



4 Concrete retaining walls for explosives magazines (removed)



5 FDA Boulevard looking west



6 Former Air Blast Field Lab



7 Service Road in the 300 Area



8 The former 50-Pound Bombproof Facility



9 The central intersection of the 600 area



### 1.6.4 Buildings & Hardscape

Through an examination of building footprints and hardscape, one can make broad assumptions on land use. Observations found on Figure 1-14 include:

- 1 Large office and laboratory facilities, supported by structured and/or surface parking lots: The existing FDA Headquarters, formerly the core of the Naval Ordnance Laboratory and Army Adelphi Laboratory Center
- 2 Big box retail surrounded by surface parking: The White Oak shopping center at the US 29 / New Hampshire Avenue interchange
- 3 Smaller buildings surrounded by surface parking: Light commercial and industrial establishments
- 4 Long buildings located parallel to driveways and cul-de-sacs: Garden apartment multifamily developments
- 5 Small buildings spaced evenly along looping roads and cul-de-sacs: Typical single family residential subdivisions
- 6 Small buildings placed along looping roads and cul-de-sacs with large gaps: Large lot single family residential subdivisions

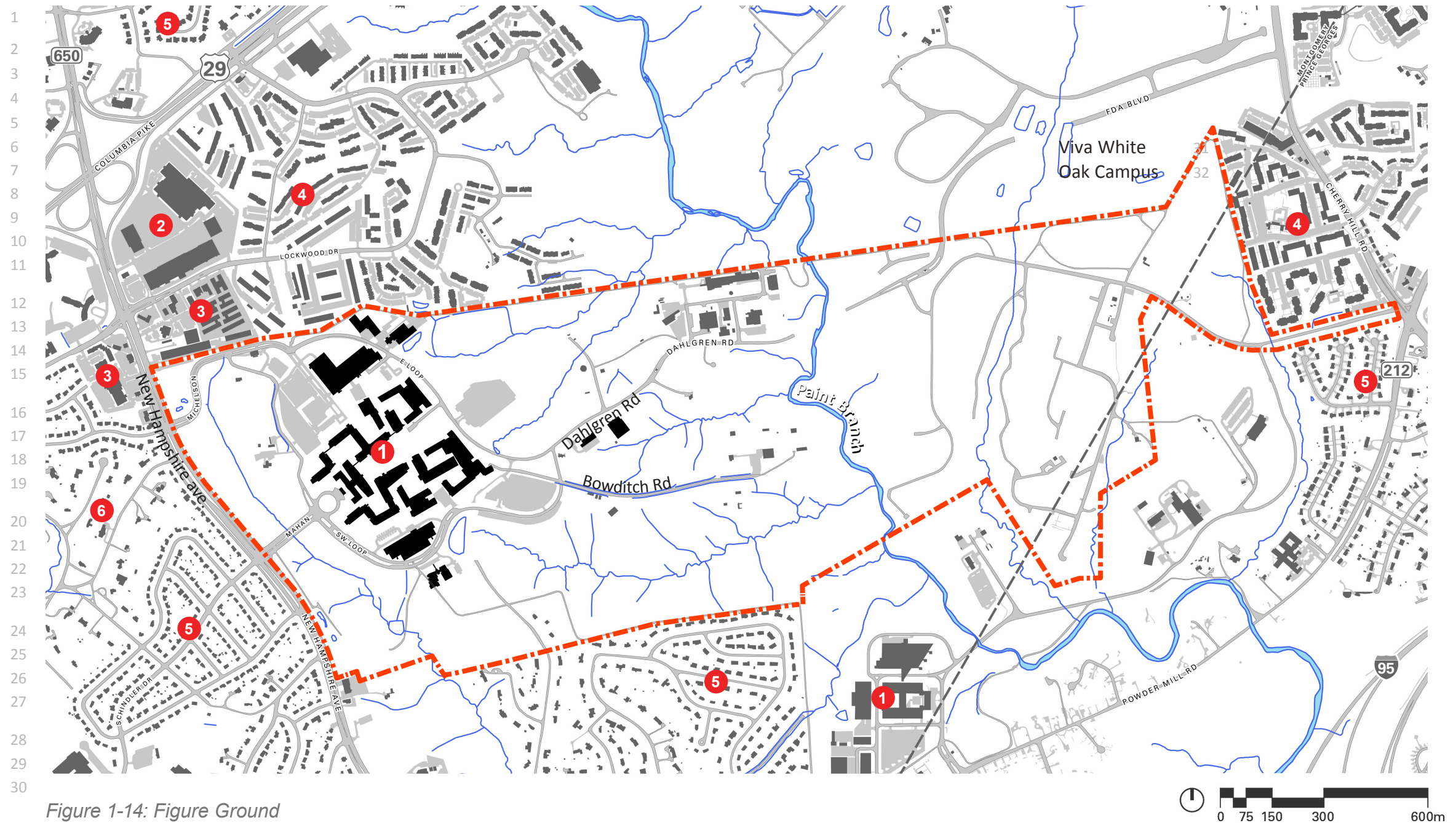


Figure 1-14: Figure Ground

- FDA Facilities
- Other Buildings
- Impervious Surfaces
- Site Boundary



## 1.7 Natural Resources

### 1.7.1 Topography

Figure 1-15 depicts the topography found on the FRC Campus and its surrounding context.

The property is located along the Atlantic Coastal Plain, a relatively flat topographical region. The dominant topographical feature on the property itself is the Paint Branch stream valley, creating hills over 100 feet high. The lowest point on the property is located along the Paint Branch. Tributary streams to the Paint Branch create dynamic conditions on the central portions of the property.

The FDA Headquarters itself lies on a generally flat area at approximately 360' above sea level. The highest point on the property (approximately 390') is the northwest corner of the site, adjacent to the US 29 / New Hampshire Avenue interchange.

East of Paint Branch is another stream valley belonging to the West Branch that creates dynamic topographical conditions on the far east of the FRC.

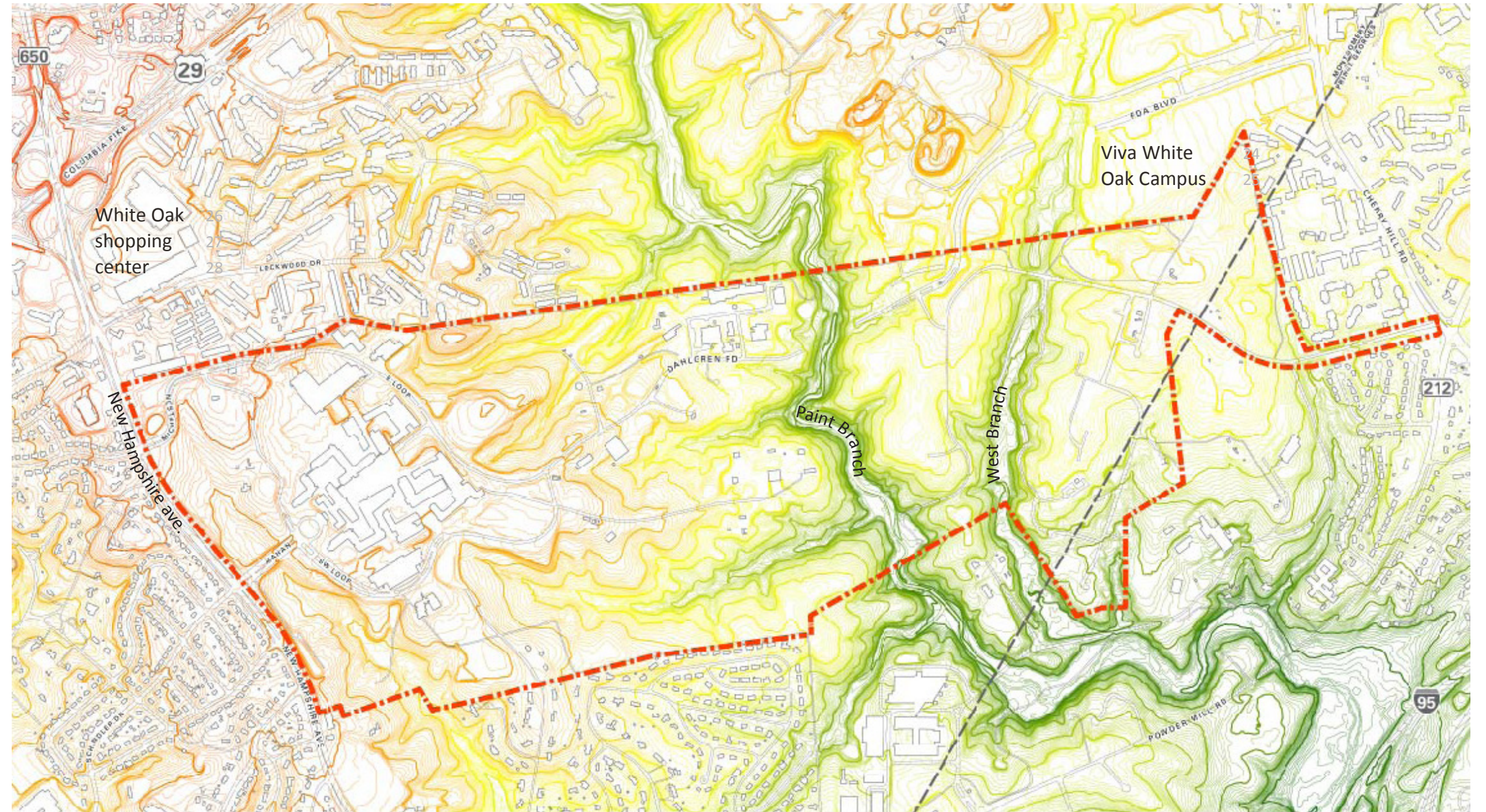


Figure 1-15: Site Topography

— 2' contours  
— 20' contours

400'  
300'  
200'  
100'  
Site Boundary





### 1.7.2 Steep Slopes

Figure 1-16 depicts the steep slopes found on the FRC Campus and its surrounding context.

Most steep slope areas (at times greater than 25 percent) are located along stream valley buffers, primarily the Paint Branch, the West Branch, and their smaller tributaries and valleys. Aside from the FDA Headquarters itself, areas along Dahlgren and Bowditch Roads, as well as south of the FDA Headquarters do not feature significant steep slopes. While topographically dynamic, portions of land on the far east of the property do not feature steep slopes.

Several smaller, isolated steep slopes, especially on the western and eastern portions of the campus and its context, may be artificial creations typically consisting of landfill, berms, or retaining walls.

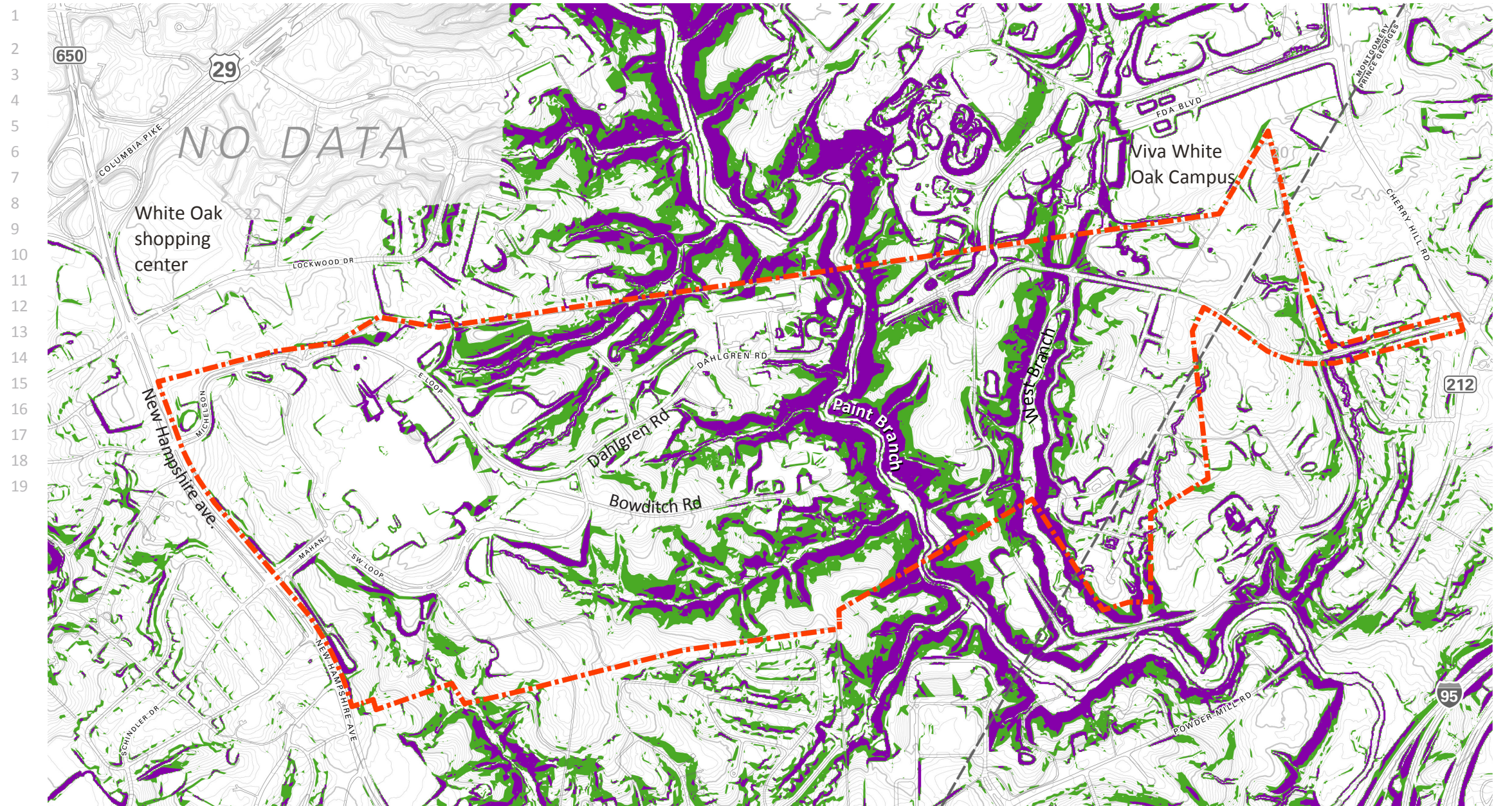


Figure 1-16: Steep Slopes

— 2' contours  
 — 20' contours

■ Slope Between 15-25%  
 ■ Slope Greater than 25%  
 □ Contours  
 - - - Site Boundary





### 1.7.3 Tree Cover

Figure 1-17 shows the existing tree cover on the FRC and in the surrounding context. In addition, the Stream Valley Buffers have been overlaid to depict the amount of forest contained within these areas.

The majority of the property is forest saved for the FDA Headquarters itself. The former NOL golf course was partially reforested as part of an environmental mitigation process.

Most of the magnetic research area on the center of the property, as well as the former explosives research area on the far east of the property is slowly becoming reforested due to the abandonment and/or demolition of the buildings and facilities.

Beyond the FRC, there is significant tree cover in the Paint Branch stream valley, as well as moderate tree cover within the older residential subdivisions to the south and west of the property.

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Figure 1-17: Tree Cover





### 1.7.4 Historic Resources

The former Naval Ordnance Laboratory (NOL) White Oak campus was determined eligible for the National Register of Historic Places in 1997 for its exceptional significance as a first generation Cold War-era defense weapons research facility.

The historic buildings and structures of the NOL were documented for the Historic American Engineering Record in 2003. Under the terms of the 2002 and 2003 Memoranda of Agreement (MOAs) with the Maryland State Historic Preservation Office and the Advisory Council on Historic Preservation, the majority of the historic resources in the 100, 300, and 600 areas were removed. Buildings 1, 100, the historic flagpole environmental setting, and the historic buffer (golf course) were retained and protected.

GSA has identified the contributing buildings and features within Area 100 affected by the Master Plan alternatives, and determined that no buildings will be directly impacted. Contributing historic resources remain within the 200 and 400 areas, but the Master Plan alternatives do not extend into those areas.

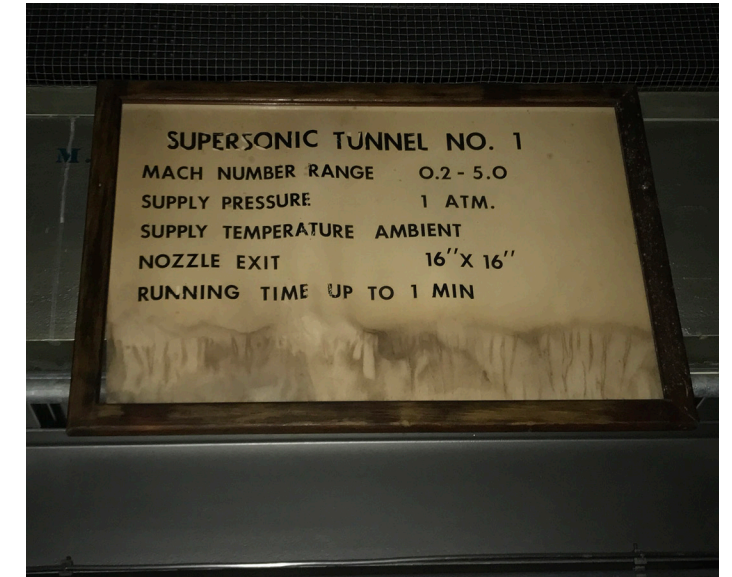
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Former Naval Ordnance Laboratory Main Building



Former Naval Ordnance Laboratory Fire Station



Former Supersonic Tunnel Infrastructure



Former Magnetic Research Facility



Current AEDC Wind Tunnel Facility



Former Dahlgren Road Bridge and Free Fall Drop Tower



## 1.8 Circulation

### 1.8.1 Vehicular Circulation

White Oak is relatively well-connected to the regional freeway network, including I-95, I-495, and US 29 via Cherry Hill Road, New Hampshire Avenue, and Powder Mill Road. The campus has three access points: two access points on New Hampshire Avenue are provided via Michelson Road, which serves as the main entrance for visitors and deliveries, and Mahan Road, which provides access to employee parking areas and the main building entrance. A third access point is provided on Cherry Hill Road via FDA Boulevard. All three access points are signalized.

Traffic is distributed throughout the site via a loop roadway network which provides access to the various surface parking lots and parking garages around the campus. The loop roads are primarily two-lane roadways, with the exception of Southwest Loop Road which is a four-lane roadway between Mahan Road and the Southeast Parking Garage. All internal intersections are unsignalized and intersections between primary campus roadways are all-way stop-controlled. Refer to Figure 1-18 for a depiction of current vehicular circulation in the study area.

### 1.8.2 Transit

Several bus routes serve the FDA Headquarters with stops along New Hampshire Avenue or internally within the campus. Currently Montgomery County is planning several BRT lines, with potential service along the US 29 corridor by 2018. Possible alignments place BRT service along Lockwood Drive, adjacent to the FRC.

In addition, FDA operates six shuttle routes that serve various regional locations, including several Metro stations. These shuttles are intended to fill gaps in the existing public transit network.

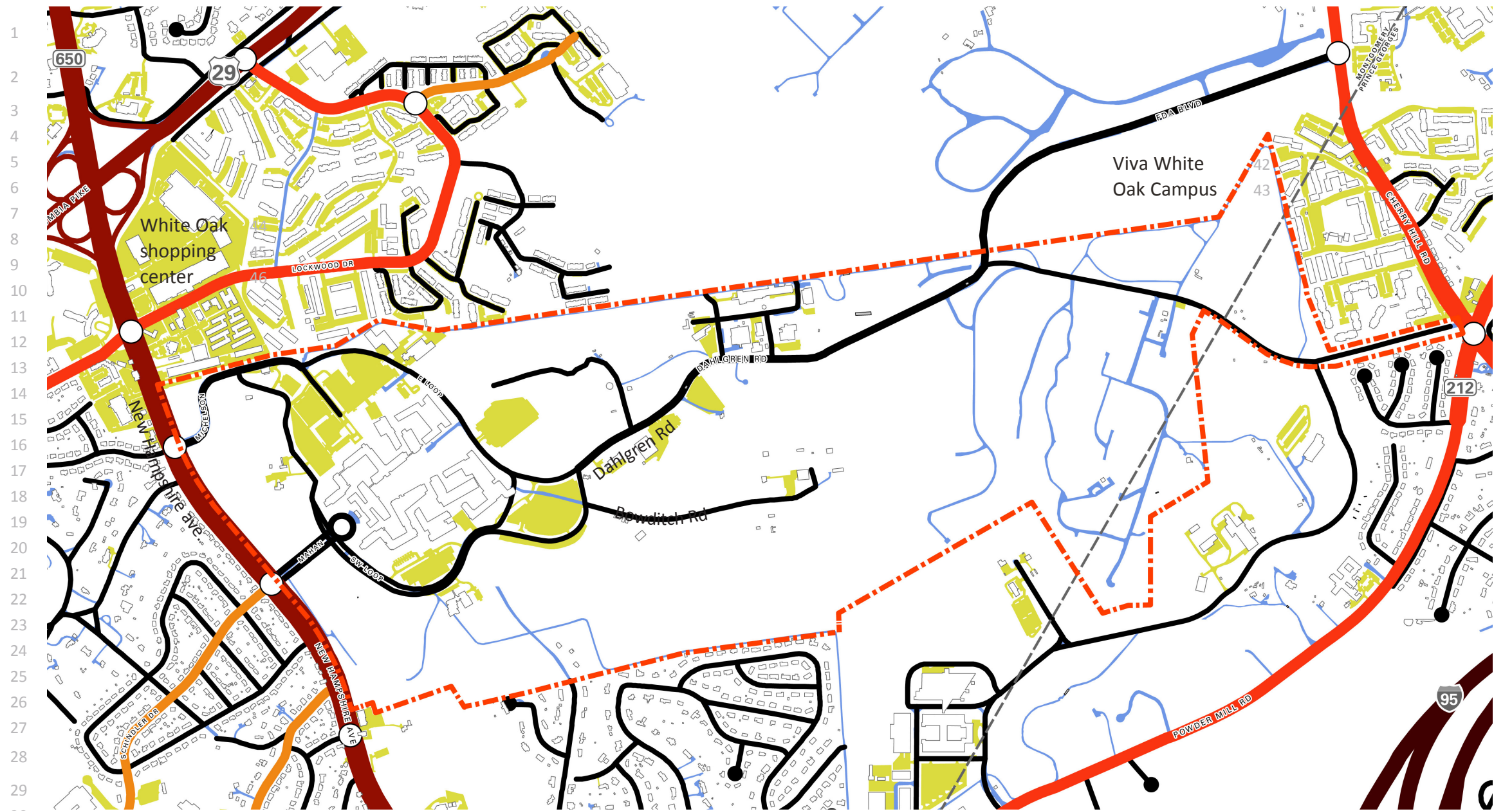
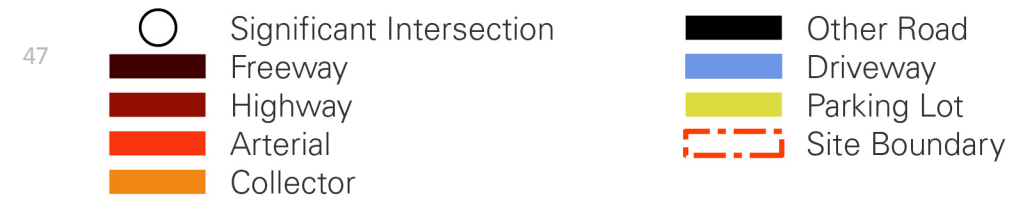


Figure 1-18: Vehicular Circulation





### 1.8.3 Parking

Parking has been identified as one of the key issues on the FDA Headquarters. Two parking structures have been constructed; however, a parking structure that was to be located in the southeast side of the campus has not been built. The FDA has implemented attendant-assisted parking in order to provide parking capacity for approximately 6,800 vehicles. The attendant-assisted parking is intended to be a stop-gap measure until additional parking can be provided because it is costly and not considered sustainable.

### 1.8.4 Pedestrian Facilities

Four- to five-foot wide sidewalks are provided along most roadways, connecting the FRC to nearby residential and retail areas. An eight-foot wide shared-use pathway is provided along northbound New Hampshire Avenue. A sidewalk and shared-use path are provided along FDA Boulevard. However, they terminate at the security gate and no pedestrian facilities are provided along Dahlgren Road to connect the FDA Headquarters.

### 1.8.5 Bicycle Facilities

Bicycle facilities are relatively limited. A narrow, five-foot wide bicycle lane is provided along northbound New Hampshire Avenue along the FDA site frontage. Please refer to Figure 1-19 for a depiction of the bicycle network.

Within the headquarters campus, pedestrian sidewalks and walkways are provided between parking areas and buildings, as well as along Northwest Loop Road and Southwest Loop Road. Sheltered bicycle parking is provided within parking garages and adjacent to building entrances. However, bicycle lanes are not provided on the internal roadway network.

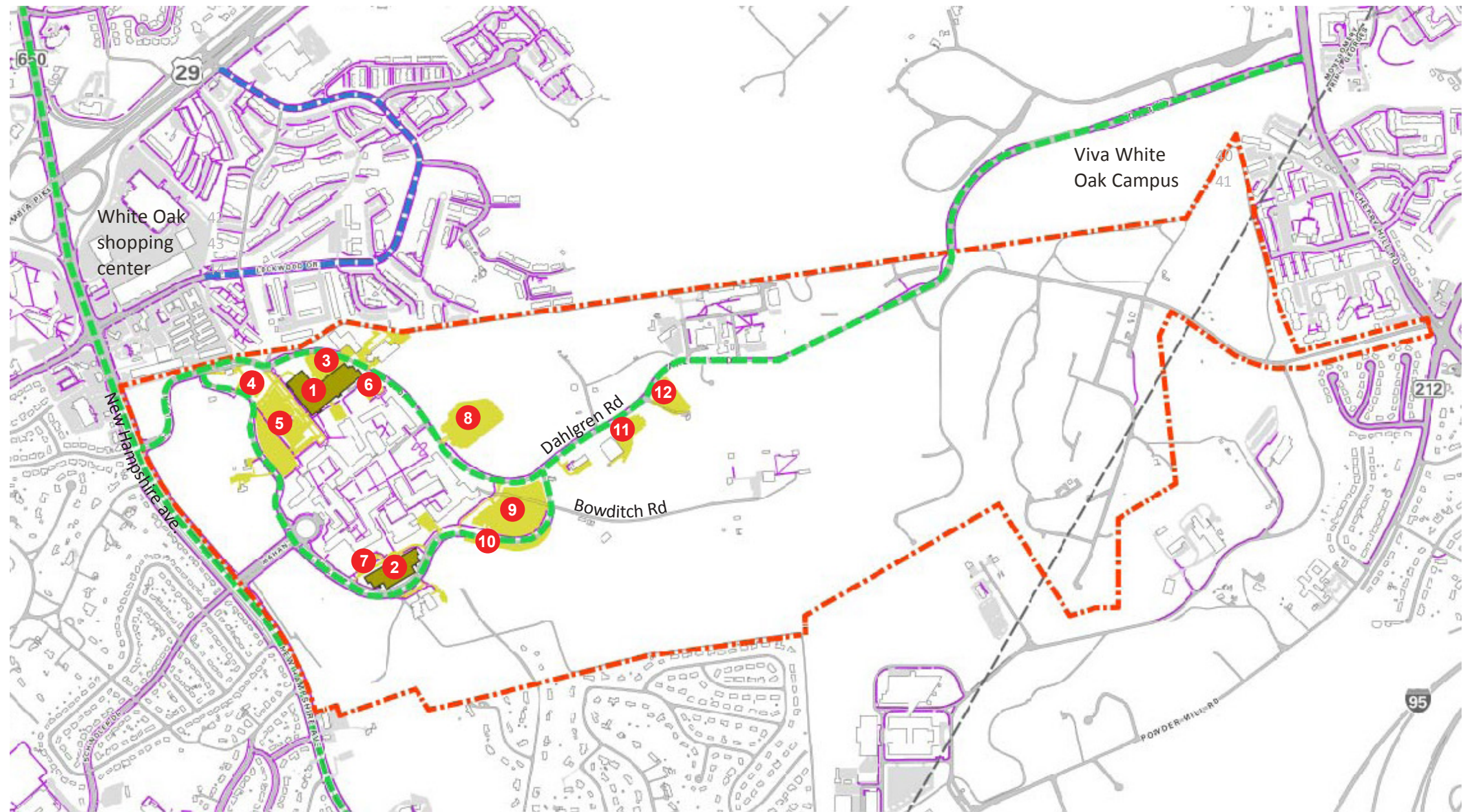


Figure 1-19: Parking, Pedestrian, & Bicycle Network

- |   |                                     |    |                                 |    |                             |
|---|-------------------------------------|----|---------------------------------|----|-----------------------------|
| 1 | Northeast & North Parking Garage    | 7  | Southwest Surface Parking       | 51 | Parking Structure           |
| 2 | Southwest Parking Garage            | 8  | East Loop Road Surface Parking  | 52 | Parking Lot (on FRC campus) |
| 3 | Northeast Surface Parking 2         | 9  | Southeast Surface Parking       | 53 | Shared Use Path             |
| 4 | Visitor Parking Lot                 | 10 | South Loop Road Surface Parking | 54 | Bicycle Lane                |
| 5 | Northwest Surface Parking 1, 2, & 3 | 11 | Lot 132A Surface Parking        | 55 | Sidewalk Network            |
| 6 | Northeast Surface Parking 1         | 12 | Lot 132B Surface Parking        | 56 | Site Boundary               |