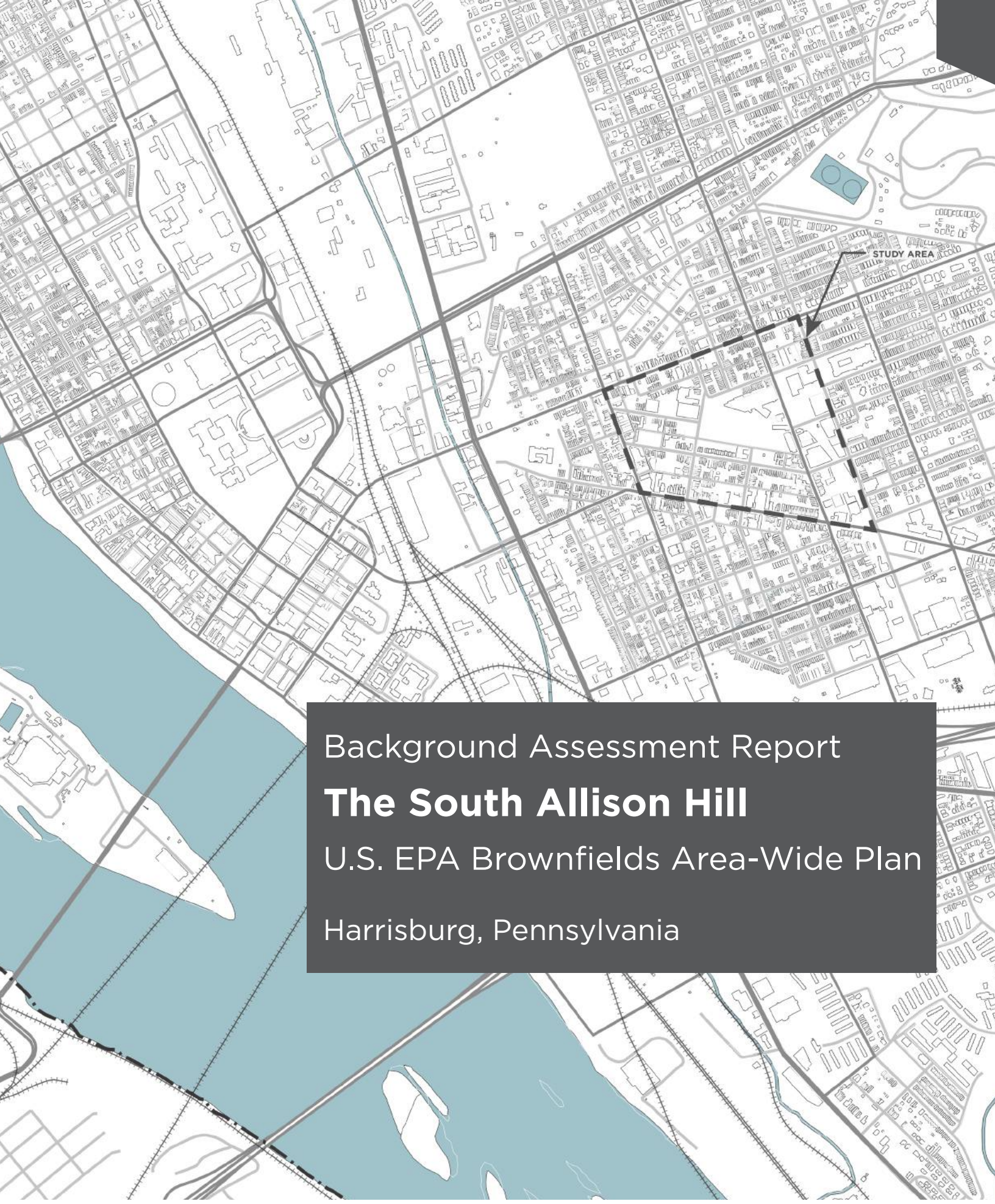


Background Assessment Report

The South Allison Hill

U.S. EPA Brownfields Area-Wide Plan

Harrisburg, Pennsylvania

DRAFT
FOR DISCUSSION PURPOSES ONLY

May 2018

PROJECT OVERVIEW

Setting the Stage - Current Conditions and the Basis for Reuse Planning

The City of Harrisburg was one of 19 communities selected in 2017 to receive funding support from the U.S. Environmental Protection Agency's grant program known as the Brownfields Area-Wide Planning Program (AWP). The AWP program empowers states, communities, and other stakeholders to work together to inventory and develop sustainable reuse plans for brownfields and their surrounding context. A brownfield site is real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. In 2002, the Small Business Liability Relief and Brownfields Revitalization Act was passed to help states and communities across the United States clean-up and revitalize brownfields sites. Under this law, the U.S. EPA provides financial assistance through various grants to eligible applicants to perform reuse planning and assess and clean-up brownfield sites.

The U.S. EPA selected the Harrisburg neighborhood of South Allison Hill and the Harrisburg Redevelopment Authority, as an AWP grant recipient primarily as a result of the concentration of potential brownfield sites within the community and the success of the Hamilton Health Center as a redevelopment project on a former brownfield. This site is referred to as the Catalyst Site since it plays a significant role in establishing what is possible and may be a potential driver of future investment.

South Allison Hill U.S. EPA Brownfields Area-Wide Plan Study Area Overview

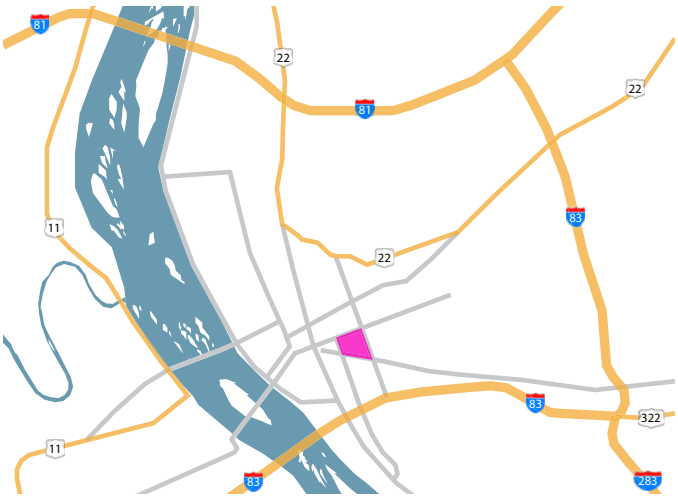
The South Allison Hill AWP study area is an approximately 55-acre area located east of downtown. The boundaries of the study area are Market Street to Derry Street and 13th Street to 18th Street (see Figure A1.1). The core of the area's brownfields are located along a former Reading Railroad (later Conrail) rail spur corridor that served a series of industrial operations, most notably the former Harrisburg Foundry and Machine Works where the Hamilton Health Center is currently located, and the former Harrisburg Boot and Shoe Company which was located on the north side of Mulberry Street, between 17th and 18th Streets.

This assessment of the physical/built environment considers how present and planned land use, environmental conditions, zoning policy, transportation and utility infrastructure, and public open spaces are likely to shape future improvements. Additionally, key findings for reuse planning efforts provide context for the planning and design recommendations offered by the AWP.

An initial step in the Brownfields Area-Wide (AWP) Planning process is the determination of key existing condition and critical community components that may influence reuse planning and to document the intentions and desired outcomes of previous and current planning activities. This Background Assessment report summarizes this step of the process and includes:

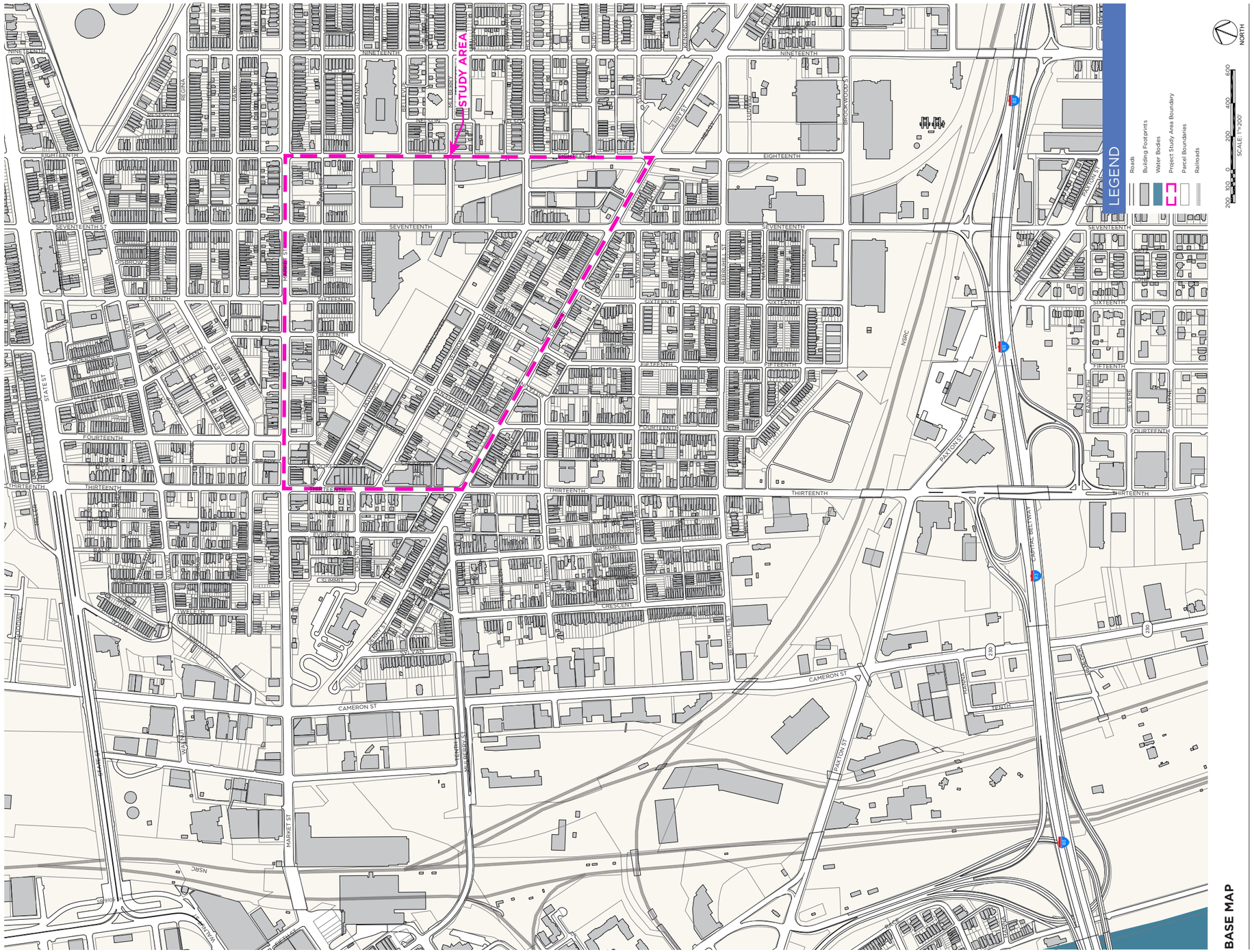
- Input received during recent public planning workshops and topic meetings;
- An evaluation of existing physical conditions primarily focused on the public infrastructure and realm;
- Land use patterns and existing policies;
- Activities on and near the Catalyst Brownfield Site that may leverage further investment; and
- Pending and anticipated private development projects.

An important component of the overall analysis of existing conditions includes an assessment of socio-economic market conditions and where there may be opportunities to attract new business and economic investment to support brownfields reuse. A separate Market Analysis report is being prepared. When combined with the finding of this report, it will provide the basis for reuse planning and the preparation of initial recommendation alternatives.



Location of the study area within Harrisburg

Figure A1.1
Base map



BASE MAP

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AWP Public Open House Event held at Hamilton Health Center



Illegal dumping is an issue on many of the areas vacant lots.

BROWNFIELDS & UNDERUTILIZED SITES

Industrial Legacy of the South Allison Hill Neighborhood

The South Allison Hill AWP study area has a long industrial and commercial history. The area was home to companies such as a Coca Cola production and bottling facility, Harrisburg Foundry and Machine Works, Harrisburg Boot and Shoe Company, Harrisburg Car Manufacturing Company, and others. Many of the industries facilities were served by rail which bisected a vast majority of the study area (see Figure A1.2).

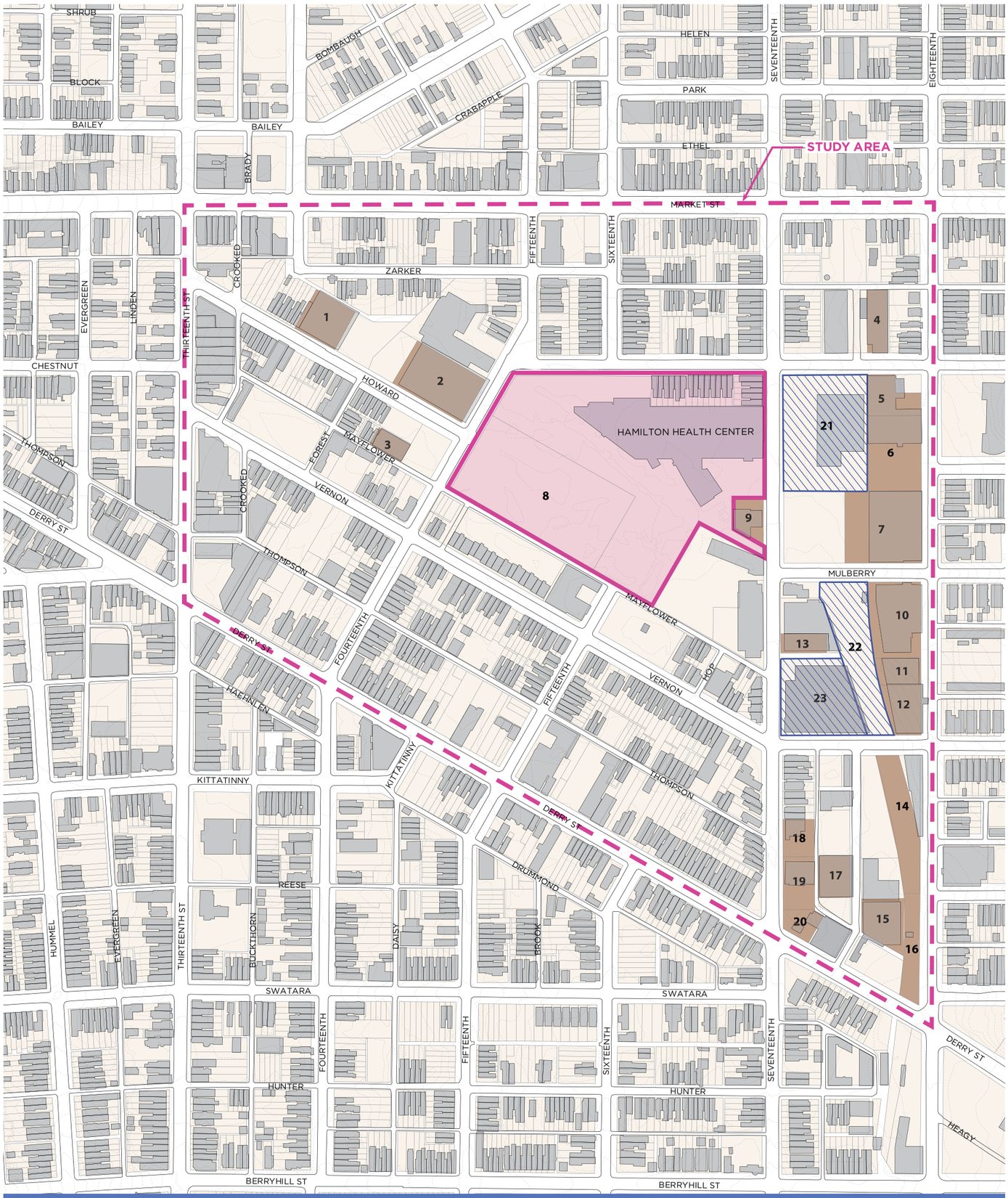
The industrial history of the neighborhood elevates the likelyhood for brownfield properties to be present. Several available Environmental Site Assessments (ESA) and associated environmental reports were reviewed in an attempt to ascertain the current existing environmental conditions in the South Allison Hill study area, including:

- Phase 1 ESA, Former Allison Hill Automotive Property and Former Conrail Property, prepared by Skelly & Loy, June 2004.
- Phase 2 ESA, Former Allison Hill Automotive Property and Former Conrail Property, prepared by Skelly & Loy, March 2005.
- Final Report, Former Allison Hill Automotive Property And Former Conrail Property, City Of Harrisburg, Dauphin County, Pennsylvania, eFACTS PF #732272, prepared by Skelly & Loy, September 2012.
- Draft Final Report, Former Allison Hill Automotive Property, 47 South 14th Street.
- City Of Harrisburg, Dauphin County, Pennsylvania, eFACTS PF #732272; REMEDIATION I.D. #48245, prepared by Skelly & Loy, July 2017.



Figure A1.2 1900 historic map showing rail spur that served the industrial uses (digital harrisburg)

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LEGEND

- Roads
- Building Footprints
- Project Study Area Boundary
- Catalyst Brownfields Redevelopment Project
- Parcel Boundaries
- Revitalization Opportunity Sites
- Keystone Opportunity Zone Properties
- Contour Lines

REVITALIZATION OPPORTUNITY SITES MAP

100 50 0 100 200 300
SCALE: 1"=100'

NORTH

Revitalization Opportunity Sites

Number	Site Address	City	Zip	Parcel #	Property Use	Notes
1	1334 Howard St	Hbg	17104	09-049-031	C23 - WHSE/IND 10-50000 SQ FT	(Former Crystal Ice Co)
2	1380 Howard St	Hbg	17104	09-050-058	C02 - STORE/RETAIL	
3	1356 Mayflower St	Hbg	17104	09-061-016	C22 - WHSE/IND TO 10000 SQ FT	
4	1722 Chestnut St	Hbg	17104	09-053-037	C22 - WHSE/IND TO 10000 SQ FT	
5	104 S 18th St	Hbg	17104	09-057-008	C22 - WHSE/IND TO 10000 SQ FT	
6	S 18th St	Hbg	17104	09-057-002	C23 - WHSE/IND 10-50000 SQ FT	
7	Mulberry St	Hbg	17104	09-057-004	C23 - WHSE/IND 10-50000 SQ FT	
8	47 South 14th St	Hbg	17014	09-056-010	E21 - REDEVELOPMENT AUTHORITY	(Former Automotive site)
9	138 S 17th	Hbg	17104	09-056-003	C25 - COMMERCIAL/INDUST MISC	
10	200 S 18th St	Hbg	17104	09-064-007	C23 - WHSE/IND 10-50000 SQ FT	
11	230 S 18th St	Hbg	17104	09-064-008	C23 - WHSE/IND 10-50000 SQ FT	(Lumber Mill - One of the five high priority sites)
12	234 S 18th St	Hbg	17104	09-064-009	C23 - WHSE/IND 10-50000 SQ FT	(Lumber Mill - One of the five high priority sites)
13	209 S 17th St	Hbg	17104	09-064-003	C22 - WHSE/IND TO 10000 SQ FT	Neighorhood - C0909 - Single Family
14	314 S 18th St	Hbg	17104	09-071-028	C25 - COMMERCIAL/INDUST MISC	Parcel retired in Tax Year 2017.
15	345 Carlisle St	Hbg	17104	09-071-004	C25 - COMMERCIAL/INDUST MISC	(The Big Ugly Warehouse)
16	1734 Derry St	Hbg	17104	09-071-029	C25 - COMMERCIAL/INDUST MISC	Parcel retired in Tax Year 2017. Part of the Big Ugly Warhouse
17	322 Carlisle Street	Hbg	17104	09-071-009	C22 - WHSE/IND TO 10000 SQ FT	
18	319 S 17TH St	Hbg	17104	09-071-020	C08 - RESTAURANT/TAVERN	
19	325 S 17th Street	Hbg	17104	09-071-021	C02 - STORE/RETAIL	
20	1700 Derry St	Hbg	17104	09-071-026	C02 - STORE/RETAIL	

Keystone Opportunity Zone Properties

Number	Site Address	City	Zip	Parcel #	Property Use	Notes
21	101 S 17th St	Hbg	17104	09-057-006	C36 - KOZ PROPERTY	(Former Hajoca Plant - now Marble manufacturing site. KOZ. One of the high prioirty sites)
22	1715 Mulberry St	Hbg	17104	09-064-010	C36 - KOZ PROPERTY	
23	227 S 17TH St	Hbg	17104	09-064-004	C36 - KOZ PROPERTY	(Coca Cola Bldg)

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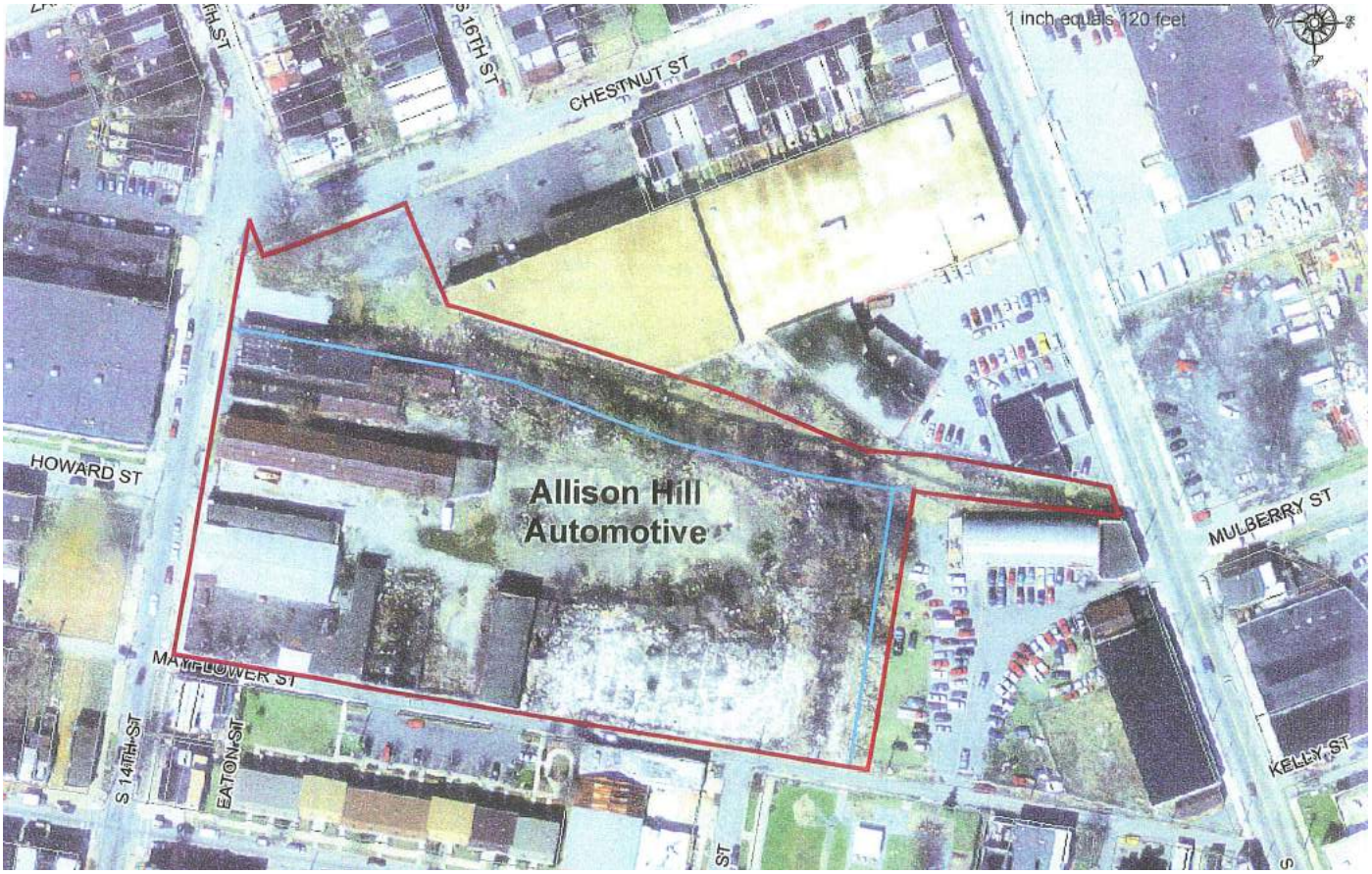


Figure A1.4 Boundary of the former South Allison Hill Automotive site (2005 Skelly & Loy Phase 2 Report)

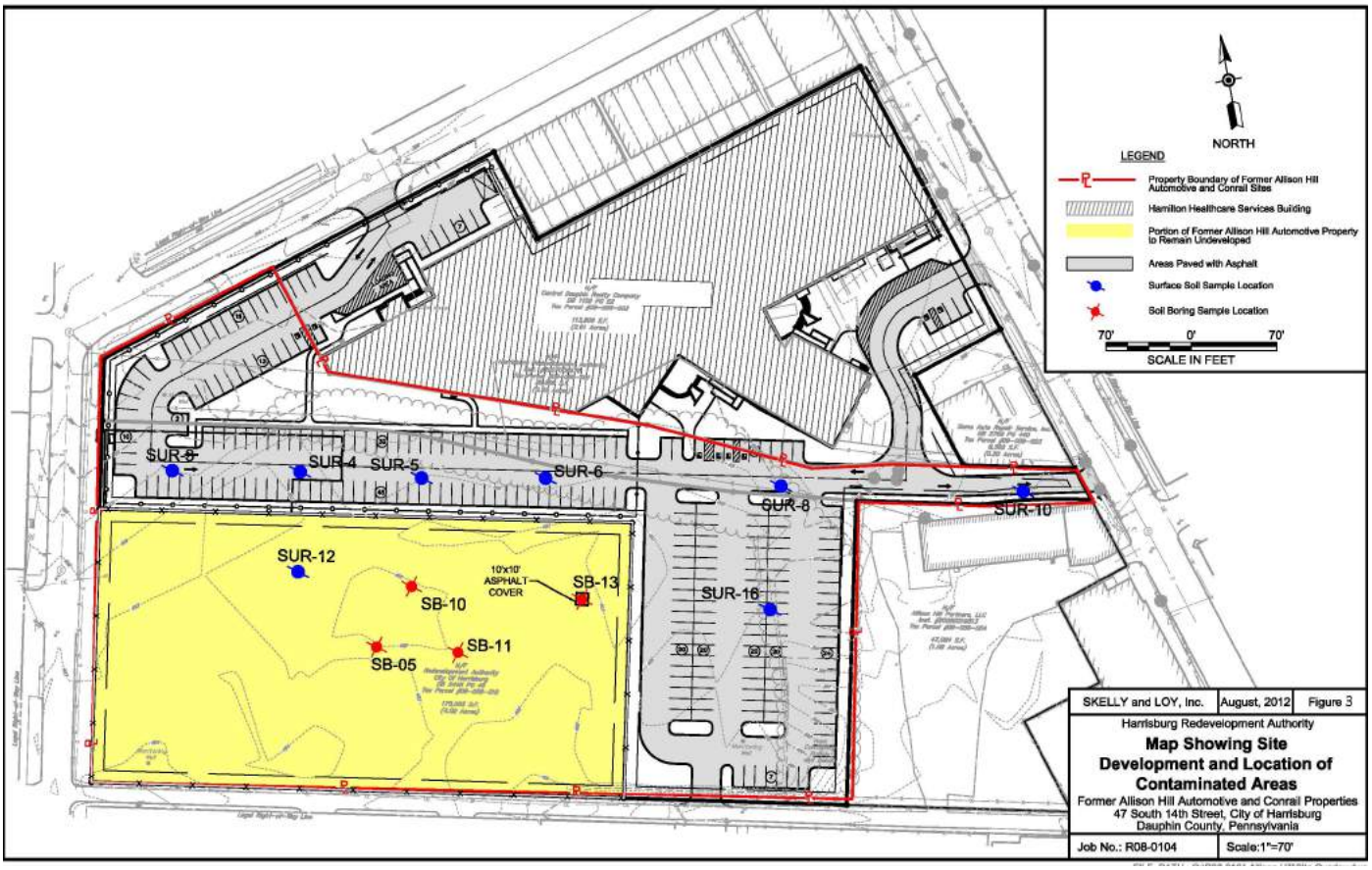


Figure A1.5 Portion of the site retained by HRA for future development (2012 Skelly & Loy Final Report)

The Former South Allison Hill Automotive Site

The original brownfield redevelopment site consisted of the former Allison Hill Automotive property (47 South 14th Street, approximately four-acres) and former Conrail property (124 South 17th Street, approximately one-acre) in the City of Harrisburg, Dauphin County, Pennsylvania. The original brownfield redevelopment site totaled approximately five-acres and is bordered to the west by South 14th Street, to the north by Chestnut Street, to the east by South 17th Street, and to the south by Mayflower Street as shown in Figure A1.4.

The Phase 1 ESA indicated that the combined site had been in industrial and manufacturing use since 1884 and had numerous environmental issues. The historical uses of the combined site included: automotive storage and repair; manufacturing, warehousing; and rail lines. A Phase 2 ESA was conducted and included a geophysical survey, test pits, and soil borings. The Phase 2 ESA investigation concluded that remedial work was necessary including removal of underground storage tanks, removal of debris, further investigation of groundwater, and remediation of soil depending on the intended end use of the site.

At the start of the investigative and remedial work in 2004, approximately 40% of the site consisted of abandoned buildings in various states of disrepair. The remaining 60% of the site was vacant land which was partially covered by concrete. Due to neglect, open areas of the site were heavily overgrown with vegetation, and various articles of trash and debris were strewn throughout. In 2008, the buildings and structures on the site were demolished, and the site was cleared of vegetation and debris.

A remedial investigation began in 2008 and was completed in February 2011. A remedial investigation report was completed by Skelly and Loy in April 2011 and approved by PADEP in July 2011. Four underground storage tanks were removed and impacted soils were remediated. Additional groundwater investigations determined the groundwater had not been impacted by site-related activities. A relief from liability was pursued for soils under PADEP's Act 2 Program. A Non-Residential Site Specific Standard was achieved via pathway elimination on both portions of the site.

A 2.29-acre portion of the site (southwestern corner) as shown in yellow on Figure A1.5 was retained by Harrisburg Redevelopment Authority (HRA) for future development, while the remainder of the site was purchased in 2011 by Hamilton Health Center Community Services, Inc. Environmental Covenants (ECs) were prepared for the two parcels – one for the parcel to be retained by HRA and a second for the parcel to be purchased by HHC. The ECs require that an asphalt cap remain in place over areas of remaining contaminated soil and that a sub-slab depressurization system be incorporated into any buildings constructed on the site to mitigate potential vapor intrusion issues.

Hamilton Health Center Parcel Redevelopment

In September 2012, Hamilton Health Center opened its new 117 South 17th Street facility in the City of Harrisburg, offering expanded medical services to better serve the community. The project involved renovations and adaptive reuse of an 88,000-square-foot building, formerly a state-owned print shop and warehouse. An adjacent four-acre portion of the former South Allison Hill Automotive property was also redeveloped and is now used for vehicular traffic and parking space for the center.

The completed redevelopment project has created a "medical mall"—giving residents access to a wide range of services under one roof, including adult medicine, pediatrics, women's health, and dental services. The center also provides room for the Women, Infant and Children Supplemental Feeding Program (WIC), behavioral health services, special services for individuals with HIV/AIDS, a full-service pharmacy operated by The Medicine Shoppe, as well as laboratory services provided by Quest Diagnostics. The Hamilton Health Center is located in an environmental justice area, providing essential services to a poor and underserved community. This project is bringing new jobs and improving the lives of people throughout the community it serves. In addition, the successful completion of the Hamilton Health Center is serving as a catalyst for growth and economic activity of the South Allison Hill area of the city. The redevelopment project was recognized with a Phoenix Award in 2017 as the 2017 Community Impact Award Winning Project.

U.S. EPA Brownfields Areawide Plan Catalyst Site

The catalyst site for EPA Brownfields Area-Wide grant consists of the remaining portion of the former South Allison Hill Automotive property (47 South 14th Street, approximately 2.29-acres) which was retained by HRA when the larger parcel was sold to HHC in 2011 (the yellow area shown in Figure A1.5). The site is bordered to the west by South 14th Street, to the south by Mayflower Street, and to the east and north by property owned by Hamilton Health.

As stated earlier, the catalyst site had previously received a Relief of Liability from PADEP for Non-Residential end uses. In 2017, Skelly and Loy was asked to re-evaluate their prior investigation in the context of a residential end-use as defined by PADEP's Act 2 Technical Guidance Manual. Their re-evaluation concluded that the concentrations of several contaminants, while less than non-residential Medium Specific Concentrations (MSCs), did exceed the residential MSCs.

The Final Report prepared by Skelly and Loy in November of 2017 proposed pathway elimination measures to demonstrate attainment of a Residential Site-Specific Standard. The proposed measures require contaminated soils to be capped by a building, parking lot or 2 feet of clean fill; that a sub-slab depressurization system be incorporated into any buildings constructed on the site to mitigate potential vapor intrusion issues; and that the existing EC be amended to change the end use from non-residential to residential on this parcel. The new Final Report was approved by PADEP in September 2017, thus accepting this remedy and allowing the catalyst site to now be used for residential end-uses.

Other Potential Brownfield Sites

Several additional South Allison Hill properties have been identified by various entities as underutilized due to potential or perceived environmental impacts. A summary of these additional potential brownfield properties is provided below.

Keystone Opportunity Zone Properties

Three properties in the study area have been designated by the Commonwealth of Pennsylvania as "Keystone Opportunity Zone" (KOZ) properties. The Keystone Opportunity Zone designation and program is intended to help spur redevelopment by eliminating certain state and local taxes within specific underdeveloped and underutilized areas. Projects in KOZs receive priority consideration for assistance under Pennsylvania community and economic development programs as well as community building initiatives. Projects in designated KOZs that are approved for Pennsylvania Industrial Development Authority (PIDA) or Small Business Financing shall receive the lowest interest rate extended to borrowers. In addition, if environmental remediation is needed on a property within a KOZ, the PADEP offers the Special Industrial Area (SIA) cleanup standard



Hamilton Health Center

which allows remediators to address only immediate, direct, and imminent threats to the human health and the environment based on the intended reuse of the property, thus providing a more cost-effective option for site cleanup.

The three properties with KOZ designation are:

- 101 S. 17th Street, the former Hajoca Plant – Sanborn Maps from 1956 show this entire block as industrial or commercial businesses served by rail.
- 227 S. 17th Street, the former Coca Cola Bottling Plant – Sanborn Maps from 1964 show this building and adjacent parcels as a print shop served by rail.
- 1715 Mulberry Street, the parcel east of the Coca Cola Bottling Plant – Sanborn Maps from as recent as 1984 show this parcel being served by rail and adjacent to other industrial operations.

Aside from a few Sanborn Maps, no environmental information was readily accessible or provided for these KOZ properties during the U.S. EPA Brownfield Area-Wide Planning process. However, based on the former industrial uses, the potential for environment impacts exist and should be investigated prior to redevelopment. The potential for asbestos and lead-based paint should also be investigated if existing buildings are to be reused.

Other Former Industrial Properties

Two additional former industrial properties identified as having strong redevelopment potential are:

- 230 and 234 S. 18th Street and 1721 S. Holly Street – A former lumber mill site.
- 345 Carlisle Street and 1716/1734 Derry Street – The "Big Ugly Warehouse."

No environmental reports were provided for these properties during the U.S. EPA Brownfield Area-Wide Planning process. However, based on the former industrial uses, the potential for environment impacts exist and should be investigated prior to redevelopment.



Former Coca-Cola Bottling Plant

Key Findings For Reuse Planning:

A. In regards to the Catalyst Site, the property is ready for unrestricted (residential standard) reuse so long as the conditions of the EC are met. There are no further recommendations for this site.

B. For the identified KOZ properties, it is recommended that current environmental conditions be identified and remediated, if necessary, prior to the expiration of the KOZ status in 2023. Redevelopment plans should be developed with the KOZ financial incentives in mind.

C. It is recommended that environmental conditions be identified and remedial plans be developed that will support recommended end uses for the remaining identified potential brownfield sites.

What We Heard

- As typically happens at the on-set of a U.S. EPA Brownfields Area-Wide Planning Project, property owners in the South Allison Hill raised concerns that their properties were identified as potential brownfield sites. They were concerned that they could become the target of a regulatory enforcement action by either U.S. EPA or PADEP. The project team explained in various meetings during the Community Workshop that no environmental investigation would be conducted on any properties under this grant funded effort and that there is absolutely no enforcement component to the U.S. EPA Brownfields Area-Wide Planning Program.
- The was also perception by property owners that their property value may be negatively impacted as a result of the "brownfield label." This concern was also addressed by explaining that the desired outcomes of the U.S. EPA Brownfields Area-Wide Planning Project is to aid in removing uncertainty regarding potential existing environmental conditions on properties, as much as possible. It also focuses on identifying solutions for mitigating potential environmental impacts if they are known to exist and to facilitate reuse and redevelopment of such sites. A primary goal is to assist property owners and the community as-a-whole, hopefully increasing property values.
- Since most lenders require buyers to perform environmental Due Diligence prior to completing a real estate transaction, environmental uncertainty can be a significant limitation to property sales transactions. The Project Team presented several examples of how the Areawide Planning Program benefited Property Owners by:
  - Determining what known environmental impacts exists and where there is no known evidence of such conditions, potentially immediately increasing property value and facilitating a sale of the property for the owner, if desired;
  - Assisting property owners in identifying resources for fully defining environmental impacts if they exists, as well as to mitigate the conditions; and
  - Providing reuse planning that may support a property owner's ability to actively and successfully market and sell their property if that is their desired outcome.
- Finally, property owners were reassured that participation in the U.S. EPA Brownfields Area-Wide Planning Project is strictly voluntary. Their property could be excluded from the process if they so desired.

LAND USE & ZONING

Land Use

The Allison Hill district is bounded by Route 22 to the north, 18th Street and the City Line north of Reservoir Park to the east, the railroad tracks to the south, and the bluff along Cameron Street to the west. Allison Hill has three distinct neighborhoods: North Allison Hill (from Route 22 to State Street); Central Allison Hill (from State Street to Market Street); and South Allison Hill (from Market Street to the railroad tracks). The study area for this project, includes most of South Allison Hill – from Market Street to Derry Street and from 13th Street to 17th Street.

Residential Streets: South Allison Hill residential streets are characterized by compact rowhomes with no front or sideyard. The majority are three stories, built between 1850 and 1920, many have porches. This area provides the walkable amenity of traditional urban neighborhoods which should stabilize turnover and encourage investment. However, the vacancy rate is as high as 20% in some areas. A significant portion of residential properties are blighted, diminishing values and dampening the interest of potential new residents and making existing owners less motivated to invest in improvements or maintenance.

Mixed-Use Community Commercial: There are several commercial corridors within Allison Hill – Market Street, Derry Street, and 17th Street – that function as both commuter thoroughfares and neighborhood commercial corridors. These blocks provided needed uses such as convenience stores, barbershops, and restaurants that serve the surrounding community. These properties are generally defined by older, attached buildings with little to no parking on-site. Exceptions are the anchor establishments along Derry Street, at the corners of 13th Street (Mount Pleasant Plaza) and 17th Street (Derry Family Supermarket); both served by off-street parking.

Industrial Buildings: As noted in the City's Draft Comprehensive Plan, concentrations of vacant and underutilized industrial buildings exist here and there throughout the city. Historically, the nature of uses in industrial districts has required that they be separated from residential and commercial areas. Warehouses, manufacturing, automotive garages and repair shops, scrap yards, and transportation infrastructure such as train yards and bus depots can create noxious impacts on surrounding areas through noise and air pollution, visual blight, and increased truck traffic.

In the case of South Allison Hill, where such building groupings are directly adjacent to residential neighborhoods, there is a real incentive to identify and attract lower-impact, neighborhood-sensitive businesses such as Maker Spaces, business incubators, and light fabrication uses which could restore the economic and social value of these properties.

Hamilton Health Center (opened 2012) occupies a former brownfields site on what was a 19th century hub of commerce and manufacturing activity. The Health Center addressed subsurface contamination and repurposed several former industrial buildings.

Blocks between 17th and 18th Streets are still occupied by handsome brick industrial buildings that are today largely underutilized. There are several more of this building type to the west of the Hamilton Health Center. Some have been renovated and are supporting commercial endeavors such as light manufacturing, storage, assembly or repair activities.

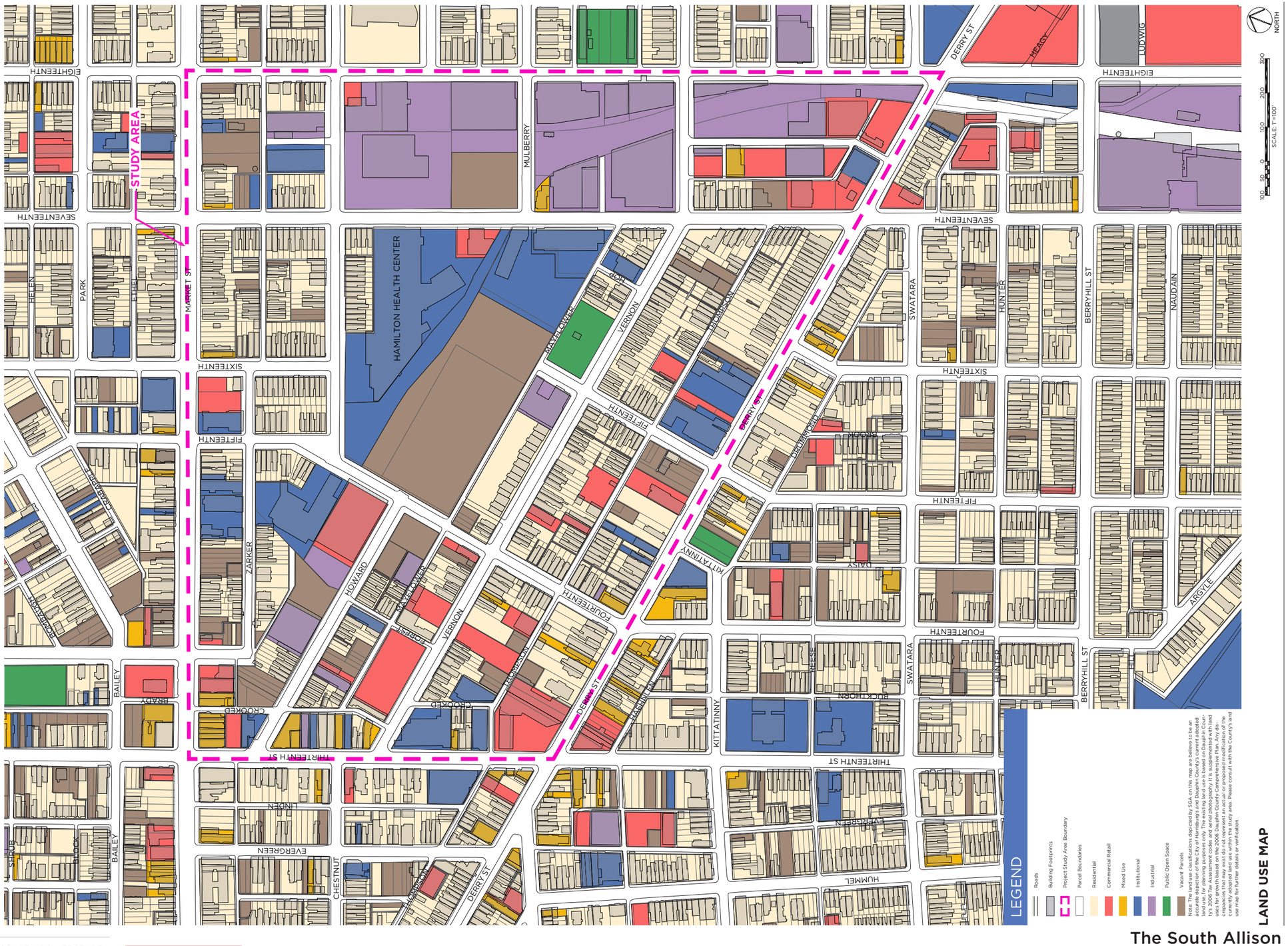
Parks and Open Spaces: Connecting parks, natural space, and civic areas strengthen ecological, recreational, and social networks within the city. In fact, an April 2018 report by National Geographic lists Harrisburg as one of the "The Ten Greenest Cities" in the nation.

Harrisburg's landmark public green space network, envisioned in the early 19th century by city leadership and landscape architect Warren Manning, is a legacy of the City Beautiful Movement. Structured around landforms and waterways, most of the city's signature parks: Riverfront Park, Wildwood Park, Italian Lake, Paxton Creek, and City Island are at the lowest elevations.

Of the early parks, only Reservoir Park is in the eastside of the city and at a higher elevation (reservoirs had to be higher than their gravity-fed service area) and is relatively close, though not very accessible on-foot. The park is to undergo a significant $6,000,000 make-over that will broaden the active recreation offerings; playgrounds, skateboarding, bandshell, renovated handball, tennis, pickleball and basketball courts, a spray-field, and bike track. The plan also anticipates accommodation for food trucks and additional restrooms.

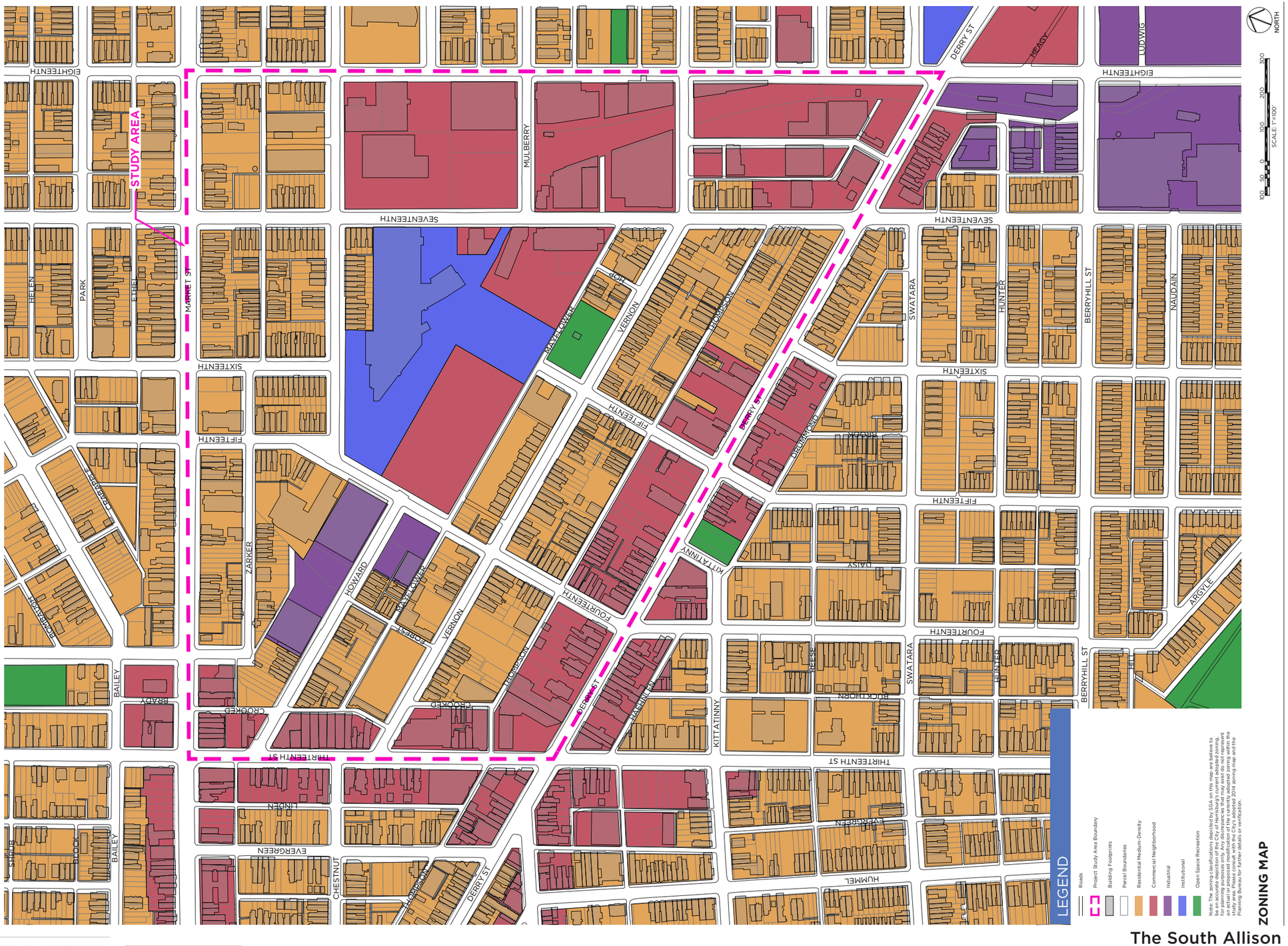
Closer to home, the Vernon Street Playground – 1509 Vernon Street, offers modern play equipment, a shaded sitting area, and an enclosed dog run.

Figure A1.6
Land Use Map



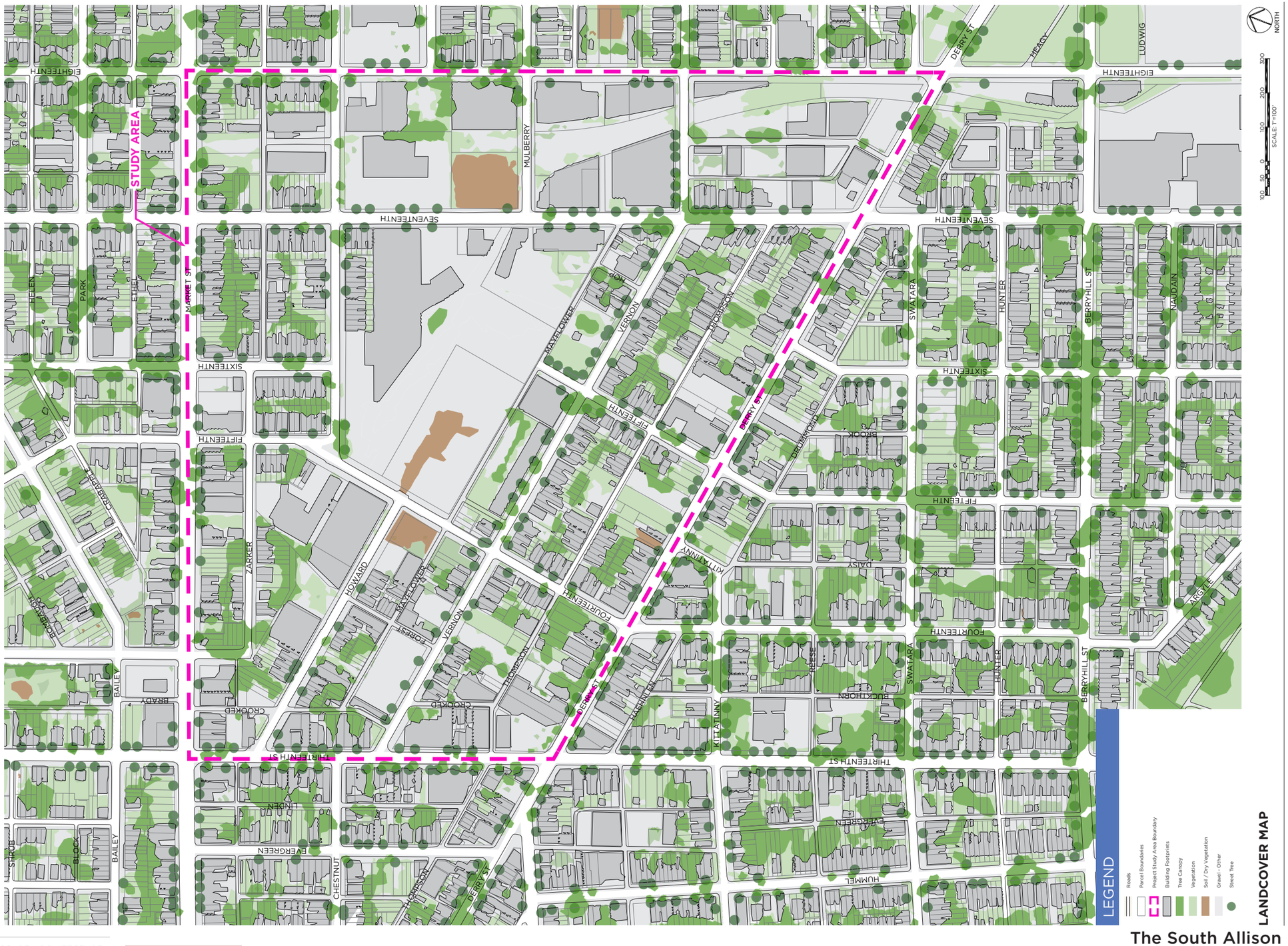
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Figure A1.7
Zoning Map



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Figure A1.8
Landcover Map



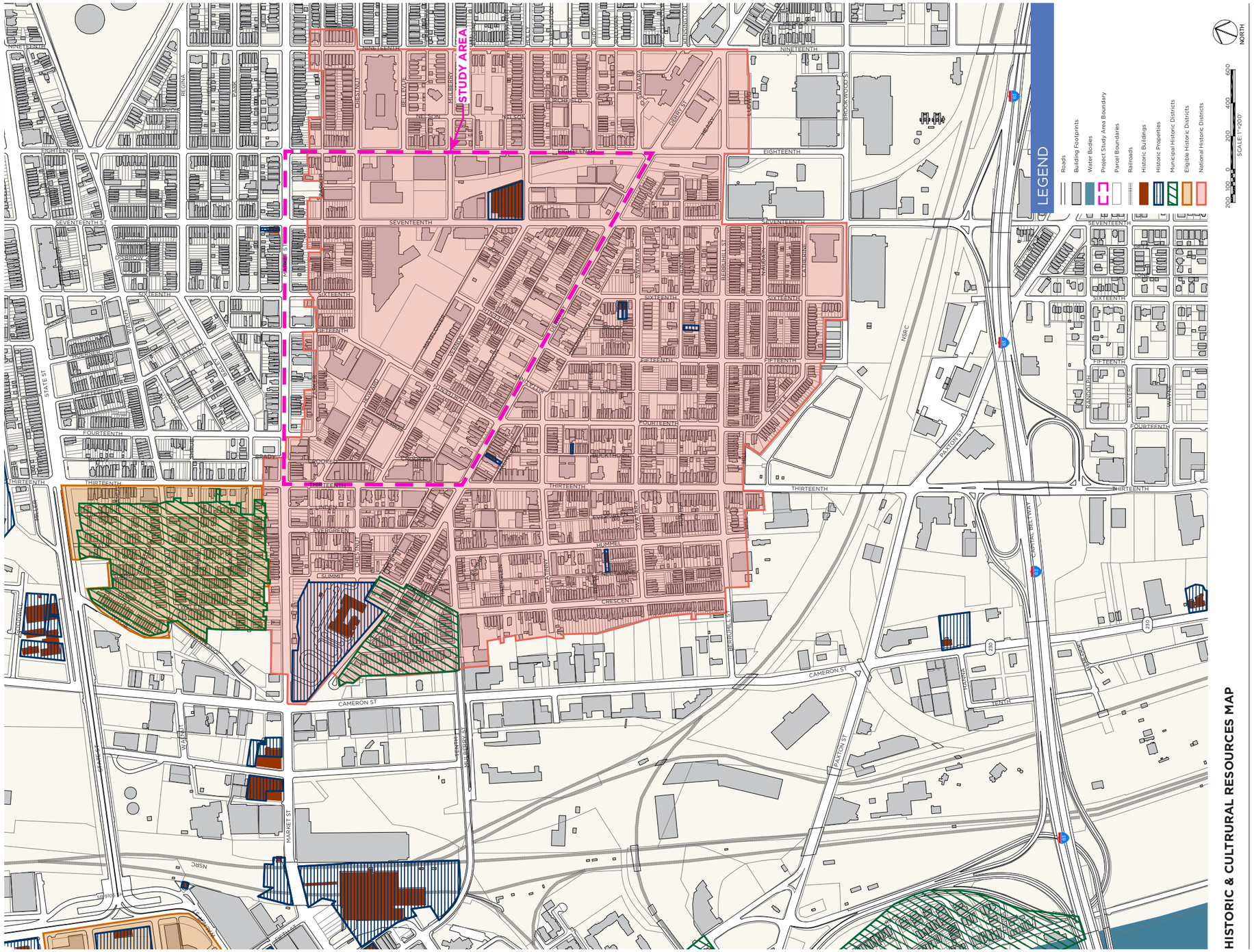
S/G/A LANDSCAPE ARCHITECTURE PLANNING
STROMBERG/GARRIGAN & ASSOCIATES

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The South Allison Hill U.S. EPA Brownfields Area-Wide Plan
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Figure A1.9
Historic & Cultural Resources Map



HISTORIC & CULTRURAL RESOURCES MAP

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In the works are the Capital Region Water 2017 City Beautiful H20 Master Plan initiatives for assisting schools and private property owner to manage stormwater and, at the same time, establish small pocket parks providing green and shade. This initiative represents an opportunity to layer facilities to provide greater civic and economic impact through infrastructure investments.

Zoning Code

The current Zoning Code provides a more simplified and mixed-use guide for Harrisburg than the 64-year-old document that preceded it, which strictly separated uses through a complex, pyramidal zoning structure.

Current models of urban living emphasize a more uniform distribution of residential, commercial, and retail uses to establish truly mixed-use neighborhoods. The 2014 update to the code designates property in the study area into four zoning designations:

RM Residential Medium Density - To provide for neighborhoods at medium densities. To protect neighborhoods from incompatible uses and other activities that would adversely affect the stability of the area. Note that the Code anticipates that Special Exceptions may be granted for a new apartment building, day care, or café. Existing legal uses such as various commercial activities in the RM zoned parcels along Market Street and on 17th Street are generally protected and may continue indefinitely.

CN Commercial Neighborhood - To encourage and preserve corridors with a mix of medium- and high-density residential and neighborhood retail activities. To encourage pedestrian-oriented uses, while avoiding auto-related uses. Note that existing legal uses such as various manufacturing, storage and repair activities in the CN zoned parcels along 17th Street and on 18th Street are generally protected and may continue indefinitely.

INS Institutional - To facilitate and protect institutional development including, but not limited to, government facilities, educational institutions, and hospitals. Hamilton Health Center is the only property zoned INS – Institutional within the study area.

IND Industrial - To encourage all types of light industries, offices, warehousing, and wholesale sales uses. To also provide for a broad range of commercial uses, including retail sales, to provide a broad market for reuse of buildings and land. To permit heavy industrial uses by Special Exception to avoid conflicts with neighboring uses. Modern industrial uses such as Maker Spaces, light fabrication operations, and high-tech manufacturing do not impart the same adverse effects on the surrounding community as traditional industrial uses.

Focused reinvestment to repurpose vacant and underutilized land to increase the concentration of cultural and economic services around the city's core will make the city more attractive as the preferred place of business, leisure, and living for the region.

The Mount Pleasant Historic District

With the exception of a few lots along Market Street, the entire study area is with The Mount Pleasant Historic District, which was entered onto the National Register of Historic Places in 1985. Owners of income-producing properties listed individually in the National Register of Historic Places or of properties that are contributing resources within a National Register Historic District may be eligible for a 20% investment tax credit for the rehabilitation of the historic structure. The rehabilitation may be of a commercial, industrial, or residential property for rentals. The tax incentives program is operated by the Federal Historic Preservation Tax Incentives program which is managed jointly by the National Park Service, individual State Historic Preservation Offices, and the Internal Revenue Service. Aside from the 20% tax credit, the tax incentive program offers a 10% tax credit for rehabilitation to owners of non-historic, non-residential buildings constructed before 1936.



Vacant former industrial building on 18th Street.



Derry Family Supermarket - one of the few commercial uses in the study area served by off-street parking.

Key Findings For Reuse Planning:

A. There is an oversupply of older small-lot houses in the South Allison Hill area. At the present time the need for ongoing maintenance and improvement of the 100-year old houses in the district is not supported by present opportunities for available employment.

- Rental housing is increasingly unaffordable for residents, especially larger households.
- Although properties are fairly inexpensive throughout much of the city, it is difficult for many city households to purchase them, leading to blighted structures and absentee ownership, and contributing to housing problems and the further erosion of housing stock in the long-term.
- There is a need to engage/assist property owners with securing funding and technical assistance in rehabilitating their residences.

B. Some restaurants, commercial services, and retailers along the three commercial corridors report that they are struggling.

- As is typical for businesses along commercial corridors established before WWII, property dimensions, municipal regulations, lack of parking, existing building types, lending norms, and franchise standards often make it difficult to operate efficiently and profitably.
- Operators and franchisors for desired businesses do not have confidence that underlying demand will support additional retail.

C. There is a general recognition that as national trends guide large industrial uses such as distribution centers to the fringes of urban areas, there is a need to determine how best to transition the industrial properties of the past and to prepare for the future.

- New uses could take the form of smaller, less-noxious, neighbor-friendly activities such as maker spaces, artisan fabricators, or advanced manufacturing of energy-based products, medical technology, or prototype development.
- Resident-driven land use management, coordinated planning, and flexible controls (including shared parking arrangements) may be needed accommodate these uses in the study area.
- Large vacant and underutilized properties, which present substantial opportunities for new development and economic growth, are sometimes encumbered by the expectation (often not quantified) of having some aspect of on-site contamination and possible related remediation costs, making development challenging.

D. The presence of Hamilton Health Center can attract synergistic services and other non-profit institutional uses or social service providers. An expanded community health and neighborhood services "campus" could provide employment opportunity, commercial activity, and public amenity as well as health services.

What We Heard

- TCCA and HRA are to initiate a project to determine viability of existing housing stock and prioritize areas of structurally-sound construction for repair and rehabilitation.
- There is a need for recreation facilities. All of Allison Hill is lacking recreational and sport facilities and options for all ages, especially for children and young adults.
- Future land use planning, private investment, and daily quality-of-life are encumbered by lack of adequate convenient parking.
- Ongoing investment along Derry Street will spark economic opportunity in the area, adding to customer base, improving appearance and resolving episodes of flooding during rain events.

PREVIOUS PLANNING EFFORTS

A goal of each U.S. EPA Brownfields Area-Wide Planning Project throughout the country is to identify and implement the objectives of residents, property owners, and local government. For South Allison Hill the effort needs to build upon previous and ongoing plans especially the Tri-County Community Action (TCA), Capital Region Water (CRW), and the City's Comprehensive Plan. These planning activities attracted a lot of community involvement as well as professional staff participation. As a result of all of the previous work performed, this AWP project should be considered as a tool to: A.) Implement community goals identified by neighbors and Tri-County Community Action "Heart of the Hill" Action Plan; B.) Assist in the implementation and funding for some of CRW's proposed projects that focus on South Allison Hill; C.) Develop an implementation strategy for needs identified in the Public Workshop; and D.) Assist the neighborhood, property owners, and the City to identify and document specific projects that will remove barriers and unlock economic reuse potential for properties.

A brief overview of key planning initiatives follows below:

1998 Neighborhood Action Strategy | Community Action Commission w/ Urban Research and Development Corporation

Chance Management provided assistance with transportation and parking. The project was funded through a State Planning Assistance Grant for the Department of Community and Economic Development. The purpose was to establish a comprehensive Neighborhood Action Strategy conceived and continuously supported by neighborhood residents, business people, and institutions. The Action Strategy lays out specific goals and actions to: 1. Improve Housing Conditions. 2. Provide Open Space and Recreation Opportunities. 3. Provide More and Better Quality Shopping and Services. 4. Increase Business, Job Opportunities. 5. Improve Vehicular and Pedestrian Circulation. 6. Make the neighborhood Safer and More Attractive. The 17th Street or "Manufactures' Rail Line" Corridor is identified a legacy land use that could support new economic activity. The Plan includes a concept for the 17th Street corridor as a "Neighborhood Small Business and Industrial Corridor; showing commercial buildings around a cooperatively managed parking lot.

2009 South Allison Hill / Mt. Pleasant Neighborhood Strategic Plan | Community Action Commission w/ Urban Research and Development Corporation

The project was funded through a New Communities Elm Street Planning Grant from the PA Department of Community and Economic Development. This is an Update of the 1998 Strategic Plan and provides an operational framework for achieving the goals outlined above. Beginning with an inventory of demographic data, housing, transportation services, and economic conditions, the plan delineates a slate of tactical, action-oriented objectives and strategies for the overall improvement and enhancement of the Neighborhood. The document lays out an organizational and leadership structure to ensure that priority projects are advanced, neighbors and project partners are engaged, and that resources for implementation are pursued and made available. The Update makes no specific mention of a strategy to repurpose underutilized industrial-era buildings.

2014 Renaissance of Historic Mt Pleasant / South Allison Hill: Investment Prospectus | Tri County Community Action

Essentially an application for support of a proposed $994,758 three-year project to support: 1) ongoing advocacy and revitalization work 2) expanded educational and employment services 3) redevelopment of the South 17th Street KOZ properties. The bulk of the project budget, $813,000, is to be deployed over three years for a project manager to manage pre-development, and for architect services to conduct site surveys and environmental reviews on previous industrial sites to ensure the land is ready for development. The approach recognizes that pre-development costs are a "significant barrier for companies who do not have the capital for such studies especially if they reveal issues to remediate that they cannot afford."

2017 Heart of the Hill: An Action Plan to UNITE South Allison Hill | Tri County Community Action

The focus of the Heart of the Hill plan is on the area of Harrisburg bordered by Cameron Street to the west, South 18th Street to the east, Market Street to the north, and Paxton Street to the south. This planning process builds on previous neighborhood plans and broad resident participation, bringing a renewed focus to agreed-to values and goals, thus growing partnerships.

The Action Plan details specific initiatives offering support for engagement, education, employment, cohesion, leadership; Improved security and services; Education of landlords and tenants; and resources for maintenance and repair of older homes. There is an emphasis on physical planning and reinvestment and on objective measures of performance, focusing on maintenance and rehab of houses. Mention of former industrial properties focuses on vacant parcels that could be converted to useful purpose such as parks, parking, health services, or housing.

2017 Harrisburg, PA Comprehensive Plan | Bret Peters, Office of Planning and Architecture

The City's first Comprehensive Plan update since 2004 provides background and policy structure for Land Use, Community Facilities, Housing, Mobility and Access, Parks and Open Space, Energy, Utilities, and Implementation. The Plan acknowledges Allison Hill as one the city's seven primary districts and offers specific policy goals and objectives to guide private development, public improvements, and institutional investment over the coming decades. Specific goals include redevelopment of "abandoned and underutilized property along former railroad spur as a pedestrian space and neighborhood commercial corridor"… "a vibrant public space incorporating social, economic, and recreational activities to reactivate former manufacturing buildings."

2017 Community Greening Plan | Capital Region Water, w/ WRT and Duffield Associates

The City and Capital Region Water are responsible for reducing sediment and nitrogen levels discharging into the Chesapeake Bay through CSOs through a Consent Decree with the U.S. EPA. The Community Greening Plan is a Green Stormwater Infrastructure (GSI) strategy to guide stormwater projects and policies going forward. The City and residents will, over time realize significant economic and environmental benefits from stronger and more coordinated management of Harrisburg's open spaces and natural resources. The Plan vividly documents GSI design solutions that could be deployed in the study area. The study also documents specific hydraulic and structural problems in South Allison Hill such as standing water in streets and basement flooding as priorities.

Key Findings For Reuse Planning:

To the degree possible, this AWP project should be considered as a tool to:

A. **Implement community goals identified by neighbors and Tri-County Community Action "Heart of the Hill" Action Plan.**

B. **Assist in the implementation and funding of some of CRW's proposed projects that focus on South Allison Hill.**

C. **Develop an implementation strategy for needs identified in the AWP public workshop.**

D. **Assist the neighborhood, property owners, and the City to identify and document specific projects that will remove barriers and unlock economic reuse potential for properties. Although the planning recommendations developed through the AWP's workshop and from CRW and TCCA (evolved through the Draft City Comprehensive Plan process) are logical and mostly agreed-to, (other than concern around some ideas for Future Land Use proposed in the Draft Comprehensive Plan) there is a need to develop an approach for assigning priority.**

What We Heard

- Residents, property owners, and the City generally agree with and support the recommendations of the CRW Community Greening Plan and the TCCA Heart of the Hill Plan. The AWP process can assist with developing project priorities and with identifying resources that may not have been accessible before.

TRANSPORTATION & CIRCULATION

The notion of "connectivity" is important when considering the ability of residents and visitors to move through the study area as well as the ability to connect South Allison Hill to the rest of the City and the region. Through this and previous planning efforts a few key aspects of transportation and connectivity were identified.

The study area's transportation system is a traditional urban grid network located in the City of Harrisburg. The study area includes the following intersections and the area bounded between and within:

- Market Street & 13th Street
- Market Street & 17th Street
- Derry Street (SR 3012) & 17th Street
- Derry Street (SR 3012) & 13th Street

Derry Street (SR 3012) is owned and maintained by the Pennsylvania Department of Transportation, while Market Street, 13th Street, and 17th Street are all owned and maintained by the City of Harrisburg. There is a secondary street grid that is the result of the former rail line and industrial uses that are the focus of the AWP effort. Although the traditional street grid block structure establishes a sound organizational network and provides a lot of circulation options, the interface of the two grid alignments, especially at the major intersections of Derry, 13th, and 17th Streets, creates functional and safety challenges for all modes of travel.

Data Collection - Traffic Counts

In order to better understand the functionality of the existing transportation network in the study area, vehicular, pedestrian, and heavy vehicle intersection turning movement counts were conducted at each of the study area's major intersections. Counts were conducted between 6:30 AM to 8:30 AM and 3:30 PM to 6:00 PM on a typical weekday evening (Tuesday – Thursday), and 11:00 AM to 2:00 PM on a Saturday. The weekday counts were conducted on March 27th and the Saturday counts were conducted in part on March 10th and March 24th. The peak hour within each study period for each study intersection is noted in Table 1.

Table 2 provides the total number of entering vehicles (EV), the percentage of that traffic that are entering heavy vehicles (EHV%), and the total number of entering pedestrians (EPeds) within each of the study intersections during the peak hours noted.

An existing turning movement figure for all peak hours is included for all four study intersections.

Transportation System Analysis and Assessment

Using the data collected, an analysis of the existing transportation system was performed, with insights based on field observations and capacity analyses conducted at each of the study intersections.

In general, the roadway network is comprised of one-way roadways and narrow roadways within the bounds of the study area. These roadways pose internal land access constraints between 13th and 17th Streets. The existing traffic control and roadway constraints may be confusing for non-local motorists and restrictive for heavy vehicles/ delivery vehicle access. In addition, vehicles egressing side streets frequently have little available corner sight distance to gage gap acceptance because of the presence of on-street parking near intersections.

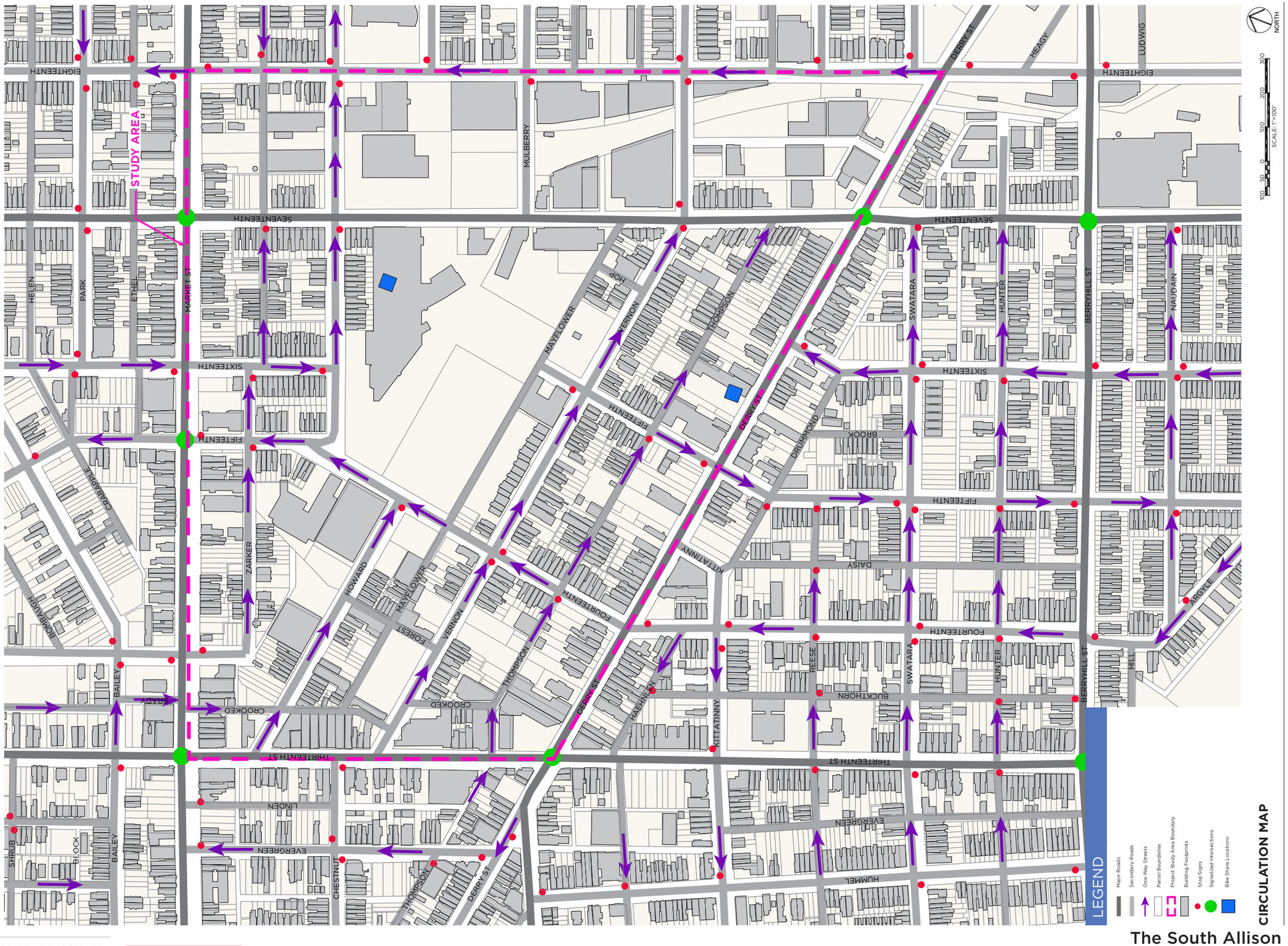
An existing lane configuration and control figure is included for all four study intersections.

Capacity

Based on the vehicular turning movement counts and field observations, Market Street, Derry Street (SR 3012), and 17th Street function as commuter thoroughfares and neighborhood commercial corridors. During the AM peak, the traffic flows through the study area are relatively balanced north to south but greater in the westward direction (towards downtown Harrisburg), indicating commuter flows. During the PM peak, traffic flows are greatest in the southward and eastward directions, again indicating strong commuter presence but, in the case of the PM peak, a tendency for commuters leaving downtown Harrisburg to use the study area network to leave the city and access Interstate 83 is evident. As for the Saturday midday peak, the traffic is relatively balanced in directional flows.

Each of the study area intersections are signalized and all four signals are part of a coordinated network. It was observed that left turning vehicles, at locations without left turn signal control, would anticipate the start of green

Figure A1.10
Circulation Map



S/G/A LANDSCAPE ARCHITECTURE PLANNING
STROMBERG/GARRIGAN & ASSOCIATES

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The South Allison Hill U.S. EPA Brownfields Area-Wide Plan
A1-28

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and jump off the stop bars to get in front of opposing traffic rather than wait for acceptable gaps in opposing traffic. This driver behavior indicates that the motorists are familiar with the signal operations by time of day and know that if they don't jump out front then they may not have an opportunity to turn left because of sustained opposing traffic. At the intersection of Market Street and 13th Street there is an existing broken vehicle detector loop on the northbound approach which was causing the side street signal phase to max out. As a result, this took green time away from Market Street which carries the majority of the traffic.

With regards to intersection traffic capacity, the following intersection movements in Table 3 currently operate at level of service (LOS) D or worse during each respective study period.

In summary, the biggest capacity concern is moving traffic efficiently along both 13th Street and 17th Street within the study area. Although it was not a part of the study area, the intersection of Derry Street and 19th Street was noted to perpetuate a lot of the traffic flow issues along Derry Street.

Existing peak hour levels of service figures for all peak hours is included for all four study intersections.

Transit Analysis & Assessment

There are currently twelve (12) Capital Area Transit (CAT) bus routes that travel through one or more of the study area intersections. The Route 1 – Market Street is the most highly used route of the twelve (158,993 riders during CAT fiscal year 2016-2017) which travels along Market Street. The following CAT routes travel along 17th Street and adjacent to the Hamilton Health Center:

- Route 17 – HHC
- Route 27 – Hall Manor/HHC
- Route CY – Carlisle Pike

It was observed that CAT bus stops near the study area intersections impede/disrupt traffic flow as passengers are boarding or departing.

Pedestrian Analysis & Assessment

Pedestrian activity is substantial throughout the study area, with the greatest activity of pedestrians being located in the southeast corner of the study area at the intersection of Derry Street and 17th Street. This strong pedestrian presence can be attributed to two schools that are 1-2 blocks away. Pedestrians cross at either intersections or mid-block locations based on field observations. It was also observed that pedestrians tended not to use available pedestrian push-buttons and at times would cross in front of conflicting vehicular movements.

Nearby Development Plans that may Influence Overall Connectivity in South Allison Hill

A major project that needs to be accounted for in future development scenarios is the Interstate 83, East Shore, Section 3 project that is in preliminary engineering by PennDOT Engineering District 8-0. The following is a summary of the project and its anticipated impacts in the area of the 13th Street and 17th Street exits per the I-83 Master Plan, December 2003 (http://www.i-83beltway.com/projects/i-83-master-plan.php).

The purpose of this project is to address existing problems and accommodate design year 2030 traffic volumes. The project directly impacts I-83 and its interchanges. From 2nd Street to 19th Street, the I-83 mainline would be separated into through lanes and local collector-distributor access lanes. The through lanes, 3 in each direction, would be barrier separated from the local access lanes and would restrict access to any of the interchanges in East Shore Section 3. The local access I-83 lanes, two in each direction plus a third auxiliary weaving lane, would provide access to all of the interchanges and consequently into Harrisburg and the local roadway network. From 19th Street to 29th Street the mainline would consist of four lanes in each direction.

Within the study area, the Interstate 83, East Shore, Section 3 project creates a major local access change. The interchange at 13th Street would be removed and replaced with an interchange on Cameron Street (PA 230). This direct connection to Cameron Street would facilitate traffic movements since Cameron Street is four lanes and a major North-South connector between I-83 and I-81 to the north.

A public meeting is anticipated during Fall 2018 for this transportation improvement project, with stakeholder meetings currently taking place. Actual mainline construction could start as soon as 2022.

Table 1. Intersection Peak Hours

	Intersection	Peak Hour		
		AM	PM	Saturday
1	Market Street & 13th Street	7:30-8:30 AM	4:15-5:15 PM	11:45 AM – 12:45 PM
2	Market Street & 17th Street	7:30-8:30 AM	3:45-4:45 PM	12:30-1:30 PM
3	Derry Street (SR 3012) & 17th Street	7:30-8:30 AM	4:15-5:15 PM	12:45-1:45 PM
4	Derry Street (SR 3012) & 13th Street	7:30-8:30 AM	4:15-5:15 PM	1:00-2:00 PM

Table 2. Intersection Entering Vehicles & Pedestrians

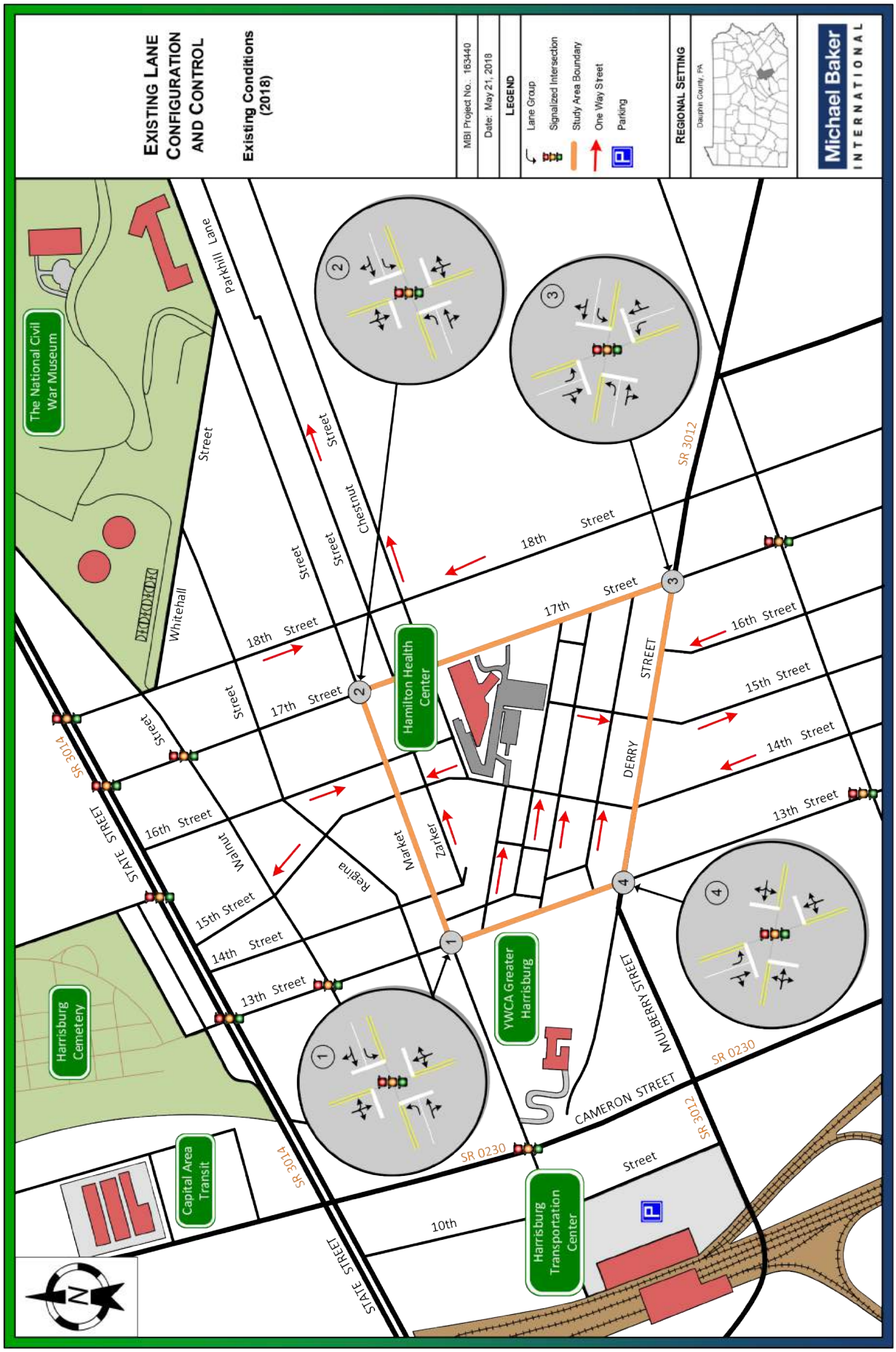
Int.	AM Peak			PM Peak			Saturday Peak		
	EV	EHV%	EPeds	EV	EHV%	EPeds	EV	EHV%	EPeds
1	1100	4%	34	1462	2%	95	1097	1%	78
2	1643	4%	63	1863	2%	51	1567	1%	TBD
3	1454	3%	133	1809	1%	46	1474	1%	73
4	1029	6%	55	1338	1%	43	1061	2%	71

Table 3. Intersection Approach LOS D or Worse

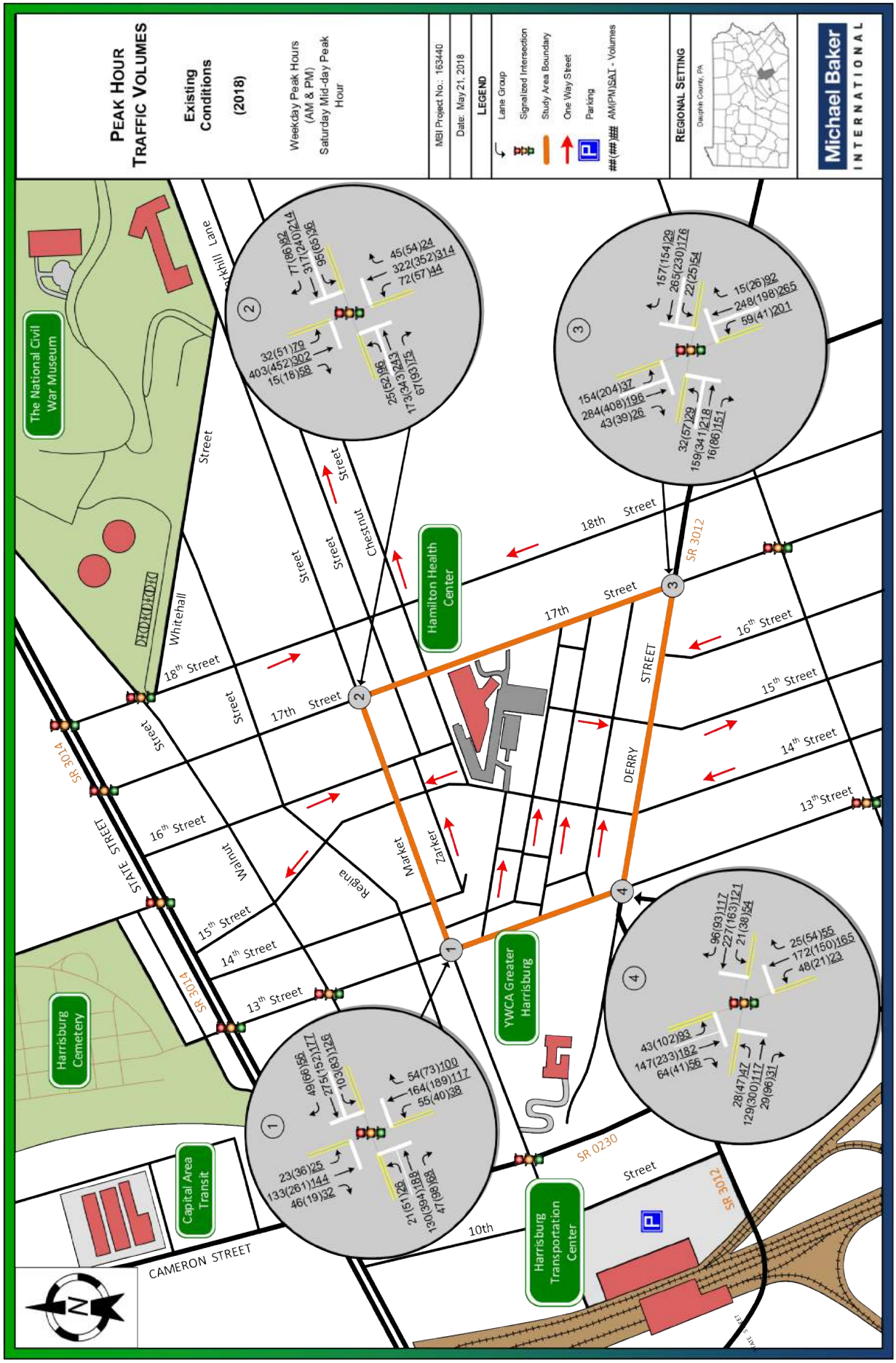
Int.	AM	PM	Saturday Midday Peak
1	13th St. Approaches	13th St. Approaches	N/A
2	EB Market St. Left Turn 17th St. Approaches	EB Market St. Approach 17th St. Approaches	N/A
3	NB 17th St. Thru-Right Turn	17th St. Approaches	NB 17th St. Approach
4	NB 13th St. Approach	13th St. Approaches	NB 13th St. Approach

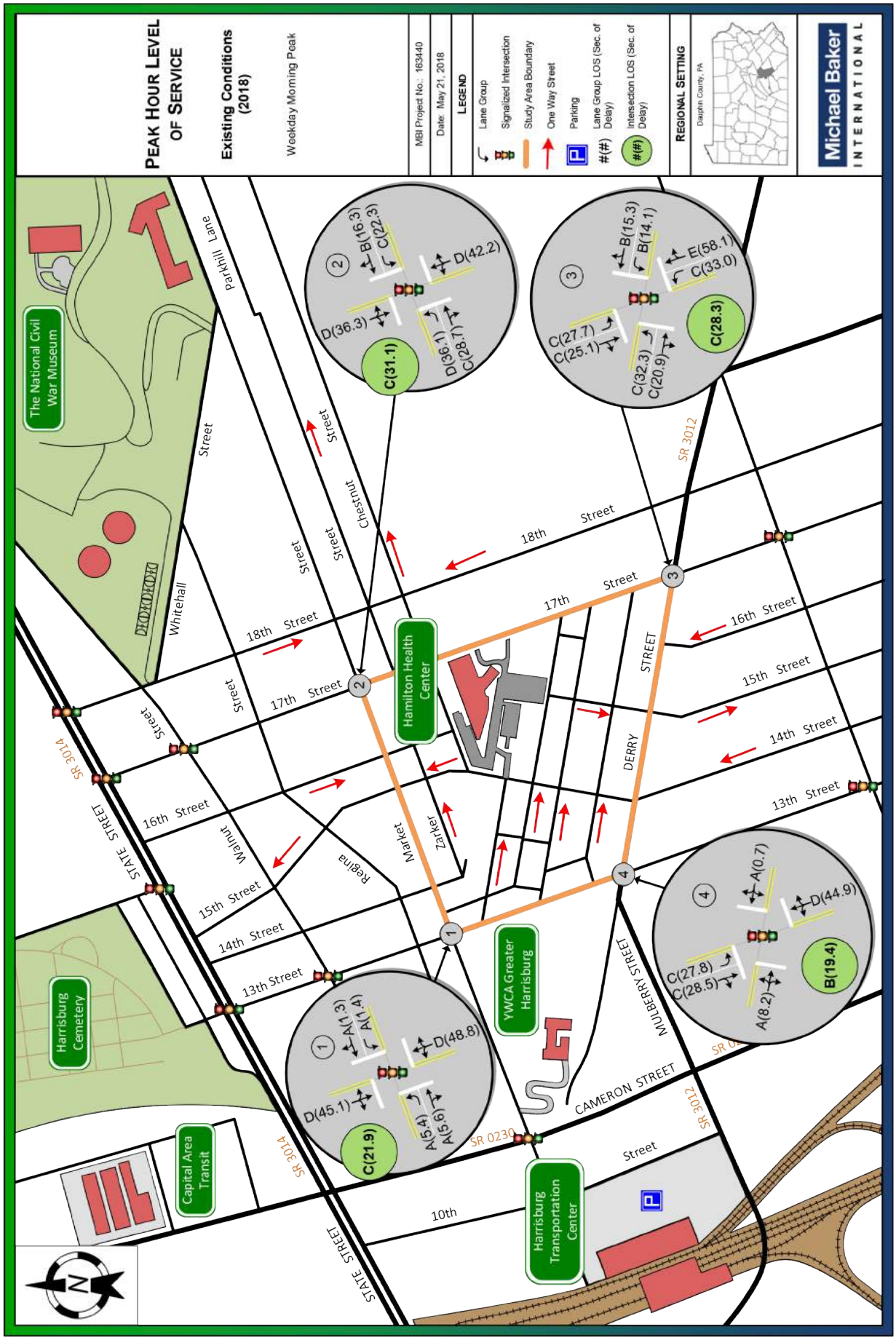


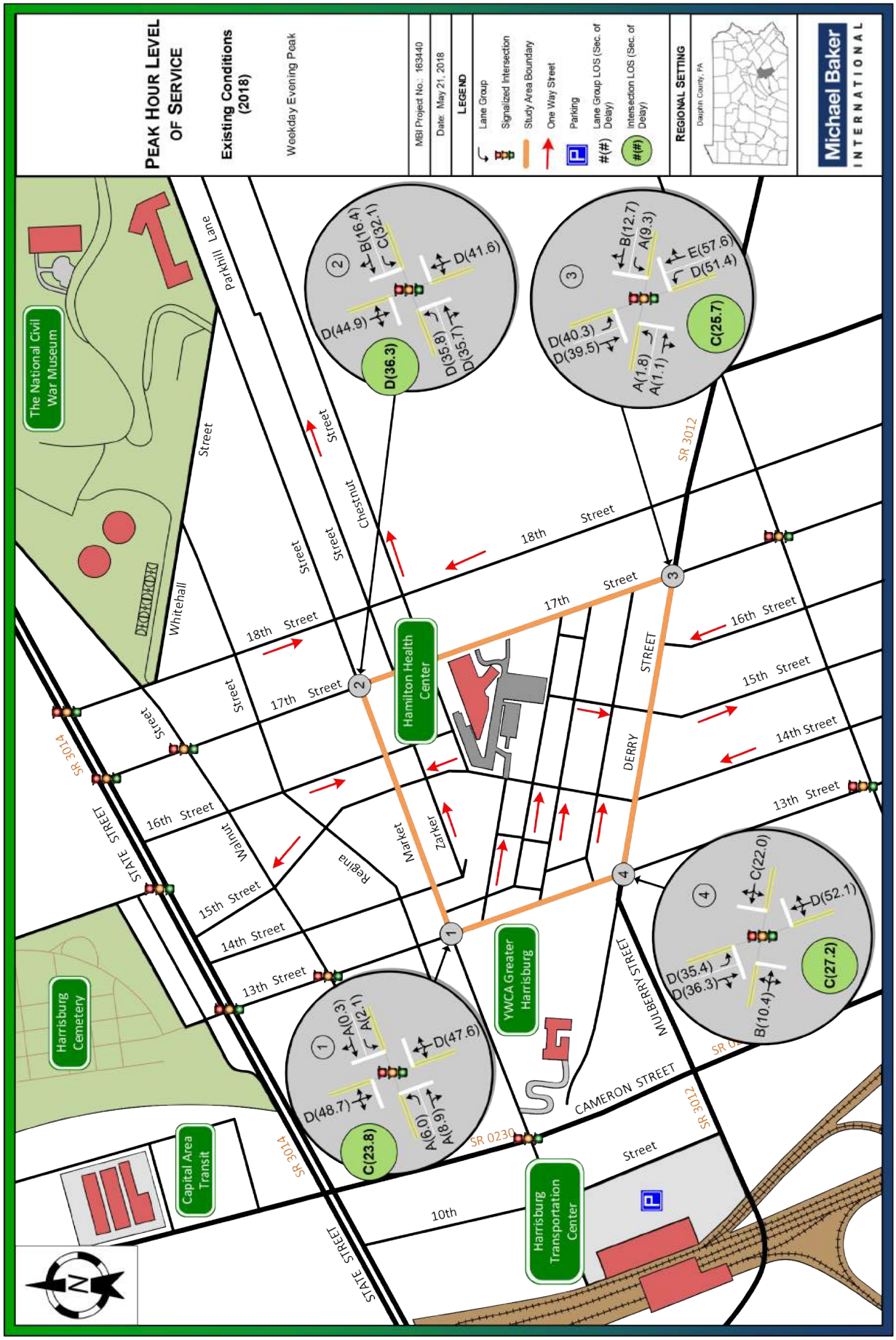
The City of Harrisburg in partnership CRW has begun to implement complete street projects that include green stormwater infrastructure components, such as the North 3rd Street Improvement Project.

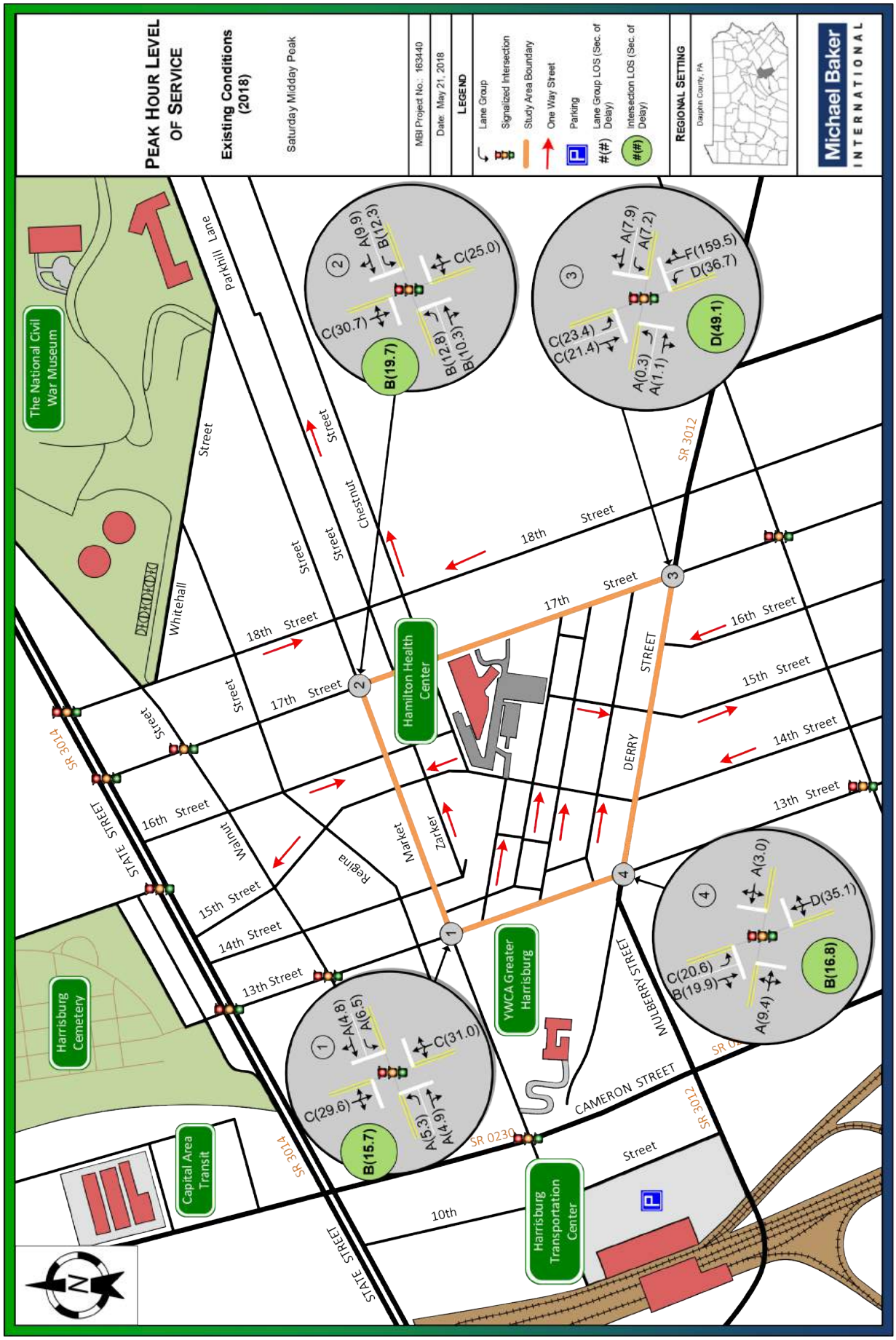

EXISTING LANE CONFIGURATION AND CONTROL
Existing Conditions (2018)
MBI Project No.: 163440
Date: May 21, 2018
LEGEND
Lane Group
Signalized Intersection
Study Area Boundary
One Way Street
Parking
REGIONAL SETTING
Dauphin County, PA
Michael Baker INTERNATIONAL
The National Civil War Museum
Parkhill Lane
Whitehall
Chestnut Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
SR 3012
SR 3014
STATE STREET
Walnut
Regina
Market
Zarker
DERRY STREET
MULBERRY STREET
CAMERON STREET
SR 0230
SR 2012
10th Street
Hamilton Health Center
YWCA Greater Harrisburg
Harrisburg Cemetery
Capital Area Transit
Harrisburg Transportation Center
N

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PEAK HOUR LEVEL OF SERVICE
Existing Conditions (2018)
Weekday Morning Peak
MBI Project No.: 163440
Date: May 21, 2018
LEGEND
Lane Group
Signalized Intersection
Study Area Boundary
One Way Street
Parking
Lane Group LOS (Sec. of Delay)
Intersection LOS (Sec. of Delay)
REGIONAL SETTING
Dauphin County, PA
Michael Baker INTERNATIONAL
The National Civil War Museum
Parkhill Lane
Whitehall
Chestnut Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
10th Street
SR 3014
SR 3012
SR 0230
STATE STREET
Walnut
Regina
Market
Zarker
DERRY STREET
MULBERRY STREET
CAMERON STREET
Hamilton Health Center
YWCA Greater Harrisburg
Harrisburg Cemetery
Capital Area Transit
Harrisburg Transportation Center
B(16.3) C(22.3) D(42.2) D(36.3) C(31.1) D(36.1) C(28.7)
B(15.3) B(14.1) E(58.1) C(33.0) C(27.7) C(25.1) C(32.3) C(20.9) C(28.3)
A(1.3) A(1.4) D(48.8) D(45.1) C(21.9) A(5.4) A(5.6)
A(0.7) D(44.9) C(27.8) C(28.5) A(8.2) B(19.4)
N


PEAK HOUR LEVEL OF SERVICE
Existing Conditions (2018)
Weekday Evening Peak
MBI Project No.: 163440
Date: May 21, 2018
LEGEND
Lane Group
Signalized Intersection
Study Area Boundary
One Way Street
Parking
Lane Group LOS (Sec. of Delay)
Intersection LOS (Sec. of Delay)
REGIONAL SETTING
Dauphin County, PA
Michael Baker INTERNATIONAL
The National Civil War Museum
Parkhill Lane
Whitehall
Chestnut Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
SR 3012
SR 3014
STATE STREET
Hamilton Health Center
YWCA Greater Harrisburg
Harrisburg Cemetery
Capital Area Transit
Harrisburg Transportation Center
MULBERRY STREET
DERRY STREET
CAMERON STREET
Market
Zarker
Walnut
Regina
10th Street
SR 0230
D(36.3)
C(25.7)
D(36.3)
C(23.8)
D(27.2)


PEAK HOUR LEVEL OF SERVICE
Existing Conditions (2018)
Saturday Midday Peak
MBI Project No.: 163440
Date: May 21, 2018
LEGEND
Lane Group
Signalized Intersection
Study Area Boundary
One Way Street
Parking
Lane Group LOS (Sec. of Delay)
Intersection LOS (Sec. of Delay)
REGIONAL SETTING
Dauphin County, PA
Michael Baker INTERNATIONAL
The National Civil War Museum
Parkhill Lane
Whitehall
Chestnut Street
18th Street
17th Street
16th Street
15th Street
14th Street
13th Street
10th Street
Walnut Street
Market Street
Zarker Street
Regina Street
DERRY STREET
MULBERRY STREET
CAMERON STREET
STATE STREET
SR 3014
SR 3012
SR 0230
Hamilton Health Center
YWCA Greater Harrisburg
Harrisburg Cemetery
Capital Area Transit
Harrisburg Transportation Center
B(19.7)
C(30.7)
B(12.8)
B(10.3)
C(25.0)
A(9.9)
B(12.3)
D(49.1)
C(23.4)
C(21.4)
A(0.3)
A(1.1)
A(7.9)
A(7.2)
F(159.5)
D(36.7)
B(15.7)
C(29.6)
A(5.3)
A(4.9)
C(31.0)
A(4.8)
A(6.5)
B(16.8)
C(20.6)
B(19.9)
A(9.4)
A(3.0)
D(35.1)



The only covered bus stop in our study area is at Hamilton Health.



Poor conditions for pedestrian circulation are particularly challenging to those with disabilities.

Key Findings For Reuse Planning:

A. **Street and thoroughfare typologies have generally been established linking multi-modal transportation needs and urban design guidelines for the uses and buildings that front onto them. The City's Draft Comprehensive Plan is advocating a "complete streets" approach to the design of streets and thoroughfares to provide the maximum opportunity of a balanced benefit to all modes. Ensuring that streets are constructed to include the appropriate number and limited widths of travel/ parking lanes, bicycle and pedestrian facilities as well as supporting streetscaping and green infrastructure (GSI) elements such as street trees, landscaping, street fixtures, flow-through stormwater planters, etc. should be incorporated into the redevelopment goals of this plan. The community clearly understands the relationship between great streets and great and vibrant places and those parameters must be deployed through appropriate redevelopment actions. This approach towards improving the overall transportation and connectivity should be considered throughout the study area, especially focused on 17th Street, Derry Street, and Market Street (especially to enhance connections between South Allison Hill and downtown). Strategic improvements at critical intersections focused on improving safety for all modes and promoting pedestrian and bicycle activity are important for overall connectivity.**

B. **Consider opportunities to elevate the importance of 17th Street as a mini-main street within the neighborhood. Although Derry Street is currently identified as the primary activity corridor, due to the high level of vehicular traffic, it may not be the most suitable for this purpose. With the investments of Hamilton Health and the concentration of buildings and undeveloped parcels fronting on this street with great reuse potential, opportunities exist, using a complete streets approach, to make this the physical and "branded" spine of the neighborhood. Although 17th Street also has a significant level of vehicular traffic, it could be a more pedestrian-friendly street, especially with the addition of new street-oriented uses on the potential redevelopment sites.**

C. **The interface of two different street grid alignments creates functionally challenging intersections. Improvements should be explored at these intersections as well as other key intersections within the study area to determine if there are functional and safety improvement options. Intersection improvements especially along 17th, Derry, 13th, and Market Streets should be considered. Related to this effort is the aspect of the one-way street system and the level of confusion it creates, especially for visitors not familiar with the area. Opportunities to re-think some aspects of the one-way flow should be considered.**

What We Heard

- Redevelopment is good but it has the potential to attract more traffic concerns with many residents. This issue, combined with narrow streets, on-street parking conflicts, and the safety challenges at intersections could lead to greater problems. Improvements to the underlying transportation and connectivity infrastructure in the neighborhood should happen in tandem with reuse activities to ensure that vitality increases along with safety and functionality of the study area's transportation network.

PARKING

In any city or neighborhood, parking is a crucial component of the daily function of many residents and businesses. Particularly in older neighborhoods, parking demand can often outpace the number of available spaces within an area. Surface parking is rarely a preferable use for a given property, both from an urban/community design perspective and a highest and best use/value perspective. This dynamic can lead to the aforementioned shortages in parking supply and frustrating day-to-day activities and potentially impede further investment in a neighborhood.

Within the South Allison Hill neighborhood, parking for a majority of the properties, particularly the residential dwellings, relies heavily on the supply and availability of on-street parking. This presents challenges in terms of the available supply for those who live within the neighborhood as well as those who run businesses. The currently available parking supply in the neighborhood is significantly stressed and many residents and stakeholders have indicated that the current available parking is insufficient. This neighborhood developed in a time when personal vehicle ownership was limited or did not exist. Infrastructure such as robust public transportation, bike lanes, and nearby jobs and amenities, which would lessen the demand for personal vehicles, is absent.

The fact that parking is mostly limited to the on-street supply is further compounded by the condition of the streets themselves which are not particularly well situated to allow for sufficient and safe parking of vehicles. Many of the streets within the study area are narrow, and the abundance of one-way streets within the neighborhood can make navigating areas with parking cumbersome. Some streets are too narrow as currently configured to accommodate two-way traffic without eliminating significant amounts of on-street parking. This constraint is partially responsible for the issue of damage to parked cars– although other security-related factors also contribute to this condition.

Key Findings For Reuse Planning:

A. Given the current strain on the existing parking demand it is crucial for any approach to redevelopment to be mindful of the additional demand that will be created by a given use. Business owners in the area have indicated that visibility and accessibility are important when considering parking options and while some businesses are able to accommodate off-street parking adequately on their sites, others rely on the strained public options to support vehicular access for potential customers.

B. Desire for public parking in some capacity is clearly present within the study area both for residents and current/future business owners. This demand will have to be meshed with the City of Harrisburg's concerns regarding management and proper utilization of land within an urban context. Parking should not be overlooked as a major consideration within any proposed plan, but the plan should be cognizant of trade-offs, ranging from potential increases in impervious surfaces and stormwater runoff to aesthetics, urban design, accessibly, visibility, safety, security, and maintenance perspectives.

What We Heard

- The current parking supply within the South Allison Hill neighborhood is inadequate to meet the current demands of both residents and businesses. It is heavily dependent upon on-street parking.
- Residents have expressed desire for greater parking supply as well as more secure parking options.
- Business owners desire readily accessible and visible parking options to serve employees and patrons.



Narrow, one-way streets create on-street parking challenges for residents in South Allison Hill.



Residents sometime park on sidewalks to prevent damage to their vehicles.

STORMWATER MANAGEMENT

South Allison Hill resides within the large portion of Pennsylvania belonging to the expansive Chesapeake Bay watershed. The Chesapeake Bay watershed includes portions of six states (New York, Pennsylvania, Maryland, Delaware, West Virginia, and Virginia) as well as the District of Columbia. Per the Chesapeake Bay Program, the watershed covers around 64,000 square miles, as well as almost 11,700 miles of shoreline, and is populated by over 17 million people. A vast number of rivers and streams are contained within the Chesapeake Bay watershed, including the Potomac, James, and Susquehanna Rivers. The Chesapeake Bay was the first estuary in the nation targeted by Congress for restoration and protection in 1983, with an emphasis on pollution reduction and ecosystem restoration efforts.

The Susquehanna River is the largest river among those which outlet into the Chesapeake Bay and its watershed, which includes all of Harrisburg, contributes about 50 percent of the Bay's total fresh water. The Susquehanna, starting from its upper reaches in Cooperstown, New York for the Main Branch and Cambria County, Pennsylvania for the West Branch, flows southward through east-central Pennsylvania after the confluence of its two branches near Sunbury. After passing Harrisburg, the river runs south and east, crossing into northern Maryland before terminating where it flows into the northern reaches of the Chesapeake Bay.

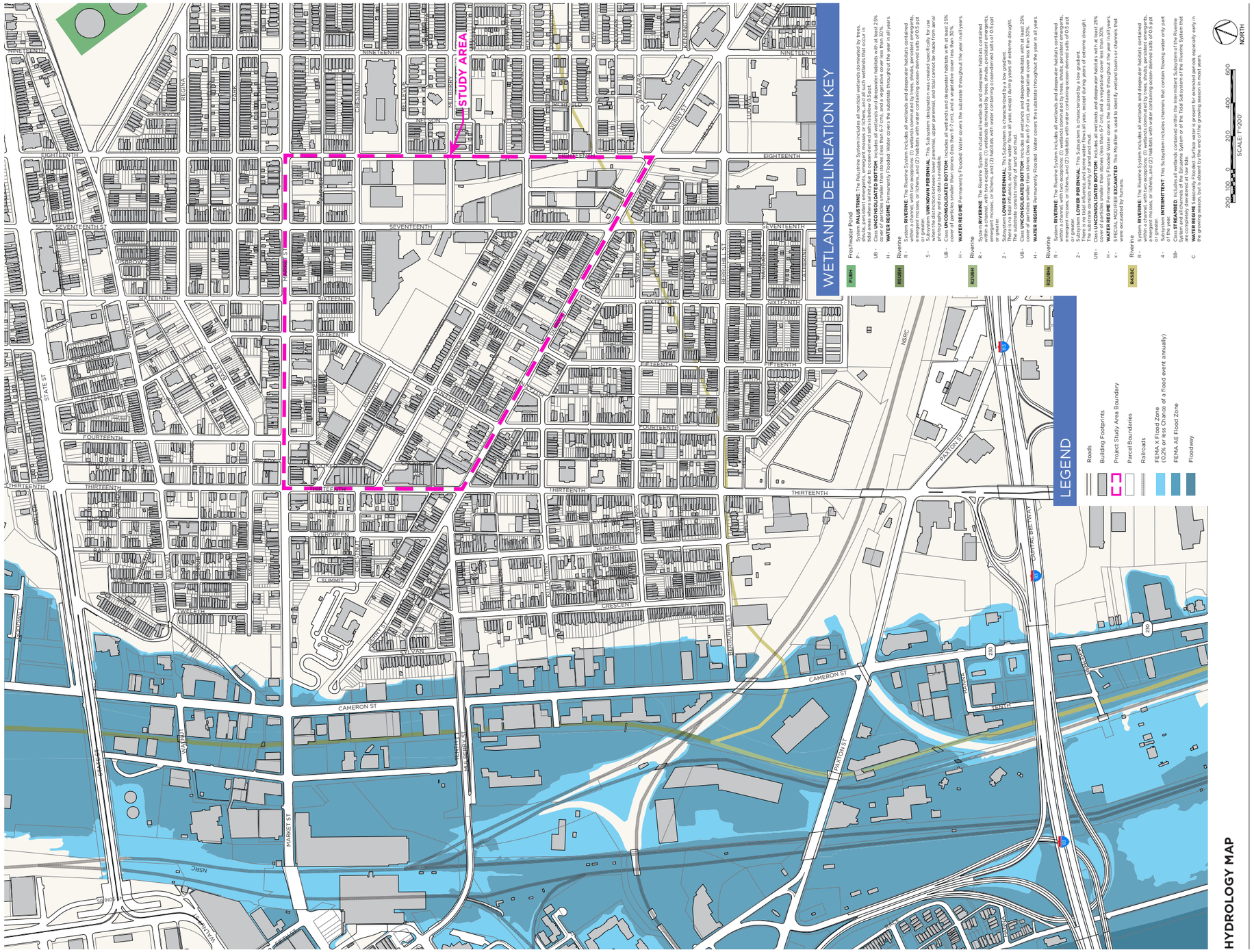
The Paxton Creek is where the majority of the study area's storm and sewer outfalls reside. The majority of the Paxton Creek consists of a modified concrete-lined channel that was constructed by the City of Harrisburg in 1914 to remedy the heavily polluted and stagnant condition caused by the City's urban and industrial development in the 1800's. Due to rapid growth and development and widespread ecological degradation of the Creek, the channel has been altered by flash flooding and elevated concentrations of nutrients and contaminants. In 2013, the PADEP determined that 20 miles of the Paxton Creek are impacted by sediment and at least eighty six percent of the sediment is contributed by stream erosion. To alleviate this condition the U.S. EPA created a Total Maximum Daily Loading (TMDL) Report that required all entities discharging stormwater or combined sewer overflows to Paxton Creek to collectively reduce sediments loads by thirty five percent . This is key to what Capital Region Water (CRW) is undertaking in their City Beautiful H2O program plan from 2018.

Beyond the network of streams and rivers through which surface waters from a region flow, a portion of stormwater runoff behavior is related to the underlying soils and geology. On Pennsylvania's geologic map, Harrisburg resides near the edge of the ridge and valley region through which the Susquehanna River cuts. In many parts of this region, particularly in lower-lying valleys, calcareous rock types such as limestone can be prevalent, leading to the formation of karst features like caverns and sinkholes from the dissolution of rock by surface and underground water flows. In this particular portion of Harrisburg though, the underlying geology consists mainly of rock types not prone to this dissolution, including shale and other sedimentary rocks.

Most of the South Allison Hill neighborhood of Harrisburg, including the entirety of the study area, is underlain by bedrock designated within the Hamburg sequence. Per the USGS description of the unit, the Hamburg sequence consists of shale, siltstone, and greywacke (a type of sandstone) with greenish and maroon coloring. The Hamburg sequence does have sections of limestone bedrock but none are delineated within the study area specifically, sparing the neighborhood from the levels of sinkhole risk that exist in much of the city. This more stable bedrock typically leads to less percolation of stormwater, which while beneficiary due to the reduced sinkhole risk, also can result in more runoff.

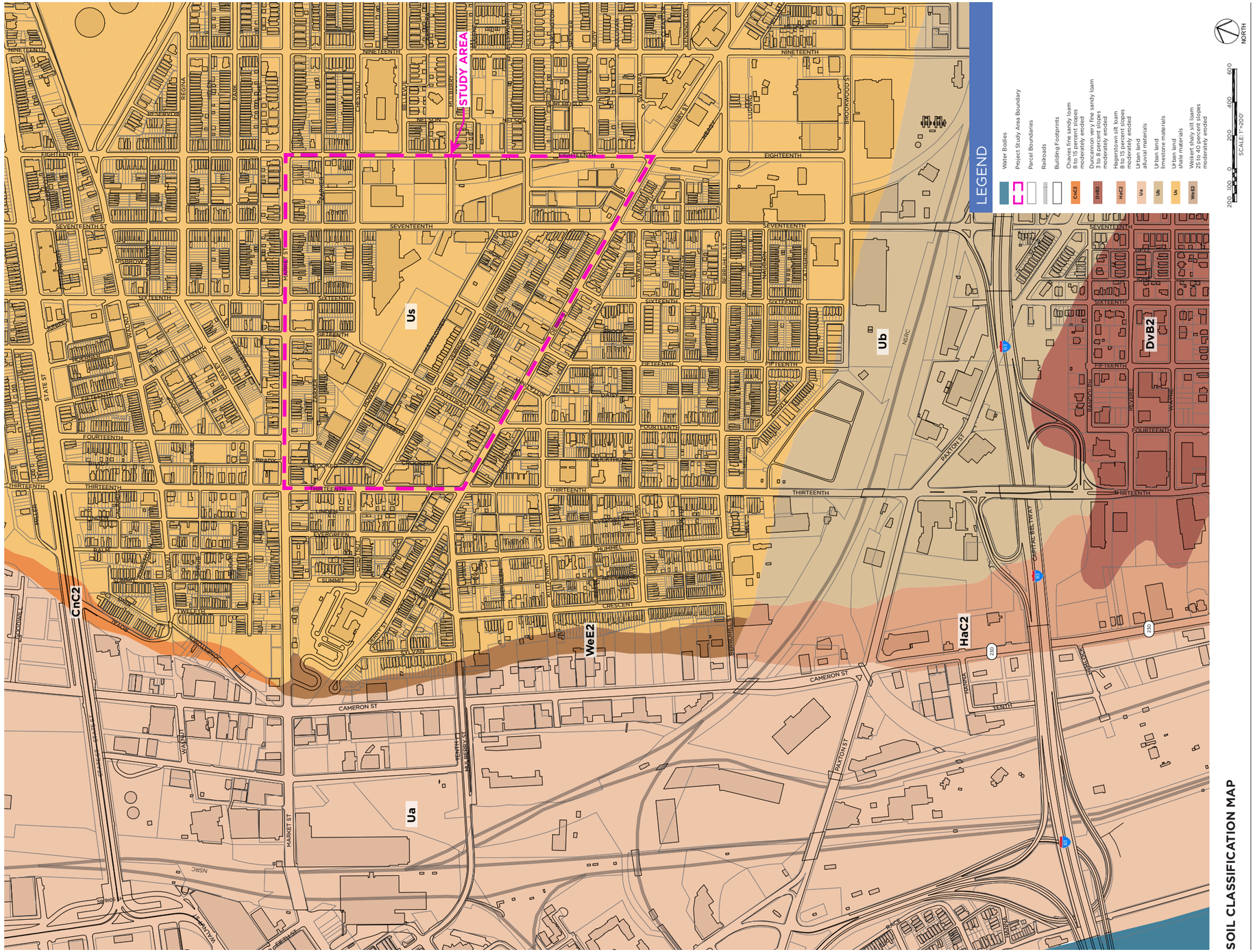
The residual soils over a primarily shale rock formation like the Hamburg sequence will typically be fine-grained, limiting some of the infiltration potential. However, the urban context means much of the natural soil profile has been altered, both by the presence of impervious surfaces and the importing and removal of materials through many decades of development and redevelopment. For this reason, the soils are just designated "urban land" with shale materials by the NRCS. The topography of the neighborhood, which is terraced significantly above the lower-lying areas closer to Paxton Creek and the Susquehanna River, means that any flooding issues will typically be limited to local occurrences at intersections or specific low points, rather than neighborhood-wide concerns.

Figure A1.11
Hydrology Map



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Figure A1.12
Soil Classification Map



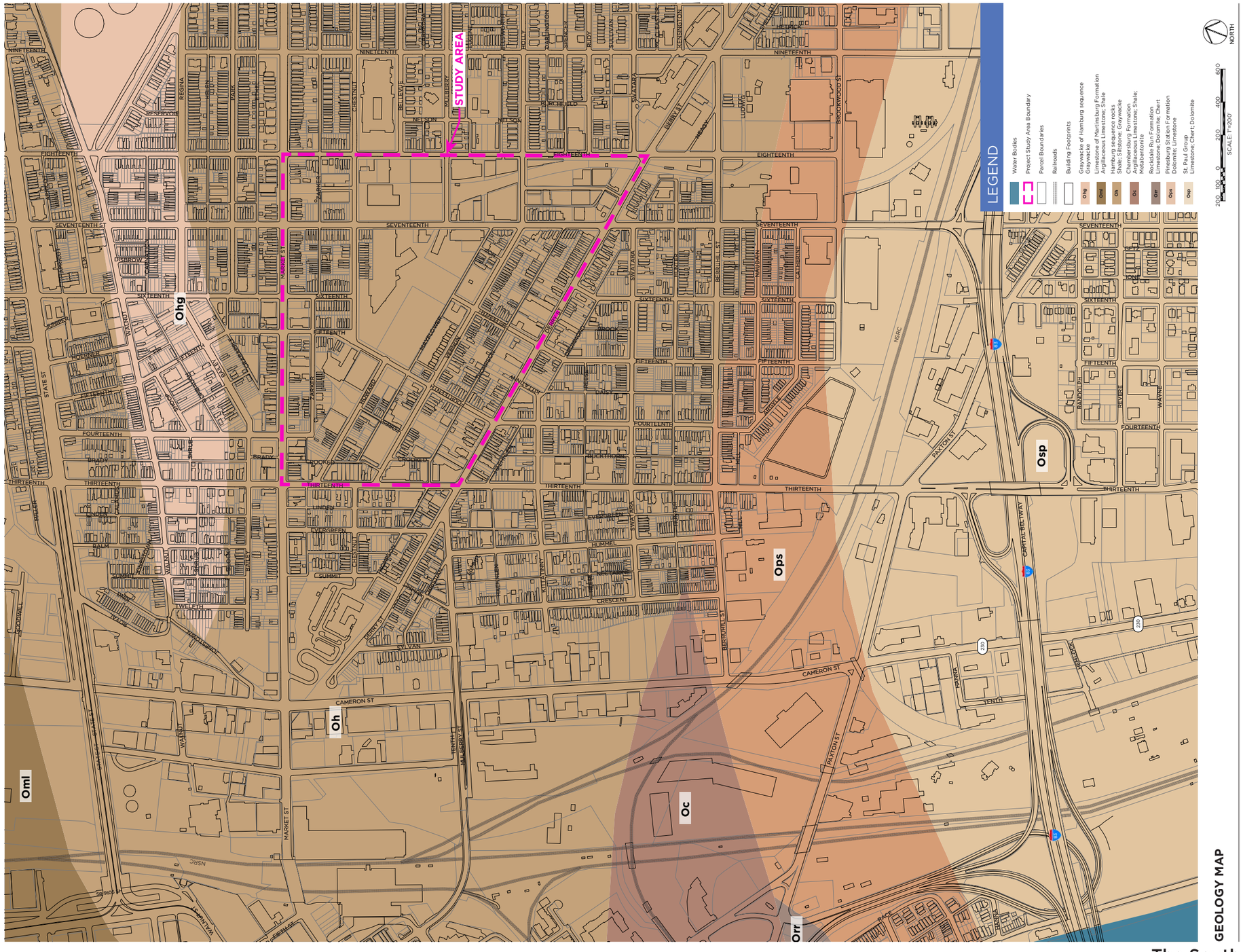
SOIL CLASSIFICATION MAP

S/G/A LANDSCAPE ARCHITECTURE PLANNING
STROMBERG/GARRIGAN & ASSOCIATES

DRAFT
FOR DISCUSSION PURPOSES ONLY

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Figure A1.13
Geology Map



GEOLOGY MAP

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Existing Conveyance

The Lower Paxton Creek Area encompasses 948-acres within the Paxton Creek Interceptor Sewershed bounded by the north to Market Street, south to I-83, west to the Paxton Creek, and east to 25th Street. The area consists mostly of residential developments and some commercial and institutional properties west and south within the sewershed. All of the catchment areas drain to the Paxton Creek interceptor and then to the Paxton Creek. Most of the conveyance to the east of the study area contains separated sanitary and stormwater systems while the majority within the study are combined sewer systems.

CRW's H2O plan has identified that a presumptive level of control is achieve with in the Lower Paxton Creek Planning Area at all combined sewer outfalls except for S-048 where the majority of South Allison Hill and the study area reside. Additional control was identified as a near to mid-term priority for CRW.

Floodprone Areas

Through their research, CRW has identified areas of concern within South Allison Hill mostly within the boundaries of the combined sewer and stormwater system. The separated stormwater lines converge near the main trunk line on 18th Street into a combined system. This area follows a natural topographical depression where flooding regularly occurs. Separating out the stormwater connections into surface detention basins to control peak flow rates could ease the regularity of the flooding issues.

CRW has identified several flooding and stormwater infrastructure issue locations:

- Chronic Flooding Area at 14th and Market
- Stormwater rehabilitation needs on Market Street between Cameron Street and 14th Street. Currently under investigation
- Chronic Flooding Area on 18th Street between Rudy Road and Berryhill
- Market Street between 13th and 14th Streets
- 18th Street north of Market Street to south of Derry Street
- Holly Street and Rudy Road between 17th and 18th Streets.

CRW currently has identified several important pipe "Replacement and Rehabilitation Opportunities" within the South Allison Hill Area:

Current Policies and Programs

Community Greening Plan – This is a green stormwater infrastructure (GSI) plan for Harrisburg created in January 2017 by CRW. This Community Greening Plan, Capital Region Water's Green Stormwater Infrastructure Plan, focuses on identifying areas of opportunity for green stormwater infrastructure and assessing the feasibility of implementation in the City. Green infrastructure has the ability to enhance place making, stimulate economic development, and lead to the development of more memorable and enjoyable public spaces.

Joint Pollution Reduction Plan – CRW, Lower Paxton Township, and Susquehanna Township joined together to create a single TMDL Strategy for the entire watershed that would satisfy permit requirements and be more cost-effective than separate initiatives. The joint partners expanded the TMDL to include requirements for the Chesapeake Bay Pollutant Reduction Plan (CBPRP). This Joint Pollutant Reduction Plan will meet the pollutant load reductions requirements necessary for each of the municipalities' MS4 permit processes. Goals for the Joint Plan included:

- Short-term sediment load reduction of 10% for the Paxton Creek TMDL.
- Long-term 35% sediment load reduction necessary for the Paxton Creek TMDL.
- 10% sediment load reduction for the Municipal Entities' combined Chesapeake Bay Planning Areas.
- 10% sediment load reduction for Wildwood Lake.
- 10% sediment load reduction for the UNT to Spring Creek.

These goals will be achieved within five years of the PADEP's issuance of each Municipal Entities' individual MS4 Permit processes.

City Beautiful H2O Program Plan – Capital Region Water's responsible approach to addressing a combination of system-wide infrastructure deterioration and failure with

high-priority water quality compliance activities. CRW must balance delivery of reliable service with the Federal Clean Water Act and Commonwealth Clean Streams Law obligations in a manner which ratepayers can afford. This program was created in order to address issues identified and program repairs and improvements to areas within the Joint Pollution Reduction Plan as well as in the Paxton Creek TMDL.

Chesapeake Bay TMDL – The U.S. EPA first established the Chesapeake Bay TMDL comprehensive "pollution diet" program in 2010. This program provides accountability features and guidelines to restore clean water to the Chesapeake Bay. The largest ever TMDL program developed by the EPA covers the entire 64,000-square mile watershed and identifies the necessary pollution reductions from major sources of nitrogen, phosphorus and sediment across the Bay including jurisdictions in Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia. The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025. Actions under the Chesapeake Bay TMDL will also have significant benefits far beyond the Chesapeake Bay itself, including helping to clean rivers and other waterways that support local economies and recreational pursuits.

Planned Capital Improvements

A central principle of the South Allison Hill Brownfields Area-Wide Plan's approach to stormwater management will be decentralization of the stormwater management system via a wide pallet of stormwater elements that can capture and treat runoff at different scales. Rather than relying solely on "upsizing" pipes or pumps to deal with additional flow, the goal is to remove as much stormwater from the system as possible before it reaches the conveyance lines. This includes the use of bio-retention, permeable pavements, and other pre-treatment strategies which can be tailored to fit a wide range of applications and scales. Maximizing open space and reducing impervious surface coverage wherever possible is also key to this particular strategy of decentralization. Particularly in the context of the catalyst site, there is an opportunity to decrease the amount of runoff being generated and conveyed into Paxton Creek during storm events. This would greatly impact the Allison Hill Neighborhood as a whole.

A valuable component of a stormwater and flood management plans is the inclusion of pre-treatment elements. Elements such as flow-through planters, green roofs, bio-retention swales, and micro-pool/terraced wet meadows can be used to intercept and treat water before it enters the main conveyance system. Engineered soils can filter out pollutants and proper plantings can help remove excess nutrients produced by runoff flowing over impervious surfaces. During storm events, pre-treatment structures can also help to reduce peak flows by temporarily storing water and reducing overall volume.

Construction of complete streets and "Green Streets" are also critical components when designing modern transportation improvements. AWP projects allow municipalities to plan for and include features like rain gardens, street trees, and other stormwater elements within the public right-of-way. Including green technologies within these envelopes can reduce runoff, help cut down pollutant loads, and provide redundancy for the overall stormwater management conveyance systems. Many of these features also add aesthetic value and environmental benefits to the community, making them a valuable part of any AWP.

Proposed complete streets should not only focus on accommodating vehicular traffic and pedestrian activity, but also create a comprehensive sidewalk network that allows for free movement of pedestrians and prevents people from reaching dead ends or having to walk within vehicular cartways. Features like planters, plantings, rain gardens, and street trees should be provided along many of the streets and can be utilized as stormwater management features. Complete streets create buffers between vehicular and pedestrian traffic through various traffic calming measures designed to improve safety for everyone using the roadway. Improvements should be considered to the stormwater management facilities already existing with the South Allison Hill Neighborhood. It is crucial to develop these systems to handle a range of storm conditions and to drain under moderate to small rainfall events.

Planning from CRW is already undertaking projects in a majority of the South Allison Hill study area. Major stormwater infrastructure improvements have been planned including separation of the stormwater drainage system from the currently combined sewer system running south down 18th Street, where a majority of the flooding has occurred within the study area to-date. There are several projects currently in place including a green streets initiative on Derry Street with traffic improvements with rain garden bump-outs at Mulder Square and additional rain garden bump-outs and

stormwater infrastructure improvements between 13th and 15th Streets.

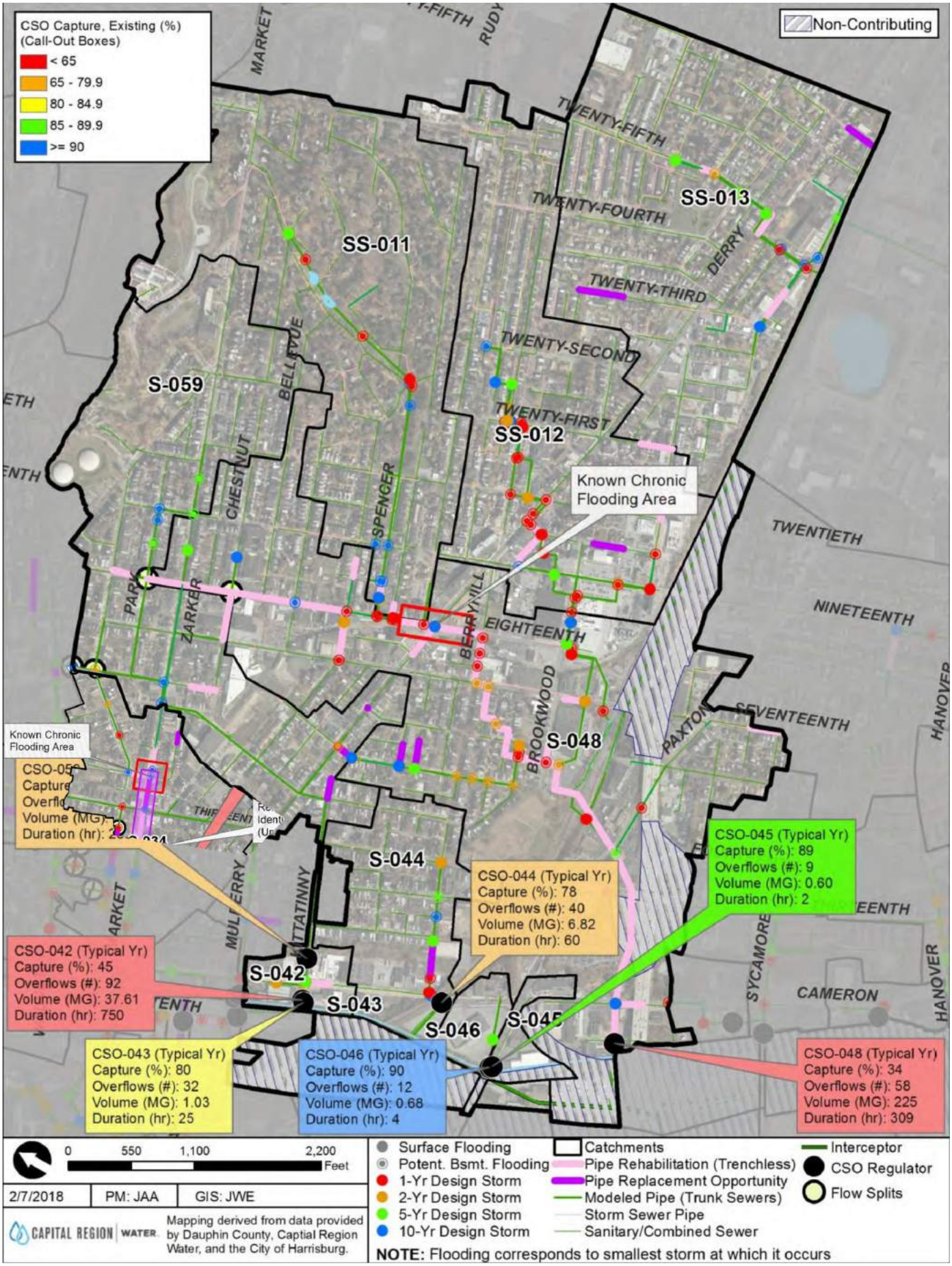
CRW has looked at four potential cost effective solutions to the issues within the Lower Paxton Creek Planning Area including South Allison Hill. Improvement and control strategies include:

- **Cost-effective Separation of an Entire Catchment area:** These areas are focused on where a limited number of sanitary connections exist within an entire catchment that can be diverted to a short length of new separate sanitary sewer.
- **Cost-effective Sanitary Flow Rerouting of a Sub-catchment area:** These areas are focused on where a limited number of sanitary connections exist within an entire catchment that can be diverted to a short length of new separate sanitary sewer. The existing sanitary line would be converted into a separate stormwater line bypassing the combined sewer overflow regulators.
- **Cost-effective Stormwater Disconnection of a Sub-catchment area:** Particularly for the 18th street corridor by diverting the stormwater source and creating a detention basin south of Berryhill Street.
- **Full Separation of an Entire Catchment area:** This is focused on separating out the entire stormwater and sanitary system into two systems within the Lower Paxton Creek Sewershed.

An important consideration through the implementation of stormwater Best Management Practice (BMP) is that development projects must satisfy the requirements of state and federal laws as authorized by the Clean Water Act, the U.S. EPA Municipal Separate Storm Sewer System (MS4) as well as the Chesapeake Bay Watershed Implementation Plan. As it satisfies these requirements, the City should lead the effort to ensure that stormwater management systems are integrated into existing and proposed development patterns and not engineered in a way that negatively impacts the urban form of the overall redevelopment. The City should also ensure that redevelopment efforts comply with NPDES/MS4 permitting regulations as a designated MS4 community.



The City is continually working to address ongoing and deferred maintenance on aged stormwater and utility infrastructure.



Existing Hydraulic and Structural Problems (City Beautiful H20 Program CRW)

Key Findings For Reuse Planning:

A. First and foremost, all development projects must satisfy the requirements of state and federal laws as authorized by the Clean Water Act as well as Chesapeake Bay Watershed Implementation Plan. As it satisfies the various requirements of these plans and permits, the City should lead the effort to ensure that stormwater management systems are integrated into the development patterns and not done in a way that negatively impacts the urban form of the overall redevelopment. This means that stormwater facilities should be designed to be amenities whenever possible and not result in unintended consequence of negatively impacting the urban character of the neighborhood.

B. Methods to approach stormwater management as an area-wide system and not on a site-by-site basis should be explored. Stormwater and drainage are inherently part of networks. Water flows downhill into continual larger, further concentrated conveyance systems. If stormwater management systems are treated as an area-wide network of interconnected components, it ensures effectiveness and provides the benefit of overlaying other uses that also want to interconnect. This is especially true for parks and public spaces. A good example of this is the urban meadow project at the HACC campus downtown.

C. Consider stormwater management as both a necessity and amenity through the integration of management systems into all types of facilities and development. There is no single solution or treatment to address all of the existing and future stormwater management needs within the City of Harrisburg or even the South Allison Hill neighborhood. Therefore, a wide variety of techniques that range from grey water building systems to rain gardens, underground cisterns, and detention areas should be considered. A hybrid of different techniques, linked together, provides the greatest opportunity to effectively manage stormwater in an urban environment.

D. Encourage the design of streets which integrate stormwater management facilities and GSI into public rights-of-way. This should be done as seamlessly as possible. For example, "rain gardens" should be seamlessly integrated into the design of streets and other open spaces, rather than be added on as ostentatiously "green" interventions. The City is advancing this approach with the current streetscape improvements along North 3rd Street.

E. Consider strategic areas for large volume storage that can also provide additional off-street parking to expand the parking supply while reducing runoff. If located and design properly, these two value-added aspects could coexist and greatly increase the overall value of land dedicated for off-street parking, which the City is generally discouraging as a primary land use.

F. Continuous and healthy street tree coverage should be promoted throughout the street network. Continuous street tree canopy provides a positive aesthetic value but equally it provides real environmental benefits. Street trees improve air quality and reduce heat island effect by providing shade. Canopy "interception" can also dramatically reduce peak stormwater events by holding water within the tree canopy versus direct ground impact. Appropriate use of street trees entails focusing on context along with the promotion of diversity to ensure street tree longevity and minimize the potential for large-scale dissemination due to species monocultures. Residents sometimes hold negative perceptions about street trees due to potential root damage and other maintenance issues. These real and perceived issues should be addressed in the appropriate design and planting of tree wells and trees.

What We Heard

- Poor drainage and deteriorating stormwater inlets are a major concern and a health hazard in some locations due to the combined sewer system still in place in the neighborhood. Even in low rainfall events these inlets are overflowing causing both sewage and stormwater to flood onto streets.
- There are several areas where flooding occurs on Market Street at 14th Street, 18th Street between Rudy road and Berryhill, as well as on Market Street between Cameron Street and 14th Street.
- Recommendations for improvements to stormwater management and a combined sewer outfall reduction plan within the neighborhood should be a top priority for the City.

UTILITIES

Any neighborhood or city approaching a strategy for redevelopment will have to take stock of the realities of available utility infrastructure in the area. In an older neighborhood such as South Allison Hill, there will typically be some issues and limitations related to public utilities. This is not always the case, but should be considered as planning efforts advance, as upgrades to utilities require significant time and funding.

Within Harrisburg, the wet utilities – which include drinking water supply, sanitary sewers, and storm sewers – are all managed by Capital Region Water (CRW). CRW is nominally separate from the City of Harrisburg, but is essentially the local government unit in charge of the city's public utilities (also known as a municipal authority). Within the City of Harrisburg, approximately 80% of the collected stormwater is conveyed by the city's combined sewer system, according to CRW. The South Allison Hill neighborhood, being one of the city's older neighborhoods, is included among the areas served by combined sewers.

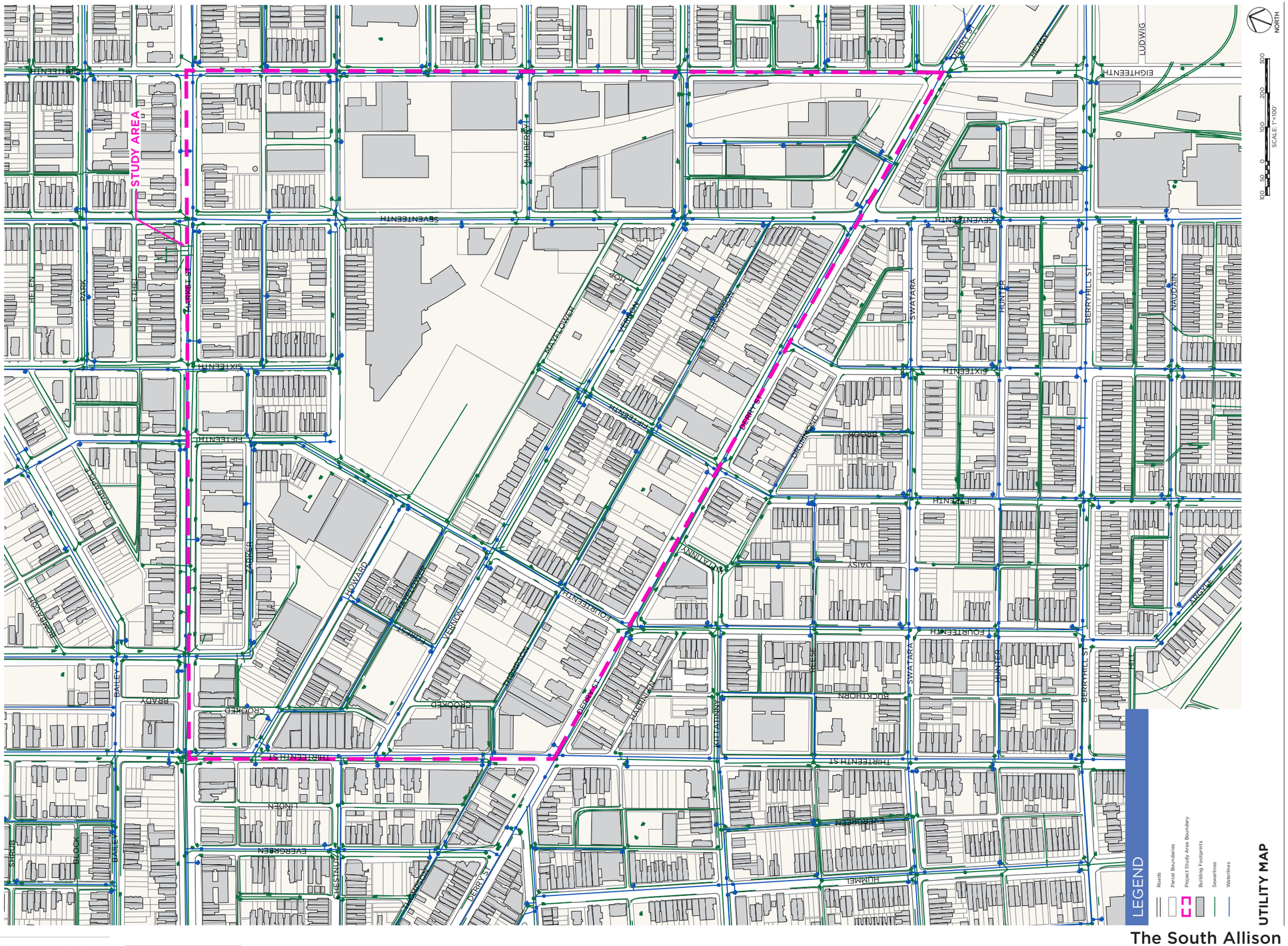
While combined sewers have implications for both sanitary and stormwater flows, the impacts from a stormwater perspective are more thoroughly explored in the stormwater management section of this Background Assessment report. During large runoff events, the capacity of the sewer system can be exceeded and flows are often released into creeks and rivers or back up into neighborhoods. Residents and stakeholders did indicate that there are specific areas within the neighborhood where combined sewers are regularly overwhelmed. Intersections at 14th Street/Market Street and 18th Street/Derry Street were specifically noted by the public. These and similar concerns should be addressed as part of any reuse recommendations.

The dry utilities, which include electric supply and telecommunications, are managed by several companies within the study area. The electric is supplied by PPL Corporation, cable is provided by Comcast, and the phone utility is provided by Verizon. The electrical and telecommunications utilities throughout the neighborhood are largely above ground on utility poles. Along the main thoroughfares – specifically Market and Derry Streets – they appear to be mostly supplied from rear service alleys. This is beneficial to the neighborhood and attractive for potential development, as it keeps overhead wires from blocking storefronts and leaves room to implement streetscape improvements like



Market Street is relatively free of utility poles as the buildings are serviced from rear alleys.

Figure A1.14
Utility Map



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Buildings along 17th Street are served with dry utilities from the front.

lighting, furnishings, and street trees. This is not the case on the north/south streets such as 17th and 18th Streets, where properties are served from utility poles in the front.

Waste management is also a challenge in South Allison Hill as the back alleys are too small for modern garbage trucks. In the typical rowhouse configuration, where the kitchen is located at the back of the house, residents must track their garbage containers through the length of the house to put them out for collecton in front. Many of the back alleys in the study area are neglected, leading to poor street and sidewalk conditions and opportunity for convenience dumping.

Key Findings For Reuse Planning:

A. Sewer and water infrastructure is old and has some evidence of disrepair and thus should be properly evaluated ahead of any substantial new development. Solutions to these problems should be integrated with other infrastructure improvements such as street and streetscape upgrades.

B. Capital Region Water has ongoing infrastructure improvement projects around the city.

C. Dry utilities are located away from street frontages along Market and Derry Streets, which can be beneficial to development.

D. Above-ground utilities front along most north/south and interior neighborhood streets. Opportunities to strategically locate utilities underground should be considered.

What We Heard

- Ponding can occur at some intersections like 14th and Market Streets and 18th and Derry Streets, which is particularly a concern if there are CSO events.
- Rights of way are crowded with utilities, making green infrastructure a challenge.
- Infrastructure on 17th Street is crucial to promoting new businesses.