

### CONTROLS SCOPE OF WORK

EPIS WAS UPDATED IN LEFT CURB ACCESS PANEL REPLACED A BAYVY PANEL TO 8 BY THE INTEGRATED 10" IN THE BAYVY.

- ALL NEW RTU'S WILL BE BACNET.
- THE GENERAL CONTRACTOR SHALL RETAIN COFFERT SYSTEMS USA (CSUSA) TO FURNISH AND INSTALL CONTROLS AS INDICATED BELOW THE CONTACT AT CSUSA IS: VALERIE BEEBE, 371746-9381
- PROVIDE PRE-CONSTRUCTION SCREEN SHOTS FROM NOVAR EPIS MONITORING TO INCLUDE UNIT STATUS, MODULE CONFIGURATIONS STATUS AND ACTIVE ALARMS.
- NOT USED.
- CONNECT NEW RTU'S TO BACNET COMMUNICATIONS.
- FOR NEW RTU'S REPLACE RTU NOVAR TEMPERATURE SENSORS WITH LENNOX SENSORS.
- NOT USED.
- CONNECT TO BACNET NETWORK, AS REQUIRED.
- NOT USED.
- UPDATE SOFTWARE PER NEW CARMAX TEMPLATE.
- COFFERT EPIS SYSTEM.
- PROVIDE POST-CONSTRUCTION SCREEN SHOTS FROM NOVAR EPIS MONITORING TO INCLUDE UNIT STATUS, MODULE CONFIGURATIONS STATUS AND ACTIVE ALARMS.
- LENNOX/CARMAX RTU SET UP SHEET IS TO BE COMPLETED UPON UNIT STARTUP. A COMPLETED SHEET IS TO BE LEFT IN EACH NEW RTU AND A COPY SUBMITTED WITH CLOSE OUT DOCUMENTATION FOR EACH NEW RTU.
- FURNISH AND INSTALL ADDITIONAL CONTROL WIRE FOR GAS SENSORS AND UNITS WITH HUMIDITROL.
- ALL CONTROL COMMUNICATION BUS AND SENSOR WIRING NEW AND EXISTING IS PART OF THE CONTROLS CONTRACTOR SCOPE OF WORK. REPLACE ANY DAMAGED WIRE.

### HVAC GENERAL NOTES

- ALL CONTROL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 70. ALL WIRING SHALL BE CONCEALED.
- CONTRACTOR SHALL INSTALL ALL ROOF CURBS FOR ROOFTOP UNITS LEVEL TO HORIZON AT (A) CORNERS.
- AIR TEST AND BALANCE REQUIRED BY INDEPENDENT THE CONTRACTOR AABC OR NEER CERTIFIED. SEE TEST AND BALANCE SCOPE ON THIS SHEET.
- EXISTING SMOKE DETECTORS TO REMAIN AND BE REUSED WHERE POSSIBLE. FIELD VERIFY LOCATION PRIOR TO START OF WORK. CARE SHALL BE TAKEN TO PRESERVE DETECTORS WHERE REUSE IS POSSIBLE.
- LENNOX START UP TECH SHALL PROGRAM THE PROTECTO BOARDS IN ALL NEW RTU'S. PROTECTO BOARDS SHALL BE PROGRAMMED PRIOR TO CSUSA RECOMMISSIONING THE NOVAR SYSTEMS.
- CONTRACTOR SHALL PROVIDE CLEAN FILTERS IN ROOFTOP UNITS PRIOR TO AIR BALANCE AND ASIAN PRIOR TO OWNER ACCEPTANCE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2010 FLORIDA MECHANICAL CODE WITH LOCAL AMENDMENTS. ALL EQUIPMENT AND MATERIALS CAPABLE OF BEING UL LISTED OR LISTED SHALL BEAR THE UL LABEL.
- CONTRACTOR SHALL PROVIDE A GASKET BETWEEN BASE OF ROOF MOUNTED FANS AND ROOF CURBS TO PROVIDE AN AIRTIGHT JOINT.
- PROVIDE MISCELLANEOUS STEEL AND/OR WOOD BLOCKING AND SUPPORT AT ROOF CURBS AND OPENINGS AS REQUIRED TO SUPPORT ROOF AND EQUIPMENT. SPECIFIC REQUIREMENTS SHALL BE VERIFIED WITH STRUCTURAL ENGINEER AND APPROVED EQUIPMENT DRAWINGS PRIOR TO PLACEMENT.
- ANY NEW SUPPLY AND EXHAUST DUCT SHALL BE 2" IN PRESSURE CLASS.
- ANY NEW DUCT SHALL HAVE PAINT GRAFT FINISH AND BE EITHER GALVANNEALED OR HLL PHOSPHATIZED.
- ANY NEW SUPPLY DUCT SHALL BE INTERNALLY INSULATED WITH 7" DUCT LINER EQUAL TO OWNER CORNING ACOSYSTEM 1.5 LB DENSITY, R-3.4.

### ROOFTOP UNIT NOTES

- CARMAX AUTO SUPERSTORE LLC HAS A NATIONAL ACCOUNT WITH LENNOX INDUSTRIES, INC. FOR PRICING AND DELIVERY OF PACKAGED ROOFTOP UNITS IN ACCORDANCE WITH THE FOLLOWING: NO SUBSTITUTIONS WILL BE ALLOWED.
  - ROOFTOP UNITS SHALL BE AS SCHEDULED.
  - THE ELECTRICAL PACKAGE SHALL INCLUDE:
    - UNIT DISCONNECT (INSTALLED AND WIRED)
    - SECTION POWER BUS
    - STANDARD LOW VOLTAGE CONTROL
    - GAS, OIL AND TYPE COILS (TO BE FIELD WIRED)
    - SIGNAL OR TELLER ECONOMIZERS (IF APPLICABLE) (NOT AND LARGER UNLESS OTHERWISE NOTED)
    - GLOBAL DRY BULB ECONOMIZERS (BAROMETRIC RELIEF (RT AND 8" SMALLER)
- THE LENNOX NATIONAL ACCOUNT CONTACT IS: RON JOHNSON, 164-451-2606
- HVAC EQUIPMENT PERFORMANCE CHECK (EPC)
 

UPON COMPLETION OF THE HVAC INSTALLATION AND STARTUP, THE OWNER'S SERVICE CONSULTANT, AT THE OWNER'S EXPENSE, IS TO INSPECT THE JOB AND PREPARE AN EPC. THIS EPC WILL AID THE CONTRACTOR IN CHECKING EACH MACHINE FOR PROPER OPERATION, CHECKING THE CONTROL PANEL AND ADJUSTING CONTROLS AS NECESSARY.

THE OWNER'S SERVICE CONSULTANT: COFFERT SYSTEMS, 371746-9381, valerie@csusa.com

ALL PROBLEMS DISCOVERED WITH THE EQUIPMENT OR ITS INSTALLATION (EXCLUDING NOVAR INSTALLATION) SHALL BE CORRECTED BY THE HVAC SUBCONTRACTOR IN ACCORDANCE WITH THE OWNER'S SERVICE CONSULTANT.

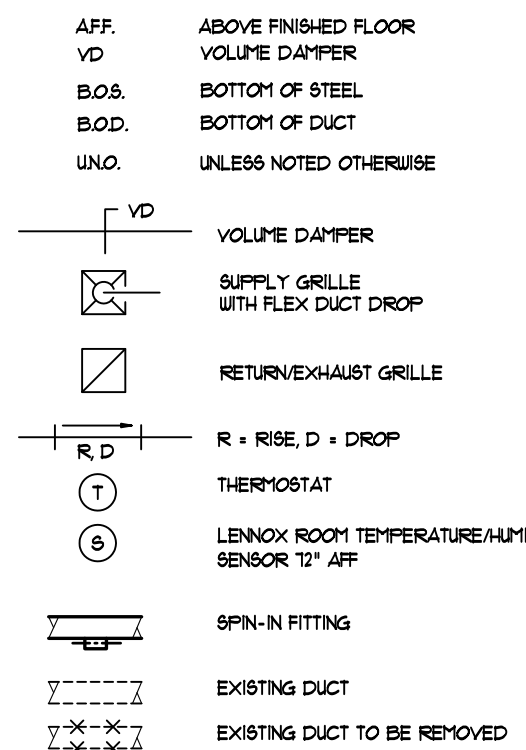
AFTER ALL PROBLEMS HAVE BEEN CORRECTED, CARMAX AUTO SUPERSTORE LLC SHALL VERIFY ALL EQUIPMENT IS OPERATING PROPERLY THROUGH THE NOVAR CONTROLS.

PRIOR TO PERFORMANCE OF THE EPC, THE CONTRACTOR SHALL HAVE SET AND CONNECTED ALL COMPONENTS, COMPLETED THE POWERING, CONNECTED ALL PIPING, REMOVED ALL SHIPPING BLOCKS, COMPLETED THE STARTUP OF ALL UNITS AND FURNISHED THE PRE-EPC CHECKLIST TO THE OWNER'S SERVICE CONSULTANT.

THE EPC INCLUDES A FULL WRITTEN REPORT. COPIES WILL BE SENT TO THE GENERAL CONTRACTOR, AND CARMAX AUTO SUPERSTORE, LLC. COPIES OF THE EPC SHALL BE INCORPORATED IN TO THE O & M MANUALS BY THE GENERAL CONTRACTOR.

  - RTU AIR FILTERS SHALL BE CAREFULLY MARKED, IDENTIFIED OR RELATED, 1" THICK HEAVY DUTY OR EQUAL, MARK FILTERS WITH INSTALLATION DATE.
  - THE PACKAGE COMPONENTS SHALL BE CLEARLY LABELED IN A LEGIBLE FONT ON THE EXTERIOR OF ALL BOXES OR CRATES.
  - SUBMIT RTU SUBSTITUTIONS IN PDF OR PRINTED FORMAT TO THE ENGINEER FOR APPROVAL.

### HVAC LEGEND



### TEST & BALANCE SCOPE

MARK	TOTAL AIR ACROSS COIL	OUTSIDE AIR	RETURN AIR	SUPPLY AIR TO REGISTERS	OTHER
RTU-1 THRU 8, 12, 14, 15	AS SCHEDULED	AS SCHEDULED	AS SCHEDULED	N/A	AIR QUANTITIES MEASURED AT THE RTU

### EXISTING ROOFTOP UNIT SCHEDULE

MARK	SERVICES	EER	VOLT/PH	FAN DATA			COOLING DATA		HEAT DATA		MIN O/A CFM	MODEL	APPROX. WEIGHT	REMARKS
				CFM	ESP (TSP)	HP	TOTAL TON	SENSIBLE TON	INPUT KW	OUTPUT TON				
RTU-1	OFFICE	-	480/3	10,000	5.0	5.0	--	--	6.0	2.04	2000	LCC300H2BJG	3400	
RTU-2	SHOOROOM	-	480/3	9,000	5.0	5.0	--	--	3.0	94	2800	LCA240H2BJG	2800	
RTU-3	SHOOROOM	-	480/3	6,000	5.0	5.0	--	--	3.0	94	1250	LCC180H2BJG	2800	
RTU-4	BUSINESS	-	480/3	9,000	5.0	3.0	--	--	3.0	94	2800	LCA240H2BJG	2650	
RTU-5	BREAK/OFFICE	-	480/3	7,000	5.0	3.0	--	--	3.0	94	1400	LCA180H2BJG	2650	
RTU-6	PARTS	-	480/3	2250	5.0	15(1)	--	--	13.5	314	200	LCA060H2BDIG	900	
RTU-7	PHOTO BOOTH/ OFFICE	-	480/3	8,000	5.0	3.0	--	--	11.0	141	1700	LCA240H2BJG	2800	
RTU-8	SERVICE WRITER	-	480/3	2250	5.0	15(1)	--	--	13.5	314	240	LCA060H2BDIG	900	
RTU-9 (ERV)	SERVICE	12.0	480/3	5600	(14.0)	5.0	240	141	45	154	5600	LCH240H4BK3G	3700	(1)
RTU-10 (BP)	DETAIL	10/8	480/3	8400	(1.6)	5.0	352	220	6.0	204	4700	LCH360H4BNIG	4400	(2)
RTU-11 (ERV)	DETAIL	12.0	480/3	5600	(14.0)	5.0	240	141	45	--	5600	LCH240H4BK3G	3700	(2)
RTU-12	FQC FLAT BAYS	-	480/3	2,700	5.0	15(1)	--	--	3.0	94	1700	LCA060H2BDIG	900	
RTU-13	FQC OFFICE	-	208/1	1150	5.0	3.0	191.64	139.13	6	15.7	120	LCA036H2BNIP	900	
RTU-14	FQC	-	480/3	2,700	5.0	15(1)	23.66	19.08	3.0	94	1700	LCA060H2BDIG	900	
RTU-15 (BP)	SERVICE	10/8	480/3	8400	(1.6)	5.0	352	220	6.0	204	4700	LCH360H4BNIG	4400	(1)
RTU-16	FBX	12.0	480/3	960	(1.0)	5	32.4	23.3	0	0	0	LCH036H4BK3G	1000	(2)
RTU-17 (BP)	SERVICE	10/8	480/3	8400	(1.6)	5.0	352	220	6.0	204	4700	LCH360H4BNIG	4400	(1)
RTU-18 (BP)	SERVICE	10/8	480/3	8400	(1.6)	5.0	352	220	6.0	204	4700	LCH360H4BNIG	4400	(1)
RTU-19	AUCTION/ DRIVE AISLE	-	480/3	--	--	--	--	--	13.5	314	--	LCA060H2BDIG	900	

- (1) ESTIMATED ELEC HEAT
- (2) EXISTING TO REMAIN

### NEW ROOFTOP UNIT SCHEDULE

MARK	SERVICES	EER (SEER)	VOLT/PH	FAN DATA			COOLING DATA (1)		HEAT DATA		MIN O/A CFM	MODEL	WEIGHT		REMARKS	
				CFM	TSP	ESP	HP	BEAT D.B./W.B.	TOTAL TON	SENSIBLE TON			INPUT KW	OUTPUT TON		EXISTING
RTU-1	OFFICE	11.6	480/3	10,000	12.0	0.75	5.0	-	-	6.0	2.04	2000	LCH300H4B	3400	3600	(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100) (101) (102) (103) (104) (105) (106) (107) (108) (109) (110) (111) (112) (113) (114) (115) (116) (117) (118) (119) (120) (121) (122) (123) (124) (125) (126) (127) (128) (129) (130) (131) (132) (133) (134) (135) (136) (137) (138) (139) (140) (141) (142) (143) (144) (145) (146) (147) (148) (149) (150) (151) (152) (153) (154) (155) (156) (157) (158) (159) (160) (161) (162) (163) (164) (165) (166) (167) (168) (169) (170) (171) 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