

SITE DEVELOPMENT REQUIREMENTS

3.1.5

SITE DEVELOPMENT REQUIREMENTS SUMMARY
STRUCTURES AND FENCES
SITE ACCESS AND CIRCULATION
PARKING AND PAVING
CODE REQUIREMENTS
ZONING SETBACKS AND LIMITATIONS
ACCESSIBILITY REQUIREMENTS
EASEMENTS
WETLANDS AND/OR FLOOD RESTRICTIONS
EMERGENCY VEHICLE ACCESS
SAFETY AND SECURITY REQUIREMENTS
UTILITIES
ATHLETIC FIELDS AND OUTDOOR EDUCATIONAL SPACES
SITE ORIENTATION AND LOCATION

SITE DEVELOPMENT REQUIREMENTS

SUMMARY

The current school site at 685 Washington St. is the only site for consideration under this study. This report also contemplates three different enrollments: 715, 985, and 1080 students. Any project will need to consider how the existing site can support repair or renovation-only alternatives for 715 students or addition-renovation / new alternatives for all proposed enrollments. In addition to considering development of the site, construction operations and swing-space considerations – including associated site logistics and costs – are considered in the Evaluation of Existing Conditions in Section 3.1.4. This section will evaluate more specifically the site development requirements for any completed project, but some consideration of construction operations is still warranted given the significant design and development constraints imposed by an occupied building and site.

STRUCTURES AND FENCES

The existing Consentino and Silver Hill schools are the primary structures on the current site. The Consentino school occupies the northern portion of the site with associated drives, pedestrian pathways, parking areas, and playfields to the west, north, and east of the current school. (Image 1) Immediately south of the Consentino school is the shared bus loop and parking area associated with the Silver Hill school and southeast of the Consentino school is the Silver Hill school itself. The bus loop and Silver Hill access drive around the school effectively form the southern boundary for any proposed scope of work at the Consentino school. Alternatives that considered development beyond this boundary were considered early in the PDP phase, but were abandoned given that they would be costly, would negatively impact the Silver Hill school operations, and did not result in substantial benefit to the Consentino school. The other development boundaries are Washington St. to the west and the project property lines to the north and east, including associated setbacks.

Currently, limited fencing exists at the project site. Short, intermittent sections of chain link fence exist along the northern property line. All of the proposed alternatives will consider new continuous fencing along the entire north and east property lines. Those site boundaries are in locations that are not readily and consistently observed portions of the site. The western side boundary can be monitored from the administrative spaces in the school and the southern school perimeter can be monitored from the Silver Hill school administration spaces.

In addition to the two schools, there is a storage container and a Massachusetts Department of Environmental Protection air quality monitoring station on site. All proposed alternatives will consider relocation of the air quality monitoring station and the construction new location of a storage shed for facilities maintenance.

SITE ACCESS AND CIRCULATION

Existing vehicular access to the site is through two curb cuts along Washington St. The southern curb cut provides access to the Silver Hill parking lot, the Silver Hill delivery / emergency vehicle / parent route, the shared bus route (around the Silver Hill parking lot), the Consentino van / taxi loop along the west side of the school, and access to the Consentino visitor parking lot. The northern curb cut provides access for the Consentino staff parking and Consentino parent pick-up / drop-off loop.

Pedestrian access is provided through several paved walks and striped crosswalks and several informal pedestrian paths across the site property line to adjacent neighborhoods. The Traffic Operations Diagram included in Section 3.1.4-B2 illustrates the primary pedestrian routes within and immediately adjacent to the project site. As the diagram illustrates, there are several crossings of pedestrian paths and vehicular paths, each of which require careful consideration when evaluating the various alternatives. Some pathways to the south and southeast of the Silver Hill school are dedicated pedestrian or pedestrian / bike routes, but they require several crossings of vehicular routes to access those paths. Only the informal path across the play fields to the north of the Consentino is a pedestrian-only path that doesn't require crossing vehicular routes.

Bicycle traffic utilizes a combination of paved pedestrian and vehicular routes into and within the site. There are no paved sidewalks along Washington St. south of the south curb cut, but there is a paved walk on the east side of Washington St. north of the site.

Each alternative attempts to re-use the existing curb cuts and improve separation of on-site traffic. Although complete isolation of the various traffic types is not feasible, efforts in the PDP phase have been made to separate the bus routes from parent drop-off route and to separate vehicular traffic in general from pedestrian traffic.

PARKING AND PAVING

Similar to the site access configurations noted above, any proposed parking and paving patterns will, to some degree, follow what has already been established. Separate parking for the Consentino MS will be established and expanded, and more parking spaces will be required as noted in the Zoning regulations portion of this report.

CODE REQUIREMENTS

Any new facility or addition to the existing building will comply with all current applicable building and accessibility codes. Alternatives that consider alterations or repairs to the existing building will comply with codes as applicable to the scope of work. No significant impediment to compliance with codes is anticipated for any of the proposed alternatives. For a more detailed description of applicable

regulations and an assessment of the existing building, refer to the Regulatory Overview and Regulatory Assessment in Section 3.1.4-A.

ZONING SETBACKS AND LIMITATIONS

Specific requirements for zoning setbacks and other zoning requirements are described in Section 3.1.4-A1. All of the proposed new construction or addition-renovation options comply with setback requirements for the district. Because the district has a limitation of 2.5 stories and 35 feet in height, any proposed alternative that utilizes a three-story or four-story massing will require adjustment to zoning requirements. A four-story building is assumed to be approximately 60 feet in height. A 3-story building is assumed to be approximately 46 feet in height. A two-story classroom wing would be approximately 30 feet in height and a new gymnasium would be approximately 34 feet in height, both of which would comply with zoning requirements. Each proposed alternative would be required to provide 3 parking spaces per classroom, but the actual number of required classrooms cannot be determined until the selected alternative is more developed in later project phases.

ACCESSIBILITY REQUIREMENTS

Similar to building code requirements, any all-new or addition alternatives will comply with accessibility requirements. The renovation-only and repair-only alternatives will certainly exceed the threshold compelling full-facility compliance with Massachusetts accessibility regulations (521 CMR) and each of these alternatives have assumed that improvements to accessibility such as new elevators, platform lifts, and reconfiguration of some site features will be required. No variances to accessibility requirements are anticipated at this time.

EASEMENTS

The Title Analysis included as an appendix to this report indicates one easement held by the gas company for the gas line connecting the north end of the building (at the existing boiler room) to Washington Street. The existing site plan generally shows the location of this utility easement. Any proposed alternative will seek to work with the utility company in both maintaining the existing gas service during construction / alterations and reconsidering the condition and location of the current easement as part of a completed project.

WETLANDS AND/OR FLOOD RESTRICTIONS

There are no known wetlands and/or flood restrictions on the site at this time.

EMERGENCY VEHICLE ACCESS

Each of the two existing schools is provided with a full-perimeter emergency vehicle access loop. It is possible that the Fire Department will require a similar full-perimeter loop as part of any proposed alternative and each alternative has been developed to either provide such a loop or allow for one to be incorporated should it be required. For some alternatives, the access loop maintains a tight perimeter to each individual building and for other alternatives, the access loop is generalized to the site as a campus, allowing for through-traffic of emergency vehicles.

SAFETY AND SECURITY REQUIREMENTS

Specific to the site, each alternative will seek to clarify and make evident the main entry or entries into the site from Washington St. Administrative spaces will be positioned within the building to maintain “eyes on the street” for visitor, delivery, and other vehicles entering and leaving the site. To the north and east of the project location, perimeter fencing will be developed that reinforces the message of territoriality of the site. This perimeter fencing will need to be carefully evaluated to see what, if any, pedestrian openings, or access to adjacent neighborhoods should be considered. The south pedestrian access paths (southeast and south of Silver Hill school) present unique challenges in establishing well monitored but inviting pedestrian access to the site. Specific to the Consentino school, some administrative spaces or opportunities for visual access will also be incorporated into the south elevation of each alternative.

UTILITIES

Currently, domestic water, natural gas, electrical, and telecommunications utilities are all routed in a common corridor location from the north curb cut at Washington street, through the north parking lot, and into the boiler / main electrical room. The existing sewer leaves the building at the southern end of the west elevation and connects to the municipal sewer near the south curb cut onto Washington St. Storm drainage and roof drains also tie into the municipal storm drain at Washington St. Existing utility routes will need to be maintained during construction since the existing Consentino school is anticipated to remain occupied throughout construction phases. Independent utility routes to a new mechanical / electrical / water entry location will be established to permit the installation of new utilities without disrupting school operations. Sewer connections will most likely still connect into Washington St. Opportunities to connect to utilities at Virginia Avenue will be investigated following selection of a preferred alternative.

ATHLETIC FIELDS AND OUTDOOR EDUCATIONAL SPACES

There are no specific athletic field requirements for the school (such as a little league baseball field or minimum size and type of soccer fields). However, the current baseball field is shared by both

Consentino and Silver Hill schools and the soccer fields east of Consentino are also very popular. The selected alternative will make efforts to preserve as much large open green space as possible in order to mitigate the impact of a potentially larger building footprint. Outdoor educational spaces will be incorporated into the project but have different requirements than athletic fields. Rather than large expanses of open space, outdoor educational spaces will benefit from close walking proximity to classrooms and more intimate and inviting settings.

Repair-only or renovation-only alternatives will create the greatest potential to improve outdoor athletic areas since they don't result in an increase in building footprint. All-new and addition-renovation options that attempt to consolidate additional square footage closer to the north and east property line will create more opportunities to maintain or re-create shared athletic space between the Silver Hill and Consentino schools. Alternatives that divide the existing green space into smaller outdoor spaces provide a variety of opportunities for outdoor educational space. Prioritization of the type, amount, and configuration of outdoor athletic and educational spaces has been incorporated into the evaluation of alternatives included with this report.

SITE ORIENTATION AND LOCATION

The current school building orients the two-story classroom wing along an east-west axis, optimizing daylighting for the classrooms in that wing. However, some spaces within the building are land-locked, offering no views to the exterior into educational or administrative spaces. The repair-only and renovation-only options will explore opportunities to improve upon the current school building orientation and configuration with re-organization of interior spaces (for the renovation-only option) or though improved daylighting through repaired skylights (in the repair-only option).

Addition-renovation and all-new alternatives seek a balance between linear massing of classrooms and administrative areas to maximize visual and solar access and a more compact massing that improves energy efficiency though minimizing exterior envelope areas. Classrooms would ideally be oriented north / south on the site to minimize the potential for glare within educational spaces. The location of any proposed new construction is largely dictated by the existing schools and site access drives. The buildable area north and east of the Consentino are a direct result of these site limitations, but still afford opportunities for high quality daylighting, improved site access and security, and exterior play and educational spaces.

THIS PAGE INTENTIONALLY LEFT BLANK.



THIS PAGE INTENTIONALLY LEFT BLANK.