Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 01/19/2026

Completed By: National TAB

PROJECT

02-02-26 WAWA #7420 SCOTTSBURG, IN

1215 WEST MCCLAIN AVENUE

SCOTTSBURG, IN 47170

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

Table Of Contents

Project Summary

Project Summary
The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers
Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

General Exhaust Fans w/ Grilles
The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Ceiling Exhaust Fans
The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests
After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report

CheckList List

- 01: RTU's/AHU's
- 02: LENNOX SETUP PARAMETERS
- 03: SENSOR WIRING (LENNOX)
- 04: EF'S
- 05: CLOSEOUT CHECKS

02-02-26 WAWA #7420 SCOTTSBURG, IN

CheckList Information

Name :	01: RTU's/AHU's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/17/2025 - Natasha Louw - National TAB		
Completed Date :	02/24/2026 - Noah Stafford - National TAB		

CheckList Item Details

RTU's/AHU's

All diffusers and grilles are installed and match design?	Pass
Comment:	
Clean filters installed?	Pass
Comment:	
Economizers are assembled and functional?	Pass
Comment:	
Motors are all operating below the FLA rating?	Pass
Comment:	
Are belts tight?	N/A
Comment:	
If direct drive unit is the speed controller working?	Pass
Comment:	
Is gas piping installed and valves turned on?	Pass

Comment:	
Condensate drains are installed?	Pass
Comment:	
Unit free of noticeable noise and vibration	Pass
Comment:	
Final outside air damper position is marked with permanent marker?	Pass
Comment:	
No alarms present?	Pass
Comment:	
Any noticeable duct leakage?	Pass
Comment:	
Total supply and OA flows are balanced within +/-5% and supply & return diffusers within +/-10%?	Pass
Comment:	
Adjust side wall diffusers on spiral duct that blow towards the coffee island drop-in to prevent issues with it staying at temperature. Fan out of the deflector blades or reduce airflow as necessary to prevent drafting.	Pass
Comment:	
IN TEST MODE, TEST THE FOLLOWING:	
Cooling mode is operational? Record EAT/LAT for each unit:	N/A
Comment: Ambient temperature too cold to safely test.	
Heating mode is operational? Record EAT/LAT for each unit:	Pass
Comment: RTU1: 65F EAT/69F LAT RTU2: 63F EAT/67F LAT RTU3: 68F EAT/78F LAT	

Dehumidification mode is operational? (Feel dehumidification coil with your hand. Is it hot?) Record EAT/LAT for each unit:	N/A

Comment:

Ambient temperature too cold to safely test.

02-02-26 WAWA #7420 SCOTTSBURG, IN

CheckList Information

Name :	02: LENNOX SETUP PARAMETERS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/17/2025 - Natasha Louw - National TAB		
Completed Date :	02/05/2026 - Noah Stafford - National TAB		

CheckList Item Details

UNIT ID CONFIGURATIONS

BACNET CONFIGURATION: GO TO SETTINGS>GENERAL>CONFIGURATION ID1 POSITION 5 SET TO "N".	Pass
Comment:	
NETWORK CONFIGURATION: GO TO SETUP>NETWORK INTEGRATION, SET TO BACNET IP	Pass
Comment:	
CONTROL MODE: SET CONTROL MODE TO ROOM SENSOR: CO2, TEMP & HUMIDITY (PER UNIT, AS NEEDED).	Pass
Comment:	

INDIVIDUAL PARAMETER CONFIGURATIONS (MECHANICAL CONTRACTOR TO DEFINE / AS APPLICABLE):

PARAMETER 105 DEHUMID MODE: 7 NO CONDITIONS	Pass
Comment:	
PARAMETER 106 DEHUMID SETPOINT: 50, THIS IS A CENTERED SET POINT (+/-)	Yes
Comment:	
PARAMETER 107 DEHUMID DEADBAND: 3 (DEFAULT) THIS IS THE ACTUAL +/- VALUE	Pass

Comment:	
PARAMETER 117 CO2 DAMPER MAX OPEN: 50%	Pass
Comment:	
PARAMETER 118 CO2 START OPEN PPM: 1500	Pass
Comment:	
PARAMETER 119 CO2 MAX OPEN PPM: 1500	Pass
Comment:	
PARAMETER 137 OCCHET SET POINT: 68 (BACK UP)	Pass
Comment:	
PARAMETER 131 SET TO THE SAME % AS THE MINMIUM OA DAMPER SETPOINT	Pass
Comment:	
PARAMETER 139 OCC COOLING SET POINT: 72 (BACK UP)	Pass
Comment:	
PARAMETER 154 OCC BLOWER MODE: ON-CONTINUOUS 1	Pass
Comment:	
CFM VALUES / MSAV FAN SPEEDS (AIR BALANCER TO DEFINE / IF APPLICABLE):	
OA DAMPER SET TO SAME POSITION IN ALL FAN SPEEDS?	Pass
Comment:	
ALL FAN SPEEDS SET TO THE SAME CFM VALUE (ENTER SETPOINTS BELOW)	Pass
Comment:	
HEAT CFM VALUE: PER THE HVAC SCHEDULE	Pass
Comment:	
HIGH COOL CFM VALUE: THE HIGH COOL CFM VALUE	Pass

Comment:	
LOW COOL CFM VALUE: MATCH THE HIGH COOL CFM VALUE	Pass
Comment:	
VENTILATION CFM VALUE: MATCH THE HIGH COOL CFM VALUE	Pass
Comment:	

02-02-26 WAWA #7420 SCOTTSBURG, IN

CheckList Information

Name :	03: SENSOR WIRING (LENNOX)	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/17/2025 - Natasha Louw - National TAB		
Completed Date :	02/05/2026 - Noah Stafford - National TAB		

CheckList Item Details

COMBINATION TEMPERATURE/HUMIDITY SENSOR

Sensors are installed where shown on the drawing?	Pass
Comment:	
2 conductor shielded cable has one wire landed to Vin, one to GND, and the shield wire is not connected.	Pass
Comment:	
For second shielded cable, one wire is landed to Vout and the shield wire is not connected.	Pass
Comment:	
Verify that the CORE or Prodigy controller is sensing a relative humidity (record the reading)	Pass
Comment:	

02-02-26 WAWA #7420 SCOTTSBURG, IN

CheckList Information

Name : 04: EF'S **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 12/17/2025 - Natasha Louw - National TAB

CheckList Item Details

EF's

Rotation is correct?	Pass
Comment:	
Belts are tight (if applicable)?	Pass
Comment:	
Speed controller installed and functional (if applicable)?	N/A
Comment:	
There is no major leakage around base of fan?	Pass
Comment:	
Is the motor operating below the motor FLA rating?	Pass
Comment:	
Back draft damper installed and can it fully open?	Pass
Comment:	
Unit free of noticeable noise and vibration?	Pass

Comment:	
Total exhaust flow balanced within +/-5% and grilles are within +/-10%?	Fail
Comment: EF-1: MISSING DAMPERS	

02-02-26 WAWA #7420 SCOTTSBURG, IN

CheckList Information

Name :	05: CLOSEOUT CHECKS	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/17/2025 - Natasha Louw - National TAB		

CheckList Item Details

SPACE COMFORT	
Is space free of drafting?	Pass
Comment:	
Is space comfortable in all areas?	Pass
Comment:	
Is the space free of ventilation noise?	Pass
Comment:	
BUILDING PRESSURE	
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	
Comment:	

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: AHU/RTU

Asset: RTU 1 AREA:FOOD SERVICE

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5625E01960
Model Num	LGT150H5E	LGT150H5E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	16X24"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2"

Motor Data		
	Design	**Actual**
Horsepower	3.75	3.8
Phase	3	3
Rated Voltage	208	208V
Rated Amperage	-	8.0A

Test Data		
	Design	**Actual**
SF CFM	4500	4406
RA CFM	4000	3898
OA CFM	500	508
RL Voltage	-	209/210/212V
RL Amperage	-	8.3/8.3/8.2A
SF System SetPt	-	97%
OA Damper Position	-	20%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.65”
Fan Suction SP	-	-1.07”
Fan Discharge SP	-	1.45”
Total ESP	0.70"	2.10”
Fan Total SP	-	2.52”

Completed By: Noah Stafford on 02/24/2026

National TAB

Project:02-02-26 WAWA #7420 SCOTTSBURG, IN

AHU/RTU

Diffuser Supply (GRD)

RTU 1/FOOD SERVICE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	FOOD SERVICE	SD-6	10"	400	1	595	441	419	104.8
SGRD2	FOOD SERVICE	SD-6	10"	400	1	620	553	550	137.5
SGRD3	FOOD SERVICE	SD-6	10"	450	1	665	372	455	101.1
SGRD4	WASHROOM	SD-6	10"	350	1	574	322	322	92.0
SGRD5	FOOD SERVICE	SD-6	12"	600	1	0	343	368	61.3
SGRD6	FOOD SERVICE	SD-6	10"	450	1	373	487	442	98.2
SGRD7	FOOD SERVICE	SD-6	12"	500	1	93	671	514	102.8
SGRD8	FOOD SERVICE	SD-6	12"	500	1	806	515	486	97.2
SGRD9	WASHROOM	SD-6	10"	400	1	476	542	431	107.8
SGRD10	TRASH	SD-6	8"	200	1	313	248	191	95.5
SGRD11	ELECTRICAL	SD-6	10"	250	1	166	161	228	91.2
Total				4500		4681	4655	4406	97.91%

Diffuser Ret/Exh (GRD)

RTU 1/FOOD SERVICE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	FOOD SERVICE	RG-2	12X10	500	1	139	458	548	109.6
EGRD2	WASHROOM	RG-1	14X12	700	1	751	661	671	95.9
EGRD3	FOOD SERVICE	RG-1	14X12	800	1	463	749	756	94.5
EGRD4	FOOD SERVICE	RG-1	14X14	1000	1	574	1063	931	93.1
EGRD5	FOOD SERVICE	RG-1	14X14	1000	1	555	1048	992	99.2
Total				4000		2482	3979	3898	97.45%

Completed By: Noah Stafford on 02/24/2026

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: AHU/RTU

Asset: RTU2 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5625D03925
Model Num	LGT102H5E	LGT102H5E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	16X24"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2"

Motor Data		
	Design	**Actual**
Horsepower	3.75	3.8
Phase	3	3
Rated Voltage	208	208V
Rated Amperage	-	8.0A

Test Data		
	Design	**Actual**
SF CFM	3400	3368
RA CFM	2950	2888
OA CFM	450	480
RL Voltage	-	209/210/209V
RL Amperage	-	2.7/2.7/2/7A
SF System SetPt	-	65%
OA Damper Position	-	17%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.21”
Fan Suction SP	-	-0.61”
Fan Discharge SP	-	0.71”
Total ESP	0.50"	0.92”
Fan Total SP	-	1.32”

Completed By: Noah Stafford on 02/24/2026

Notes:
MISSING RETURN DAMPER, SEE RELATED ISSUE

Written By: Noah Stafford on 02/24/2026

National TAB

Project:02-02-26 WAWA #7420 SCOTTSBURG, IN

AHU/RTU

Diffuser Supply (GRD)

RTU2/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	ENTRANCE	SD-5	8"	250	1	195	200	256	102.4
SGRD2	RETAIL	SD-2		400	0.71	533	400	400	100.0
SGRD3	RETAIL	SD-2		400	0.71		405	416	104.0
SGRD4	RETAIL	SD-2		400	0.71		420	390	97.5
SGRD5	RETAIL	SD-2		350	0.71	460	380	372	106.3
SGRD6	RETAIL	SD-2		325	0.71		323	330	101.5
SGRD7	RETAIL	SD-2		350	0.71		365	367	104.9
SGRD8	RETAIL	SD-2		325	0.71		366	320	98.5
SGRD9	RETAIL	SD-2		350	0.71		355	350	100.0
SGRD10	OFFICE	SD-1	8"	250	1	191	274	274	109.6
Total				3400		1379	3488	3475	102.21%

Diffuser Ret/Exh (GRD)

RTU2/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	SPECIALITY BEVERAGE	RG-1	14X14	1000	1	504	504	504	50.4
EGRD2	RETAIL	RG-4	18X16	1450	5	2010	2010	2010	138.6
EGRD3	RETAIL	RG-4		500	0.71	374	374	374	74.8
Total				2950		2888	2888	2888	97.9%

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: AHU/RTU

Asset: RTU3 AREA:FOH

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5625E03665
Model Num	LGT072H5E	LGT072H5E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	30X16"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2"

Motor Data		
	Design	**Actual**
Horsepower	1.5	1.5
Phase	3	3
Rated Voltage	208	208V
Rated Amperage	-	4.4A

Test Data		
	Design	**Actual**
SF CFM	2400	2350
RA CFM	2075	2035
OA CFM	325	315
RL Voltage	-	211/211/210V
RL Amperage	-	3.5/3.5/3.4A
SF System SetPt	-	89%
OA Damper Position	-	26%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.41”
Fan Suction SP	-	-0.60”
Fan Discharge SP	-	0.51”
Total ESP	0.50"	0.92”
Fan Total SP	-	1.11”

Completed By: Noah Stafford on 02/05/2026

Notes:
SUPPLY DIFFUSER 3-1 NOT PRESENT

Written By: Noah Stafford on 02/05/2026

National TAB

Project:02-02-26 WAWA #7420 SCOTTSBURG, IN

AHU/RTU

Diffuser Supply (GRD)

RTU3/FOH

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	WALK IN FRIDGE			0	0	0	0	0	-
SGRD2	RETAIL	SD-2		300	0.71		308?	283	94.3
SGRD3	RETAIL	SD-2		150	0.71		231?	173	115.3
SGRD4	RETAIL	SD-2		400	0.71		400?	434	108.5
SGRD5	RETAIL	SD-2		150	0.71		143	143	95.3
SGRD6	RETAIL	SD-2		400	0.71		395	404	101.0
SGRD7	DELIVERY ROOM	SD-6	8"	250	1	182	185	226	90.4
SGRD8	WOMENS RR	SD-5	8"	125	1	136	163	120	96.0
SGRD9	REAR VESTIBULE	SD-5	8"	250	1	174	188	222	88.8
SGRD10	MENS RR	SD-5	8"	175	1	122	133	156	89.1
SGRD11	ASSOCIATES AREA	SD-6	8"	200	1	125	149	189	94.5
Total				2400		739	1356	2350	97.92%

Diffuser Ret/Exh (GRD)

RTU3/FOH

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	CLOSET	RG-3		125	1	112	112	112	89.6
EGRD2				1950	1	1923	1923	1923	98.6
Total				2075		2035	2035	2035	98.07%

Completed By: Noah Stafford on 02/05/2026

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	GB-098-6	GB-098-6
Serial Num	-	27886361
Type	DOWBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	LEESON
Frame	-	48Y
Horsepower	0.167	0.167
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115V
Amperage (rated)	-	3.6A
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	375	385
Fan RPM	-	1210
Fan Rotation	-	CW
Motor RPM	-	
System SetPt	-	100%
RL Voltage	-	115V
RL Amperage	-	3.6A
Total ESP	0.38"	0.24"
Fan Inlet SP	-	-0.24"
Fan Discharge SP	-	ATM

Notes:
MISSING DAMPERS, SEE RELATED ISSUE

Written By: Noah Stafford on 02/24/2026

National TAB

Project:02-02-26 WAWA #7420 SCOTTSBURG, IN

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/RESTROOM

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	MENS RR	EG-1	8X8	225	1	148	199	199	88.4
EGRD2	WOMENS RR	EG-1	8X8	150	1	143	186	186	124.0
Total				375		291	385	385	102.67%

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: FAN - Exhaust

Asset: EF2 AREA:BOH

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	GB-098-6	GB-098-6
Serial Num	-	27886362
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	LEESON
Frame	-	48Y
Horsepower	0.167	0.167
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115V
Amperage (rated)	-	3.6A
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	400	381
Fan RPM	-	1117
Fan Rotation	-	CW
Motor RPM	-	1117
System SetPt	-	100%
RL Voltage	-	112V
RL Amperage	-	3.6A
Total ESP	0.38"	0.19"
Fan Inlet SP	-	-0.19"
Fan Discharge SP	-	ATM

Completed By: Noah Stafford on 02/05/2026

National TAB

Project:02-02-26 WAWA #7420 SCOTTSBURG, IN

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/BOH

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	BOH	RG-2	8X8	200	1	199	199	199	99.5
EGRD2	BOH	RG-2	8X8	200	1	182	182	182	91.0
Total				400		381	381	381	95.25%

National TAB

Project: 02-02-26 WAWA #7420 SCOTTSBURG, IN

System/Unit: FAN - Exhaust

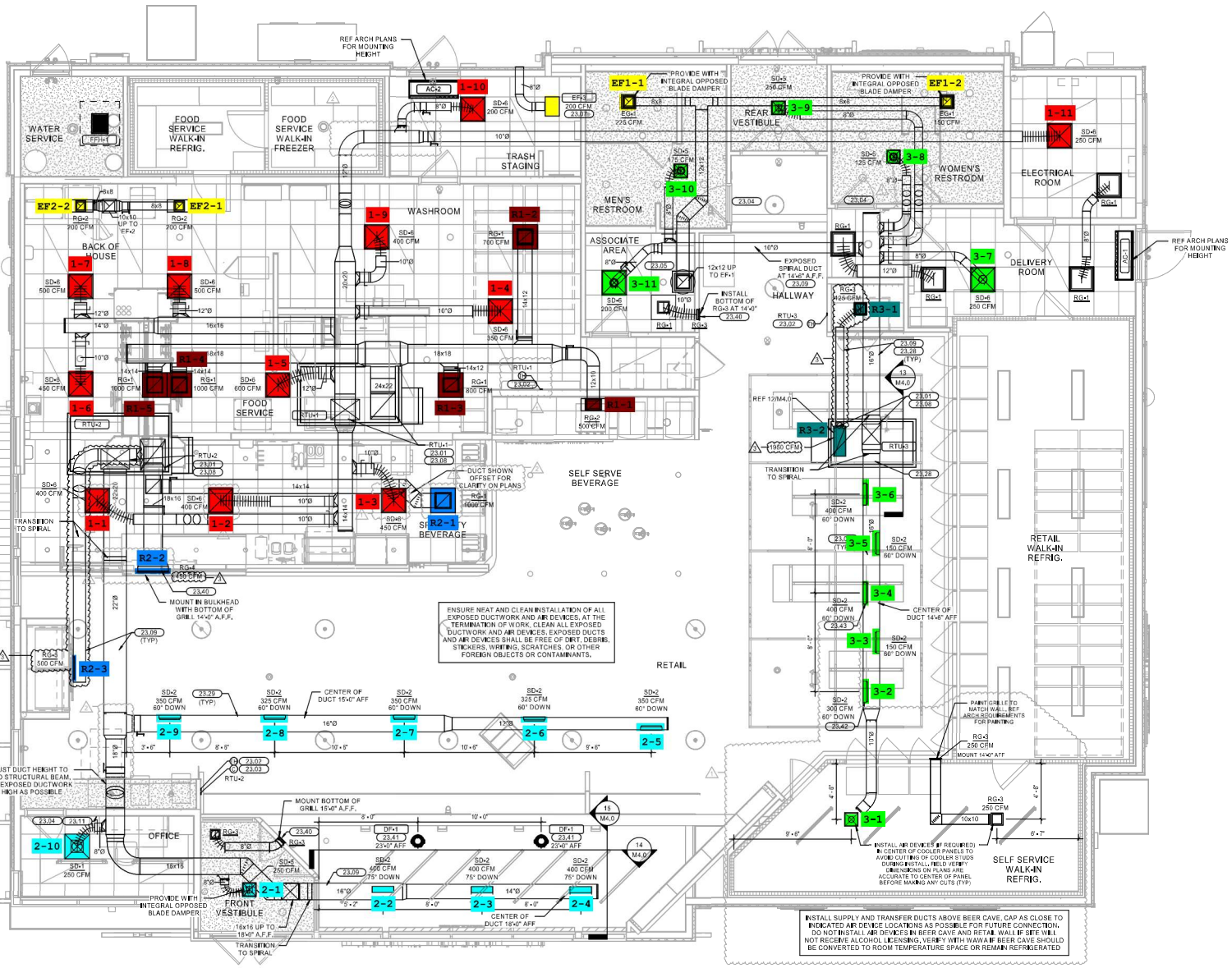
Asset: EF3 AREA:TRASH

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SP-B200	SP-B200
Serial Num	-	202915149-0044
Type	CEILING	CEILING
Configuration	HORIZONTAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	
Horsepower	0.167	0.033
Motor Rpm	-	1000
Phase	1	1
Voltage (rated)	120	115V
Amperage (rated)	-	2.7A

Test Data		
	Design	**Actual**
CFM	200	218
Fan Rotation	-	CW
System SetPt	-	100%
RL Voltage	-	115V
RL Amperage	-	2.21A
Total ESP	0.50"	0.22”
Fan Inlet SP	-	-0.22”
Fan Discharge SP	-	ATM

Completed By: Noah Stafford on 02/04/2026



1 HVAC FLOOR PLAN
1/4" = 1'-0"