

Revisions:  
ISSUED FOR BID 10/14/2024

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FIRST FLOOR PLAN - HVAC

ROOFTOP UNIT REPLACEMENT  
RAYMOND ELLIS ELEMENTARY SCHOOL  
720 CENTRAL PARK DR, ROUND LAKE, IL 60073  
ROUND LAKE CUSD 116  
884 W NIPPERSINK RD  
ROUND LAKE, IL 60073

Issue Date:  
24 JUNE 2024  
Drawn By:  
CS2  
Job Number:  
886-F-1  
**HV1.1**  
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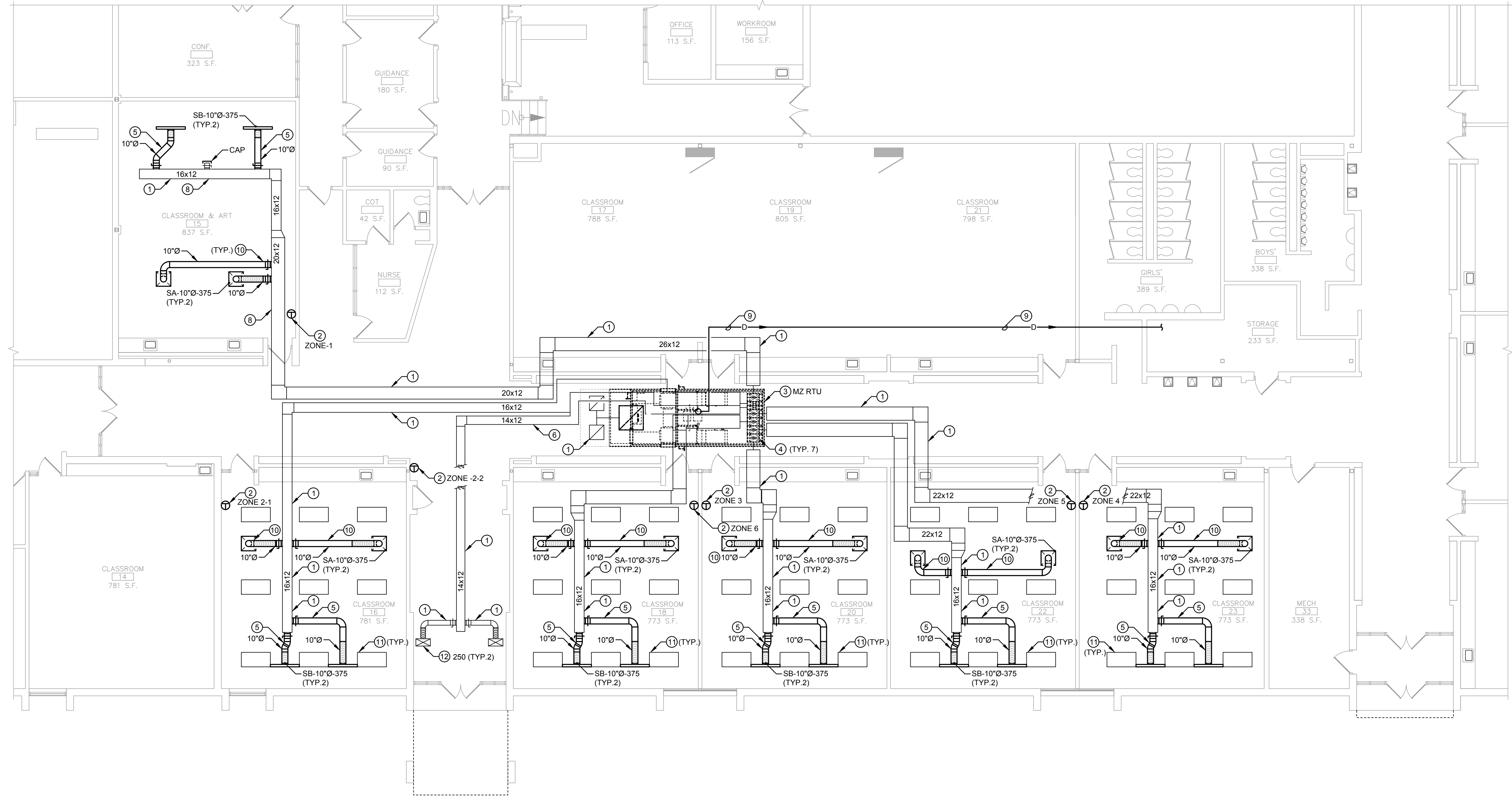
**DRAWING NOTES:**

- EXISTING DUCT BOARD DUCTWORK, DIFFUSERS, REGISTERS, AND GRILLES TO REMAIN.
- PROVIDE NEW DDC THERMOSTAT INCLUDING ALL ASSOCIATED CONDUIT, WIRING, ETC. LOCATE ABOVE ANY ACCESSIBLE CEILING BETWEEN THERMOSTAT AND THE ZONE CONTROLLER IT CONTROLS. COORDINATE WITH UNIT MANUFACTURE AND EXISTING DISTRICT BUILDING AUTOMATION SYSTEM (INTELLI BUILDING CONTROL SYSTEMS)
- NEW CME MULTI-ZONE ROOF TOP UNIT ON ROOF ABOVE. REFER TO ROOF PLAN ON DRAWING M1.2.
- CONNECT EXISTING ZONE DUCTWORK TO NEW CME MULTI-ZONE ROOFTOP UNIT.
- PROVIDE NEW TITUS 10" Ø LINEAR DIFFUSER, NEW 10" DIAMETER BRANCH DUCTWORK BETWEEN DIFFUSER AND EXISTING SUPPLY MAIN, NEW VOLUME DAMPER AND MODIFIED CONNECTION AT SUPPLY MAIN. FIELD VERIFY EXACT LOCATION OF NEW DIFFUSER IN EXISTING 2x4 CEILING TO AVOID LIGHT FIXTURE AIR PATH OBSTRUCTION. ADJUST PATTERN DEFLECTORS PER DETAIL.
- REPAIR DISCONNECTED DUCTWORK AT THIS LOCATION.
- REPAIR HOLE IN DUCTWORK AT THIS LOCATION.
- REPAIR DAMAGED DUCTWORK AT THIS LOCATION.
- PROVIDE CONDENSATE DRAIN OF UNIT CONNECTION SIZE FROM NEW MZ RTU CONNECTION TO MOP BASIN IN NEAREST JANITOR'S CLOSET. MOUNT DROP TO WALL AND TERMINATE WITH INDIRECT CONNECTION. FLASH/SEAL DRAIN CONNECTION AT UNIT AND ROOF MEMBRANE WITHIN CURB PER UNIT MANUFACTURER'S DIRECTION. SEAL PIPE/WALL PENETRATIONS PER DETAIL. FIELD VERIFY EXACT ROUTE TO POSITIVELY PITCH FROM UNIT TO DRAIN.
- PROVIDE NEW TITUS PLAQUE DIFFUSER, NEW 10" DIAMETER BRANCH DUCTWORK BETWEEN DIFFUSER AND EXISTING SUPPLY MAIN, NEW VOLUME DAMPER AND MODIFIED CONNECTION AT SUPPLY MAIN. FIELD VERIFY EXACT LOCATION OF NEW DIFFUSER IN EXISTING 2x4 CEILING TO AVOID LIGHT FIXTURE AIR PATH OBSTRUCTION.
- EXISTING 2x4 BELOW CEILING MOUNTED LIGHT FIXTURE TO REMAIN. FIELD VERIFY EXACT LOCATION.
- EXISTING DIFFUSERS TO REMAIN. BALANCE TO AIRFLOW RATE INDICATED.

**EXISTING DUCT BOARD SUPPLY DUCTS**  
EXISTING SUPPLY DUCTWORK IS CONSTRUCTED OF INSULATION DUCT-BOARD. (NO SHEET METAL). CONTRACTOR TO INCLUDE 10 LINEAR FEET OF REPAIR TO EACH OF THE SEVEN ZONES IN THERE BID SCOPE OF WORK.

**CEILING WORK NOTE:**  
REFER TO ARCHITECTURAL PLANS FOR CEILING WORK IN CONTRACT TO BE PERFORMED BY OTHER TRADES. THIS CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE, RESTORE, CUT, PATCH, PAINT, ETC. ANY CEILING WORK NOT SHOWN ON ARCHITECTURAL PLANS AS REQUIRED TO PERFORM THIS CONTRACTORS WORK. THIS INCLUDES REMOVAL AND REPLACEMENT OF LIGHTS, SPEAKERS, SMOKE DETECTORS, ETC., AS WELL AS REPLACEMENT OF ANY CEILING TRACK & TILES DAMAGED DURING CONSTRUCTION/DEMOLITION. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO DOCUMENT ANY DAMAGED CEILING TILES OR COMPONENTS PRIOR TO CONSTRUCTION/DEMOLITION. THIS CONTRACTOR RESPONSIBLE FOR ALL ASSOCIATED COSTS. CONTRACTOR SHALL PROVIDE ACCESS PANELS AS REQUIRED.

**BUILDING AUTOMATION SYSTEM NOTES:**  
ALL CONTROL WORK SHALL BE AN EXTENSION OF THE EXISTING INTELLI-BUILDING. BUILDING AUTOMATION SYSTEM (BAS) CURRENTLY INSTALLED IN THE BUILDING. CONTACT RICK FREUND 312.735.6546 OR RICK@INTELLI-BUILDING.COM  
TEMPERATURE CONTROLS CONTRACTOR SHALL RE-PROGRAM EXISTING BUILDING AUTOMATION SYSTEM AS REQUIRED, AND/OR PROVIDE NEW CONTROLS. UPDATE ALL EXISTING/NEW IDENTIFICATION TAGS AS REQUIRED.  
PRIOR TO DEMOLITION, THE HVAC CONTRACTOR SHALL COORDINATE WITH THE CONTROLS CONTRACTOR. THE REMOVAL OF ALL EQUIPMENT SO THE EQUIPMENT CAN BE TAKEN OFF-LINE AND CONTROL WIRING REMOVED FROM DEVICE.

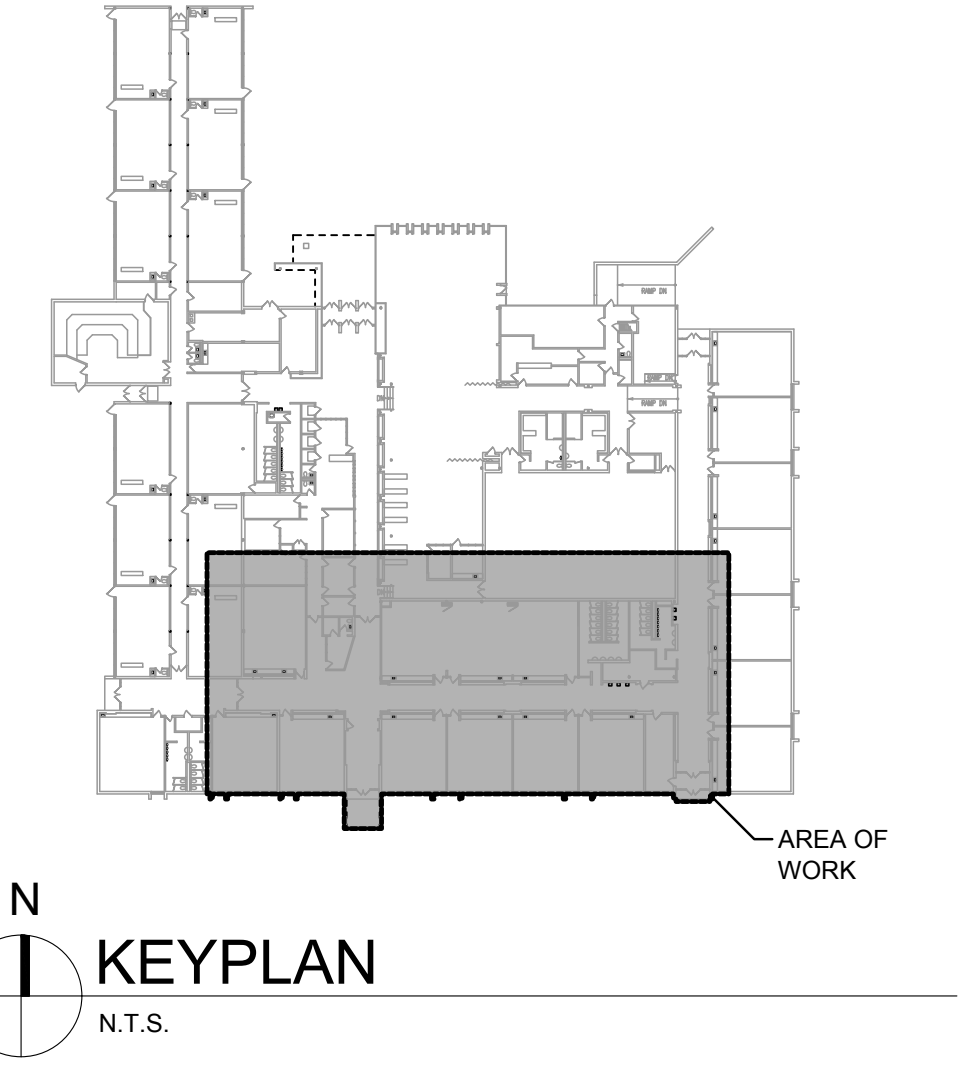


**DIFFUSER, GRILLE AND REGISTER SCHEDULE**

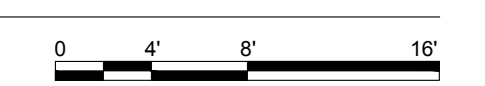
| EQUIPMENT TAG | MANUFACTURER | MODEL   | TYPE                  | NOMINAL FACE SIZE | MATERIAL | MAX. N.C. | NOTES   |
|---------------|--------------|---------|-----------------------|-------------------|----------|-----------|---------|
| A             | TITUS        | OMNI    | SQUARE PANEL FACE     | 24"x24"           | STEEL    | 30        | 1,2,3   |
| B             | TITUS        | TBDI-80 | LINEAR INSULATED BOOT | 48" LONG          | STEEL    | 30        | 1,2,3,4 |

**NOTES:**  
1. OTHER ACCEPTABLE MANUFACTURERS: SEE SPECIFICATIONS.  
2. OFF-WHITE BAKED ENAMEL FINISH.  
3. MATCH FRAME TYPE TO WALL/CEILING TYPE.  
4. (2) - 1 1/2" WIDE SLOTS

**FLOOR PLAN TAG LEGEND:**  
S= SUPPLY  
R= RETURN/RELIEF  
E= EXHAUST  
AIR FLOW (CFM)  
NECK SIZE (IN.)



**FIRST FLOOR PLAN - HVAC**  
SCALE 1/8" = 1'-0"



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