

**Report By:**

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CINCINNATI, OH 45246



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 02/04/2026**  
**Completed By: National TAB**

**PROJECT**  
**02-09-26 QT #1145 GREENVILLE, SC**

1509 GROVE RD

GREENVILLE, SC

**Client**

QUIKTRIP  
4705 SOUTH 129TH EAST AVENUE  
TULSA, OK 74134

# National TAB

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Project: 02-09-26 QT #1145 GREENVILLE, SC  
Function: Test, Adjust, & Balance

## Project Summary

### Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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)

Each of the RTU's was measured with a flow hood to establish total flow. The total flow was then adjusted via the VFD so that airflow fell within design tolerances. All diffusers on the kitchen RTU were balanced to the engineer's design flow. The diffusers on the sales floor were only adjusted when there were noticeable issues present like drafting or dampers that were found completely closed. The Hoods On outside air rate was set by first establishing the typical QT set point at the Emerson controller and then making manually adjustments on the roof. The hoods off airflow setpoint was found by adjusting the damper position at the Emerson controller until the design airflow was achieved. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. After completion of TAB all overrides were released.

### Kitchen Exhaust Hood & Associated Fans

The kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow.

### Restroom Exhaust Fans

The restroom exhaust fans were measured with a flow hood. The total flow was balanced for the fan with the exception of the new grille over the combi-oven, which was balanced to the listed design.

### 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. The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

## Issue List

- EF-3 at 81% of design
- Improper diffusers in kitchen
- Kitchen dampers inaccessible

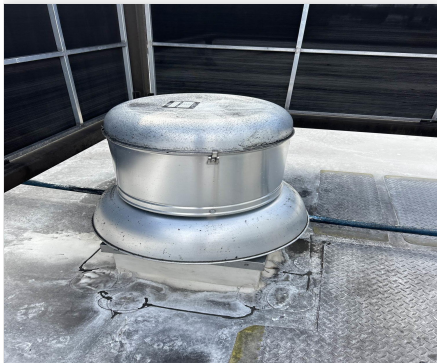


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**Project Issue Information**

**Issue Name :** EF-3 at 81% of design  
**Description :** EF-2 is currently at 81% of design. The motor is at max on dail.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** InfoOnly                      **Asset Tag :** EF2  
**Originated Date :** 02/18/2026 - Jearod Ferrette - National TAB

Project Issue File Details



02/18/2026



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**Project Issue Information**

**Issue Name :** Improper diffusers in kitchen  
**Description :** Improper kitchen diffusers not installed  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** **Medium**                                      **Asset Tag :** RT-3  
**Originated Date :** 02/18/2026 - Jearod Ferrette - National TAB

Project Issue File Details



02/18/2026



02-09-26 QT #1145 GREENVILLE, SC

**Project Issue Information**

**Issue Name :** Kitchen dampers inaccessible  
**Description :** First 4 dampers in the kitchen are inaccessible. The electric wire for the light was cut short, which prevents the ceiling tiles to be moved enough so that you're able to reach to dampers.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :** RT-3  
**Originated Date :** 02/18/2026 - Jearod Ferrette - National TAB

Project Issue File Details



02/18/2026

**National TAB**

**Project: 02-09-26 QT #1145 GREENVILLE, SC**

- [Open QT\\_Balance\\_Schedule.xlsx](#)

## CheckList List

- 01: RTU's/AHU's
- 02: Exhaust Fans
- 03: Hoods
- 04: Final Tests



**02-09-26 QT #1145 GREENVILLE, SC**

**CheckList Information**

**Name :** 01: RTU's/AHU's **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/04/2026 - Trinity Dodds - National TAB  
**Completed Date :** 02/18/2026 - Jearod Ferrette - National TAB

**CheckList Item Details**

RTU's/AHU's

Evaporator coils are clean? Pass

Comment:

Condenser coils are clean? Pass

Comment:

Gas piping is installed and valves are turned on? N/A

Comment:

Unit free of noticeable noise and vibration Pass

Comment:



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**CheckList Information**

**Name :** 02: Exhaust Fans **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 02/04/2026 - Trinity Dodds - National TAB

**Completed Date :** 02/18/2026 - Jearod Ferrette - National TAB

**CheckList Item Details**

EF's

Hinge kit installed installed on hood fan?	Pass
--	------

Comment:

Flex conduit is long enough so that fan can be completely tilted back?	Pass
--	------

Comment:

No major leakage around the fan base	Pass
--------------------------------------	------

Comment:

Unit is free of noise and vibration	Pass
-------------------------------------	------

Comment:



02-09-26 QT #1145 GREENVILLE, SC

**CheckList Information**

**Name :** 03: Hoods **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 02/04/2026 - Trinity Dodds - National TAB  
**Completed Date :** 02/18/2026 - Jearod Ferrette - National TAB

**CheckList Item Details**

**HOODS**

---

**Hood is free of alarms?** Pass

**Comment:**

---

**Hood is free of damage?** Pass

**Comment:**

---

**End panels are installed per prototype?** Pass

**Comment:**

---



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CheckList Information

**Name :** 04: Final Tests **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 02/04/2026 - Trinity Dodds - National TAB

**Completed Date :** 02/18/2026 - Jearod Ferrette - National TAB

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

FRYER, PIZZA OVEN

List smoke candle type used

Comment:

STAFF IS TRAINING IN THE KITCHEN, HOOD CAPTURE 100%

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed

02/18/2026

**Comment:**

---

**TAB tech name / Firm**

**Comment:**

JEAROD FERRETTE/ NTAB

---

**Site super name / Firm**

**Comment:**

NA

---

**Owner representative name / Firm (if Applicable)**

**Comment:**

NA

---

**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)**

Pass

**Comment:**

FRONT 0.01, SIDE 0.007, REAR 0.007



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Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: AHU/RTU

Asset: RT-1

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07653
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	Actual
SF CFM	4200	4167
SF RPM	-	DD/33 HZ
OA CFM (Hoods On)	800	883
OA CFM (Hoods Off)	350	361
RL Voltage	-	77 VFD
RL Amperage	-	7.5 VFD
VFD Max SetPt	-	33HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.36"
Fan Suction SP	-0.49"
Fan Discharge SP	0.48"
Total ESP	0.84"
Fan Total SP	0.97"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Completed By: Jearod Ferrette on 02/18/2026





# National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: AHU/RTU

Asset: RT-2

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07655
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	Actual
SF CFM	4200	4140
SF RPM	-	DD/ 33 HZ
OA CFM (Hoods On)	800	876
OA CFM (Hoods Off)	350	368
RL Voltage	-	79 VFD
RL Amperage	-	7.1 VFD
VFD Max SetPt	-	33HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.36"
Fan Suction SP	-0.48"
Fan Discharge SP	0.45"
Total ESP	0.81"
Fan Total SP	0.93"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Completed By: Jearod Ferrette on 02/18/2026





# National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: AHU/RTU

Asset: RT-3

AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07654
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	Actual
SF CFM	4200	4213
SF RPM	-	DD/43 HZ
OA CFM (Hoods On)	800	876
OA CFM (Hoods Off)	350	382
RL Voltage	-	143 VFD
RL Amperage	-	9.5 VFD
VFD Max SetPt	-	43 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.73"
Fan Suction SP	-0.91"
Fan Discharge SP	0.88"
Total ESP	1.61"
Fan Total SP	1.79"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Completed By: Jearod Ferrette on 02/18/2026

Notes:

First 4 dampers in the kitchen are inaccessible.

Written By: Jearod Ferrette on 02/18/2026





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Project:02-09-26 QT #1145 GREENVILLE, SC

## AHU/RTU

### Diffuser Supply (GRD)

#### RT-3/BOH/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SUPPORT SERVICE	SI	12"	800	1	950	950	950	118.8
SGRD2	SUPPORT SERVICE	SI	12"	800	1	595	595	595	74.4
SGRD3	SUPPORT SERVICE	SI	12"	800	1	512	512	512	64.0
SGRD4	SUPPORT SERVICE	SI	12"	800	1	1136	1136	1136	142.0
SGRD5	DOCK	ES	12"	750	1	861	861	861	114.8
SGRD6	WORKROOM	ES	8"	250	1	159	159	159	63.6
Total				4200		4213	4213	4213	100.31%



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Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: FAN - Exhaust

Asset: EF1

AREA:WOMEN'S RR

Unit Data	
	Actual
MFG	NA
Model Num	NA
Serial Num	050SE48946
Type	UPBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	FASCO
Horsepower	1/8
Motor Rpm	1600
Phase	1
Voltage (rated)	115
Amperage (rated)	1.7
Service Factor	1

Test Data		
	Design	Actual
CFM	225	223
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	80%
Total ESP	-	0.15"
Fan Inlet SP	-	-0.15"
Fan Discharge SP	-	ATMO

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**Unit Data - PHOTO LOG**



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# National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: FAN - Exhaust

Asset: EF2

AREA: MEN'S RR/COMBI

Unit Data	
	Actual
MFG	NA
Model Num	NA
Serial Num	044SE53450
Type	UPBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	FASCO
Horsepower	1/4
Motor Rpm	1550
Phase	1
Voltage (rated)	115
Amperage (rated)	3.2
Service Factor	1

Test Data		
	Design	Actual
CFM	525	430
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	MAX ON DAIL
Total ESP	-	0.17"
Fan Inlet SP	-	-0.17"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 02/18/2026

**Unit Data - PHOTO LOG**



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# National TAB

Project:02-09-26 QT #1145 GREENVILLE, SC

Diffuser Ret/Exh (GRD)

## EF2/MEN'S RR/COMBI

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	SUPPORT SERVICE	RI	8"	150	1	146	155	155	103.3
Total				150		146	155	155	103.33%



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Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: FAN - Exhaust

Asset: EF3

AREA: KITCHEN HD

Unit Data	
	Actual
MFG	CAPTIVEAIRE
Model Num	DU50HFA
Serial Num	8262120
Type	UPBLAST
Configuration	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Horsepower	1/2	1/2
Motor Rpm	-	1800
Voltage (rated)	-	208
Service Factor	-	1

Test Data		
	Design	Actual
CFM	1350	1360
Fan RPM	-	1230
Fan Rotation	-	CCW
Motor RPM	-	1230
System SetPt	-	54.8HZ
Total ESP	-	0.27"
Fan Inlet SP	-	-0.27"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 02/18/2026

# Unit Data - PHOTO LOG



02/18/2026



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# National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

## System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	8262120
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X20	16X20
Filter Qty 1	6	6
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	12.48	12.48
Filter1 FPM	-	107
Filter2 FPM	-	115
Filter3 FPM	-	127
Filter4 FPM	-	111
Filter5 FPM	-	96
Filter6 FPM	-	103
Filter Ave FPM(corr)	-	109
CFM	1350	1360

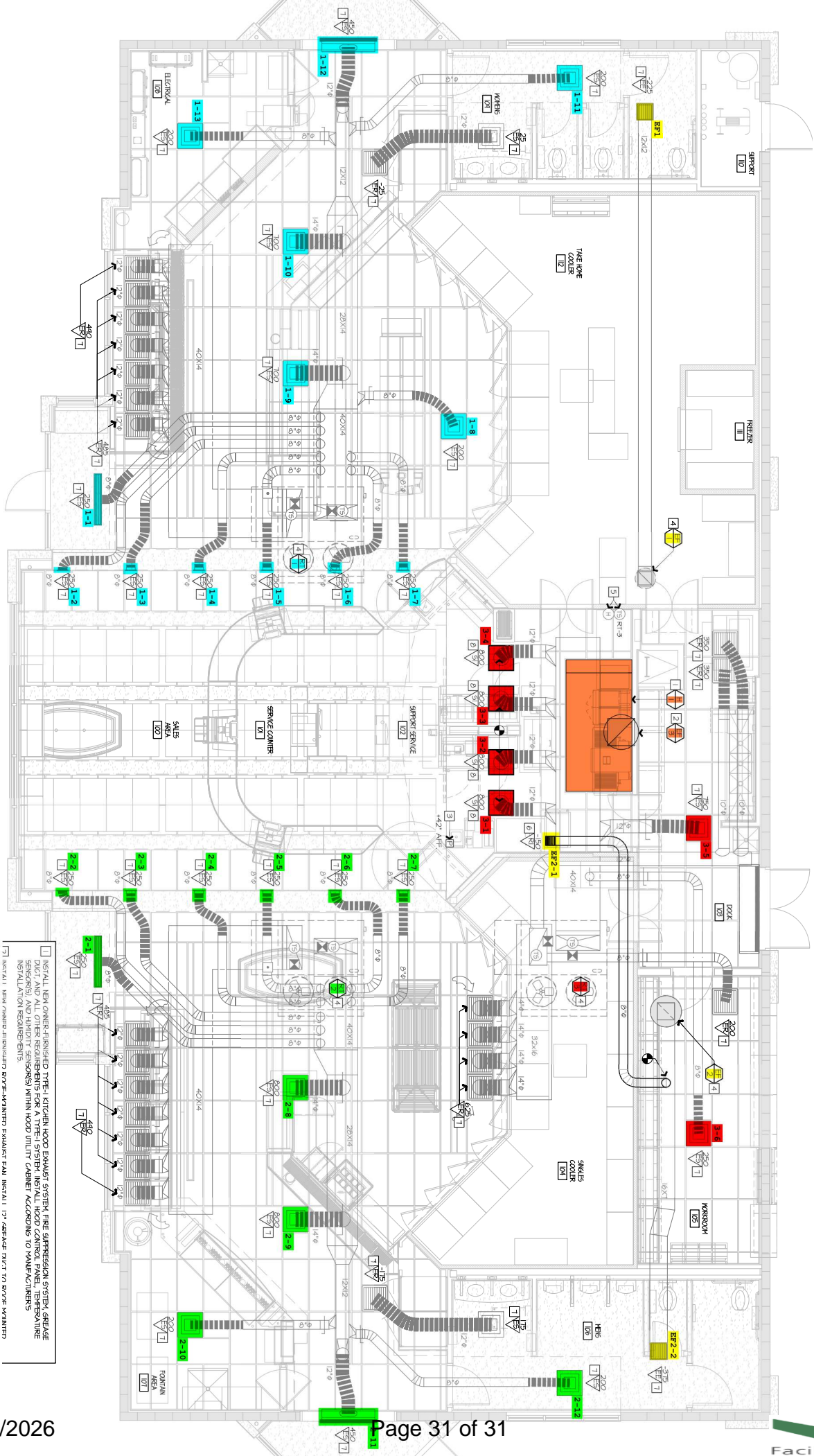
Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	PIZZA OVEN

Completed By: Jearod Ferrette on 02/18/2026

**Unit Data - PHOTO LOG**



**02/18/2026**



□ INSTALL NEW OWNER-FINISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM FIRE SUPPRESSION SYSTEM GREASE DETECT AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM INSTALL HOOD CONTROL PANEL, TEMPERATURE SENSORS, AND INFLUITY SENSORS WITH HOOD UTILITY CABINET ACCORDING TO MANUFACTURERS INSTALLATION REQUIREMENTS.  
 □ INSTALL NEW WAREHOUSE BOVE-MOUNTED EXHAUST FAN INSTALL 1"