

# DICK SCOBEE ELEMENTARY SCHOOL HVAC System Assessment



Completed for:



February 19, 2021

Site Visits, Analysis & Report by:  
Metrix Engineers  
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## **SCOPE**

Metrix Engineers was hired to perform an assessment of the existing heating, ventilation and air conditioning systems at the Dick Scobee Elementary School site in Auburn School District. The goal of the assessment was to provide an executive summary level of detail regarding the type and condition of the existing mechanical systems, determine if the systems are operating in compliance with their original design intent, and identify any areas of improvement based on site observations.

Dick Scobee elementary is a new facility completed in 2020 that replaced the existing school entirely. The new facility is a two-story building of approximately 75,500 square feet that consists of two classroom wings and a central administration and activities area.

A site walk was conducted on February 17, 2021 to review the existing mechanical systems. This report summarizes Metrix observations based on that visit.

## **EXECUTIVE SUMMARY**

The building appears to be operating per its original design intent. No major operating points of concern were observed and there are no spaces that have been modified beyond the original design intent.

## **EXISTING SYSTEM OBSERVATIONS**

### **HVAC:**

A central gas fired boiler plant comprised of two high efficiency 2,000 MBH gas fired boilers is located in a dedicated boiler room. Heating water is distributed to the building via two central system pumps also located in the boiler room. A central cooling chiller with a cooling capacity of 150 tons is located on grade outside the boiler room. Two central systems pumps located in the boiler room distribute chilled water throughout the building.

Heating and air conditioning to classrooms spaces are provided by fan coil units located in mechanical platforms above each of the two classroom wings. Classroom ventilation is handled by energy recovery ventilators located in the same mechanical platforms as the fan coil units. Heating, cooling and ventilation to administration spaces are provided by a high efficiency variable air volume (VAV) system, with the VAV's, dedicated air handling unit and energy recovery ventilator unit located on a platform above the kitchen. The gym, kitchen and library are each served by a dedicated air handling unit, providing heating, cooling and ventilation.

A spot check of the internals of various HVAC system components was completed during the site visit. Systems scheduled on at the time of the site visit were verified operational. There is some scope that appears to be incomplete from the recent construction of the school that can be added to the project punchlist, however, the items noted below do not impact the ability to occupy the school:

- ERV-1 duct smoke detector does not appear to be installed. Note 1
- SLP Office 143 fan coil return grille in ceiling is covered with tape, not allowing airflow through the grille. Note 2
- Staff Lounge 203 ventilation return grille in ceiling is partially covered with tape, reducing airflow through the grille. Note 3
- Privacy Room 203A is missing a fire sprinkler head. Note 4
- Paint storage was observed in Mechanical Platform 302 at the top of the stairs. Storage of chemicals and paint is not recommended in spaces without a source of dedicated exhaust. Note 5



**Controls:**

Building automation system controls are new Honeywell controls.

A review of the Building Automation System and outside air damper setpoints was conducted and all systems and spaces appear to be meeting or exceeding design outdoor airflow ventilation rates.

During control system review, no space temperature deficiencies were identified.





Dick Scobee Elementary  
HVAC System Assessment Notes

Note	Additional Notes		Estimated Completion Date	Final Completion Date
1		Notify Capital Projects of finding.	3/11/21	3/11/21 email Kenworthy
2		Remove tape	3/11/21	3/11/21
3		Remove tape	3/11/21	3/11/21
4		Notify Capital Projects of finding.	3/11/21	3/11/21 email Kenworthy
5		Notify Capital Projects of finding.	3/11/21	3/11/21 email Kenworthy

Revision Date 3/11/21