

The Site

After completing the case study, I felt more prepared to apply my findings to the chosen project site. This section describes the site to which the thesis design will be applied. Its regional setting, physical and climatic features, traffic and zoning are all mapped. Also included are its historical and social characteristics, and a functional analysis is made of the lot's potential as an informal day labor site. Finally, the opportunities and constraints are noted, and the section concludes with a description of the site's current and future users.

The site occupies about one-third of an acre, in a vibrant, ethnically diverse neighborhood in the Washington, D.C. Metropolitan area. It sits at the intersection of four neighborhoods along the Columbia Pike Corridor in Arlington, Virginia.

The site comprises the building lot of the Arlington Mill Community Center and adjacent stream corridor of Four Mile Run. The center is located in a former Safeway grocery store building. This was acquired in 1995 by Arlington County as a site for a high school continuation program, serving a population of non-traditional, largely non-Anglo users who cannot attend a traditional high school. The Arlington Mill Community Center offers many services, including ESL classes, DHS and health care consultation, and computer labs. It also provides flexible meeting spaces for Columbia Heights West and other nearby neighborhoods.

The adjacent park is the 100-foot wide, 45-mile long Washington and Old Dominion Railroad Regional Park (the skinniest park in Virginia). Originally a railroad, the right of way was acquired from the defunct Washington and Old Dominion Railroad in 1968 by Virginia Power, where it served as a right of way for power lines. In 1977, the Northern Virginia Regional Parks Authority began to purchase the use rights for the corridor, and gradually installed asphalt and crushed stone paths throughout the length of the old rail line for public trail use. This trail receives heavy use on the weekends from many Caucasian bicyclists and walkers. During the week, use by Hispanics seems to be greater.

Adjacent buildings include a small strip mall with a CVS drugstore, bakery, and Asian market. A 7-11 sits across Columbia Pike, which is heavily used and also acts as an informal day labor work site. The surrounding neighborhoods are extremely diverse, with a majority

of Hispanic residents. Most are renters, but many are buying duplexes and small homes, steadily working their way into the American dream of home ownership. The next largest ethnic group is Caucasian (roughly 30 percent). About two-thirds of these are long-time home owners, and the rest are renters or recent home purchasers. The neighborhoods are steadily converting their apartment complexes into owner-occupied condominiums. This could signal the beginning wave of gentrification. While this coming trend will initially benefit native-born Caucasians, it could also represent an opportunity for upwardly mobile immigrants to purchase property.

This diversity presents significant challenges to designing a public plaza that can be useful and welcoming to everyone. Any design for a public space should be sensitive to all these dynamics, while hopefully expressing the designer's unique intent.

The following set of photos and drawings should help familiarize the reader with the physical character of the site and surroundings.

Inventory

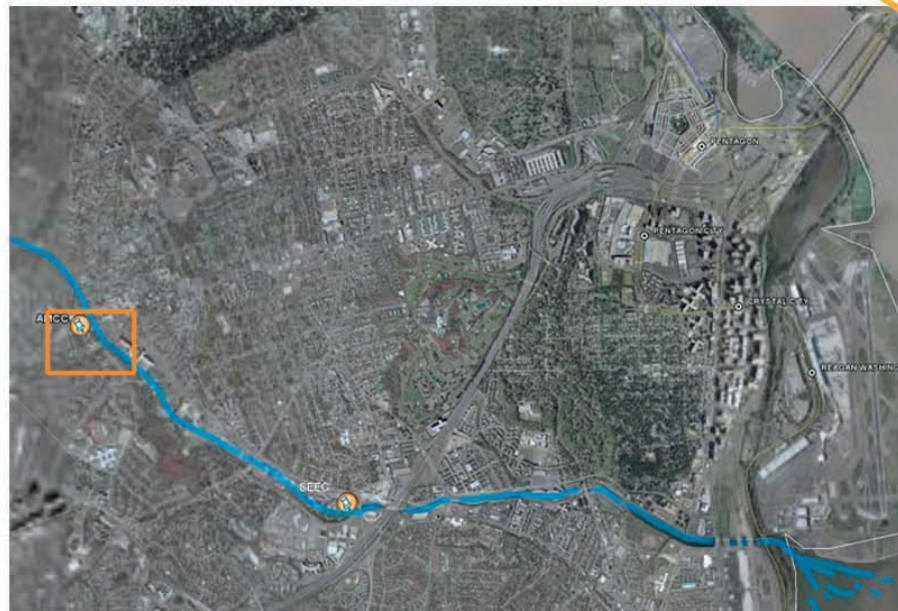
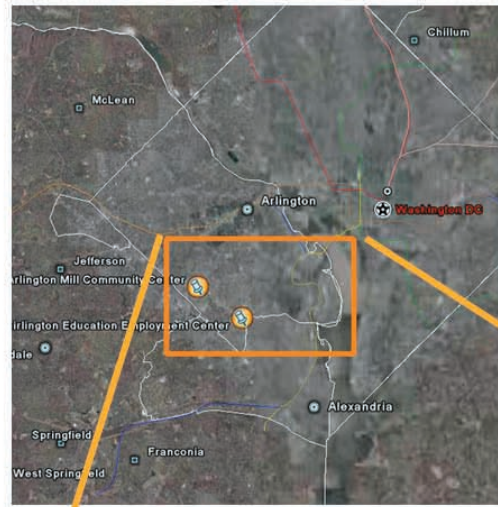


Fig. 3.1. Aerial photos showing how the site fits into the larger DC Metropolitan region. The colored lines in the picture on the right indicate the boundaries of the four neighborhoods. (8) (© Google Maps)



Fig. 3.2. Aerial photo of the AMCC site and three views at left. (9) © Google Maps



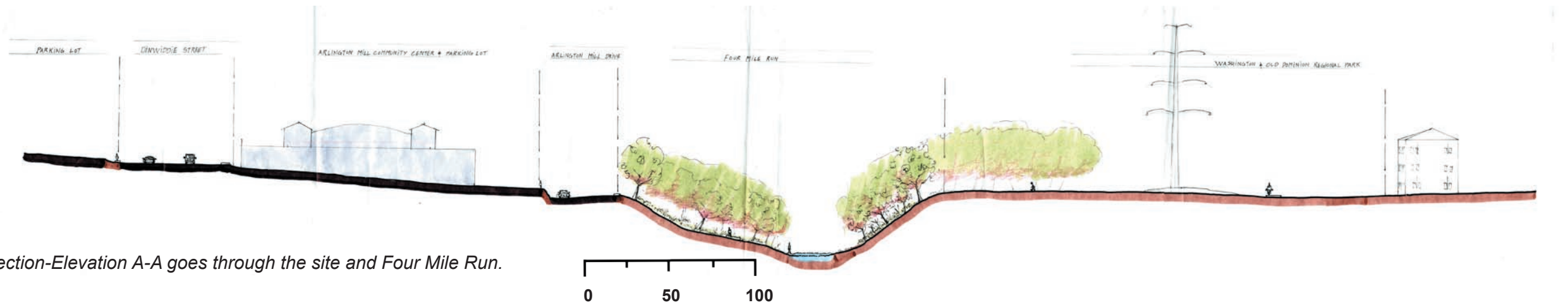
View 1



View 2



View 3

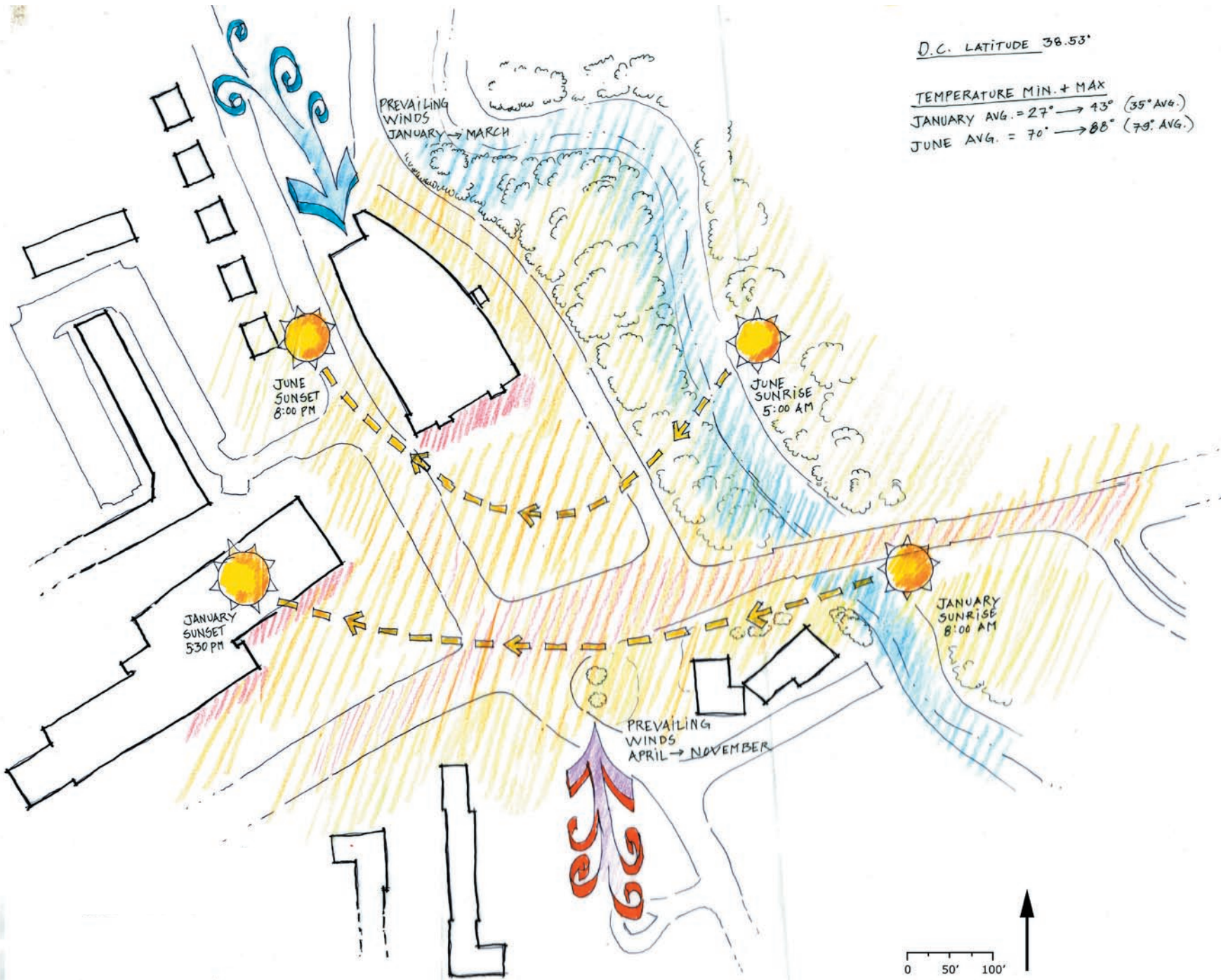


Section-Elevation A-A goes through the site and Four Mile Run.

These two photos give an idea of the site's surrounding physical character. The photo on the right is a view looking up Columbia Pike towards the west, with the AMCC seen to the right. Note the highrise multifamily dwellings in the background, which gives an indication of the high residential density of this neighborhood.

The photo below is a view looking down Columbia Pike towards the east, with the AMCC on the left.





This page shows a climatic analysis map, useful in analyzing the comfort zones of the site. As indicated by the orange and red hatching, the site is very hot in the summer, with complete southern exposure. This is a favorable condition for growing plants and for wintertime comfort, but makes it essential to create areas of shade for summer use. The stream corridor provides a ready source of cool air and shade; unfortunately, prevailing winds blow this cool air away from the site.

Fig. 3.3. Climatic characteristics of the site.



Fig. 3.4. Figure-ground study of the AMCC site and surroundings. (10) (Adapted from maps courtesy of Arlington County, VA.)

The figure-ground analysis reveals what was already fairly obvious, that there is very little spatial enclosure on the site. This is typical of many urban areas in the region, and leaves little hope of achieving the degree of enclosure necessary to achieve the strict classical plaza criteria of Alberti or the Laws of the Indies (see page 7).

However, plans are in place for the area to eventually gain more spatial enclosure through the provision of the Form Based Code. The orange lines on the map represent the proposed building envelopes of this fairly recent zoning designation. This set of incentives covers much of Columbia Pike, and aims to pull the face of buildings much closer to the street, placing parking behind the buildings. This will create a higher building-height-to-street-width ratio, with the attendant sense of comfortable enclosure for pedestrians. While few if any projects have been built to the standards of the FBC, it represents a step towards more prescriptive zoning that can help create the conditions for a more “urban” plaza.

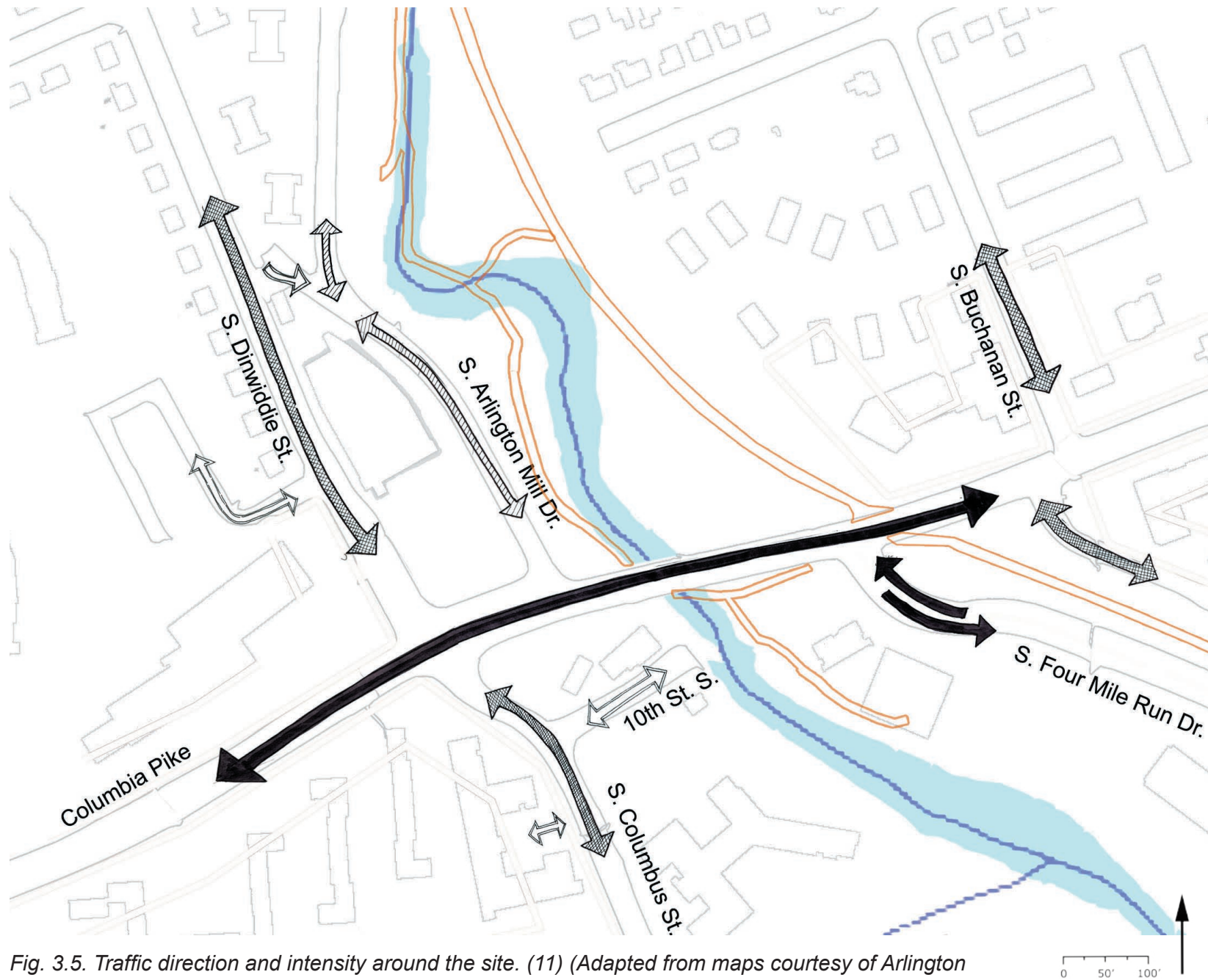


Fig. 3.5. Traffic direction and intensity around the site. (11) (Adapted from maps courtesy of Arlington County, VA.)

This page shows a traffic analysis of the AMCC site and surrounds. Higher volume and intensity is represented by darker arrows. Columbia Pike is the busiest, with an average of four lanes of traffic (two in either direction). Speed limit is generally 35 miles per hour. The street widens to six lanes of traffic in front of the site, where a major intersection with S. Dinwiddie St. creates long waits for pedestrians to cross the Pike.

S. Dinwiddie St. has the second highest traffic, because it leads to a large residential neighborhood and has several bus stops.

S. Arlington Mill Drive gets very little traffic, since it leads to an awkward intersection and a dead end. It has long been considered a logical street to close, and Arlington County's plans for the new AMCC building all assume this street's closure. For these reasons, my thesis design likewise closes S. Arlington Mill Drive.

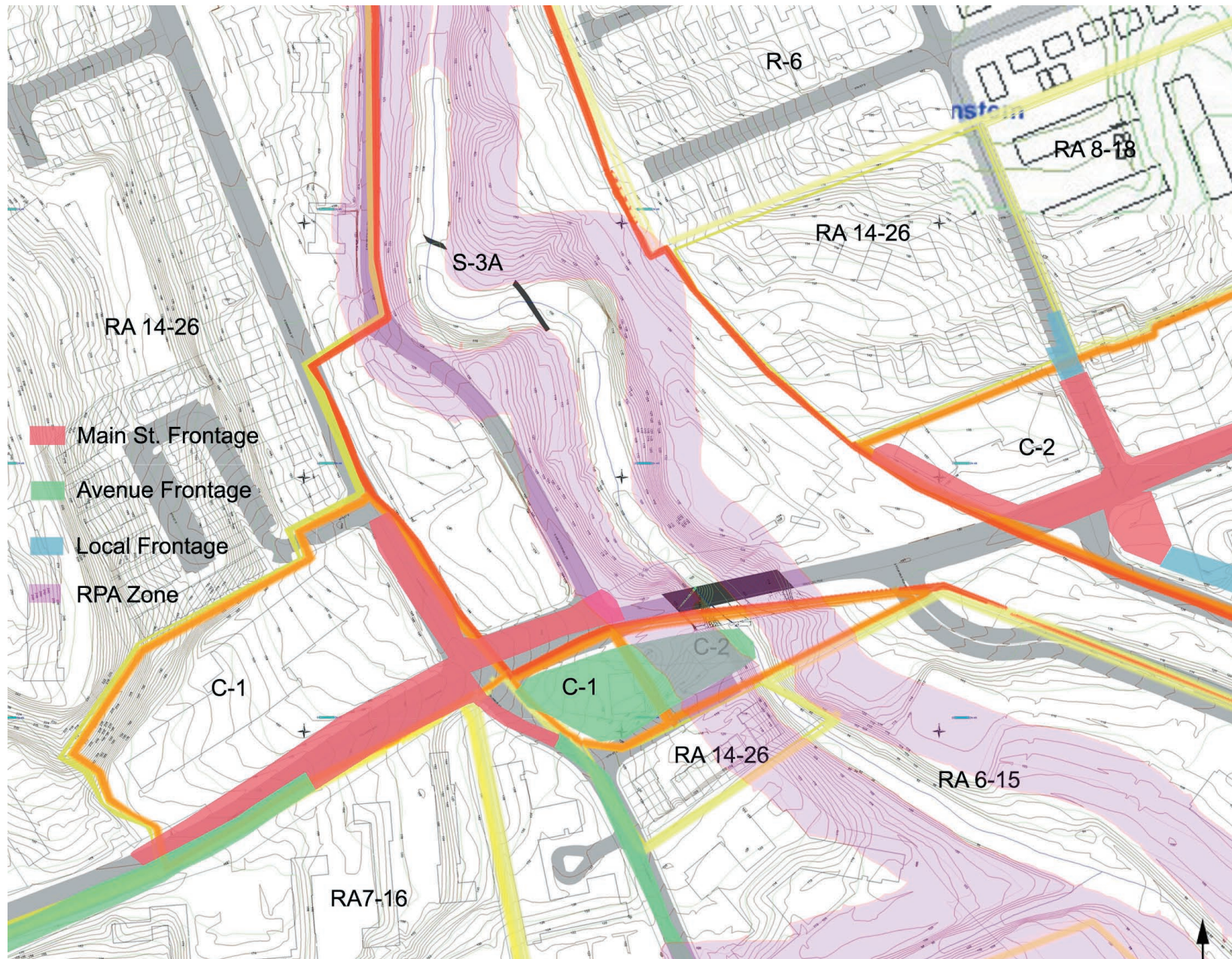


Fig. 3.6. Zoning and Form-Based Code categories. (12) (Adapted from maps courtesy of Arlington County, VA.)

This map shows the various zoning designations on and around the site. The site is zoned as S-3A, a special district. This is likely because the site is adjacent to a stream corridor (which often qualifies as parkland) and is also county-owned, as a facility of Arlington County public schools.

Surrounding zoning includes commercial (C-1) and residential (RA 14-26, RA 7-16), depending on the density and type. Of note is the one-hundred-foot buffer zone along Four Mile Run called the Resource Protection Area (RPA). This is a provision of the Chesapeake Bay Protection Act, which subjects any development within the RPA to a strict set of guidelines (usually overcome through proffers and incentives).

The portions of the street that are shaded represent different categories of the Form Based Code. Unlike conventional zoning which covers land parcels, it targets a street and the frontages that go along with it. Red shading indicates Main St. frontage, with a certain set of “build-to” lines for new development, while Avenue and Local frontage areas have a less stringent set of requirements.

My thesis design is not subject to the demands of existing zoning; to follow the codes in place would probably only result in the design of another parking lot. However, zoning is an important factor because it has enabled the built fabric that exists, and it will shape subsequent development around the site. Zoning sets up the conditions that determine to a large degree the success of public spaces.

Arlington Mill Community Center



1996 - facility is established, converted from former Safeway

Services include English language classes, citizenship classes, health clinic, after school programs.

2001 - planning begins for 33,000 sf. facility

Will include structured parking, meeting rooms, computer lab, gymnasium, outdoor plaza. Regarding the plaza, users have expressed interest in a farmers' market, coffee shop, playground, and bike route.

2006 - project put on hold; future uncertain...

Fig. 3.7 Summary of the history and activities of the Arlington Mill Community Center.

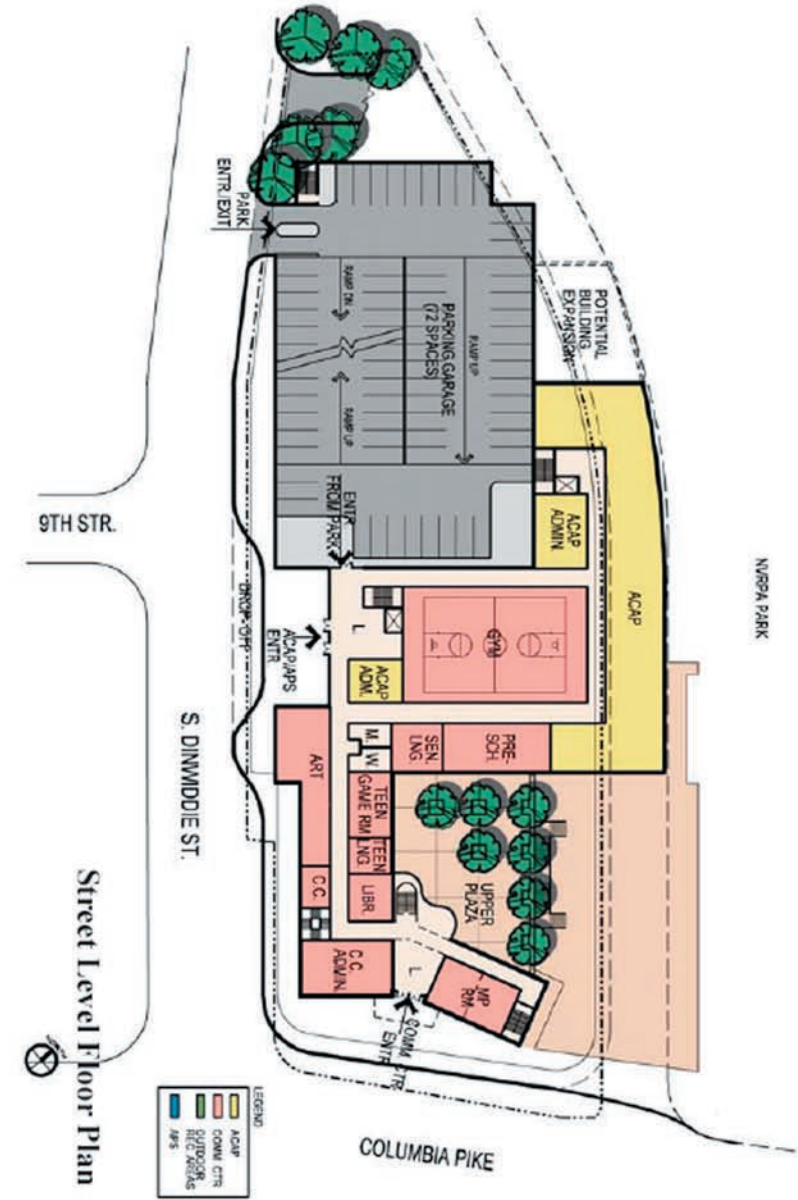


Fig. 3.8 One of several conceptual designs (13) (© Bowie Gridley Architects).

The Arlington Mill

early 1800s - Custis grist mill constructed

Civil War - mill burned and destroyed by Confederate troops

1880 - mill purchased and rebuilt by Dr. Barcroft, called "Arlington Mill"

1898 - post village of Barcroft established

1920 - mill demolished

1920's - 1946 - Mill's Dam Raceway used as an icehouse

Site, circa 1936

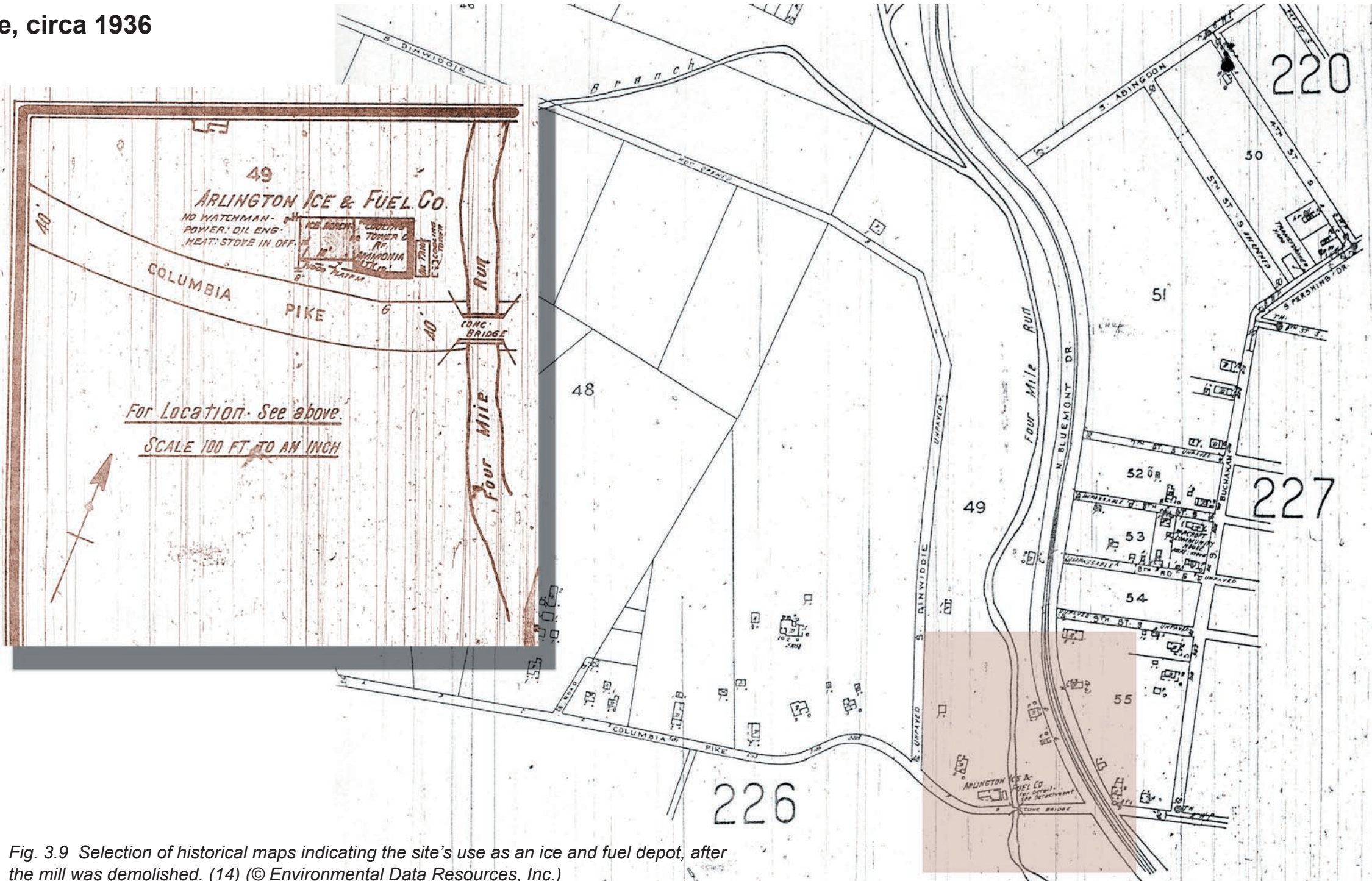


Fig. 3.9 Selection of historical maps indicating the site's use as an ice and fuel depot, after the mill was demolished. (14) © Environmental Data Resources, Inc.)

Columbia Pike

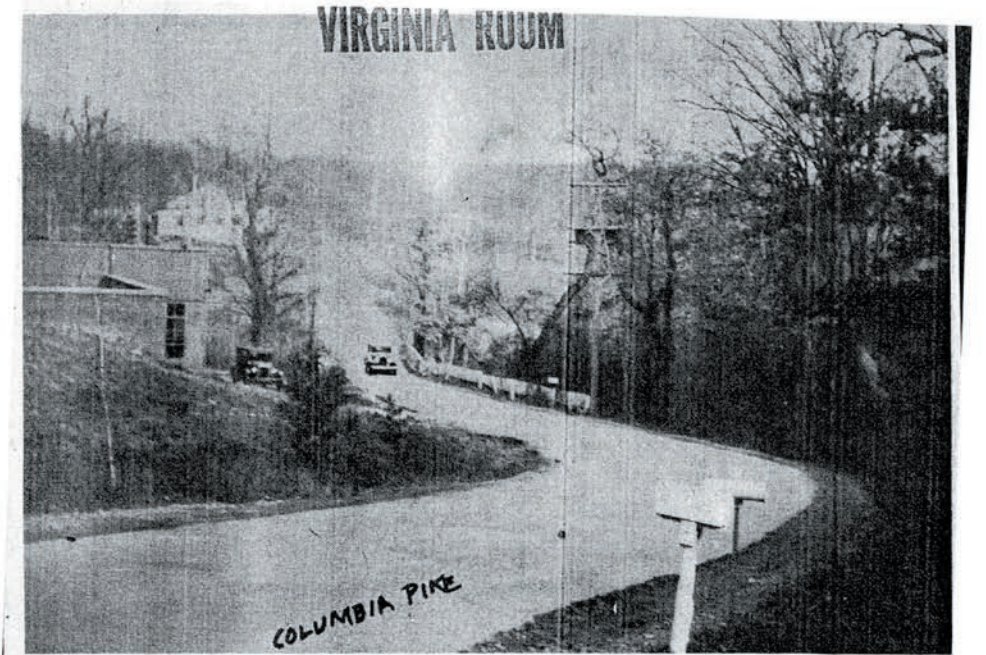
late 1700's - Congress authorizes Pike construction as a toll road connecting Washington with Fairfax County and surroundings

1808 - construction started - dirt roadbed of Arlington section finished in 1812

mid-1800's - gradual development of repair shops, inns, liverys along the Pike; intersections with other roads and streams become important economic centers

1920's - first gravel-paved sections of the Pike

1950's - 2004 - periodic street widenings, gradual increase in traffic volume



Then—"Death trap" section of Columbia Pike in Barcroft, 1931. Photo by Herman G. Freiwald now in the archives of the Arlington Historical Society.

Fig. 3.10. Columbia Pike in the 1930s (15) (© Sun Gazette)



Analysis



Shirlington Site

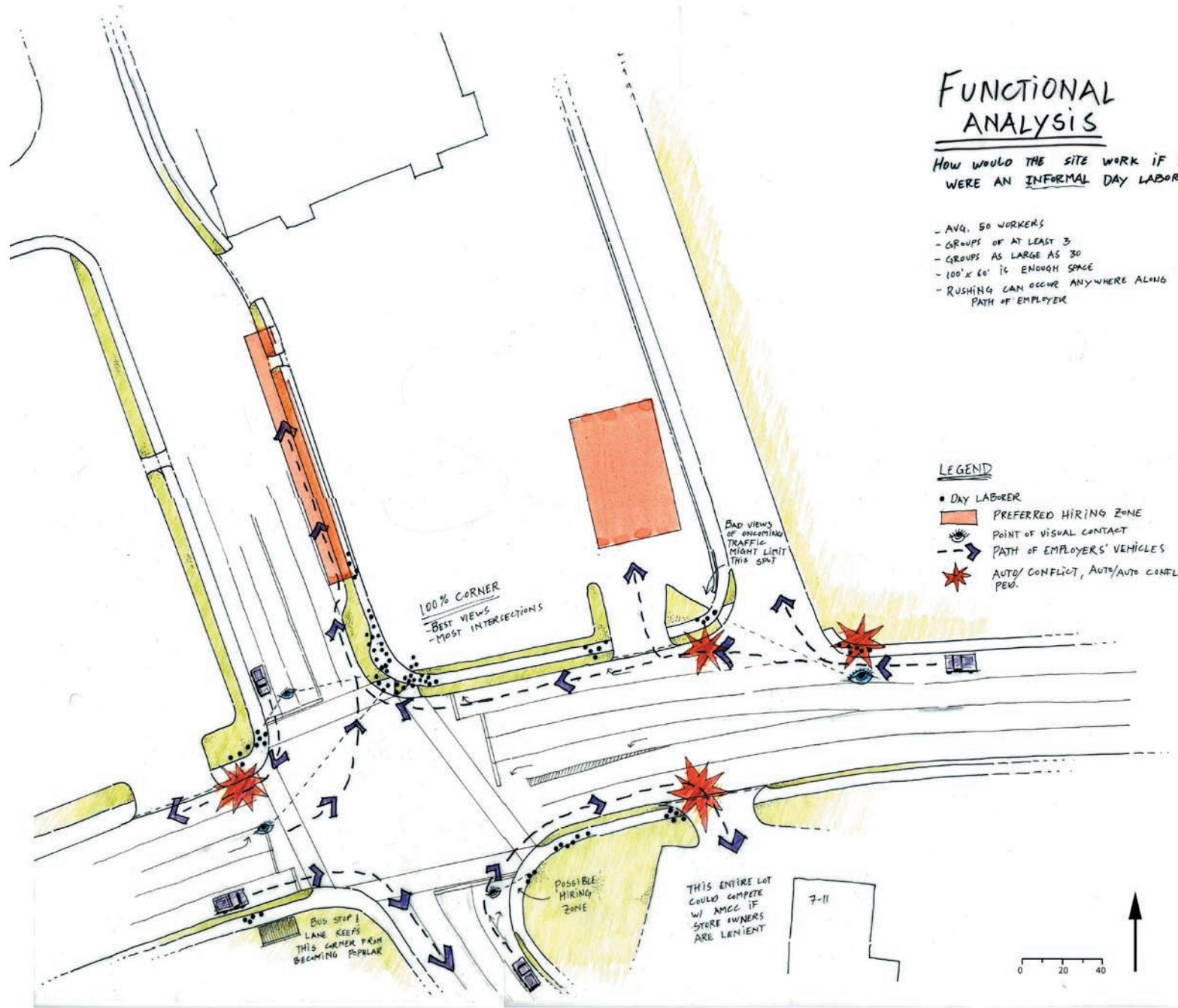


Herndon Site



Arlington Mill Site

Fig. 3.11. Size comparison. How big should a day labor site be? Among other considerations, it depends upon how many people are to be accommodated. It was useful to compare the area occupied by the two day labor sites with the available area of my thesis site at the AMCC. This study helped me determine that the thesis site had plenty of room to fit a day labor site comparable in size to those I had studied. (16) (© Google Maps.)

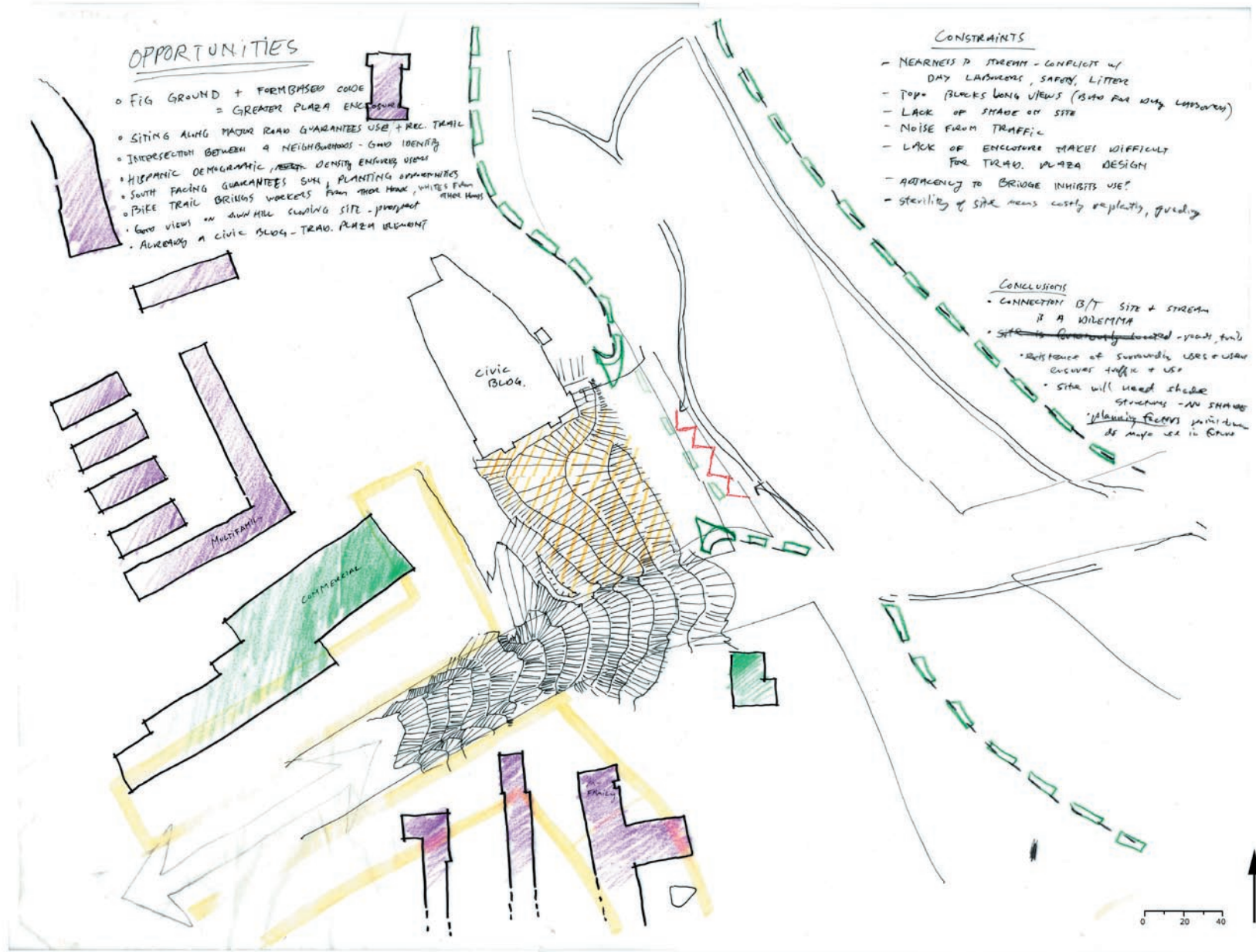


This page shows a “functional analysis” map. It was made by taking the observations and findings from the case study and applying them to the AMCC site to see what might happen if it became an informal day labor site. (This is certainly possible, as I saw several day laborers waiting for work across the street at the 7-11 and was approached by a man asking if I had any work for them.)

The shaded orange areas are the supposed preferred place for the hires to take place (analogous to the “Hiring Zone” identified in the case study). They were chosen because they are out of traffic, but still close to the main street (Columbia Pike). Day laborers are represented by small dots, with around 50 shown and considered a reasonable average. The arrows represent the path of employers’ vehicles, and the eyeball symbol indicates at what point they see the day laborers (similar to the case study’s “Contact Zone”).

Although hypothetical, this study is important because it identifies (with the red explosion symbol) the location of accidents or conflicts between vehicles and pedestrians. There are at least four that would definitely be areas of trouble, with cars hitting each other or pedestrians. This study allowed me to explore how existing traffic patterns can fit into my design, and was a means to predict the tendencies of both day laborers and employers in an effort to design a safer and more effective day labor site.

Fig. 3.12. Functional Analysis Map.



This map is an attempt to show the various opportunities and constraints of the site. Most of these come from the physical, legal, and social factors already discussed, bringing them together on one sheet to help decide which were most important. Here are some of the opportunities identified:

- Figure Ground and Form Based Code allow for greater enclosure
- Intersection between four neighborhoods ensures good identity for plaza
- Already a civic building (AMCC) - traditional plaza element

Some of the constraints included the following:

- Nearness to stream - conflict w/ day laborers, safety, litter
- Topo blocks long views (bad for day laborers)
- Noise from traffic

Conclusions:

- Connection b/t site and stream is a dilemma
- Existence of surrounding uses and users ensures traffic and use
- Site will need shade structures
- Planning factors point towards more use in future

Fig. 3.13. Opportunities and Constraints.

SYNTHESIS - WHAT'S IMPORTANT?

- SITE LOCATION ITS CONTEXT OF SURROUNDING DENSITY
- USES ENSURES TRAFFIC + USES
- VEHICULAR + PEDESTRIAN ACCESS IS VERY GOOD
- FUTURE PLANNING INITIATIVES IMPROVE SITES CHANCES FOR SUCCESS
- SITE IS HOT - ALL PAVED, SOUTHERN EXPOSURE, NO SHADE
- LINKING THE SITE TO FOUR MILE RUN CARRIAGE IS A PROBLEM
- ADJACENCY TO EXISTING COMMUNITY CENTER IMPROVES POTENTIAL



Fig. 3.14. Synthesis Map.

Finally, the synthesis map builds upon the preceding studies to arrive at a more cohesive direction for the site design. Included are indications of the heat of the parking lot, the disconnect between the site and the stream corridor, the future Form Based Code envelope, and the importance of traffic patterns. New to this map is a representation of potential conflict under the bridge, where the existing trail brings pedestrians. The area is litter-strewn and dark at nighttime, creating the perception of danger.



Litter and debris under the bridge over Four Mile Run.

Users

These various maps and studies helped me to analyze the site's physical, spatial, and legal characteristics. This step was critical in gaining the necessary understanding to develop the thesis design. Before launching into the design process and outcome, it is helpful to discuss the users who inhabit the neighborhood and will hopefully use the proposed plaza. This section contains a brief look at demographics of Hispanic users, as well as a more anecdotal summary of the neighborhood's non-Hispanic residents. (This summary is based upon an interview I had with an active resident, who had also been on the review committee for the proposed AMCC building. The interviewee is not named for reasons of confidentiality.)

Hispanics in the US

Hispanic Americans form one of the largest and fastest growing groups in the United States. In 2003, the U.S. Bureau of the Census designated them the largest minority group in the US, at an estimated population of 38.8 million people. In 2000, they made up 12.5 percent of US population. While often grouped together (as I am doing with the terms "Hispanic" or "Latino"), they are actually a diverse group both ethnically and nationally. Mexicans are by far the largest portion of this population, with nearly 60% of the Hispanic/Latino totals in 2000. Next largest is the Puerto Rican subgroup, with around 10%, and then are the Central American, around 5%, and South American countries,

around 4%. Cubans and Dominican subgroups contain around 2 million members each. The Central American subgroup, excluding Mexico, Salvadorans and Guatemalans, number the greatest (Arreola, 2004). As for illegal immigrants (or "undocumented"), estimates range widely. Some have put the number as high as 11 million illegal immigrants (Bazar and Armour, 2005).

Hispanics live in almost every state and metropolitan area of the United States. However, these areas differ in terms of length of time settled and which groups immigrate there. In the southwest US (Los Angeles, Phoenix), many Hispanic settlements can be thought of as continuous; that is, they are organized into cohesive "barrios" which have existed for most of the 20th century, and have always been the dominant population within these barrios (Arreola, 2004). Other cities contain discontinuous communities, such as the barrios in San Francisco's Mission District, Southeast L.A., and San Diego, which were once dominated by Hispanics, but have later been gentrified or transformed into neighborhoods for non-Hispanics. Then there are new communities in locations other than the US southwest where recent immigration is rapidly transforming the community fabric. This is occurring in places such as Cleveland, Kansas City, and Washington, D.C. (Arreola, 2004). In most of these places, Hispanics have not had time to organize themselves into discrete barrios, but have nevertheless become a significant population. The fact that Hispanics in this area do not have a cohesive barrio that is their own is another justi-

fication for my design to create a place with which they identify.

Hispanics in DC Metro area

In 2000, there were over 432,000 Hispanics in the DC Metropolitan area (Duncan, 2003). (This figure does not distinguish between foreign and U.S. born; it's only an indication of ethnicity.) In the years between 1990-1998, an estimated 75,000 Hispanic immigrants lived in the region. The majority were from El Salvador (33%, or 25,0263). The next largest groups came from Peru and Bolivia, but neither country had greater than 10% (Duncan, 2003). Surprisingly, Mexico only represents 4% of Latino immigrants in the DC region. This is in contrast with trends in many other metropolitan regions, where Mexico is by far the largest contributing country.

The District of Columbia had 44,953 Hispanics, or 7.9% of its population, in 2000. Arlington County had 35,268 (18.6%) Hispanics in 2000, according to the U.S. Census (Census). Neighboring areas of Fairfax and Alexandria City had 106,958 (11%) and 18,882 (14%) respectively. Loudoun County, a rapidly suburbanizing rural area west of Fairfax, had comparably fewer Hispanics (10,089) in 2000, only 5.9% of its total population (factfinder.census.gov). The area for my thesis inquiry is in Arlington County, along S. Columbia Pike.

In the metropolitan DC area, many Hispanic immigrants live in decentralized suburban groupings, as

opposed to more cohesive neighborhoods and barrios found in larger cities such as Los Angeles and New York City. This dispersal makes it difficult for these immigrants to maintain a sense of ethnic identity (Duncan, 2003). There are exceptions, of course, such as the Chirilagua neighborhood in Alexandria, and the Columbia Heights part of DC, where sizable Hispanic populations live. Another neighborhood where many Hispanics live is Columbia Heights West in Arlington, the location of the AMCC site.

Columbia Heights West Neighborhood

What do the users of the AMCC and its surrounding neighborhoods need? To answer this question, I spoke with several “gatekeepers” of the Center and the neighborhood. These were people who informally represent the larger community. Some are active in the Arlington Mill Steering Committee, while others are involved with the Hispanic community. While their comments cannot be taken to represent every citizen’s outlook, they can provide us with a good idea of the general social dynamic at work in the neighborhood.

One of the first people I spoke with was a past representative of the Columbia Heights West Civic Association, who also served as a member of the Steering Committee for the AMCC’s new building design process. She’s been living in the neighborhood for 27 years, and has seen many changes (personal interview).

Some of her main concerns were with the visual

state of the neighborhood: graffiti, trash, broken house fixtures, neglected plants. These issues would likely be of concern to other property owners in the neighborhood, but it’s unclear whether they would be as important to the renters.

Some of these concerns have been allayed, however, since conversion of some of the larger apartment complexes into condominium units has presumably caused these problems to be fixed. Letters addressed to the owners of other apartment buildings requesting changes be made have also been successful in persuading the apartment management to clean up their properties.

The neighborhood has been planned for County improvements repeatedly in the past. Several years ago, renters in Park Glen (a garden-apartment recently converted to owner-occupied condominiums) worked with Arlington County to develop a Neighborhood Conservation plan – this document allows a neighborhood to qualify for CDBG funds. Once approved, this plan allowed Columbia Heights West to get funding for sidewalk construction, new lights, and improvements to an existing neighborhood park. Another planning process took place whereby the neighborhood was designated as a Neighborhood Strategy Area, meaning that at least 40% of the residents qualify as low to moderate income earners. This also allows the neighborhood to tap into CDBG funds, and requires that the neighborhood complete a Neighborhood Strategy Plan. As part of the review process for the plan, five issues were identified

as top priorities for Columbia Heights West: 1. pedestrian safety, 2. use activity, 3. property maintenance, 4. housing, and 5. resident participation. My project would impact all of these except for housing.

Tyrol Hill Park sits at the top of the neighborhood, in the northeast corner. It satisfies many of the neighborhood’s public space needs with playground equipment, benches, basketball court, gazebo, and butterfly garden. This lets me know that for Columbia Heights West, anyway, the need for active recreation has been addressed. Additionally, the park has become host to summer programs for youth such as arts and crafts and organized sports leagues.

Safety is always a concern among public space users, and there have been problems with gang-related crime in the past in Columbia Heights West. Things have definitely improved over the past years since a new police chief began his term in Arlington. He instituted a new district-based policing system, and this change and others have significantly improved the actual and perceived problems with gang-related crime in the neighborhood. The police make frequent patrols of the neighborhood and of the park.

People I spoke to also expressed the need for greater resident involvement. Whether this is for the good of the residents themselves or for the property owners is unclear. Conversion of buildings from rental apartments to owner-occupied condominiums is believed to increase stability and community stewardship by reducing resident turnover. It would follow from this

that condominium owners would be more involved, since they have legal ownership in the neighborhood. They would likely be more involved in terms of meetings and decisions that could affect their property values. But it does not necessarily follow that condominium owners would involve themselves in other public events any more than renters.

There are some public events which occur on a semi-regular basis, such as the Pride Day Festival. This event has been held for eleven years, but may not be held again due to lack of interest and lack of monetary support from Arlington County. They have also held art markets in the parking lot of the AMCC. These monthly events featured art by local artists, crafts, jewelry, some plants, and some food, but the turn-out was not as good as hoped. The art markets were subsequently cancelled due to low turnout. Another reason for the discontinuation of the art markets was a lack of support from the county, which gives more attention to an art market in the thriving Ballston neighborhood of North Arlington.

When asked what the neighborhood needs (not necessarily what the neighborhood residents need), interviewees responded that more owner-occupied housing would be helpful. Ownership would lend cohesion by creating a steadier base of residents. But it is unclear whether more ownership would actually benefit the current population of renters; it might be that they would be forced out of the neighborhood as rents rise to unaffordable levels. More home ownership

would primarily benefit the needs of current homeowners in the area, whose home values would rise as the neighborhood becomes more desirable and stable. Increased home ownership is not a user need for the scope of my project. My project should look at the current situation, not at a future devoid of renters (even if that is the pattern that will inevitably emerge).

However, interviewees also said that the residents need affordable housing. It's possible that affordable housing exists now (in the form of rentals), but owner-occupied housing is becoming less affordable. And without rent controls, it may be impossible to maintain affordability for more than several years or however long is stipulated in the contracts before the affordable units are allowed to rise to market rates.

As far as services in the neighborhood, people mentioned a desire to see smaller grocery stores, places where one can walk, and outdoor cafes. This sounds like the general vision put forth in the Columbia Pike Redevelopment Plan from Arlington County. A strip of commercial uses already exists in the neighborhood, which includes a drugstore, bakery, dentist, and international market, among others.

The neighborhood could evolve to a different demographic in the near future. This area could become a leading edge of gentrification within ten years. As apartments are converted to condos, current renters will have the choice of either purchasing a condo (and in many locations renters are given right of first refusal on purchase) or moving on to a cheaper neigh-

borhood. As home prices continue to outpace wage increases (increasing some 200 percent in Arlington county over the last five years) the most likely scenario is that Hispanic and other non-native renters will be pushed further out to cheaper housing. Of course, rising gas prices and access to public transportation could convince them to stay in the neighborhood, even with higher housing costs. This would lead to more crowding and greater need for accessible public spaces.

Regardless of which scenario takes place, the neighborhood will likely retain its ethnic diversity for many years. The AMCC, with its emphasis on ESL and continuing education, provides an almost guaranteed population of non-Anglo users, and many of these will be Hispanic. So even if the neighborhood evolves to a less Hispanic mix over the years, the AMCC will continue to serve a primarily non-native population, and so the importance of the AMCC's public space will remain.

