

Report By:

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



Report: UC Pharmacy Relo PH1
Function: Test, Adjust, & Balance
Date: 09/03/2024

PROJECT
UC Pharmacy Relo PH1 (Cincinnati, OH)

3188 BELLEVUE AVENUE

Cincinnati, OH 45219

Client

Thomas J. Dyer Company
5240 Lester Road
Cincinnati, OH 45213

National TAB

Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

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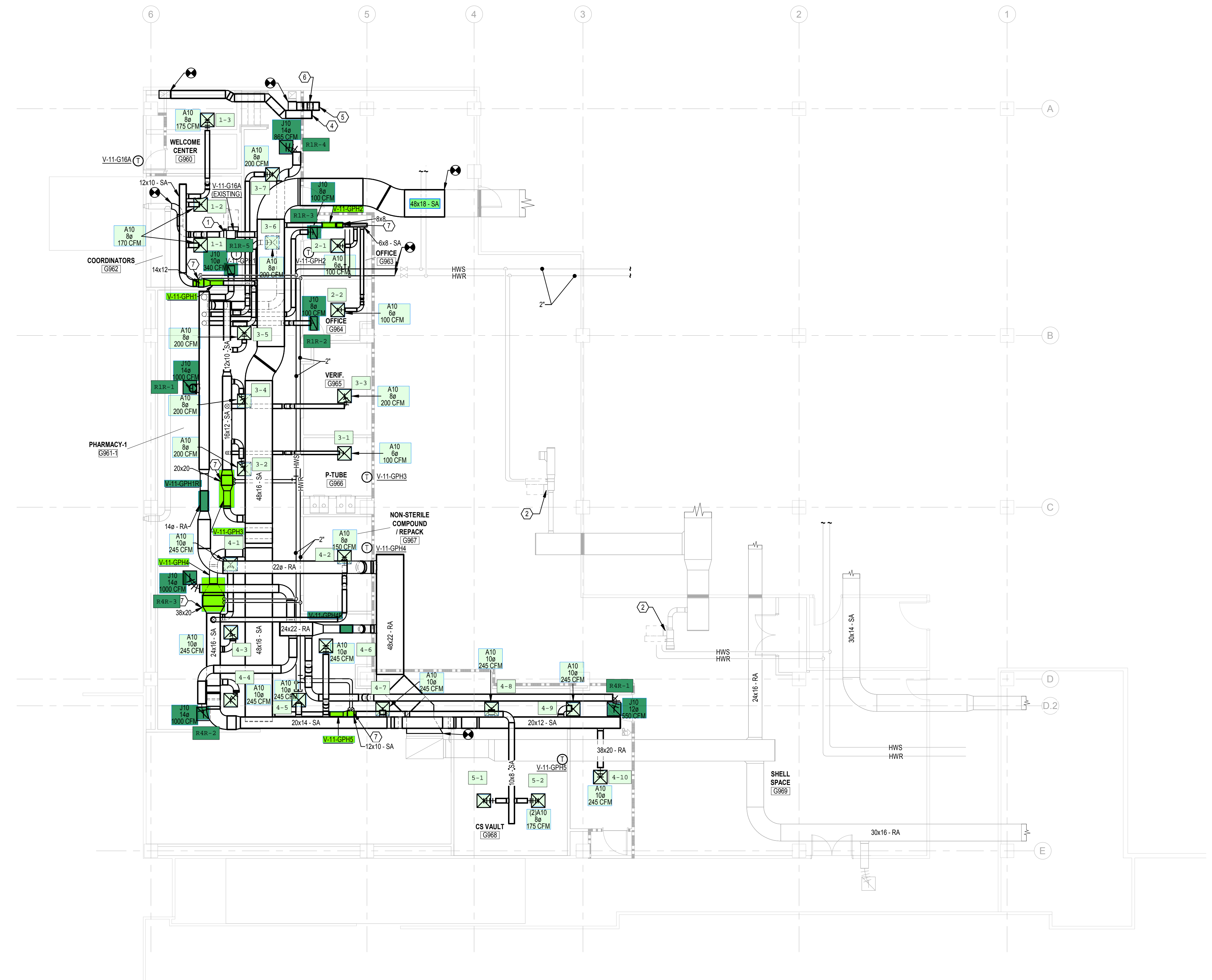
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GENERAL NOTES

A. FIRE BARRIERS - OBC 717.5.2 EXCEPTION 3 / FIRE PARTITIONS - OBC 717.5.4 EXCEPTION 4
FIRE DAMPERS ARE NOT REQUIRED (UNLESS SHOWN ON FLOOR PLANS OR SCHEMATICS) AT PENETRATIONS OF FIRE BARRIERS WHERE SUCH WALLS ARE PENETRATED BY DUCTED HVAC SYSTEMS, HAVING A REQUIRED FIRE-RESISTANCE RATING OF 1 HOUR OR LESS IN AREAS OF THESE THAN GROUP H AND ARE IN BUILDINGS EQUIPPED THROUGH WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.1.2. HVAC SYSTEM SHALL BE CONSTRUCTED OF SHEET STEEL NOT LESS THAN 26 GAUGE. FLEXIBLE AIR CONNECTORS SHALL NOT BE PROHIBITED IN FULLY DUCTED SYSTEMS AT AIR HANDLING EQUIPMENT CONNECTIONS AND AT AIR CONNECTORS INSTALLATION TO CONNECT METAL DUCT TO A CEILING DIFFUSER AND IS LOCATED ENTIRELY WITHIN THE SAME ROOM AS THE CEILING DIFFUSER. THE FLEXIBLE AIR CONNECTOR SHALL NOT PASS THROUGH ANY WALLS, FLOORS, OR CEILINGS.

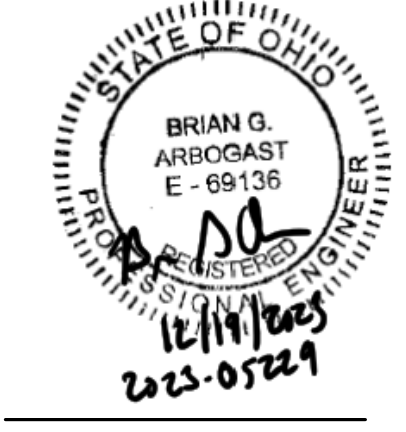
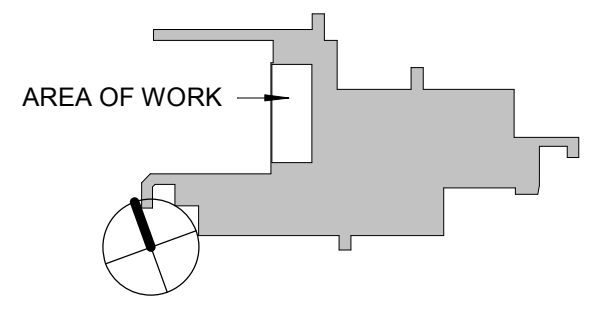
PLAN NOTES:

- 1. RELOCATE EXISTING VAV LOCATION SHOWN. REBALANCE TO CFM INDICATED.
- 2. REBALANCE EXISTING VAV TO 650 CFM MAX.
- 3. RELOCATE EXISTING THERMOSTAT FOR EXISTING VAV. EXTEND CONTROL WIRING FROM THERMOSTAT TO NEW VAV BOX LOCATION. CONNECT TO THE BAS.
- 4. CAPPED FOR PHASE TWO USP EXHAUST. HC SHALL COORDINATE NEW DAMPER ACCESS DOORS FOR EXISTING FIRE DAMPERS LOCATED IN SLAB ABOVE. DAMPERS SHOULD BE ACCESSIBLE FROM ABOVE CEILING ON GROUND FLOOR OR WALL AND DUCT ACCESS PANELS SHALL BE PROVIDED ON LEVEL 1 ABOVE.
- 5. CAPPED FOR PHASE TWO GENERAL EXHAUST. HC SHALL COORDINATE NEW DAMPER ACCESS DOORS FOR EXISTING FIRE DAMPERS LOCATED IN SLAB ABOVE. DAMPERS SHOULD BE ACCESSIBLE FROM ABOVE CEILING ON GROUND FLOOR OR WALL AND DUCT ACCESS PANELS SHALL BE PROVIDED ON LEVEL 1 ABOVE.
- 6. TRANSITION DUCT INTO OPEN SPACE BETWEEN BEAMS.
- 7. DUCT MOUNTED HEATING COIL FURNISHED WITH AIR VALVE.



1 PARTIAL GROUND FLOOR PLAN - NEW WORK
SCALE: 1/8" = 1'-0"

KEY PLAN



12/20/23 Date

1 ISSUED FOR PERMIT AND CONSTRUCTION Issue/Revision/Submission No.

BHDP ARCHITECTURE
CINCINNATI
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RALEIGH
CHARLOTTE
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BHDP

UCMC PHASE I PHARMACY RELOCATION
3188 BELLEVUE AVENUE
CINCINNATI, OH 45219-2316
PARTIAL GROUND FLOOR PLAN - NEW

Project Manager
Approver
Drawn
SMG
Checked
BHS
Initial Drawing Date
2023.12.20
Project Number
UCH0316



M101

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National TAB

Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH1 | VAV | | 515 | 499 | 515 | 499 | 0 | 0 | 680 |

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH1/COORDINATORS

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1-1 | G962 | A10 | 8 | 170 | 218 | 163 | 95.9 |
| 1-2 | G962 | A10 | 8 | 170 | 198 | 175 | 102.9 |
| 1-3 | G960 | A10 | 8 | 175 | 169 | 161 | 92.0 |
| Total | | | | 515 | 585 | 499 | 96.89% |

National TAB

Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH2 | VAV | | 200 | 219 | 200 | 219 | 0 | 0 | 680 |

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH2/OFFICE

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 2-1 | G963 | A10 | 8 | 100 | 118 | 110 | 110.0 |
| 2-2 | G964 | A10 | 8 | 100 | 126 | 109 | 109.0 |
| Total | | | | 200 | 244 | 219 | 109.5% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH3 | VAV | | 1300 | 1325 | 1300 | 325 | 0 | 0 | 720 |

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH3/G968

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3-1 | G966 | A10 | 12 | 100 | 122 | 109 | 109.0 |
| 3-2 | G961-1 | A10 | 12 | 200 | 269 | 207 | 103.5 |
| 3-3 | G965 | A10 | 12 | 200 | 36 | 210 | 105.0 |
| 3-4 | G961-1 | A10 | 12 | 200 | 297 | 215 | 107.5 |
| 3-5 | G961-1 | A10 | 12 | 200 | 319 | 211 | 105.5 |
| 3-6 | HALL | A10 | 12 | 200 | 278 | 187 | 93.5 |
| 3-7 | HALL | A10 | 12 | 200 | 182 | 186 | 93.0 |
| Total | | | | 1300 | 1503 | 1325 | 101.92% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH4 | VAV | | 2355 | 2270 | 2350 | 2270 | 0 | 0 | 2260 |

| Asset | Notes | Date | Written By |
|-----------|------------------------------------------------------------------|------------|-------------|
| V-11-GPH4 | No damper on 4-2 at top of duct, unable to finish device balance | 08/20/2024 | Riley Frady |

Diffuser Supply (GRD)

V-11-GPH4/PHARMACY-1

| Asset | | | | | | | |
|------------|----------|------|------|------------|-----------|-----------|-------------|
| Asset Name | Location | Type | Size | Design CFM | Final CFM | Final CFM | % to design |
| 4-1 | G961-1 | A10 | 14 | 245 | 282 | 240 | 98.0 |
| 4-2 | G967 | A10 | 14 | 150 | 202 | 178 | 118.7 |
| 4-3 | G961-1 | A10 | 14 | 245 | 314 | 225 | 91.8 |
| 4-4 | G961-1 | A10 | 14 | 245 | 233 | 206 | 84.1 |
| 4-5 | G961-1 | A10 | 14 | 245 | 321 | 233 | 95.1 |
| 4-6 | G961-1 | A10 | 14 | 245 | 259 | 278 | 113.5 |
| 4-7 | HALL | A10 | 14 | 245 | 258 | 233 | 95.1 |
| 4-8 | HALL | A10 | 14 | 245 | 280 | 259 | 105.7 |
| 4-9 | HALL | A10 | 14 | 245 | 239 | 224 | 91.4 |
| 4-10 | G969 | A10 | 14 | 245 | 223 | 194 | 79.2 |
| Total | | | | 2355 | 2611 | 2270 | 96.39% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH5 | VAV | | 350 | 358 | 350 | 358 | 0 | 0 | 676 |

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH5/PHARMACY-1

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5-1 | G968 | A10 | 8 | 175 | 185 | 167 | 95.4 |
| 5-2 | G968 | A10 | 8 | 175 | 216 | 191 | 109.1 |
| Total | | | | 350 | 401 | 358 | 102.29% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|--------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH1R 1 | VAV | | 2405 | 2402 | 1865 | 2402 | 0 | 0 | 1530 |

Completed By: Riley Frady on 08/20/2024

Diffuser Ret/Exh (GRD)

V-11-GPH1R 1/PHARMACY-1

| Asset | | | | | | | | |
|------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| 1R1-1 | J10 | 14 | 1000 | | 740 | | 1037 | 103.7 |
| 1R1-2 | J10 | 8 | 100 | | 137 | | 99 | 99.0 |
| 1R1-3 | J10 | 8 | 100 | | 126 | | 105 | 105.0 |
| 1R1-4 | J10 | 14 | 865 | | 579 | | 801 | 92.6 |
| 1R1-5 | J10 | 10 | 340 | | 270 | | 360 | 105.9 |
| Total | | | 2405 | | 1852 | 0 | 2402 | 99.88% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct



AIR VALVES/

| Asset | | | | | | | | | |
|--------------|------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V-11-GPH4R 1 | VAV | | 2550 | 2463 | 2550 | 2463 | 0 | 0 | 2700 |

| Asset | Notes | Date | Written By |
|--------------|-------------------------------|------------|-------------|
| V-11-GPH4R 1 | No dampers located to balance | 08/20/2024 | Riley Frady |

Diffuser Ret/Exh (GRD)

V-11-GPH4R 1/G961-1

| Asset | | | | | | | | |
|------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| R4R-1 | J10 | 12 | 550 | | 541 | | 582 | 105.8 |
| R4R-2 | J10 | 14 | 1000 | | 846 | | 879 | 87.9 |
| R4R-3 | J10 | 14 | 1000 | | 984 | | 100 | 10.0 |
| Total | | | 2550 | | 2371 | 0 | 1561 | 61.22% |

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Project: UC Pharmacy Relo PH1 (Cincinnati, OH)



Circuit Setter

HW CS/

| Asset | | | | | | | |
|------------|------|----------|------------|----------|---------|-----------|-------------|
| Asset Name | Size | Type | Design GPM | Setting | Delta P | Final GPM | % to Design |
| CS-1 | 0.75 | AUTOFLOW | 0.4 | 2-32 PSI | 5.5 | 0.4 | 100.0 |
| CS-2 | 0.75 | AUTOFLOW | 1.1 | 2-32 PSI | 6.2 | 1.1 | 100.0 |
| CS-3 | 1 | AUTOFLOW | 2.6 | 2-32 PSI | 5.8 | 2.6 | 100.0 |
| CS-4 | 1 | AUTOFLOW | 4.6 | 2-32 PSI | 5.2 | 4.6 | 100.0 |
| CS-5 | 0.75 | AUTOFLOW | 0.7 | 2-32 PSI | 5.1 | 0.7 | 100.0 |
| Total | | | 9.4 | | | 9.4 | 100% |