
Appendix E: Example of a Facilities Survey Report

The following pages show a sample Facilities Survey Report. The report does not need to look like the sample—or contain all of the elements contained in the sample report. This is merely an example to illustrate one way this type of report can be presented.

Science Building

Building No:	7409
Function:	Classrooms (2 story)
Size:	32,682 GSF total
Year Built	1976
Major Renovation	None

Architectural

The exterior of this building is a brick façade with areas of stucco finish. The building in general, appears to be structurally stable and shows no visual evidence of any stress-related cracks. The exterior entry system has concrete stairs and a metal frame and glass door system. The front entrance is ADA compliant with ramps for wheelchair access. This building has an elevator and is ADA compliant. All windows are single pane and appear to be in good working order. However, the window frame caulking is showing signs of deterioration and is near the end of its useful service life.

Architectural (cont.)

The roof is a four-ply built-up system and it appears to be in very good condition. This roof was last replaced November 1991 and it has an active service warranty that expires November 2001 and a material warranty that expires November 2006.

The building hallways and main entrance floors are terrazzo. There is carpeting in some of the offices. Based on our observations, all walls, doorframes and doors should be painted this year and this painting is scheduled to occur during school breaks.

Mechanical

The design of the HVAC system for this building is based on a four pipe, chilled water-cooling, hot water heating, built-up air handling apparatus with air side economizer. The air handling apparatus includes preheat coil, chilled water coil, return fan with inlet guide vanes, supply fan with inlet guide vanes, and the necessary motorized damper arrangement to facilitate air side economizer performance. The air distribution system is comprised of sheet metal ductwork with wrap insulation and variable air volume hot water reheat terminal boxes. Controls are pneumatic and are arranged to maintain temperature control. There are one each chilled and hot water constant volume circulating pumps. The air side economizer controls have been disabled. All of the HVAC system is original 1976 equipment. The built-up air handling apparatus and associated pumping and piping system are in poor condition. Replacement of the built-up air handling apparatus and associated piping is recommended in the near term.

Mechanical (cont.)

The plumbing system for this building is original 1976 equipment with the exception of the electric domestic water heater which is approximately five years old. An acid waste piping system exists and is made of glass material. No acid neutralizing basin exists and therefore all sanitary waste dumps directly into the site and city sanitary sewer systems. The plumbing system is in fair condition and is in no immediate need of replacement.

There are two medical gas systems that are utilized in this building and they are medical air and medical vacuum. Both units are original 1976 equipment. The medical air pump appeared to be in fair condition. The medical vacuum pump is leaking oil and appears to be in poor condition. Funds to repair the oil leaking vacuum pump should be directed from the M&O annual allowance.

There is no automatic sprinkler-type fire protection system installed in the Science building. During the next major renovation project, however, the installation of such a system is recommended.

Electrical

The electrical service to this building is 277/480V, 3 phase, 4 wire, solidly grounded wire without ground fault protection. Service entrance/lateral is underground, copper, rated 600 amps. This service provides 15.2 watts/gross sq. ft. to the building, which is more than adequate for the current load. The existing service equipment is a circuit breaker type distribution panelboard with a single main circuit breaker, which serves as the service disconnecting means. The main distribution panelboard was manufactured by Federal Pacific, a company that is no longer in business.

The main panelboard feeds the dry type transformer(s), which in turn feeds the 120/208V panelboard(s) which serve receptacle loads throughout the building. All wiring is distributed within the building in concealed metal raceway. All building wiring appears to be copper; no aluminum wiring was observed. This building has no emergency (back-up) power source in the event of failure of the normal utility source.

The power distribution system is the original building system and is twenty-two years old. Capacity is more than adequate. Minor code violations in the building were observed such as disconnect switches without NEC required working clearances. Overall, the system appears to be safe and well maintained. The system does not include transient voltage surge suppression (TVSS) devices at the service equipment or panelboards.

Electrical (cont.)

The building lighting consists primarily of 2' x 4' and 2' x 2' fluorescent acrylic lens troffers. Some classrooms use 2' x 4' parabolic fluorescents and some use 2' x 4' "egg crate" type diffusers. Fluorescent fixtures use a mixture of magnetic ballasts with T12 lamps and electronic ballasts with T8 lamps. Lighting levels appear to be adequate throughout the building. No emergency egress lighting is provided in the building. Exit signs are fluorescent type and do not have battery backup. Light fixtures are all switched locally with no building-wide lighting control systems. Exterior lighting (incandescent) is provided at building exits but is not installed on emergency power.

The building telephone system is typically wired in concealed conduit distributed from a common backboard. Computer cabling is Category 5 type-plenum rated cable distributed above accessible ceilings without conduit and dropped to workstations in surface mounted raceway.

The fire alarm system is a single zone hard wired system with audible alarm devices in main corridors. Visual devices are not installed. No smoke detectors were observed. The fire alarm control panel appears to be the original building equipment and does not have battery backup. The building does not have a sprinkler system.

Electrical (cont.)

The building does not have a lightning protection system and no special security, intrusion, CCTV, intercom or public address systems were found.

The building has a single hydraulic elevator. The elevator does not have smoke detectors in the lobby and does not appear to be interconnected with the fire alarm system.

Findings, recommendations and cost estimates for conditions cited for the Science Building are tabulated on the following page.