

Appendix

Summary of Other Site Characteristics: Utilities, Environmental and Cultural

Utilities/Easements [for more information on utilities/easements, see [Appendix 9 Site Plans and the Supplemental Narrative](#), p.2 [Appendix 10](#)]

The public water supply and sanitary sewer system have adequate capacity for the proposed land uses. It is recommended that, when Keystone Boulevard is extended to Old Reading Pike as envisioned by this project, that the 12 inch water pipe that services Keystone Boulevard be extended to Old Reading Pike as well (approximately 4,500 linear feet). Bursich has estimated the cost of this water line extension as \$550,000. Sanitary Sewer. Adequate capacity exists to service the KEEP project site. Assuming that low pressure sanitary sewer is utilized, the estimated cost of extending sanitary sewer along Keystone Boulevard is \$750,000 [for more information on the public water supply and sanitary sewer system, see [Appendix 10 Supplemental Narrative](#), [Appendix 9 Site Plans](#) and [Appendix 12 Keystone Boulevard Cost Estimate](#)].

Electric and Natural Gas Service. Electric and natural gas service area available for the Project Site, but detailed information about such service has not been analyzed. (PECO is the provider of electric and natural gas to the two municipalities). However, the Project Site is well-located for electric service, positioned just five miles from Exelon's Limerick Nuclear Generating Station. Additional research will need to be undertaken as part of the design phase of future development [for more information on electric and natural gas infrastructure, see [Appendix 10 Supplemental Narrative](#) and [Appendix 9 Site Plans](#)].

Available communications infrastructure exists (which is provided by Verizon and Comcast) to support the redevelopment of the Project Site. Further evaluation shall be undertaken as part of the design of future development.

For more information on communications, see [Appendix 10 Supplemental Narrative](#) and [Appendix 9 Site Plans](#)].

Storm sewer. There are no known storm sewer system capacity issues which would restrict the overall development of the KEEP Project Site if the floodplain and conveyance issues are adequately addressed. To meet current NPDES permit requirements, stormwater management basins and facilities will need to be provided for peak runoff rate control (detention), as well as for runoff volume reduction (infiltration) and water quality. Soil suitability will need to be verified through actual field testing at the time of design of any infiltration facilities [for more information on storm sewer, see the [Appendix 10 Supplemental Narrative](#), [Appendix 9 Site Plans](#) and [Appendix 12 Keystone Boulevard Cost Estimate](#)].

Stormwater Management may be conducted on a site-by-site basis. However, developers are encouraged to consolidate properties or establish shared stormwater management facilities with adjacent properties. Should the latter occur, a management entity for the area could achieve

efficiencies and cost savings. The site plans prepared by Bursich show conceptual locations for stormwater management basins or other stormwater facilities. These facilities include those that cross current property lines. Bursich estimated the cost of stormwater management basins to serve the entire KEEP project site at \$4.6 million.

Environmental Conditions

Superfund and Brownfield Sites. There are no Superfund sites in the KEEP Project Site. However, the KEEP Project Site includes many former and current industrial uses, and therefore includes brownfields and has numerous contamination issues. The Environmental Overview consulted a range of sources to compile past histories of each property in the KEEP Project Site, along with preliminary recommendations regarding environmental studies and permits that would need to be obtained prior to site reuse. Extensive funding opportunities at the state and federal levels exist for brownfield remediation and contaminated site cleanup. *For the Waste Overview Map, see (Figure 2, p.5) in Appendix 8: Environmental Overview.*

Streams. In addition to the streams shown on the Site Plans provided by Bursich, detailed information about the five streams in the KEEP project site (all unnamed tributaries) is provided A.D. Marble [*see Appendix 8: Environmental Overview, p.74*]. Detailed information about waterways was provided in the Overview based on review of existing literature and mapping, followed by field observation. Waterways were flagged for subsequent survey by the Crossroads Group, LLC. A qualitative in-stream assessment will be used for water obstruction-encroachment permits (Chapter 105, from the Department of Environmental Protection (DEP) and Chapter 404 from the Army Corps of Engineers (ACOE)).

Delineated wetlands. The Environmental Overview calculated that there are 17 wetlands comprising a total of 12.75 acres within the KEEP Project Site. This was based on review of existing literature and mapping followed by field investigation.

Woodlands exist along the edge of, and to the south of the KEEP Project Site. These create an attractive view, particularly those located in the riparian corridor along the Schuylkill River. Within the KEEP Project Site, woodlands are generally not present, with the exception of a few areas. Property #8 is primarily wooded. The southern portion of that property, the eastern portion of Property #5, and the extreme western portion of Property #2 are wooded where wetlands exist.

Floodplains. Much of the KEEP project site is in the FEMA 100-year floodplain. The floodway impacts the southern portion of the project site, including existing Keystone Boulevard. The floodway would be impacted by an extension of Keystone Boulevard. The Site Plans were drawn to ensure that future building sites are located outside the floodway (Keystone Boulevard, access driveways and pathways would traverse the floodway). Ongoing dialogue with the Department of Environmental Protection (DEP) and Army Corps of Engineers (ACE) will be required to ensure that development plans are consistent with DEP and ACE regulations. FEMA's Letter of Map Revision (LOMR) process ensures that new fill related to development will not raise the flood level and the floodplain will be protected.

Woodlands. Wooded areas on the KEEP Project Site are limited. More significant wooded areas lie to the south, in the riparian areas along the Schuylkill River. Site Plans [[Appendix 9](#)] show the wooded areas on the KEEP project site. The wooded areas in these locations create attractive views from the KEEP project site, and help create conditions conducive to hiking, walking, boating, fishing and bird watching [*See Appendix 31 Woodlands*].

Steep slopes. Generally, the KEEP project site is flat [*see Appendix 30 Slopes*]. However, steep

slopes exist in some locations such as the central portion, (Property #5 on Site Plans) and on the southwest portion of Property #7) where a reservoir exists. See [Appendix 9 Site Plans](#) for more information.

Threatened/endangered species in the KEEP Project Site could include the Eastern Redbelly Turtle and the Eastern Spadefoot Toad. Due to the wetlands and streams in the Project Site, a habitat assessment and/or survey would likely need to be completed prior to any land development. For cost estimates for such surveys, see [Appendix 29 Soft Costs](#). Since wetlands are present on-site and Montgomery County is known to support Bog Turtle habitat, that species needs to be considered as well. The U.S. Fish and Wildlife Service requested a Bog Turtle habitat survey.

Hazardous/residual waste. After consulting a variety of sources and conducting a limited field view, A.D. Marble formulated a “Waste Overview Summary Table” in the Environmental Overview, p.6 [\[Appendix 8\]](#). This table serves as a reference source for information on the past use of each property on the KEEP project site. In some cases, the Overview recommends that a Phase I Environmental Site Assessment (ESA), and/or soil and groundwater sampling be undertaken upon future development. The Overview notes that the property formerly hosted a landfill; thus a developer may acquire the assumption of responsibility for the abandoned residual waste landfill, associated leachate collection system, and potentially groundwater monitoring.

Cultural resources (historic structures/archaeological resources).

There are two resources that have been certified “Eligible” for the National Register of Historic Places: the Gudebrod Brothers Silk Factory and Reading Railroad, Main Line (Philadelphia to Port Carbon) [see [Appendix 8 Environmental Overview “Figure 3”, Historic Architectural Resources, p.48](#)]. Certified “eligible” properties require consideration in planning for federal, federally-licensed, and federally-assisted projects, consistent with Section 106 of the National Historic Preservation Act of 1966. Research conducted for the KEEP Specific Plan identified 11 architectural resources and potentially historic resources, several of which are located on Old Reading Pike. The Plan recommends that these resources be documented on an Abbreviated Historic Resource Survey Form (HRSF). Archaeological evidence in the area indicates that The Archaeological Sensitivity map shows areas of moderate to high sensitivity for archeological resources; the U.S. Army Corps of Engineers has indicated that additional archaeological studies will be required [see [Appendix 8 Environmental Overview “Figure 4”, p.52](#)].

