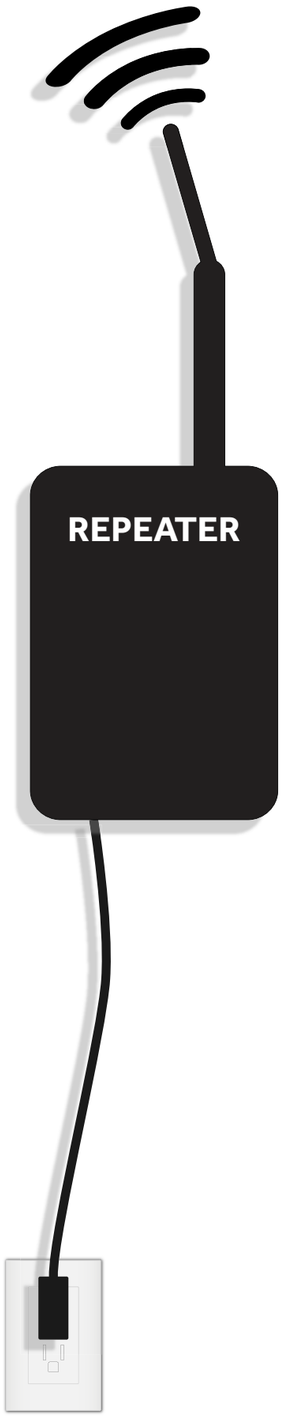
CONFIGURE THE GATEWAY ON AN EXISTING SITE: GO TO THE SITE NAME OF THE EXISTING SITE.

STEP 1 - LOGIN TO THE SITE
STEP 2 - CLICK ON ADMIN
STEP 3 - CLICK ON SITE SETTINGS
STEP 4 - CLICK ON GATEWAYS
STEP 5 - CLICK THE “+”
STEP 6 - ENTER THE NEW GATEWAY SERIAL NUMBER.
STEP 7 - CLICK ON THAT GATEWAY AND ENTER THE NAME OF THE ROOM IT IS LOCATED IN.

NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25101014	D-25101014-GW	REV01		GATEWAY	CM	10/10/2025		PELICAN	2 of 6

WR900



NOTES

NOTE 1: DEVICE WILL REQUIRE POWER FROM AN UNINTERRUPTED 120V POWER SOURCE.

NOTE 2: INSTALL IN A LOCATION THAT IS HIGH ON THE WALL WITH THE ANTENNA POINTED STRAIGHT UP.

NOTE 3: LINE OF SITE TO PELICAN DEVICES FROM THE GATEWAY ARE NOT TO BE OBSTRUCTED BY ANY SOLID METAL STRUCTURE, BUNDLE OF WIRING, OR METAL PIPING..

NOTE 4: DO NOT PLACE WITHIN 10 FEET OF ANY OTHER WIRELESS EMITTING DEVICE OR HIGH VOLTAGE SOURCE OR DEVICE SUCH AS TRANSFORMERS, MOTORS, VFDs, OR SWITCHGEAR.

NOTE 5: LOCATE NEAR ENOUGH TO THE GATEWAY SO THAT IT CAN BRIDGE THE NETWORK. WORK WITH PELICAN TECHNICAL SUPPORT TO VERIFY PROPER PLACEMENT.

OPERATING CHARACTERISTICS

1. THE PELICAN REPEATER COMMUNICATES THE PELICAN WIRELESS NETWORK UTILIZING IEEE STANDARD 802.15.4 AT 2.48GHZ AND 900MHZ LOCALLY WITH ALL PELICAN DEVICES AND CONNECTS THEM TO THE PELICAN CLOUD OVER AN ENCRYPTED VLAN CONNECTION THROUGH OUTBOUND ONLY FIREWALL PORTS. THERE IS NO PUBLIC IP ASSIGNED AND MAPPED TO ANY INTERNAL CUSTOMER LOCATION.
2. THE PELICAN REPEATER EXTENDS THE PELICAN NETWORK SIGNAL AS NEEDED.

CONFIGURATIONS

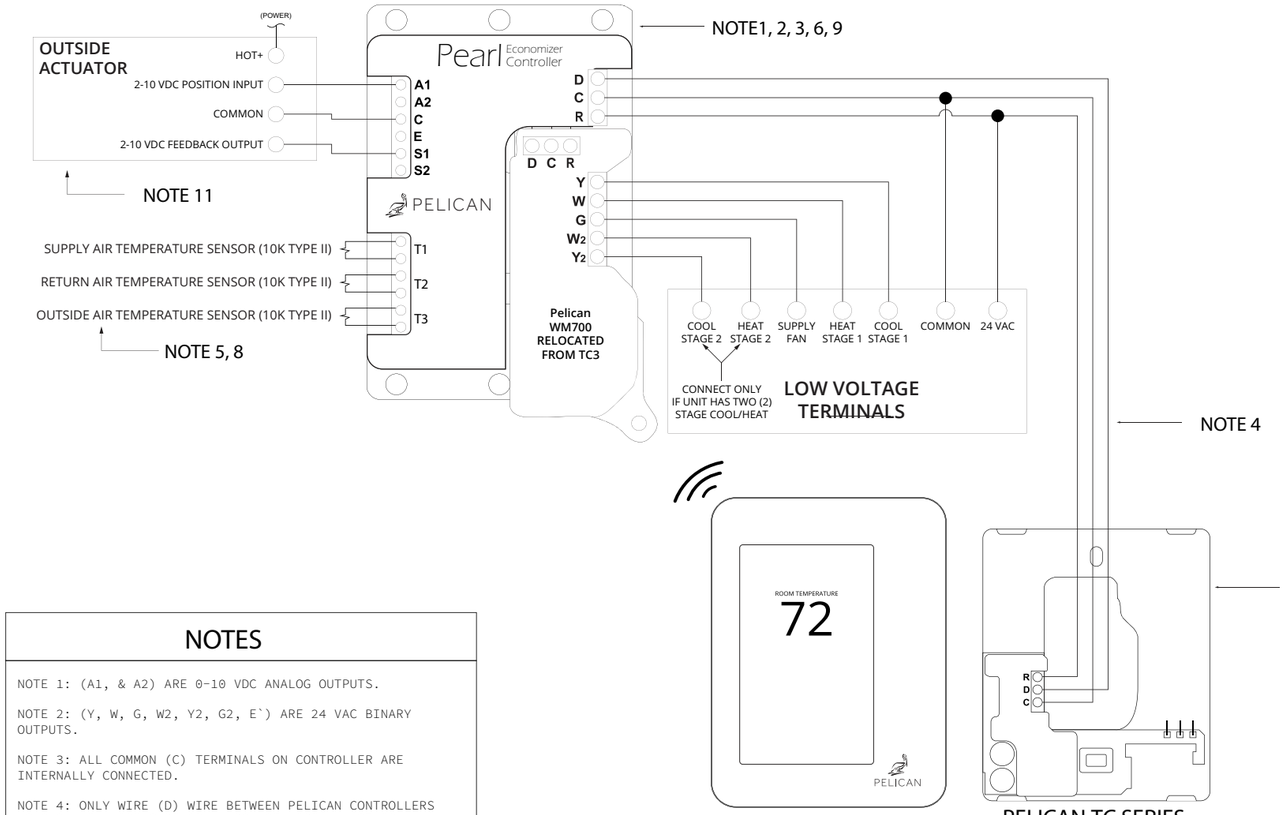
Configuration with Pelican WebApp: Go to - ADMIN > NETWORK MAP> and select the correct serial number.

Put the building and room number as the name. e.g. BLDG1RM201, or BLDG76RM400

NOTE: IF YOU HAVE ANY TROUBLE WITH THIS STEP PLEASE CONTACT PELICAN WIRELESS SUPPORT AT support@pelicanwireless.com or 888-512-0490 Opt 2.

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	BUILDING:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:			PAGE:
P-25101014	D-25101014-WR	REV01		REPEATERS (UP TO 7 REQUIRED)	CM	10/10/2025		PELICAN	3 of 6

GAS/ELEC UNIT WITH ECON CONTROL (TYPICAL TO 31)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

UNIT TAG
AC-501
AC-502
AC-503
AC-505
AC-506
AC-507
AC-508
AC-509
AC-510
AC-511
AC-601
AC-602
AC-603
AC-604
AC-702
AC-703
AC-705A
AC-801A
AC-803
AC-804
AC-807
AC-902
AC-903
AC-904
AC-906
AC-907
AC-908
AC-909
AC-910
AC-911
AC-Lib-A

NOTES

NOTE 1: (A1, & A2) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, E`) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: PLEASE STILL INSTALL THESE SENSORS WHERE APPROPRIATE.

NOTE 6: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 7: THERMOSTAT TO BE INSTALLED IN THE CONDITOINED SPACE AND OUTSIDE OF ALL METAL ENCLOSURE AND THERMOSTAT TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

NOTE 8: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

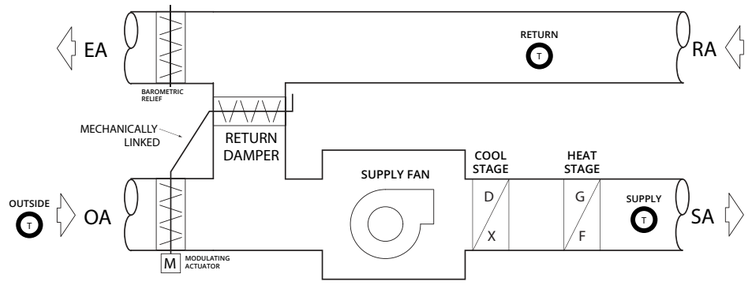
NOTE 9: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 10: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

NOTE 11: IF THERE ARE MULTIPLE ACTUATORS FOR OUTDOOR, RETURN, AND EXHAUST. THE SIGNAL AND CONMMON CAN BE WIRED IN PARALLED BUT ONLY CONNECT THE FEEDBACK SIGNAL TO THE OUTDOOR DAMPER.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TOUCH THERMOSTAT CO2	31
PELICAN	PEARL	ADVANCED CONTROLLER	31

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO AUTO.
2. OUTSIDE DAMPER SHALL OPEN TO MINIMUM AIRFLOW RATE (SET BY TAB), SUPPLY FAN SHALL RUN BY EMS.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING AND COOLING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED, AND THE OUTSIDE DAMPER SHALL INCREASE ITS VENTILATION POSITION IN RELATION TO THE CO2 RISE. THE OUTSIDE DAMPER SHALL NOT OPEN BEYOND THE MAXIMUM DAMPER POSITION (SET BY TAB).

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. ECONOMIZER: IF OUTSIDE AIR IS BELOW THE ROOM TEMPERATURE BY AT LEAST 2°F, THERMOSTAT SHALL ALLOW FOR ECONOMIZER CYCLE TO COOL ROOM.
3. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to - ADMIN > THERMOSTAT CONFIGURATION > and select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the RTU Number. e.g., RTU1, or RTU-5

Thermostat Settings
System Type: Conventional
Heat Stages: (Set Accordingly)
Cool Stages: (Set Accordingly)
Fan Stages: 1
Heat Needs Fan: Yes*
CO2 Ventilation: 800ppm

Temperature Settings
Heat Range: 56° to 72°
Cool Range: 68° to 86°

Thermostat Operation
Please leave these as shown

Economizer = On
Note that you should run the “Economizer test and calibration” function first to verify operation of the economizer damper. Damper open and closed positions will be recorded automatically.
Auto Configure: No

High Limit Shut Off: 65°F
Activation Differential: 4°F
Fixed Enthalpy Limit: YeS
Variable Damper: Yes
Damper Voltages:
Open 10.0 / Closed 2.0
Minimum Damper Position: 10%*
Track Damper Position: Yes
Demand Ventilation: On
Maximum Ventilation Position: 100%*

Variable Speed Fan = On
Cooling Fan Speed: 67%*
Cooling Fan Speed Stage-2: 100%*
Heating Fan Speed: 67%*
Heating Fan Speed Stage-2: 100%*
Ventilation Fan Speed: 67%*

Input Sensor T1 = On
Function: Supply Temperature
Cool Safe Range: 40° to 80°
Heat Safe Range: 50° to 165°

Input Sensor T2 = On
Function: Return Temperature
Input Sensor T3 = On
Function: Outside Temperature

Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

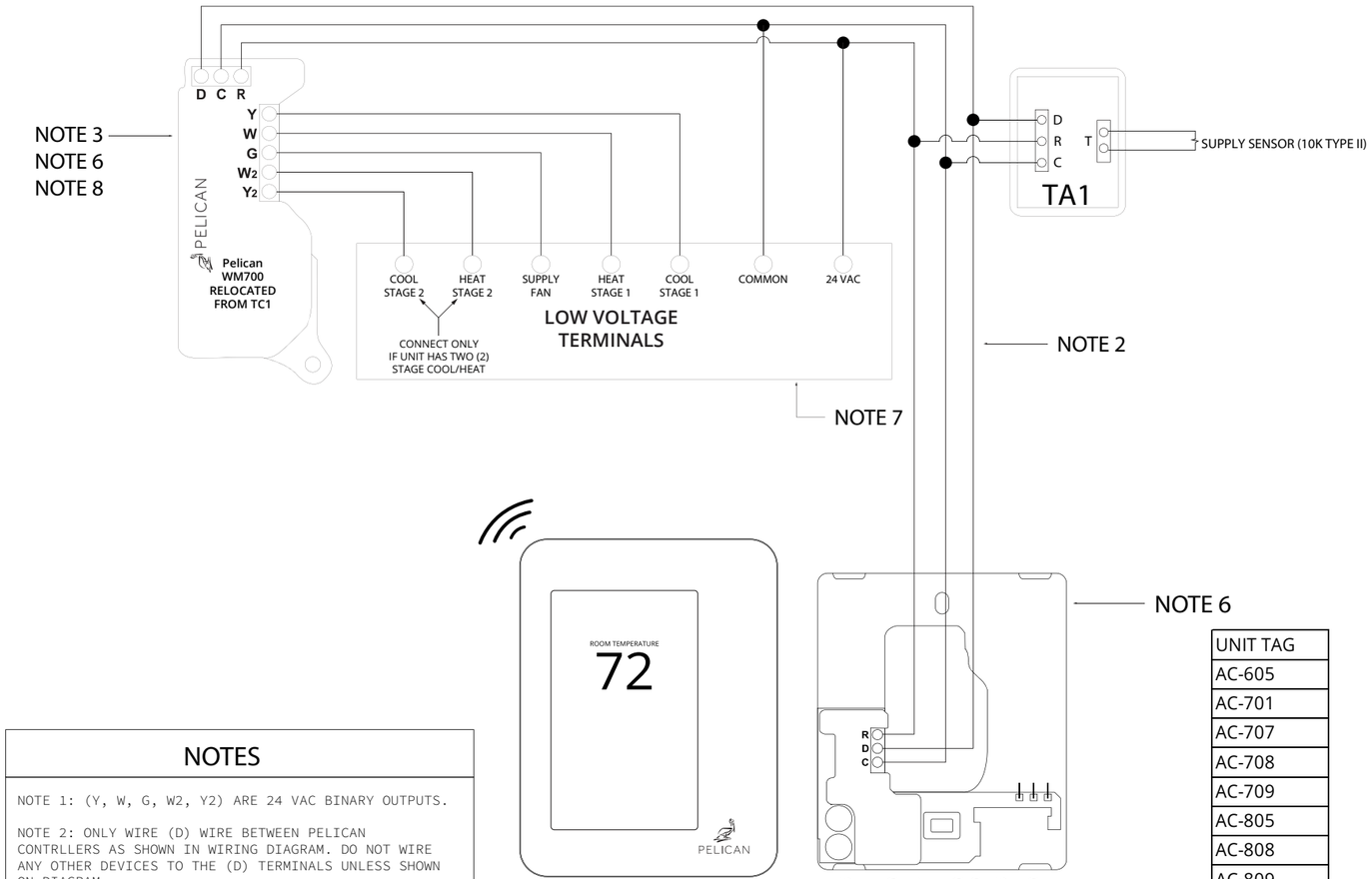
NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

Critical note on 2-Speed indoor fan units. Regardless of whether Pelican is controlling the fan directly or not, the percentage of the total fan speed for each mode must be set to ensure proper outdoor air flow.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PELICAN	PAGE:
P-25101014	D-25101014-A1	REV01	SEE EQUIP. LIST WITHIN DWG	GAS/ELEC UNIT WITH ECON. CONTROL	CM	10/10/2025			4 of 6

GAS/ELEC UNIT CONTROLS
(TYPICAL OF 9)



TC3 THERMOSTAT

PELICAN TC SERIES
THERMOSTAT
BACK PLATE

NOTE 6

UNIT TAG
AC-605
AC-701
AC-707
AC-708
AC-709
AC-805
AC-808
AC-809
AC-901

NOTES

NOTE 1: (Y, W, G, W2, Y2) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

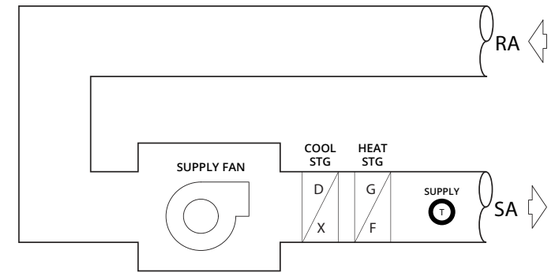
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TOUCH THERMOSTAT	9
PELICAN	TA1	TEMP & ALARM SENSOR	9
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	9

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ENABLED BY THE UNITS INTERNAL CONTROLS.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE MECHANICAL COOLING TO PROPERLY COOL THE SPACE.
2. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

SINGLE THERMOSTAT SYSTEMS

Configuration with Pelican WebApp: Go to -
ADMIN > THERMOSTAT CONFIGURATION > and
select the correct serial number.

Thermostat Setup Page:
Name: ** This is the logical room name or
descriptor that the stat is located in.
Group: ** Set as instructed by the CUSTOMER
Description: The first line should be the
UNIT Number. e.g., RTU1, or RTU-5

Thermostat Settings
System Type: Conventional
Heat Stages: (Set Accordingly)
Cool Stages: (Set Accordingly)
Fan Stages: 1
Heat Needs Fan: Yes

Thermostat Operation
Please leave these as shown

Wired Sensor
Function: Supply Temperature
Label: Supply
Probe Type: External

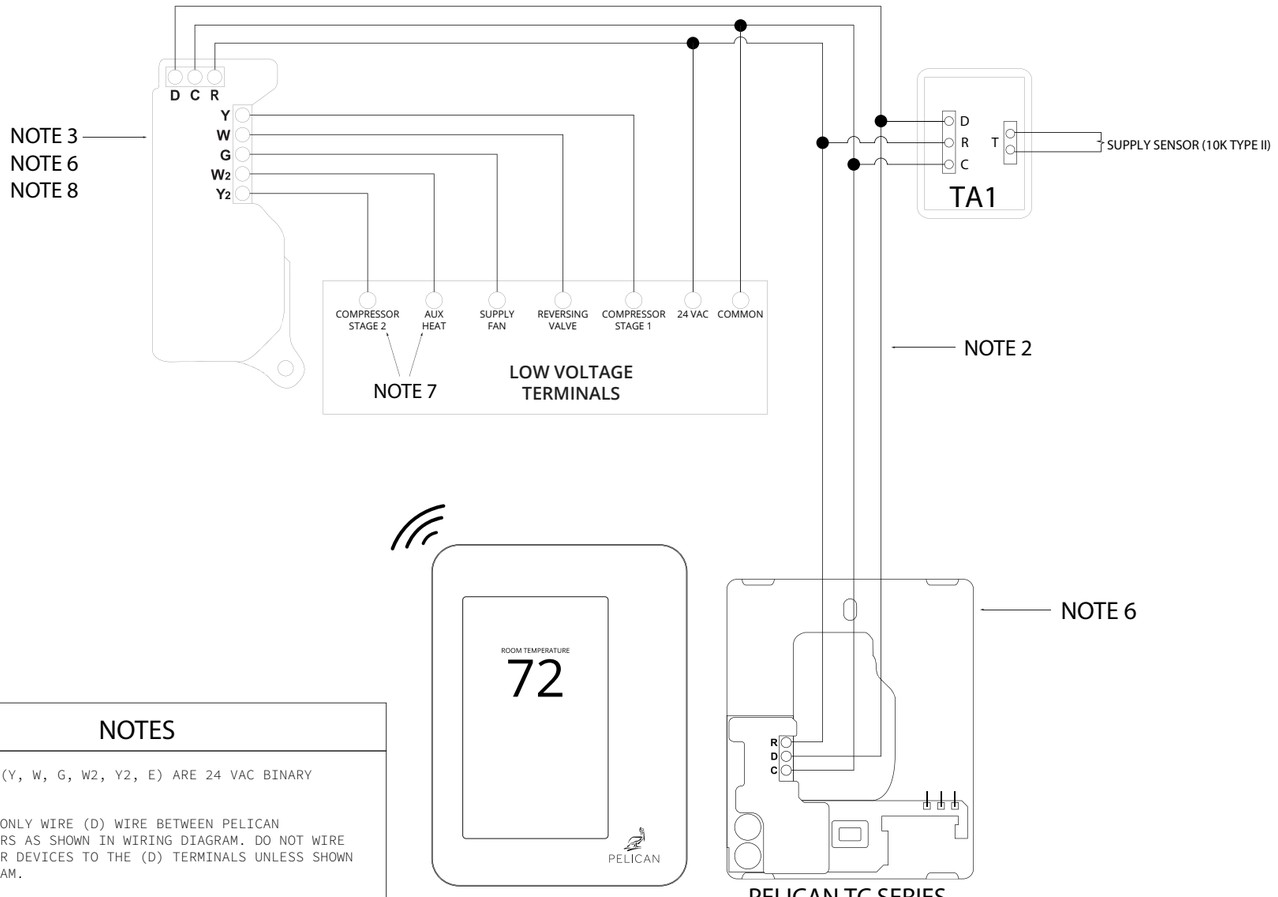
Notification Settings
Sensitivity: Custom
Setpoint Deviation: 5°
Notify if Unreachable: Yes

NOTES:
All configuration options may not be shown here. If you nave any questions regarding any configuration in the Pelican Site Manager please contact Pelican Technical Support.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PELICAN	PAGE:
P-25101014	D-25101014-A2	REV01	SEE EQUIP. LIST WITHIN DWG	GAS/ELEC UNIT CONTROLS	CM	10/10/2025			5 of 6

AC-504 UNIT CONTROL - HEAT PUMP
(TYPICAL TO 1)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

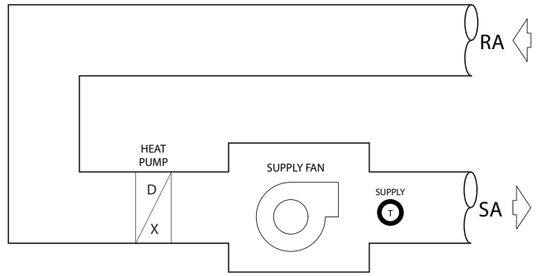
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: TWO STAGE CONTROL & AUXILIARY HEAT TO BE WIRED AS REQUIRED PER ENGINEERED EQUIPMENT SCHEDULE AND APPLICATION NEEDS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	1
PELICAN	TA1	TEMP & ALARM SENSOR	1
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	1

HEAT PUMP AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 72°F ROOM COOL SET POINT, AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE THE COMPRESSOR AND REVERSING VALVE TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL ENABLE THE COMPRESSOR AND REVERSING VALVE TO PROPERLY COOL THE SPACE.
2. DURING COOLING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: FCU-#

SYSTEM TYPE: HEAT PUMP
HEAT STAGES: (SET)
REVERSING VALVE: (SET)
AUX HEAT: (SET)
COOL STAGES: (SET)
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

PROJECT NUMBER:	DRAWING NUMBER:	REV. NO.	UNIT TAG:	DRAWING TITLE:	DRAWN BY:	DATE CREATED:		PELICAN	PAGE:
P-25101014	D-25101014-A3	REV01		AC-504 UNIT CONTROL (HEAT PUMP)	CM	10/10/2025			6 of 6

CLIMATE CONTROLS

JOE BACA MIDDLE SCHOOL
1640 S. LILAC AVENUE
BLOOMINGTON, CA 92316

NETWORK COMMUNICATION

COMMUNICATION SHALL BE ESTABLISHED ACROSS THE CAMPUS OVER PELICAN'S WIRELESS MESH NETWORK.

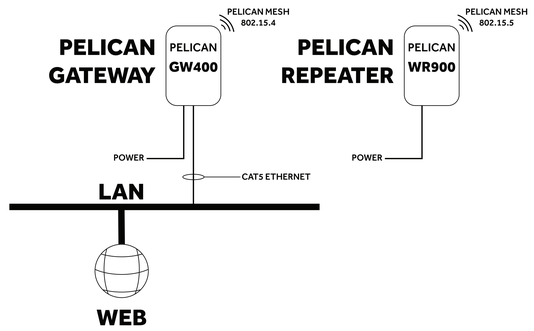
(G) A SINGLE (1) PELICAN GATEWAY SHALL BE INSTALLED AT THE PRIMARY CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. GATEWAY SHALL BE INSTALLED CENTRAL TO CAMPUS LAYOUT AS SHOWN IN DIAGRAM TO THE RIGHT. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT INTERNET TECHNOLOGIES DEPARTMENT TO BE PROVIDED AN AVAILABLE ETHERNET PORT AT REQUIRED LOCATION. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION. DO NOT INSTALL GATEWAYS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT.

(R) A MINIMUM OF (1) PELICAN REPEATERS SHALL BE INSTALLED AT THE CAMPUS, UNLESS ADVISED OTHERWISE BY PELICAN TECHNICAL SUPPORT. EACH REPEATER SHALL BE INSTALLED IN AN AREA AS SHOWN ON DIAGRAM TO THE RIGHT TO BRIDGE COMMUNICATION BETWEEN BUILDINGS. CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH DISTRICT TO BE PROVIDED AN AVAILABLE AND SECURE 120VAC POWER CONNECTION AT EACH REPEATER LOCATION. REPEATER SHALL BE INSTALLED IN A LOCATION WHERE SOMEONE CANNOT ACCESS. DO NOT INSTALL REPEATERS ON NETWORK RACKS OR NEXT TO OTHER NETWORK OR WIRELESS EQUIPMENT. ADDITIONAL REPEATERS SHALL BE INSTALLED, IF NEEDED, TO BRIDGE THE ENTIRE CAMPUS INTO THE PELICAN WIRELESS MESH NETWORK.

ALL OTHER PELICAN DEVICES SHALL BE WIRELESS REPEATERS IN THE WIRELESS NETWORK (NOT SHOWN IN NETWORK DIAGRAM TO THE RIGHT.

CONTROLS CONTRACTOR IS RESPONSIBLE TO WORK WITH PELICAN TECHNICAL SUPPORT TO ESTABLISH BEST PRACTICES WHEN IT COMES TO NETWORK ESTABLISHMENT.





MFG	PART NUMBER	PART NAME	QTY
PELICAN	GW400	PELICAN GATEWAY	1
PELICAN	WR900	WIRELESS REPEATER	7

PELICAN

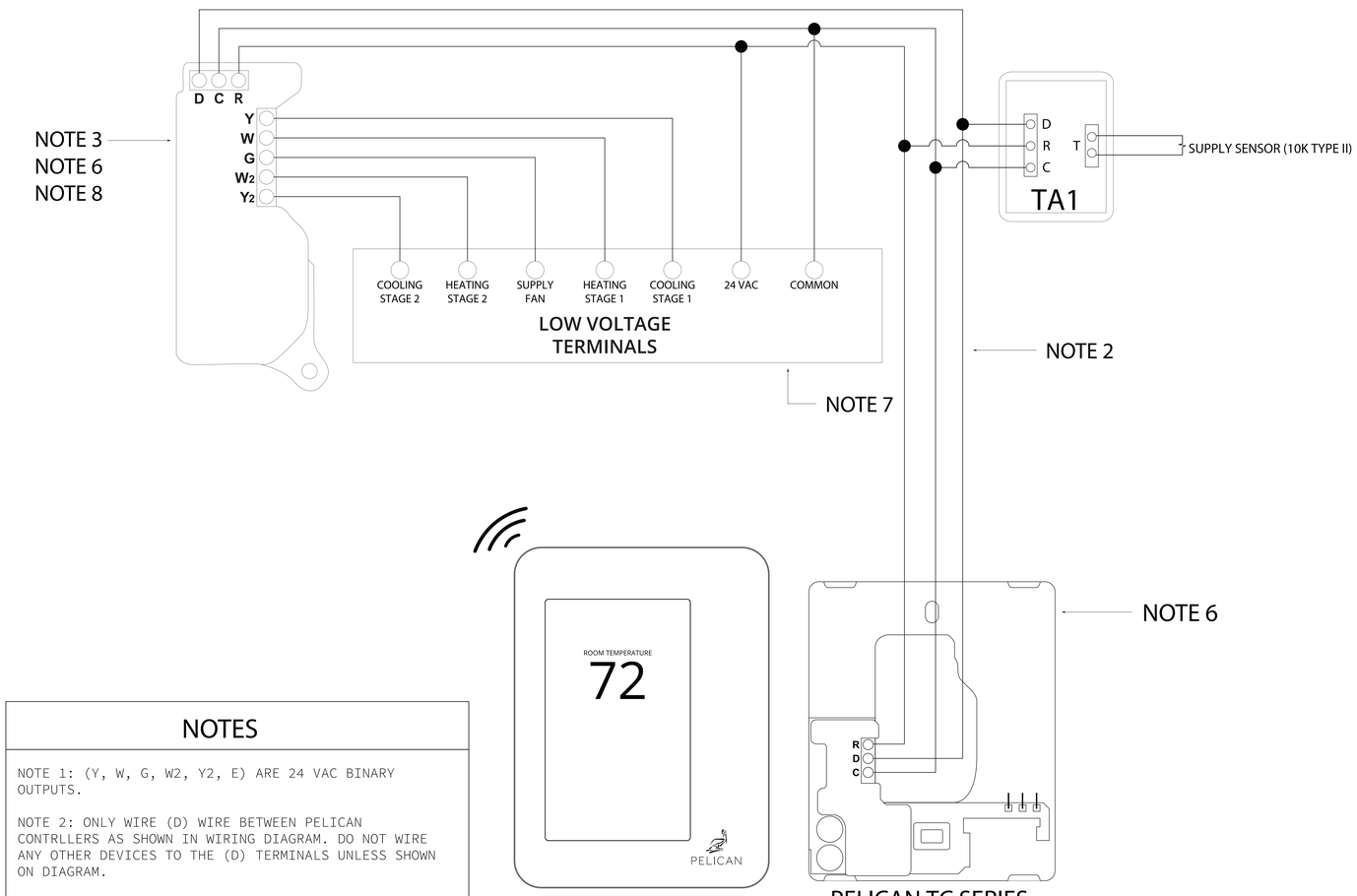
PROJECT NUMBER:
P-25101318

CLIMATE CONTROLS UPGRADES

REV02: 10/16/2025
REV01: 10/13/2025

TYPICAL OF:
AC-2101 AC-2201 AC-3101 AC-3201 AC-4-05
AC-2105 AC-2205 AC-3102 AC-3202 AC-4-06
AC-2107 AC-2208 AC-3108 AC-3206 AC-4-09
AC-2110 AC-2209 AC-3109 AC-3207
AC-2111 AC-2210 AC-3113 AC-3208
AC-2118 AC-2219 AC-3114 AC-3209
AC-2119 AC-2220 AC-3119 AC-3214
AC-2120 AC-2221 AC-3120 AC-3217
AC-2125 AC-2222 AC-3125 AC-3219
AC-2126 AC-2226 AC-3126 AC-3226
AC-2227 AC-3127 AC-3227
AC-3128

YORK GH/EC UNIT CONTROLS (TYPICAL TO 47)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

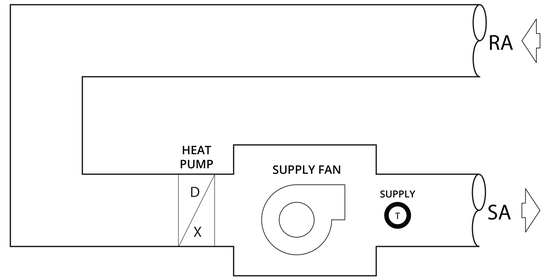
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	47
PELICAN	TA1	TEMP & ALARM SENSOR	47
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	47

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. FAN SHALL BE IN STANDBY.
3. HEATING SHALL BE IN STANDBY.
4. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS BELOW THE HEAT SET POINT, THERMOSTATS SHALL ENABLE HEAT TO PROPERLY HEAT THE SPACE.
2. DURING HEATING CYCLE, SUPPLY FAN SHALL BE ACTIVE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) THE FAN SHALL BE FORCED ON, IF NOT ALREADY ENABLED.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (THERMOSTAT)

NAME: (ROOM NAME)
DESCRIPTION: (EQUIPMENT TAG)

SYSTEM TYPE: CONVENTIONAL
HEAT STAGES: 2
COOL STAGES: 2
FAN STAGES: 1
HEAT NEEDS FAN: YES

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)

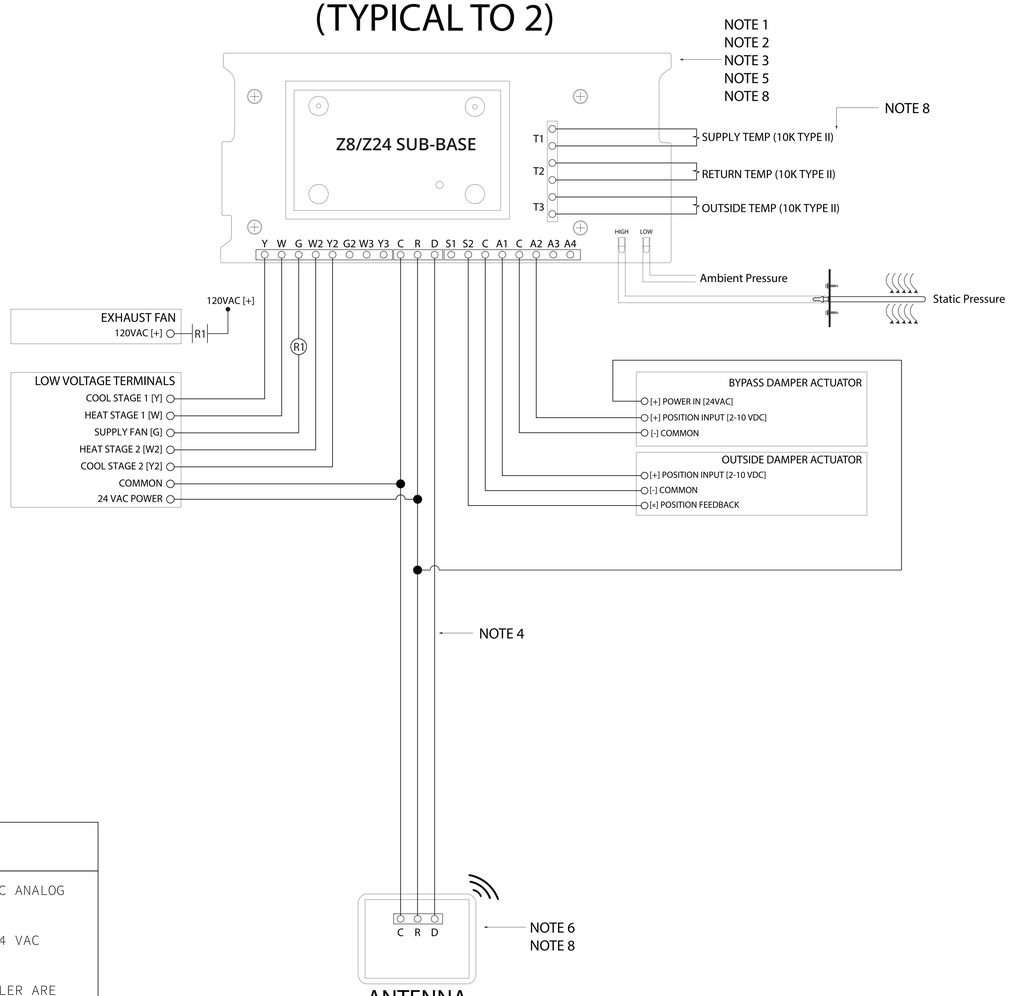
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE

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P-25101318	D-25101318-1	REV01		YORK GH/EC CONTROLS	KLR	10/13/2025	COLTON JUSD JOE BACA MS	PELICAN	2 of 4

TYPICAL OF:
AC-2206
AC-3221

VVT AIR HANDLER UNIT CONTROLS (TYPICAL TO 2)



ANTENNA
MUST BE OUTSIDE OF ALL METAL ENCLUSERS. DO NOT INSTALL ON METAL SURFACE OR BY ANY METAL OBJECTS.

NOTES

NOTE 1: (A1), (A2), (A3), &(A4) ARE 0-10 VDC ANALOG OUTPUTS.

NOTE 2: (Y, W, G, W2, Y2, G2, W3, Y3) ARE 24 VAC BINARY OUTPUTS.

NOTE 3: ALL COMMON (C) TERMINALS ON CONTROLLER ARE INTERNALLY CONNECTED.

NOTE 4: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTROLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 5: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 6: ANTENNA TO BE INSTALLED OUTSIDE CONTROLS PANEL AND OUTSIDE OF ALL METAL ENCLOSURE. ANTENNA TO BE AWAY FROM METAL OBJECTS THAT WILL BLOCK WIRELESS SIGNAL. MUST BE INSTALLED INSIDE BUILDING IN A LOCATION WHERE IT CAN CONNECT AND COMMUNICATE WITH THE PELICAN WIRELESS MESH NETWORK.

NOTE 7: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

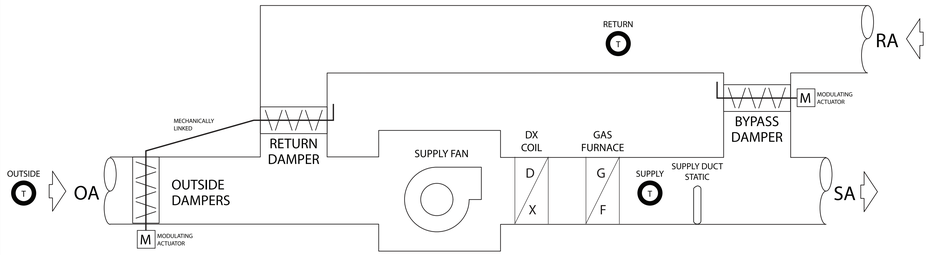
NOTE 8: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 9: (R1) IS A 120/24VAC, FIELD-PROVIED PILOT RELAY. SOURCE WITH APPROPRIATE NUMBER OF POLES FOR NUMBER OF ASSOCIATED EXH. FANS PER UNIT.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	Z8 OR Z24	ZONE COORDINATOR	2

*USE Z8 FOR UP TO 8 ZONES AND Z24 FOR 9 AND ABOVE.

AIR HANDLER AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

UNOCCUPIED MODE:
1. SUPPLY FAN WILL BE OFF.
2. OUTSIDE AIR DAMPER WILL BE CLOSED AND RETURN DAMPER WILL BE OFF.
3. HEAT AND COOL WILL BE OFF AND IN STANDBY.
 A. UNOCCUPIED OVERRIDE:
 IF A ZONE GOES INTO TEMPORARY OVERRIDE OR REACHES A SET BACK ZONE TEMPERATURE, SYSTEM WILL ALLOW FOR TEMPORARY OPERATION AS DEFINED IN NORMAL OPERATIONS; EXCLUDING THE OUTSIDE DAMPER. THE OUTSIDE DAMPER WILL REMAIN CLOSED, UNLESS ECONOMIZER OR DEMAND VENTILATION SEQUENCE IS ACTIVE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, ZONE THERMOSTATS SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION. OUTSIDE DAMPER SHALL OPEN TO MIN DAMPER POSITION (SET BY TAB) AND SUPPLY FAN SHALL MODULATE FOR VENTILATION.

SUPPLY FAN:
1. THE SUPPLY FAN WILL BE ACTIVE DURING ALL OCCUPIED PERIODS. THE BYPASS DAMPER WILL ADJUST TO REMAIN THE TARGET SUPPLY DUCT STATIC PRESSURE. RESET STATIC PRESSURE WILL OCCUR AS THE SYSTEM SWITCHES BETWEEN HEAT/COOL/VENTILATION CYCLES.

HEATING:
1. WHEN A ZONE REQUESTS HEAT, THE SUPPLY FAN WILL BE ENABLED AND A SUPPLY DUCT STATIC PRESSURE WILL BE MAINTAINED (SET BY TAB).
2. THE GAS FURNACE WILL BE STAGED TO MAINTAIN THE TARGET SUPPLY TEMPERATURE BASED ON ZONE DEMAND:
 A. LOW HEAT DEMAND: 90°F (ADJ) DISCHARGE TEMPERATURE.
 B. HIGH HEAT DEMAND: 115°F (ADJ) DISCHARGE TEMPERATURE.

COOLING:
1. WHEN A ZONE REQUESTS COOL, THE SUPPLY FAN WILL BE ENABLED AND A SUPPLY DUCT STATIC PRESSURE WILL BE MAINTAINED (SET BY TAB).
2. THE DX COMPRESSORS WILL BE STAGED TO MAINTAIN THE TARGET SUPPLY TEMPERATURE BASED ON ZONE DEMAND:
 A. IF THE BUILDING HAS HIGH COOLING DEMAND, A TARGET SUPPLY OF 55°F (ADJ) WILL BE MAINTAINED.
 B. IF THE BUILDING HAS LOW COOLING DEMAND, A TARGET SUPPLY OF 60°F (ADJ) WILL BE MAINTAINED.
3. IF THE OUTSIDE AIR IS AT LEAST 4°F (ADJ) BELOW THE RETURN TEMPERATURE, AN ECONOMIZER CYCLE IS BECOME ACTIVE. ECONOMIZER AND DX WILL BE ALLOWED TO OPERATE TOGETHER WITH A LOW LIMIT OF 56°F (ADJ) MIXED AIR TEMPERATURE.

DEMAND VENTILATION:
1. IF ANY ZONE CO2 LEVEL RISES ABOVE 800 PPM (ADJ) ADDITIONAL OUTSIDE AIR WILL BE VENTILATED INTO THE BUILDING UNTIL THE DEMAND VENTILATION IS REMOVED.

SAFETIES AND ALARMS:
1. FAN FAILURE: IF THE SUPPLY FAN FAILS TO GENERATE A 0.10” W.C. OF PRESSURE, ALARM WILL BE GENERATED AND HEATING AND COOLING WILL BE IN RESET UNTIL STATIC IS RESTORED.
2. SENSOR FAILURE: UPON FAILURE OF A SENSOR AN ALARM WILL BE ANNUNCIATED.
3. TITLE 24 FDD WILL BE ENFORCED.

CONFIGURATIONS

ZONE COORDINATOR SETTINGS

Configuration with Pelican WebApp:
Go to - ADMIN > ZONE CONTROLLER > and select the correct serial number then click CONFIGURATION SETTINGS

Name: ** This is the AHU number.
e.g., AHU-1

System Settings
System Type: Conventional
Heat Stages: 2
Cool Stages: 2
Fan Stages: 1
Heat Needs Fan: No

Variable Speed Fan = OFF

Bypass Controller = On

Damper Voltages:
Open: 10.0 / Closed 2.0 VDC

Static Pressure = On
Target Operating Static: 1.00wc*
Target Circulation Static: 1.00wc*
Minimum Static: 0.00wc
Maximum Static: 3.00wc

Economizer = On
High Limit Shut Off: 74°F
Activation Differential: 4°F
Fixed Enthalpy Limit: Yes
Variable Damper: Yes
Damper Voltages:
Open: 10.0 / Closed 2.0 VDC
Minimum Damper Position: 10%*
Track Damper Position: Yes
Demand Ventilation: Yes
Maximum Ventilation Position: 100%*

Input Sensor T1 = On
Function: Supply Temperature

Input Sensor T2 = On
Function: Return Temperature

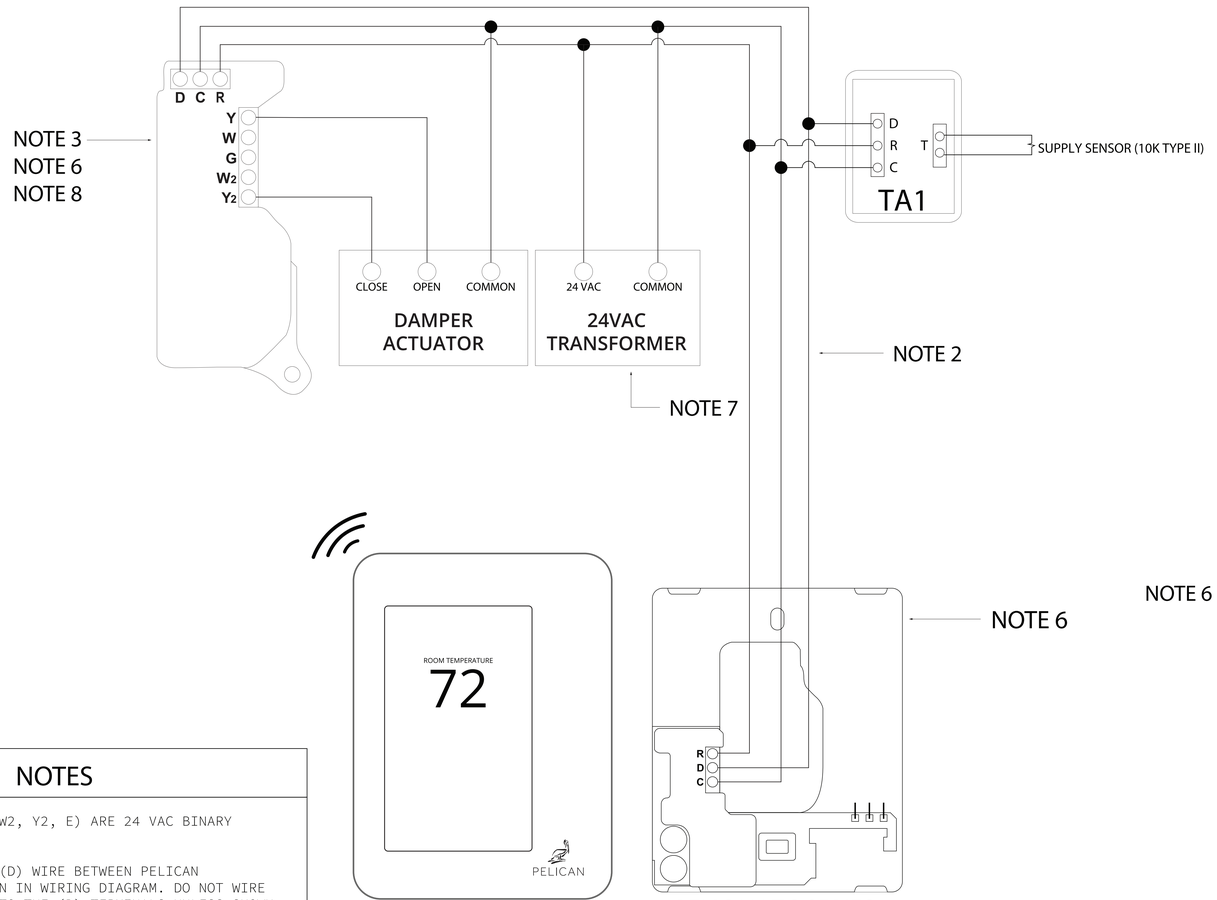
Input Sensor T3 = On
Function: Outside Temperature

NOTES:
All configuration options may not be shown here. If you have any questions regarding any configuration in the Pelican Site Manager, please contact Pelican Technical Support.

* - Set as appropriate per unit
** - Mechanical Contractor is to verify that the name is correct in respect to the Pelican Wireless thermostat serial number.
§ - Contact Pelican Technical Support for assistance

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VVT BOX
(TYPICAL OF 6)



TC3 THERMOSTAT

PELICAN TC SERIES THERMOSTAT BACK PLATE

NOTES

NOTE 1: (Y, W, G, W2, Y2, E) ARE 24 VAC BINARY OUTPUTS.

NOTE 2: ONLY WIRE (D) WIRE BETWEEN PELICAN CONTRLLERS AS SHOWN IN WIRING DIAGRAM. DO NOT WIRE ANY OTHER DEVICES TO THE (D) TERMINALS UNLESS SHOWN ON DIAGRAM.

NOTE 3: CONTROLLER TO BE INSTALLED INSIDE CONTROL PANEL.

NOTE 4: THERMOSTAT TO BE INSTALLED IN SPACE WHERE SYSTEM IS SUPPLYING AIR. LOCATION SHALL PROPERLY REPRESENT THE TEMPERATURE OF THE ENTIRE AREA BEING CONDITIONED/VENTILATED. SHALL BE MOUNTED AND INSTALLED TO MEET ALL APPLICABLE CODES.

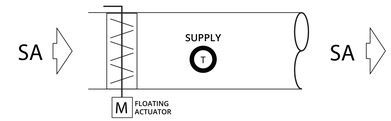
NOTE 5: ALL TEMPERATURE PROBES TO BE 10K TYPE 2.

NOTE 6: ONLY WIRE ONE (1) WIRE PER TERMINAL ON EACH PELICAN DEVICE. USE WIRE NUTS WHERE REQUIRED.

NOTE 7: A SINGLE COMMON TRANSFORMER CAN BE USED FOR ALL CONTROLS.

MFG	PART NUMBER	PART NAME	QTY
PELICAN	TC3	TEMP & CO2 THERMOSTAT	6
PELICAN	TA1	TEMP & ALARM SENSOR	6
PELICAN	PROBE-T1	DUCT MOUNT TEMP PROBE	6

AIR FLOW SCHEMATIC



SEQUENCE OF OPERATIONS

NORMAL OPERATIONS:
OCCUPIED MODE: THE AHU WILL MAINTAIN
1. THERMOSTATS SHALL BE SET TO 68°F (ADJ) ROOM HEAT SET POINT, 73°F (ADJ) ROOM COOL SET POINT, AND FAN TO ON.

UNOCCUPIED MODE (NIGHT SETBACK), SCHEDULED FROM PELICAN EMS,:
1. UNOCCUPIED SET-BACK ACCORDING TO CUSTOMER COMFORT AND ENERGY STANDARDS.
2. ZONE SET POINT ADJUSTMENT: THE OCCUPANT WILL BE ABLE TO ADJUST THE TEMPERATURE SET POINTS AT EACH THERMOSTAT. USER DEFINABLE SET POINT LIMITS SHALL BE IN PLACE.

MORNING START:
1. THE OCCUPIED SCHEDULE SHALL USE OPTIMUM START, THE THERMOSTAT SHALL BE SCHEDULED FOR THE TIME WHEN OCCUPANTS NORMALLY ARRIVE AND SHALL AUTO-CALCULATE WHEN TO START THE UNIT TO BRING ROOM TO THE OCCUPIED TEMPERATURE SET POINTS.
2. AT LEAST 1 HOUR BEFORE OCCUPANCY, THERMOSTAT SHALL CALL FOR FAN/VENTILATION.

HEATING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE HEAT SET POINT, THERMOSTATS SHALL REQUEST A HEATING CYCLE AND OPEN ITS DAMPER TO PROPERLY HEAT THE SPACE.

DEMAND VENTILATION:
1. IF THE CO2 LEVEL IN THE ROOM RISES ABOVE 800 PPM (ADJ) AN INCREASED VENTILATION REQUEST SHALL BE SENT TO THE AIR HANDLER CONTROLLER.

COOLING MODES:
1. THERMOSTATS SHALL MONITOR THE ROOM TEMPERATURES. IF THE ROOM TEMPERATURE IS ABOVE THE COOL SET POINT, THERMOSTATS SHALL REQUEST A COOLING CYCLE AND OPEN ITS DAMPER TO PROPERLY COOL THE SPACE.

SAFETIES AND ALARMS:
1. FAULTS SHALL ALARM TO THE PELICAN EMS.

CONFIGURATIONS

TC3 (VVT)

NAME:(ROOM NAME)
DESCRIPTION: VVT-##

SYSTEM TYPE: ZONE DAMPER
ZONE CONTROLLER: AH-E5

TEMPERATURE SETTINGS:
(LEAVE DEFAULTS)
THERMOSTAT OPERATION:
(LEAVE DEFAULTS)

DAMPER SETTINGS:
DAMPER TYPE: OPEN/CLOSE

REHEAT TYPE: NONE

WIRED SENSOR:
FUNCTION: SUPPLY TEMPERATURE
PROBE TYPE: EXTERNAL

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