Report By:

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

Report: Inspection Report

Function: Test, Adjust, & Balance

Date: 06/11/2025

Completed By: National TAB

PROJECT

06-09-25 WAWA #6305 WAYCROSS, GA

1725 MEMORIAL DR

WAYCROSS, GA

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

Table Of Contents

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.

NATIONAL TAB

AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	CORE	3400	3360	2900	2833	500	527	14.7%	15.7%						
RTU-2	DELI	5000	4862	4500	4339	500	523	10.0%	10.8%						
RTU-3	RETAIL	3000	2962	2725	2694	275	268	9.2%	9.0%						
EF-1	RESTROOMS													325	370
EF-2	BOH													450	447
TOTALS		11400	11184	10125	9866	1275	1318			0	0	0	0	775	817

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1275	1318
TOTAL EXHAUST	775	817
NET AIRFLOW	500	501

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.0079
SIDE	0.0066
REAR	0.0146
AVERAGE	**0.0097**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

System/Unit: AHU/RTU

Asset: RTU1 AREA:CORE

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624L04594
Model Num	LCT102H4E	LCT102H4EG2Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	23X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPAPST
Frame	-	N/A
Horsepower	.75	3.75
Motor Rpm	-	N/A
Phase	3	3
Rated Voltage	208	200-240
Rated Amperage	-	8.7
Service Factor	-	N/A

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD

Test Data		
	Design	**Actual**
SF CFM	3400	3360
SF RPM	-	979
MOTOR RPM	-	979
RA CFM	2900	2833
OA CFM	500	527
RL Voltage	-	212/211/212
RL Amperage	-	1.8/1.7/1.8
SF System SetPt	-	55%
RA Damper Position	-	N/A
RA Damper Type	-	N/A
OA Damper Position	-	36%
OA Damper Type	-	MOTORIZED DAMPER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.25"
Fan Suction SP	-	-0.53"
Fan Discharge SP	-	0.15"
Total ESP	.50"	0.40"
Fan Total SP	-	0.68"

Completed By: Ian Fuller on 06/11/2025

Unit Data - PHOTO LOG

06/12/2025

National TAB

Project:06-09-25 WAWA #6305 WAYCROSS, GA

AHU/RTU

Diffuser Supply (GRD)

RTU1/CORE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DELIVERY VESTIBLE	CD1	8"	200	1	271	280	212	106.0
SGRD2	RETAIL	LD1	10"	300	1	392	332	321	107.0
SGRD3	RETAIL	LD1	10"	300	1	419	356	273	91.0
SGRD4	RETAIL	LD1	10"	300	1	373	17	297	99.0
SGRD5	RETAIL	LD1	10"	350	1	347	295	327	93.4
SGRD6	RETAIL	LD1	10"	300	1	367	312	322	107.3
SGRD7	RETAIL	LD1	10"	300	1	383	325	319	106.3
SGRD8	RETAIL	LD1	10"	350	1	359	305	329	94.0
SGRD9	RETAIL	LD1	10"	350	1	325	276	331	94.6
SGRD10	OFFICE	LD1	10"	350	1	332	282	320	91.4
SGRD11	OFFICE	CD1	8"	150	1	257	164	151	100.7
SGRD12	JANITOR	CD1	6"	50	1	136	126	53	106.0
SGRD13	MENS RR	CD4	6"	50	1	132	101	55	110.0
SGRD14	WOMENS RR	CD4	6"	50	1	125	97	50	100.0
Total				3400		4218	3268	3360	98.82%

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

System/Unit: AHU/RTU

Asset: RTU2 AREA:DELI

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624L04770
Model Num	LCT150H4E	LCT150H4EN2Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	23X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPAPST
Frame	-	N/A
Horsepower	3.75	3.75
Motor Rpm	-	N/A
Phase	3	3
Rated Voltage	208	200-240
Rated Amperage	-	8.7
Service Factor	-	N/A

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD

Test Data		
	Design	**Actual**
SF CFM	5000	4862
SF RPM	-	1549
MOTOR RPM	-	1549
RA CFM	4500	4339
OA CFM	500	523
RL Voltage	-	211/211/211
RL Amperage	-	5.3/5.4/5.4
SF System SetPt	-	87%
RA Damper Position	-	N/A
RA Damper Type	-	N/A
OA Damper Position	-	32%
OA Damper Type	-	MOTORIZED DAMPER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.43”
Fan Suction SP	-	-1.09”
Fan Discharge SP	-	0.28”
Total ESP	.50"	0.71"
Fan Total SP	-	1.37"

Completed By: Ian Fuller on 06/11/2025

Unit Data - PHOTO LOG

06/12/2025

National TAB

Project:06-09-25 WAWA #6305 WAYCROSS, GA

AHU/RTU

Diffuser Supply (GRD)

RTU2/DELI

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	BACKROOM	CD	12"	550	1	702	533	533	96.9
SGRD2	DELI	LD1	12"	500	1	596	529	529	105.8
SGRD3	DELI	LD1	12"	500	1	539	549	549	109.8
SGRD4	STAGING	CD3	8"	200	1	67	75	75	37.5
SGRD5	ELECTRICAL	CD1	12"	550	1	89	170	170	30.9
SGRD6	WASH ROOM	LD1	12"	550	1	683	601	601	109.3
SGRD7	FOOD SERV	LD1	12"	550	1	595	639	639	116.2
SGRD8	RETAIL	LD1	12"	550	1	590	619	619	112.5
SGRD9	RETAIL	LD1	12"	500	1	546	539	539	107.8
SGRD10	FOOD SERV	LD1	12"	550	1	584	608	608	110.5
Total				5000		4991	4862	4862	97.24%

Diffuser Ret/Exh (GRD)

RTU2/DELI

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WASHROOM	G1	14"	900	1	916	916	916	101.8
EGRD2	WASHROOM	G1	14"	900	1	699	699	699	77.7
EGRD3	FOOD SERV	G1	14"	900	1	984	984	984	109.3
EGRD4	FOOD SERV	G1	14"	900	1	901	901	901	100.1
EGRD5	FOOD SERV	G1	14"	900	1	760	760	760	84.4
Total				4500		4260	4260	4260	94.67%

Asset	Notes	Date	Written By
SGRD5	BRACH DAMPER DOES IS BROKEN INSIDE OF DUCT UNABLE TO BALANCE WITHIN DESIGN AIRFLOW.	06/11/2025	Ian Fuller
EGRD1	RETURN DIFFUSER 1,3, AND 4 ARE MISSING DAMPERS. UNABLE TO BALANCE INDIVIDUAL DAMPERS.	06/11/2025	Ian Fuller

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

System/Unit: AHU/RTU

Asset: RTU3 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624L04595
Model Num	LCT092H4E	LCT092H4EG2Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	23X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPAPST
Frame	-	N/A
Horsepower	3.75	3.75
Motor Rpm	-	N/A
Phase	3	3
Rated Voltage	208	200-240
Rated Amperage	-	8.7
Service Factor	-	N/A

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD

Test Data		
	Design	**Actual**
SF CFM	3000	2962
SF RPM	-	1159
MOTOR RPM	-	1159
RA CFM	2725	2694
OA CFM	275	268
RL Voltage	-	212/210/211
RL Amperage	-	2.6/2.5/2.7
SF System SetPt	-	65%
RA Damper Position	-	N/A
RA Damper Type	-	N/A
OA Damper Position	-	18%
OA Damper Type	-	MOTORIZED DAMPER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.37"
Fan Suction SP	-	-0.77"
Fan Discharge SP	-	0.27"
Total ESP	.50"	0.64"
Fan Total SP	-	1.04"

Unit Data - PHOTO LOG

06/12/2025

National TAB

Project:06-09-25 WAWA #6305 WAYCROSS, GA

AHU/RTU

Diffuser Supply (GRD)

RTU3/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	ASSOCIATE	LD1	10"	150	1	313	162	162	108.0
SGRD2	COFFEE	LD1	10"	350	1	376	373	373	106.6
SGRD3	COFFEE	LD1	10"	400	1	469	419	419	104.8
SGRD4	COFFEE	LD1	10"	400	1	412	424	424	106.0
SGRD5	COFFEE	LD1	10"	400	1	514	429	429	107.3
SGRD6	COFFEE	LD1	10"	400	1	498	439	439	109.8
SGRD7	COFFEE	LD1	10"	400	1	409	434	434	108.5
SGRD8	VESTIBLE	CD2	12"	500	1	223	282	282	56.4
Total				3000		3214	2962	2962	98.73%

Asset	Notes	Date	Written By
SGRD8	DAMPER UNABLE TO FULLY OPEN. STUCK ON SCREWS.	06/11/2025	Ian Fuller

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	GREENHECK	LOREN COOK
Model Num	G-080	90C15DH 90 ACEH
Serial Num	-	047PL59069-00/0000701
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	48Y
Horsepower	1/10	0.125
Motor Rpm	-	1600
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.7
Service Factor	-	N/A

Test Data		
	Design	**Actual**
CFM	325	370
Fan RPM	1576	1600
Fan Rotation	-	CCW
Motor RPM	-	1600
System SetPt	-	N/A
RL Voltage	1	121
RL Amperage	-	1.1
Total ESP	.375"	0.18"
Fan Inlet SP	-	-0.18"
Fan Discharge SP	-	ATM

Notes:
NO SPEED CONTROLLER INSTALLED UNABLE TO BALANCE FAN WITHIN DESIGN AIR FLOW.

Written By: Ian Fuller on 06/11/2025

Unit Data - PHOTO LOG

06/12/2025

National TAB

Project:06-09-25 WAWA #6305 WAYCROSS, GA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WOMENS RR	G3	6"	100	1	147	147	147	147.0
EGRD2	MENS RR	G3	6"	100	1	114	114	114	114.0
EGRD3	MENS RR	G3	6"	50	1	64	64	64	128.0
EGRD4	JANITOR	G3	6"	75	1	45	45	45	60.0
Total				325		370	370	370	113.85%

Asset	Notes	Date	Written By
EGRD1	NO DAMPERS INSTALLED ON DUCTWORK. UNABLE TO BALANCE INDIVIDUAL DIFFUSERS WITHIN DESIGN AIRFLOW.	06/11/2025	Ian Fuller

National TAB

Project: 06-09-25 WAWA #6305 WAYCROSS, GA

System/Unit: FAN - Exhaust

Asset: EF2 AREA:BOH

Unit Data		
	Design	**Actual**
MFG	GREENHECK	LOREN COOK
Model Num	GB-090	90C15DH 90 ACEH
Serial Num	-	046PL59069-00/0002001
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	N/A
Horsepower	1/10	0.125
Motor Rpm	-	1600
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.7
Service Factor	-	N/A

Test Data		
	Design	**Actual**
CFM	450	447
Fan RPM	1259	1600
Fan Rotation	-	CCW
Motor RPM	-	1600
System SetPt	-	N/A
RL Voltage	-	121
RL Amperage	-	1.2
Total ESP	.250"	0.15"
Fan Inlet SP	-	-0.15"
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

06/12/2025

National TAB

Project:06-09-25 WAWA #6305 WAYCROSS, GA

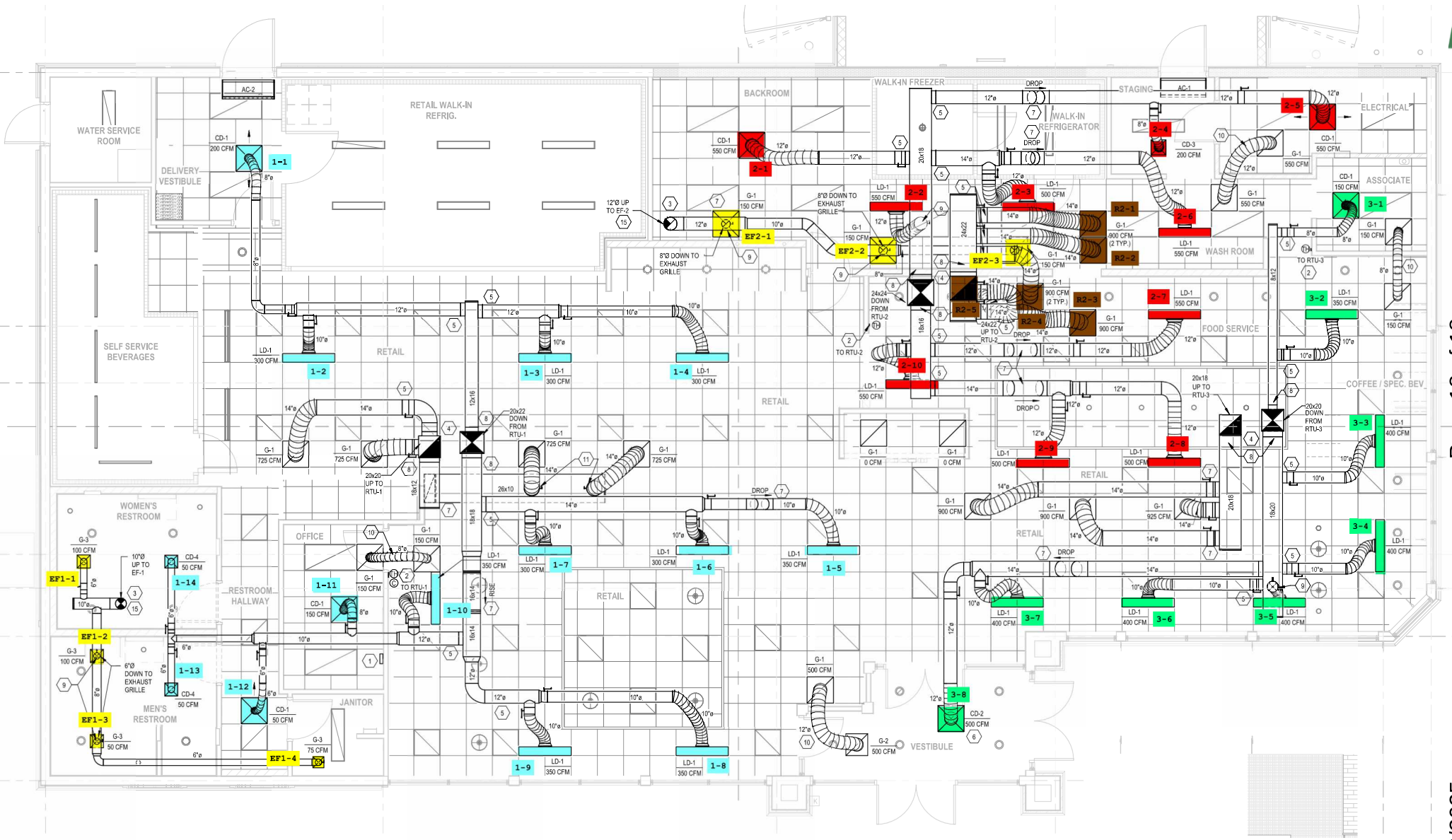
FAN - Exhaust

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	G1	12"	150	1	178	178	178	118.7
EGRD2	BOH	G1	8"	150	1	114	114	114	76.0
EGRD3	BOH	G1	14"	150	1	155	155	155	103.3
Total				450		447	447	447	99.33%

Asset	Notes	Date	Written By
EGRD1	NO DAMPERS INSTALLED ON DUCTWORK. UNABLE TO BALANCE INDIVIDUAL DIFFUSERS WITHIN DESIGN AIRFLOW.	06/11/2025	Ian Fuller



Date: 9/22/2025