FACILITY CONDITION ASSESSMENT

prepared for

Montgomery County Public Schools
45 West Gude Drive, Suite 4000
Rockville, MD 20850

Redland Middle School
6505 Muncaster Mill Road
Rockville, MD 20855

PREPARED BY:
Bureau Veritas
6021 University Boulevard, Suite 200
Ellicott City, MD 21043
800.733.0660
www.bvna.com

BV CONTACT:
Bill Champion
Senior Program Manager
443.622.5067
Bill.Champion@bureauveritas.com

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DATE OF REPORT:
August 14, 2025

ON SITE DATE:
April 29, 2025

Middle School Building: Systems Summary		
Address	6505 Muncaster Mill Road, Rockville, MD 20855	
GPS Coordinates	39.14068, -77.13193	
Constructed/Renovated	1971/2011	
Building Area	112,297 SF	
Number of Stories	1 above grade (mechanical mezzanines are present but not included in the count)	
System	*Description*	*Condition*
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip/wall footing foundation system	Good
Façade	Brick Windows: Aluminum	Good
Roof	Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, ceramic tile, painted CMU Floors: Carpet, VCT, ceramic tile, quarry tile, wood strip, unfinished concrete, rubber floor Ceilings: Painted gypsum board, suspended ACT, painted exposed steel roof framing	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and cast iron and PVC waste and venting Hot Water: Gas water heater with integral tank, domestic hot water heat exchanger Fixtures: Toilets, urinals, and sinks in restrooms	--

Middle School Building: Systems Summary		
HVAC	Central System: Boilers, chiller, and cooling tower feeding water source heat pumps and hydronic air handlers Non-Central System: Electric ductless split-systems Supplemental components: Hydronic and electric suspended unit heaters	Fair
Fire Suppression	Wet-pipe sprinkler system, fire extinguishers, kitchen hood system	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: Linear fluorescent Exterior Building-Mounted Lighting: HPS Emergency Power: Natural gas generator with automatic transfer switches	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair

Site Information		
Site Area	21.0 acres (estimated)	
Parking Spaces	116 total spaces all in open lots; 2 of which are accessible	
System	*Description*	*Condition*
Site Pavement	Asphalt lots with adjacent concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Property entrance signage; chain link fencing Playgrounds and sports fields and courts Heavily furnished with park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Significant landscaping features including lawns, trees, bushes, and planters Irrigation not present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Pole-mounted: HPS	Fair

Historical Summary

According to historical sources, the site was originally developed in 1971 for the construction of the current Redland Middle School. In 2009, renovations were performed to the HVAC system, including the replacement of the water-cooled chiller, hot water boilers, interior water source heat pumps, and the replacement of the mechanical and electrical equipment which supports these components. In 2010 and 2011, additional extensive interior renovations were performed including the renovation of the gymnasium, locker rooms, and the music room, replacement of the plumbing fixtures, fire sprinkler upgrades, and replacement of the interior doors and ceilings. More recent interior renovations include the replacement of the floor coverings in the administrative office and media center. According to on-site personnel, renovation of the interior restrooms is planned for the very near future as budgets allow. Since the original development of the campus, several site elements have been added to the property including athletic fields, courts, playgrounds and additional parking areas and driveways.

Architectural

The educational building consists of a single-story masonry structure. Secure access to the building is through the main entrance located along the south elevation of the building. The building contains classrooms, restrooms, a media center, storage and mechanical spaces, offices, gymnasiums and locker rooms, and cafeteria and kitchen spaces to support the needs of the students and the staff.

According to on site personnel, the floor finishes located in the media center and the administrative offices were recently replaced. The remainder of the interior wall, ceiling, and floor finishes, and interior doors appear to be well maintained, and only typical lifecycle replacement of these items should be anticipated. The exterior of the building, including the exterior finishes, roof, exterior doors, and exterior glazing units, also appear to be well maintained and typical lifecycle replacements should be anticipated. At the time of the assessment, several solar panel arrays were located on the roof of the building. According to on-site personnel, neither the maintenance nor the replacement of the roof mounted solar equipment is the responsibility of the school maintenance staff.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The campus is connected to the local municipal water and sewer systems and the local natural gas utility. Domestic hot water is supplied by a plate and frame style heat exchanger and a gas fired hot water heater with an integral tank. Most of the domestic water fixtures, including drinking fountains, toilets, sinks, and urinals appear to be well maintained and only typical lifecycle replacements should be anticipated.

Electric power is supplied to the building through a series of electrical distribution panels and transformers located throughout the building. A natural gas-powered generator coupled with automatic transfer switches provides emergency power.

According to on-site personnel, replacement of the original lighting fixtures with LED fixtures has not yet been completed. In order to provide better lighting efficiency and performance for the building, replacement of the original interior and exterior lighting with an LED equivalent fixture is recommended. At the time of the assessment, most of the main electrical components which service the building appear to have been well maintained and only typical lifecycle replacements should be anticipated.

Heating and cooling is supplied primarily by a network of water sourced heat pumps and hydronic air handlers located throughout the interior of the building. Chilled water for the hydronic system is supplied by an interior water-cooled chiller coupled with an exterior cooling tower. Hot water is supplied by a series of high efficiency gas fired boilers located within the main mechanical room. The primary HVAC system is supplemented by several electric and hydronic unit heaters and electric ductless split systems which have been installed at various locations throughout the building. At the time of the assessment, the components of the HVAC system, including the chillers and the boilers, appeared to be well maintained and only typical life cycle replacement of the components should be expected.

Fire protection is provided by a centralized fire detection and alarm system which includes a network of smoke and heat detectors, alarm pull stations, and audible alarms. Emergency exit signage is located throughout the building along with emergency lighting in key areas. A centralized fire suppression system provides sprinklered protection throughout the building.

Site
Access to the site is provided by paved driveways which connect the parking and drop-off areas with the adjoining public roads. Concrete sidewalks and open air covered and uncovered walkways and courtyards provide access to most of the campus. Sports fields, athletic courts and playgrounds are located throughout the campus and landscaped areas adjoin the educational building. All of the asphalt parking areas and driveways appear to be well maintained, and typical life cycle refurbishment and replacement of the asphalt surface and pavement markings should be anticipated.

Facility Condition Index (FCI) Depleted Value
A School Facility's total FCI Depleted Value (below) and FCI Replacement Value (above) are the sum of all of its building assets and systems values.

The Facility Condition Index (FCI) Depleted Value quantifies the depleted life and value of a facility's primary building assets, systems and components such as roofs, windows, walls, and HVAC systems. FCI Depleted Value metrics are useful for estimating the levels of spending necessary to achieve and maintain a specific level of physical condition. Lower scores are better, as facilities with lower FCI scores have fewer building-system deficiencies, are more reliable, and will require less maintenance spending on systems replacement and mission-critical emergencies.

The FCI Depleted Value of this school is 0.550905.