

Memorandum

Date: 21 March 2019

Project: Douglas MacArthur Elementary School Revitalization Study

Subject: Development Considerations

After reviewing the existing building and its site, it is our professional opinion that providing a school that will meet the ACPS Education Specifications is best done by replacing the existing, over 75-year old, single-story building with a new, three story structure.

Primary factors leading to this conclusion are:

- The condition of the existing building will require large scale demolition and construction of a significant addition in order to meet the building code and space requirements for a contemporary elementary school. Thus, it will be highly impractical if not impossible to occupy parts of the building during phased renovation.
- 2) Similarly, retaining the existing building while a new one is constructed on the 4.4 acre site is not possible because the existing open space is not large enough to construct a new building.
- 3) Nor is the existing open space adequate to accommodate enough temporary trailers to maintain academic and ancillary services on site during a construction period.
- 4) Expansion of the site is impractical. The site is abutted by single-family residences on the east and west, Janneys Lane on the south and public open space with extreme topography on the north, which precludes reasonable expansion.

Site expansion into the public open space on the north was considered but is not recommended due to high development cost. The terrain immediately over the school's north property line drops into a 32-foot deep ravine which would be cost-prohibitive to fill to the elevation required to support development. In addition, this abutting area contains highly plastic Marine Clay soils (see City of Alexandria Marine Clay Areas Map – November, 1976) which will require costly engineering to stabilize for construction.

Given items 1 through 4 above, we recommend that a new, multi-story building be constructed that will accommodate the number of classrooms and ancillary services to serve the projected student population, maximize open space for playing fields, and provide a high-quality learning environment for use well into the future.