WHITE PAPER

EDWARD JONES BANK

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OVERVIEW OF CHALLENGE IN THE PROJECT

Edward Jones Bank – one of the largest customer base banks in the USA was planning to open a new branch in an existing commercial building in Kissimmee, Florida. The place was a 3,000 sq. Ft. white box space with existing utilities, and sanitary services provided by the base building.
We had the following challenges while designing this commercial bank project-
We faced 3 main challenges while designing this project-

1. The client was looking for a low-cost design by utilizing the existing services and existing rooftop unit provided by the base building.
2. Design the MEP system by running the services from the existing service location to the new space, keeping the other existing commercial stores operational.
3. To fit the MEP system in a short ceiling space

While going over the architectural floor plans and the building's electrical power plans, we also realized that the existing electrical and plumbing services were undersized considering the Edward Jones bank's requirements.

YOUR ONE STOP SHOP FOR ALL MEP DESIGN NEEDS

DESIGNED & CONCEPTUALIZED BY

NY-ENGINEERS

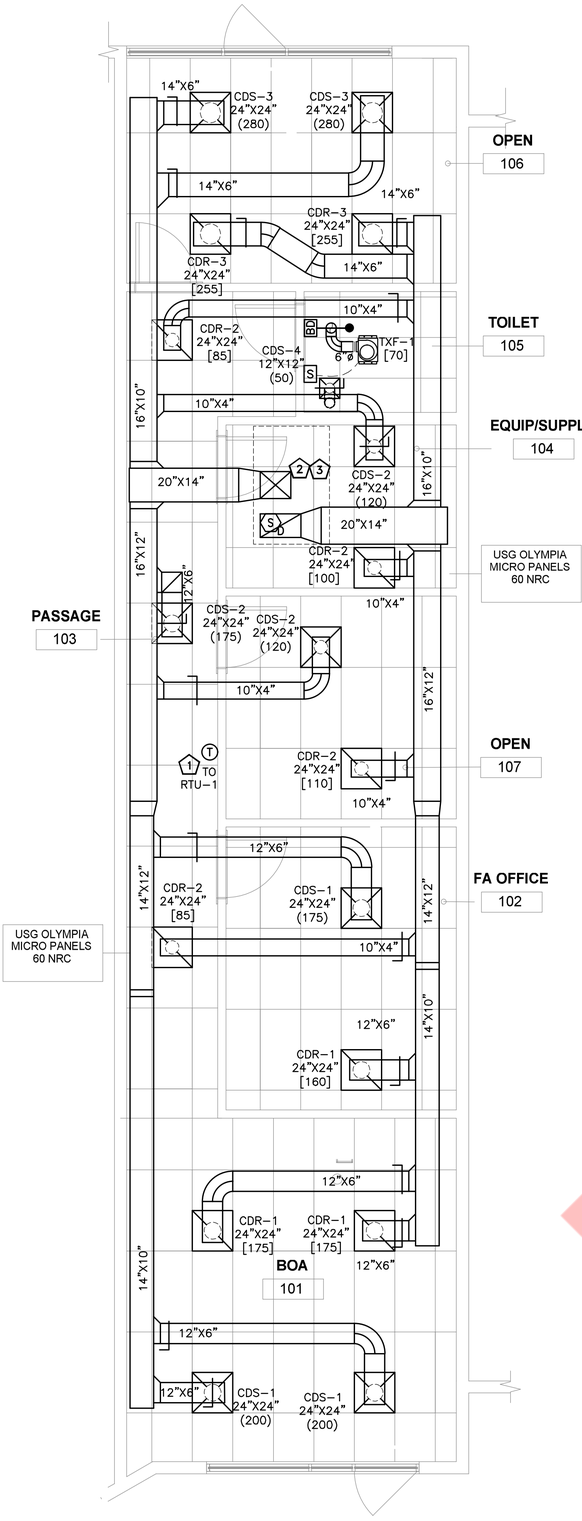
OUR CUSTOM SOLUTION

Our team of design experts with vast experience in designing banks like Citizens bank found the best possible routing for the sanitary and domestic water piping without affecting the operations of other stores. Existing ductwork was utilized to save cost.

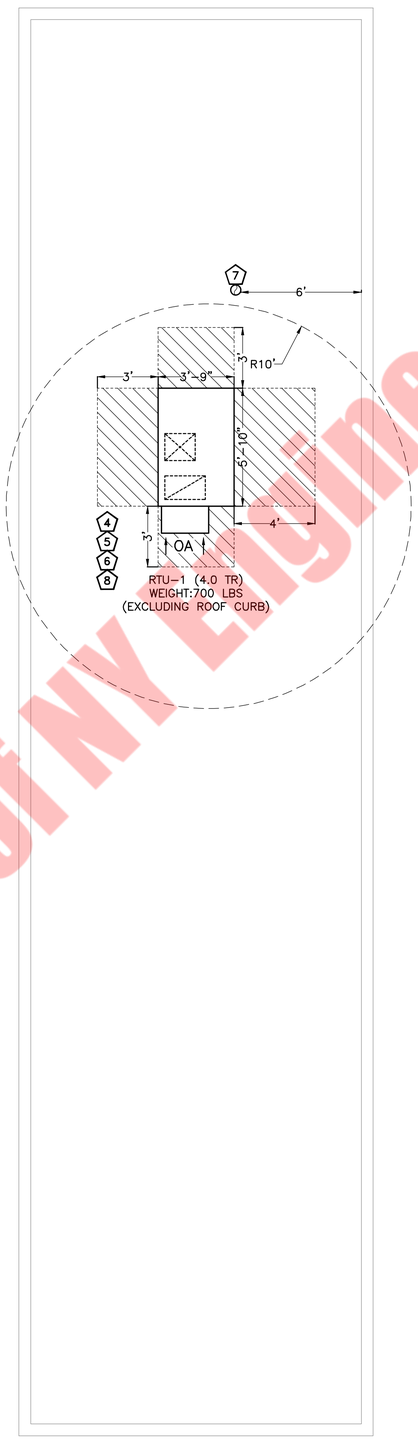
Domestic water and sewer load were calculated and satisfied within the available existing load in compliance with all local and energy conservation requirements. A compact ceiling-mounted water heater was provided to fit in a small space to avoid additional space requirements. Ductwork routing was designed to fit in a short ceiling space.

We saved the cost and time for the client by providing a quick, low-cost, and clash-free design within 2 weeks resulting in a quick construction of the Edward Jones bank.

Area - 3,000 Sq. Ft.
Services Used - Mechanical, Electrical, Plumbing



1 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 MECHANICAL ROOF PLAN
SCALE: 1/4" = 1'-0"

MECHANICAL GENERAL NOTES

A. CONTRACTOR SHALL BALANCE EACH AIR DIFFUSER WITH THE CFM SHOWN PLAN.
B. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR DUCTWORK ROUTING. OFFEST AND RUN DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
C. COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURE ENGINEERS.
D. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
E. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
F. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
G. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
H. ALL EXPOSED DUCTWORK SHALL BE AS SHOWN, DOUBLE WALL, INSULATED METAL, PRIMED FOR PAINTING. ALL CONCEALED DUCTWORK SHALL BE INSULATED METAL RECTANGULAR UNLESS OTHERWISE ALLOWED IN WRITING BY THE ENGINEER OF RECORD. COORDINATE FINAL FINISH WITH ARCHITECT.
I. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
J. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.

MECHANICAL PLAN KEY NOTES:

1. LOCATION OF DIGITAL THERMOSTAT CONTROL. INSTALL AND WIRE NEW 7-DAY PROGRAMMABLE THERMOSTAT. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. PROVIDE LOCKABLE COVER.
2. EXTEND FULL SIZE SUPPLY & RETURN DUCTWORK FROM ROOFTOP UNITS TO SPACE. EXTEND AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
3. SMOKE DETECTOR SHALL BE FURNISHED/INSTALLED BY MECHANICAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR TO SHUT DOWN CORRESPONDING RTU UNDER ALARM CONDITIONS. ALL WIRING SHALL BE IN CONDUIT PER N E C SMOKE DETECTOR SHALL BE SYSTEM SENSOR MODEL DH100ACDCLP OR EQUAL.
4. CONTRACTOR TO RUN CONDENSATE DRAIN FROM RTU-1 TO NEAREST ROOF DRAIN.
5. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCT CONNECTIONS. SET OUTSIDE AIR AS INDICATED ON ROOFTOP UNIT SCHEDULES. MECHANICAL CONTRACTOR SHALL SCRIBE INTO UNIT POSITION OF OUTSIDE AIR DAMPER AND LABEL OUTSIDE AIR VOLUME AND PERCENT OF OUTSIDE AIR. TRANSITION AND CONNECT SUPPLY AND RETURN DUCTWORK FROM BELOW. COORDINATE ROUTING THROUGH STRUCTURAL TRUSSES AND OFFSET AS REQUIRED IN CURB SPACE.
6. COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
7. TERMINATE 6" EXHAUST DUCT UP THROUGH ROOF WITH GOOSENECK AND BIRD-SCREEN. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AR INTAKES AND TERMINATE 36" ABOVE ROOF.
8. ROOF TOP UNIT TO BE INSTALLED ON ROOF CURBS PROVIDED/INSTALLED BY LANDLORD. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF ROOF CURB ON SITE.

PROJECT NORTH