



SUMMARY

EXECUTIVE

ODENTON
TOWN CENTER



ODENTON TOWN CENTER

LARC 340 SITE PLANNING AND DESIGN STUDIO

FALL 2016

Under the supervision of Professor Dennis Nola



ANNE ARUNDEL
COUNTY
MARYLAND



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Thank you to:

Anne Arundel County Office of Planning and Zoning

Lynn Miller, Assistant Planning and Zoning Officer

Mark Wildonger, Planning III

Mike Fox, Senior Planner

West County Chamber of Commerce

Claire Louder, Past President and CEO

Raj Kudchadkar, Current President and CEO

County Executive Office

Dawn Thomas, Planner, Department of Recreation and Parks

David Abrams, Special Assistant to the County Executive

Amalie Brandenburg, Education Officer

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Uri Avin, FAICP, Director, PALS Program

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Executive Summary

The Odenton Town Center (OTC) project develops a 3.5-acre site in Anne Arundel County, Maryland. The new Odenton Town Center is the result of collaboration between the Anne Arundel County Chamber of Commerce and a team of undergraduate Landscape Architecture students at the University of Maryland, made possible by the Partnership for Action Learning in Sustainability (PALS). The design team prepared a detailed analysis of the site as well as two proposed alternatives for the future of Odenton Town Center. Each plan includes detailed connections to the surrounding community, diverse and engaging recreational and educational spaces for all ages, and recommendations to make the site safer and more accessible.

The design team recommends adopting one of the following designs.

The first supports:

- 1. Enhancing and maintaining the function of Nevada Avenue, which currently runs through the center of the proposed site, while also allowing it to be occasionally closed off and used for various events such as a farmer’s market or food truck festival.
- 2. Slowing traffic on Maryland Route 175 by introducing vegetated medians and a turning lane into the site, as well as a sunken median that allows access to and from the fire station.
- 3. Implementing both programmed and non-programmed recreational spaces, historical education opportunities, an amphitheater, an interactive water feature, a rain garden, a restaurant and outdoor cafe, ample seating and gathering spaces, and on-site parking.

The second supports:

- 1. Removing Nevada Avenue and creating cohesiveness within the site, designing a large open green in the center.
- 2. Slowing traffic on Maryland Route 175 by introducing a continuous vegetated median along the length of the site with an attractive pedestrian entrance.
- 3. Implementing both programmed and non-programmed recreational spaces, historical education opportunities, a large open green, an amphitheater, ample seating and gathering spaces, an interactive water feature, rain garden, a restaurant and outdoor cafe vegetable garden, and an outdoor gallery.



Figure 1. Existing entrance into the site



Figure 2. High volume vehicle traffic along MD-175

SITE

ANALYSIS

ODENTON
TOWN CENTER



Site Analysis

Introduction

The Odenton growth management area, known as the Odenton Town Center, serves as one of three “town centers” in Anne Arundel County. The proposed site, at the intersection of Nevada Avenue and Route 175, sits on 3.6 acres of “to- be” acquired land.

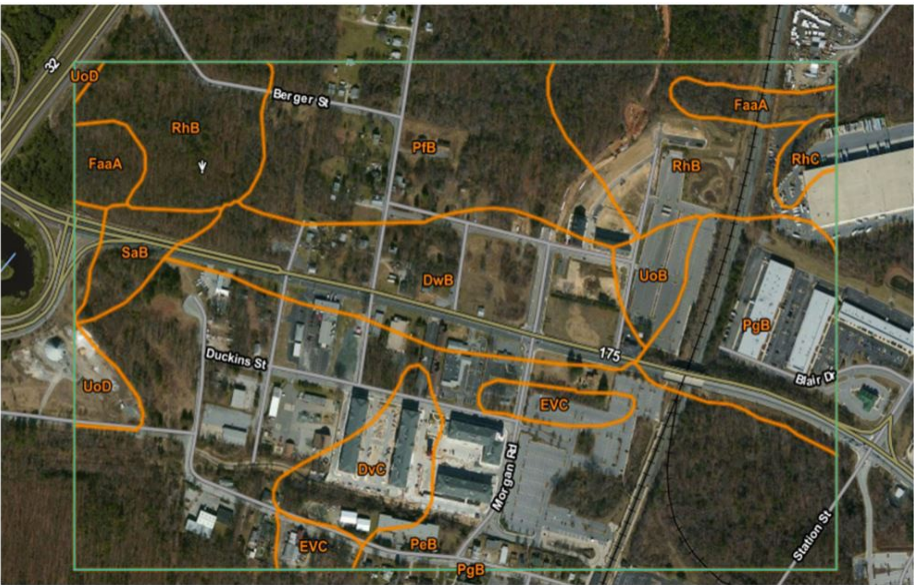
During the initial site analysis, the elements below were researched as a preliminary step to designing the site:

- Parks and Green Spaces
- Wildlife
- Orientation and Climate
- Soils
- Hydrology
- History
- Small Commercial Development

This map depicts the larger surrounding watersheds in relation to the Odenton Town Center (indicated by the star).



Figure 3. Watershed map (Sarah Whitely, Qi Zhou)



Anne Arundel County, Maryland (MD003)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DvC	Downer-Hammonton complex, 5 to 10 percent slopes	8.3	4.1%
DwB	Downer-Hammonton-Urban land complex, 0 to 5 percent slopes	24.8	12.2%
EVC	Evesboro and Galestown soils, 5 to 10 percent slopes	4.6	2.2%
FaaA	Fallsington sandy loams, 0 to 2 percent slopes, Northern Coastal Plain	5.5	2.7%
PeB	Patapsco-Evesboro-Fort Mott complex, 0 to 5 percent slopes	74.6	36.7%
PfB	Patapsco-Fort Mott complex, 0 to 5 percent slopes	26.8	13.2%
PgB	Patapsco-Fort Mott-Urban land complex, 0 to 5 percent slopes	17.2	8.4%
RhB	Russett-Christiana-Hambrook complex, 0 to 5 percent slopes	28.4	14.0%
RhC	Russett-Christiana-Hambrook complex, 5 to 10 percent slopes	1.9	0.9%
SaB	Sassafras fine sandy loam, 2 to 5 percent slopes	4.1	2.0%
UoB	Udorthents, loamy, 0 to 5 percent slopes	3.5	1.7%
UoD	Udorthents, loamy, 5 to 15 percent slopes	3.9	1.9%
Totals for Area of Interest		203.6	100.0%

Figure 4. Soil Maps and Classifications (US Web Soil Survey)

This map and chart indicate what soils are found on the proposed site, as well as their names and degree of slope.

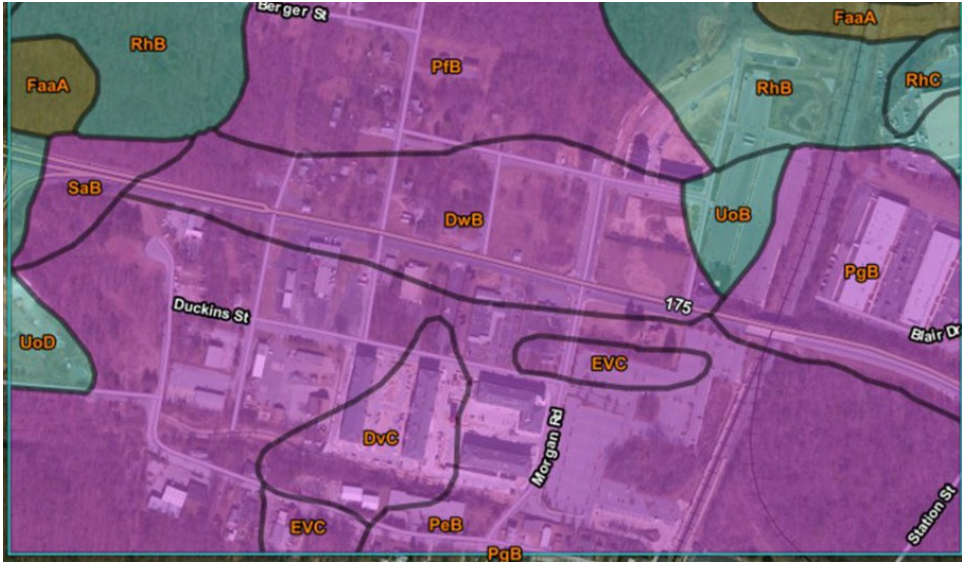


Figure 5. Hydrologic Classifications of Soils (US Web Soil Survey)

Group A: High infiltration rate. Consists mainly of deep, well-drained sands or gravelly sands.

Group B: Moderate infiltration rate. Consists mainly of moderately-deep and deep soils.

Group C: Slow infiltration rate. Consists mainly of soils with a layer that impedes downward movement.

Group D: Very slow infiltration rate. Consists mainly of clays with a high water table.

This map shows the hydrologic groups of the various soils found on the site, and that all the site’s soils have a high infiltration rate.

Regional Context

Site Analysis

The individual maps indicate the site's location and how it geographically relates to areas of interest on a state and county level.

Maryland Regional Map

This map shows the site's relationship to surrounding states, counties and waterways that impact Odenton. Odenton is located about 30 miles north of Washington, DC and about 22 miles south of Baltimore.

Anne Arundel County Map

The Anne Arundel County map shows the relationship between the site's location and surrounding areas of interest within the County. The map includes the location of several main highways: MD-175, MD-32, MD-170, and MD-100. The location of Odenton's MARC station and the tracks running from Baltimore to Washington, D.C. are also shown on the map. Fort Meade and Baltimore-Washington International Airport are important in relation to the site. The map also shows the future development that will occur just north of the site, due to land acquisition from developers.

Odenton Context Map

The Odenton Context map shows areas of interest located within Odenton. These areas include schools and cultural venues, shops and retail stores, restaurants and cafes, health and fitness, entertainment, transit, and parks, and recreation. These amenities are influential in the development of Odenton and in attracting future businesses.

Site Context Map

The Site Context map shows connections between the site, the MARC train station, and other proposed focal points of the Odenton Town Center. The green lines indicate proposed sidewalks designed to increase pedestrian safety. The blue lines indicate proposed commuter paths designed to more effectively and safely move people between the MARC station and other trails.

Maryland Regional Map

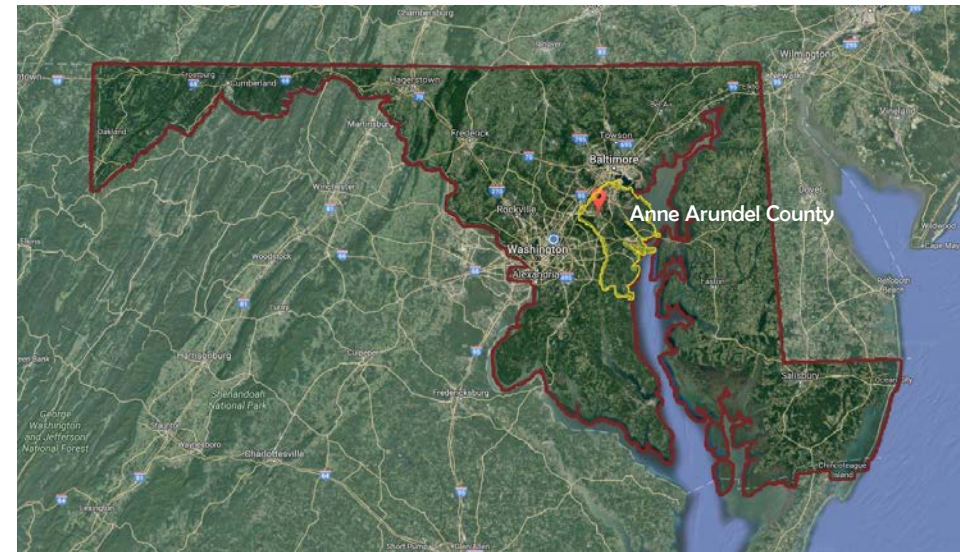


Figure 6. (Google Maps)

Anne Arundel County Map

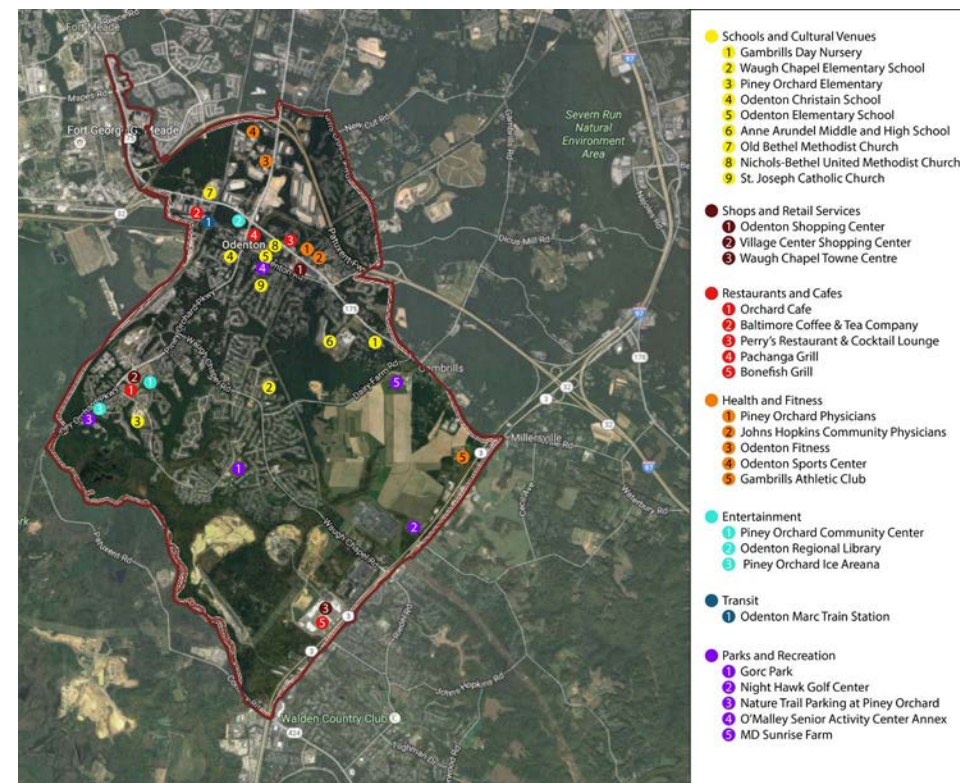


Figure 7. (Google Maps, Cecilia Tran)

Odenton Context Map



Figure 8. (Google Maps, Christopher Snyder)

Site Context Map

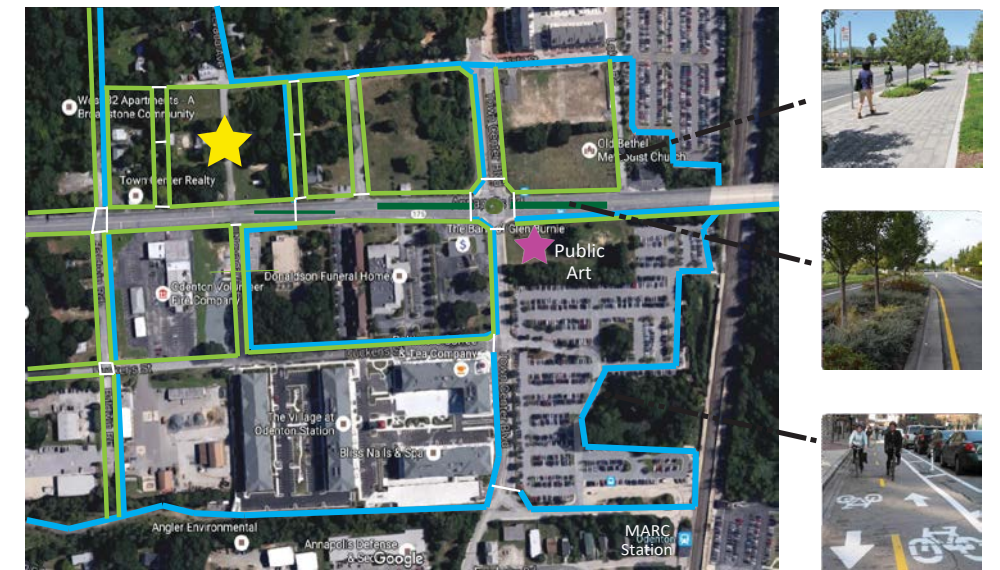


Figure 9. (Google Maps, Benjamin Hartmann)

Land Use and Zoning

Site Analysis

The zoning plan for OTC sets basic requirements and regulations for setbacks, development types, and land uses.

- Building setbacks are flexible, and allow for no setbacks when appropriate
- Projects on sites over five acres must have a mix of development

Odenton Zoning Codes

Per the OTC Master Plan, Odenton is split into zoning divisions that direct the type of development that can occur. They are: Core, Historic, Transition, Industrial, East Odenton, and North Odenton. This project is in the Core zone and is adjacent to the Transition zone.

- Core: “This is the heart of the Odenton Town Center. It is intended to be the most intensively developed area with a diverse mix of retail, office, civic, and residential uses combined to create a vibrant live/work community.”
- Transition: “A mixture of moderate density office, housing, and retail is envisioned in this area, just north of the core. This area contains several isolated development sites that are interspersed with large areas of preserved wooded wetlands.

Current Land Use

The main development area is located in a fairly under-built part of Odenton. Most of the area is wooded with small residential lots located throughout. Some development in accordance with the master plan has begun, mainly apartments and townhouses.

- Because development will be in the Core area, the site will need to safely accommodate increased traffic as people circulate throughout the site.

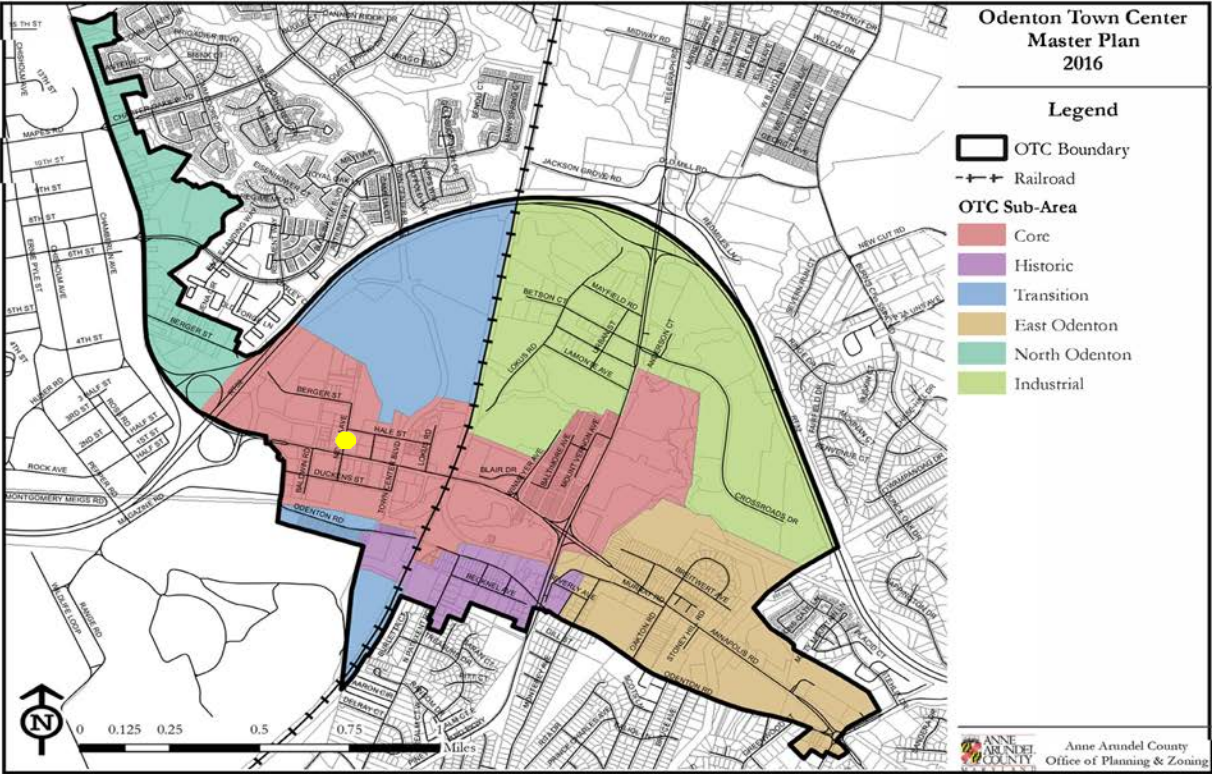


Figure 10. Odenton Master Plan Land Use and Zoning Maps

Circulation

Site Analysis

Odenton serves as a corridor for many major traffic routes. Safety and efficiency for both pedestrians and motorists must be accommodated by the future development of Odenton Town Center. With MD-175's proximity to the site, pedestrian safety, and traffic calming need to be considered when developing the lots adjacent to this major roadway. Circulation to and from the MARC station also needs to be considered in the design and development of Odenton, due to the high commuter population. Alternative routes to focal points in Odenton may also need to be developed for safe and efficient travel of both pedestrians and bicyclists to help improve safety on Odenton's roads as development occurs.

Adjustments to circulation:

- Medians to slow down traffic and provide for safe turning
- Round-about at Town Center Blvd and MD-175
- Explore two designs—with and without Nevada Avenue
- Provide additional walkways to prevent pedestrians from crossing MD-175

Current Circulation Patterns in Odenton

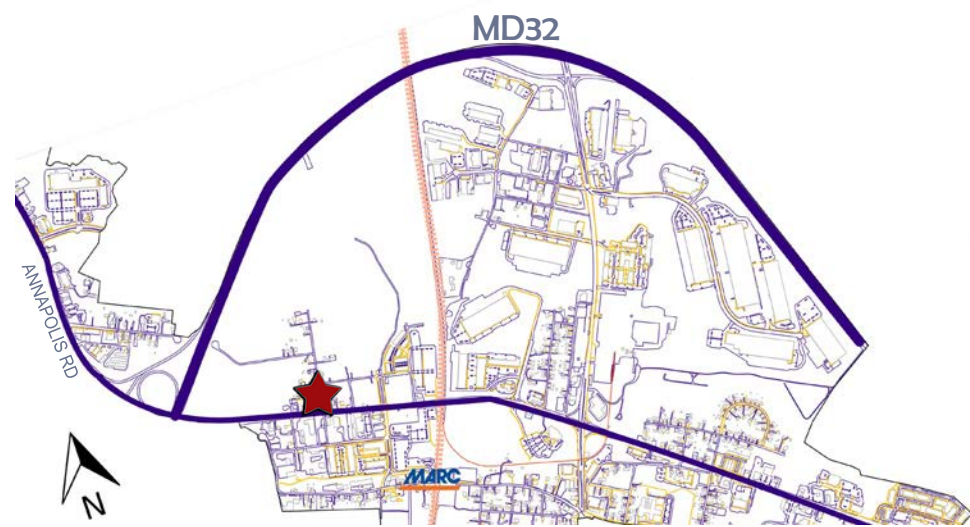


Figure 11. (Garrett Foss)

Circulation Patterns between Site and MARC Station

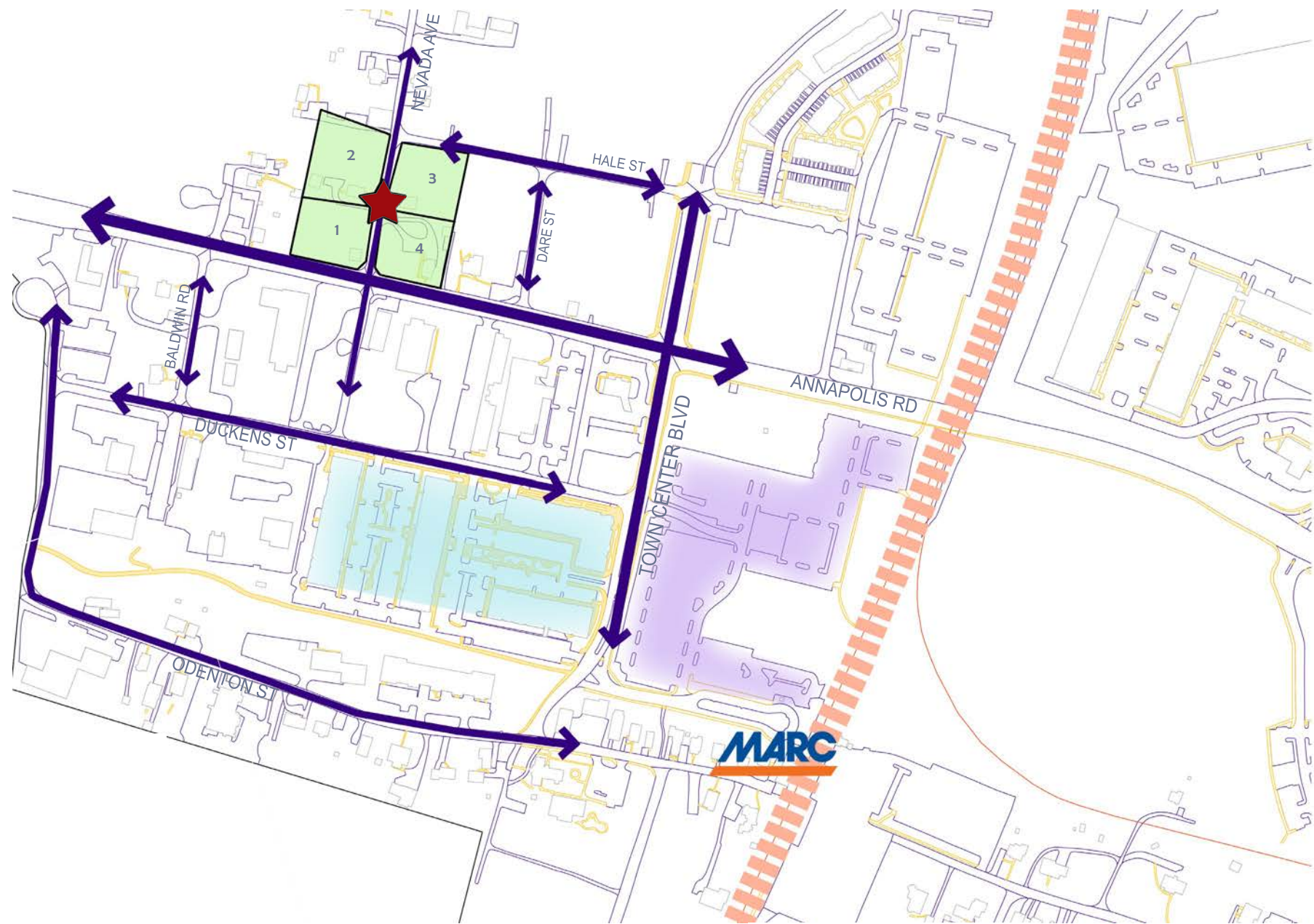


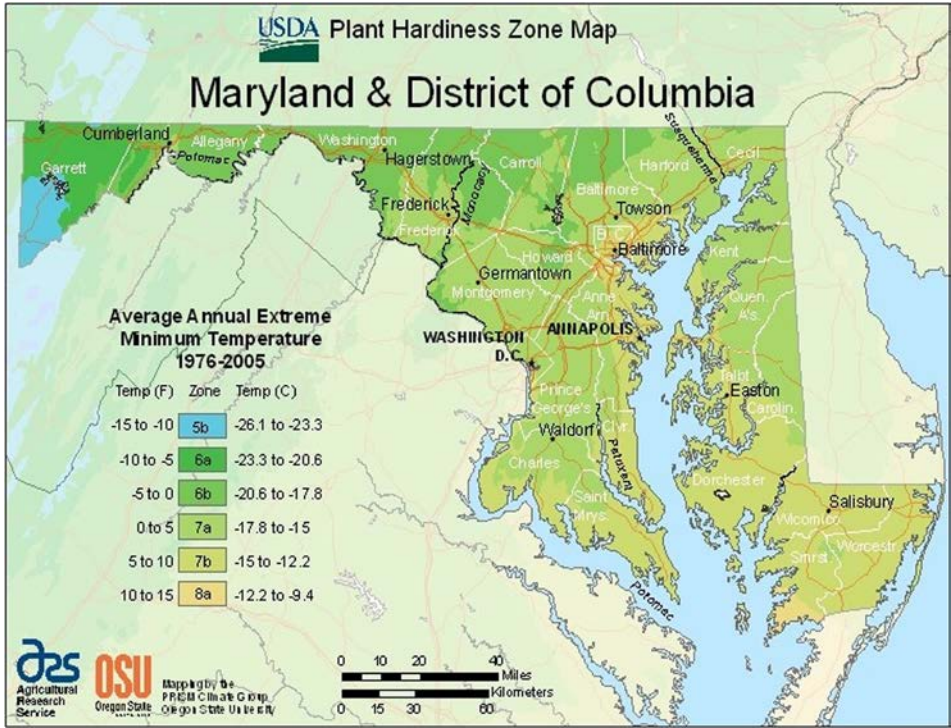
Figure 12. (Max Berger, Beverly Hernandez, Garrett Foss)

- Buildings
- Road
- Rail
- Sidewalk
- Lots
- Train Station Parking
- MARC Station
- The Village at Odenton Station
- Proposed Town Center

Vegetation

Site Analysis

Existing vegetation on and around the site comprises native, non-native, and non-native invasive species that influence the variety of pollinators and wildlife. the plant palette must be adjusted to incorporate plants that better serve the needs of the community. Plant selection suggestions are based on the hardiness zone map, aesthetic qualities and wildlife attraction. A mix of shrubs, understory plants and shade trees are needed to create a sustainable and functional ecosystem that will not only provide structure for the site but also food and habitat for outside wildlife and pollinators.



Existing and Proposed Vegetation



Figure 13. (Dong Hyun Kim)

History of Odenton

Site Analysis

Since its formation in 1868, Odenton has served as a key destination and crossroads not only for Anne Arundel County, but for Maryland as a whole. Odenton, named after Maryland's 34th governor, Oden Bowie, was founded primarily due to railroad activity in the surrounding area. Odenton's roots can be traced back to the intersection of the Annapolis and Elkridge Railroad with the Baltimore and Potomac Railroad. The influx of passengers at this intersection created commercial activity around the station. 1871 marked the establishment of the Odenton post office, which was soon followed by a school, church, factories, and general stores. Odenton continued to expand with the creation of Fort Meade in 1917. The Army base, located west of Odenton, currently serves as the headquarters of various defense agencies, including the NSA. A large portion of Fort Meade's employees reside in Odenton due to its proximity. Over the last ten years, Odenton has seen the most growth of any town in Anne Arundel County, partially due to the NSA's growth



Figure 15. View of the original Fort Meade site



Figure 14. Odenton Train Station

and expansion.



Figure 16. Lester Disney's home where he settled community disputes

the Peace. During Disney's time as justice, residents would sit on the steps while he heard his cases. Because of this, the house became an important cornerstone of Odenton. The plan for the new town center will restore the Disney House to its former role as a community gathering space.

Even though the original railroads have fallen out of service, the Odenton station still holds an integral role in the Odenton community. The station is a stop on the MARC train's Penn Line, that runs from D.C.'s Union Station to Perryville, Maryland. The Odenton station continues to receive heavy use, with over 50 trains a day stopping there.



Figure 17. Marc Train enters the station

There are a number of sites and buildings located throughout Odenton that are of historical value. One of these, the Disney House, is located in the study area. The house gets its name from its owner, Lester Disney, a railroad worker and local Justice of

Odenton Timeline

1837	Annapolis & Elkridge R.R. was chartered
1840	Annapolis & Elkridge R.R. opened for service
1860	Oden Bowie became president of Baltimore & Potomac R.R.
1861	Civil War begins
1868	Train station and house constructed establishing Odenton as a Ci
1870	Construction of Post Office
1872	Service began to the station
1891	Methodist church constructed
1892	Grade school constructed
1914	WWI begins
1917	Ft. George G. Meade established
1935	Wash. Balt. & Annapolis R.R. stopped service
1935	US 170 & US 175 were constructed on right-of-way of old tracks
1939	WWII begins
1968	NSA building established
1972	Planning of Odenton takes shape Channeling growth in the county to Odenton area and defined the area around Odenton as a Town center with the focus of creating an attractive, livable and economically viable town center
1995	A.A. County adopted Odenton Town Center Growth Mgmt. Area Plan
1999	Updated Odenton Master Plan
2001	Odenton Center Master Plan Refined vision for the core, more detailed development controls, new design standards and zoning
2015	Odenton Center Master Revision

Figure 18. (Benjamin Hartmann)

Design Description

Team Nevada Avenue

Objective: To create a space where community members are able to come together and socialize by:

- adding green open space
- providing a site that allows for a range of activities, bringing the community closer together
- planning safe circulation for pedestrians and cyclists.

Odenton Town Center is designed to provide the surrounding community with a site that will contribute to the growth and health of the Odenton community. Community members will have access to a green space that will support a healthy lifestyle throughout the seasons.

The Odenton water fountain area is one of the main design features. It can be viewed from MD-175 and proudly displays large, colorful sculptured letters that identify ODENTON to those passing through the community. It is one of the first things pedestrians will see when entering the site. During the evening, lighting will enhance the fountain’s artistic features. The fountain is interactive and provides for play and fun for all community members. Various types of seating will be available in and around this area that has a capacity of about 100 people. An overhead pergola provides shade and comfort in the seating area.

Unprogrammed, open green space allows community members to use the area for a range of activities. The open field, which is lined with paths, gives the Town Center a centerpiece. The goal is to give the community with a flexible space that allows for a variety of activities.

An amphitheater in the site’s northwest corner is a short walk from the open green space. Here concerts, plays, and other performances may take place. The area’s topography adjusts slightly downhill for a better view of the stage. Seating is provided on grass terraces that are separated by retaining walls. The terraces are highlighted by lights in the evening, providing visual effects and safety. The space also accommodates an ice rink in the winter.

On the site’s east side, pedestrians and cyclists may use a path that leads to a nature play area consisting of grass, mounds, and wooden logs. The mounds range between one and three feet high. Farther down the path is the historic Disney House. This abandoned home, will be transformed and repurposed into a historic center and cafe. The deck outside the cafe provides seating for up to 50 people under a tree canopy, making it a perfect place to host a wedding or other occasion.

South of the Disney House, a path surrounded by vegetation takes pedestrians on an interpretive journey of the history of Odenton. The path itself is intended to mimic train tracks. As the pedestrians walk along the path, they come upon nooks that provide seating and privacy.

The southeast corner of the site includes a rain garden and

memorial. The site is heavily vegetated and allows people to immerse themselves in a natural setting.

Between the meadow and the rain garden is an open mall. This area provides a space for public art, and gathering space. The paths on each side of the mall are highlighted by pergolas, which imitate the imagery of the ceiling of a train station.

Nevada Avenue bisects the site, making it possible for cars to drive through the park. The textured paved surface and the street trees are intended to slow traffic on the roadway. Ten parallel parking spaces are provided along Nevada Avenue, five on each side. The main crosswalk links the historic cafe with the interactive ODENTON sculptural fountain.

In many of the tree canopies along the paths, as well as by the historic center and cafe, light fixtures are included, providing light, safety, and visual impact.

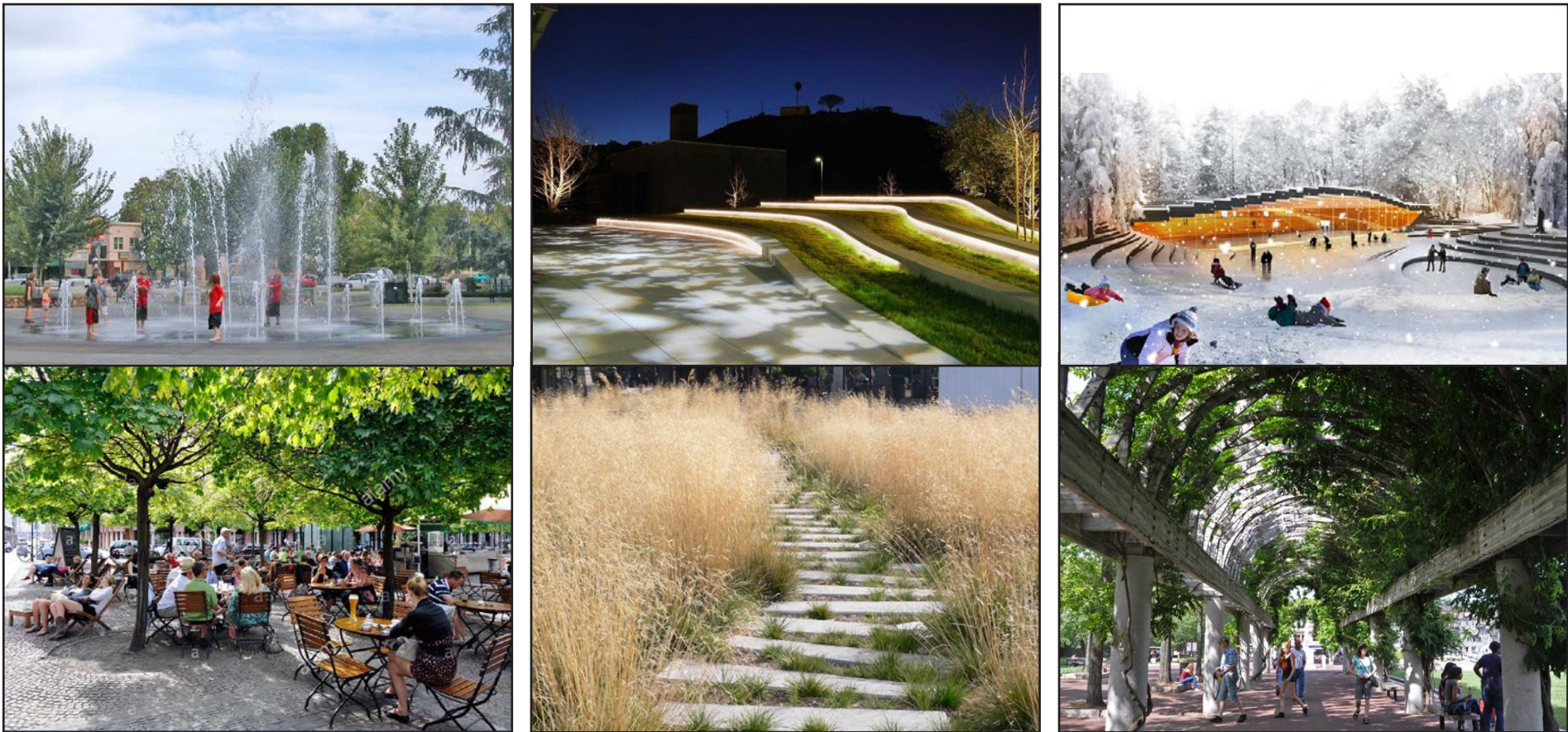


Figure 19. Images for design inspiration

Design Plan Detailed by Steven Palomino



University of Maryland College Park Department of Plant Science and Landscape Architecture | LARC 340 BLA 3rd Year Studio | Professor: Dennis Nola, ASLA |
Teaching Assistant: Mark Dennis | Project Manager: Simone Vitale | Informational Officer & Editor: Devan Hare | Design Team 2: Akin Jaiye, Akira Shepherd Beverly
Hernandez, Benjamin Hartmann, Cecilia Tran, Dong Hyun Kim, Max Berger, Sarah Whiteley, Sean Quinn

Perspectives

Team Nevada Avenue

The plaza on the site’s southeast (Figure 23), serves as a place for socialization, picnicing and play. It is equipped with a water feature edge that provides a safety barrier for pedestrians from MD-175, interactive sprinklers, and oversized sculptural ODENTON letters used as a focal point and the perfect backdrop for photos. The water feature edge illuminates the sculpture that aids in slowing traffic and drawing in visitors.

The amphitheater in the site’s northwest (Figure 21), is separated from the plaza by a large non-programmed open space. Surrounded by retail and condos, this space is ideal for performances and events that will attract visitors. In the winter, the stage space is transformed into an ice skating rink where visitors may bring or rent their own skates.

The rehabilitated historic building is located on the park’s east side (Figure 20), and is converted into a historic museum café, which showcases Odenton’s rich culture and history with an adjoining multi-functional wooden patio with public seating. Adjacent to the building is a large playground filled with earth mounds that offers an active play area for children of all ages while creating a focal point.

Visitors entering from the east adjacent to Route MD-175 (Figure 22) will be greeted by pergola entryways leading to the park’s memorial, mall and historic trail. Both sides of the park are joined together by a woonerf road which includes traffic calming techniques for pedestrian safety.



Figure 21. Winter render of the amphitheater as an ice skating rink, which doubles as a performance stage the remainder of the year. (Garrett Foss)

Figure 22. Eastern entry viewed from across MD-175 showing the historic trail meadow and parkmall entry. (Blair Danies, James Schwartz)

Team Nevada- Perspective



Figure 23. Socialize with friends, take pictures with the oversized letters or cool down in the interactive sprinklers at the plaza. (Blair Danies)

Diagrams

Team Nevada Avenue

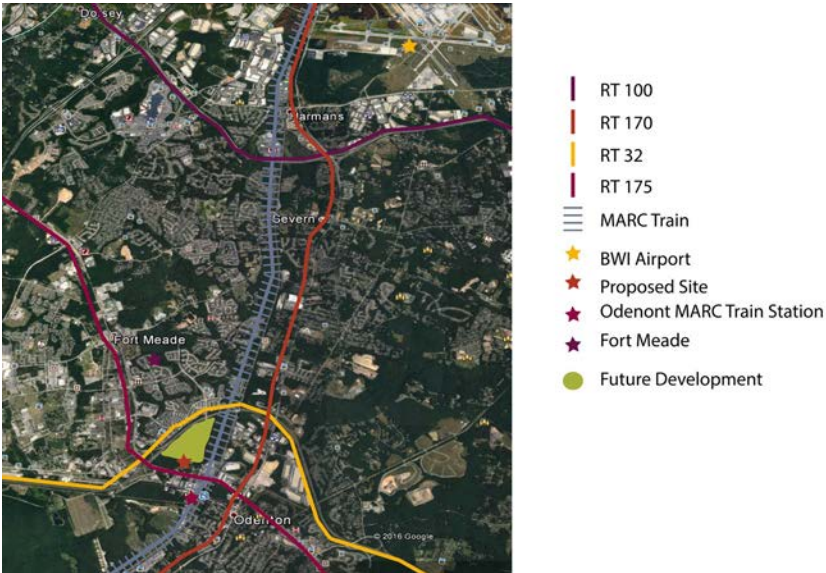


Figure 24. Regional Context (Christopher Snyder)

Figure 24 shows the relationship of the proposed Odenton Town Center to major landmarks: BWI Airport and Fort Meade. It also shows major roads connecting to Annapolis (MD-175 and MD-32), Baltimore (MD-170), Washington D.C. (MD-170), and Ellicott City (MD-100), as well as a portion of the MARC train line connecting Union Station (Washington DC) to Penn Station (Baltimore).

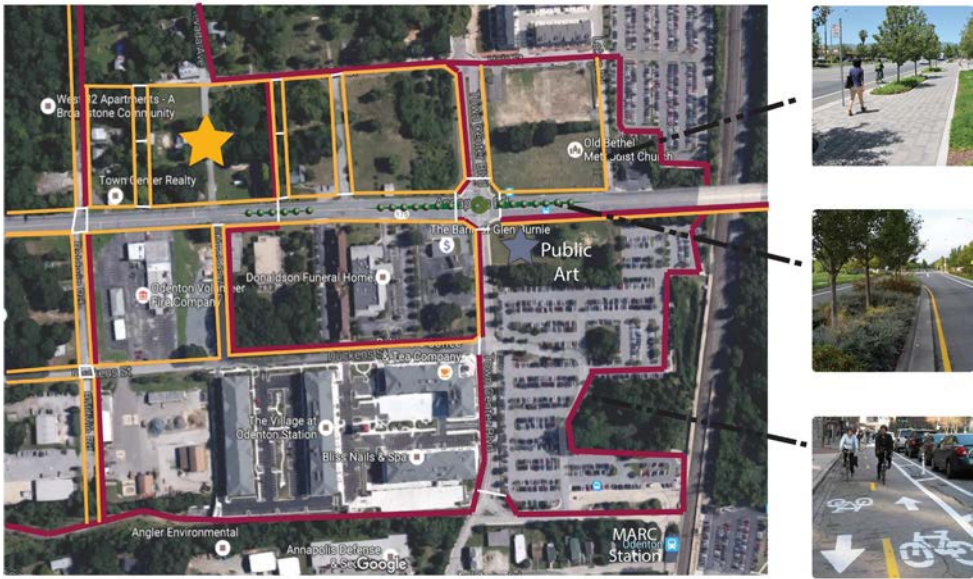


Figure 25. Proposed Circulation (Benjamin Hartmann)

Figure 26 shows various elements that comprise the proposed Odenton Town Center. The “A” layer shows the total area of the tree canopy on the site’s perimeter. The “B” layer shows the site’s built structures including the Disney House and various pergolas. The “C” layer shows the hardscape including all the on-site pathways, plazas, and Nevada Avenue. The “D” layer shows the total area of all the ground level vegetation throughout the site. This diagram helps show the space usage and provides a visual breakdown important site characteristics.

Figure 25 shows proposed circulation for pedestrians around the town center and connections to the MARC station. New crosswalks, medians, and a traffic round-about have been proposed to help slow traffic, to increase pedestrian safety crossing MD-175, and to provide more visual access into the site.

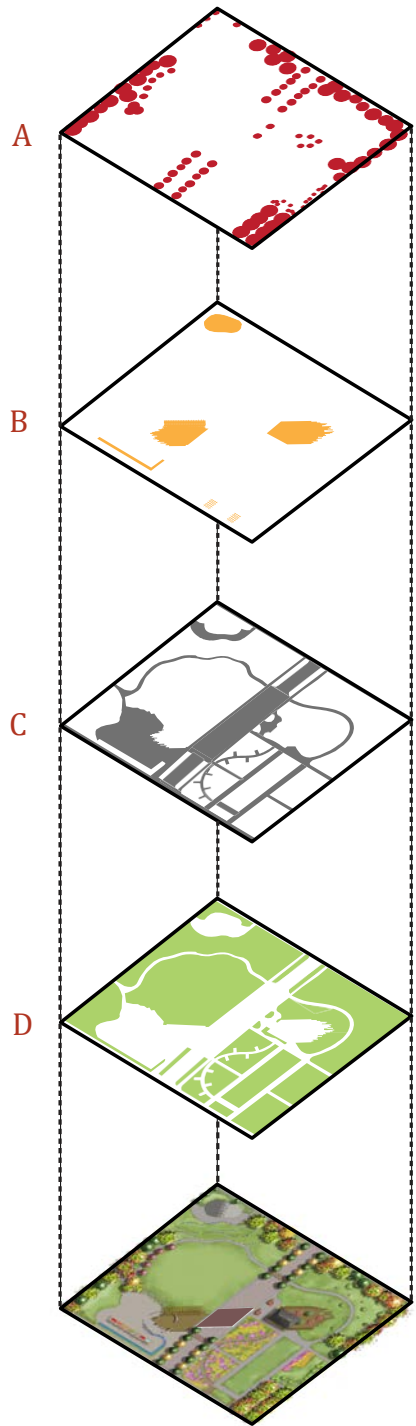


Figure 26. Tiered Site Analysis



Figure 27. MD -75 Recommendation

Figure 27 shows the new proposed section of MD-175, which includes a tree-planted median and turning lanes to help reduce traffic speed and improve pedestrian safety along this four-lane highway. New turning lanes are proposed for a safer entrance onto Nevada Avenue and in front of the fire house. Implementing this proposed redesign of MD-175 in conjunction with the site improvements will provide a slower and safer traffic pattern around the Odenton Town Center.

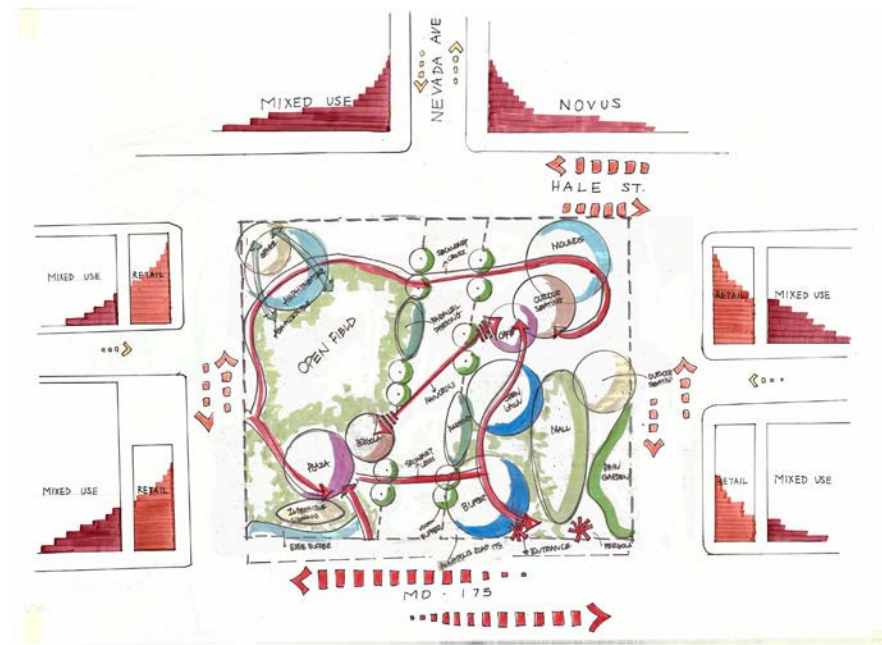


Figure 28. Concept Diagram

Figure 28 incorporates the initial concepts and identifies space, size, location, adjacencies, and connections. The concept diagram also shows the site in relation to future proposed retail and residential development and to circulation patterns throughout the site.

Performance Metrics

Team Nevada Avenue

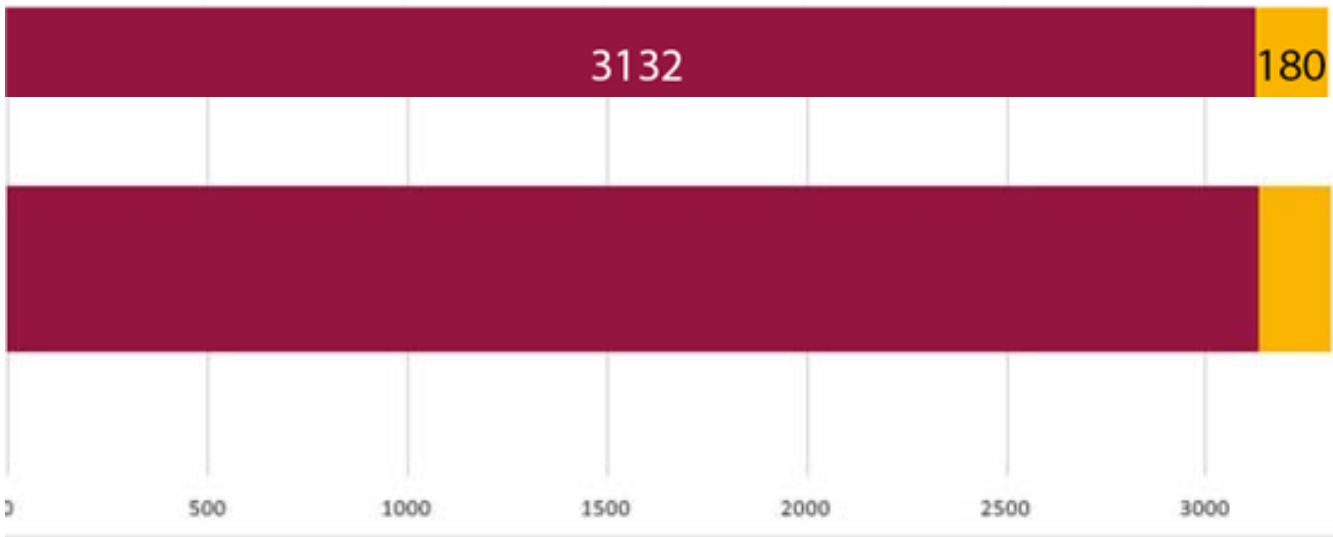
Several potential environmental and recreational benefits result from the new Town Center design while also maintaining the existing road to allow additional access and parking. The redesigned Nevada Avenue accommodates various means of transportation, while the open green spaces allow for flexible activities. The existing road occupies only 8% of the entire site with additional hardscape areas of 25%. The green space, composed of native meadows, ornamental and shade trees, native shrubs, and ground covers, occupies 97,001 square feet, 67% of the entire site.



Greenspace- 97,001 square ft (67%)
Hardscape- 38,200 square ft (25%)
Road- 10,942 square ft (8%)

Circulation and Recreational Design Proposal

The proposed plan for Odenton Town Center introduces and enhances various features that can tailor the user experience Nevada Avenue is converted into a green street to allow driving, parking, walking, and bicycling. Safety is enhanced with visual buffers that reduce the driving speeds. The playground, is designed with nature play features. Open spaces are composed of open lawns for recreational activities, ornamental and shade trees for seating areas, and native meadows and shrubs for educational events and rain gardens. Play and open space is increased to 43% of the entire site. Gathering spaces such as amphitheaters and outdoor historic cafe take up 20% of the space to accommodate events at different scales. Entertainment features such as the outdoor stage, educational rain garden, and seasonal ice rink, occupy 17% of the entire site. Gathering and entertainment spaces are increased to promote social interactions.



Play/ Open Space- 41,541 square ft (43%)
Gathering- 19,473 square ft (20%)
Entertainment- 16,467 square ft (17%)
Garden- 14,324 square ft (15%)
Dining- 3,885 square ft (5%)

3312 ft. of pathway; 3132 ADA, 180 Non- ADA

5653 square ft of canopy cover
35,700-gallon capacity of rain garden
of trees
24 bike spots



NO NEVADA

TEAM

ODENTON
TOWN CENTER



Design Description

Removal of Nevada Avenue

This design emphasizes the removal of Nevada Avenue to:

- creating memorable spaces
- create convenient access to green space and amenities
- unify the community
- provide an urban oasis
- provide large unprogrammed open space.

This design replaces Nevada Avenue with green space to unify the site for the Odenton community. Removing Nevada Avenue will reduce impervious surfaces, minimize urban heat island effects, and relieve fragmentation. This pedestrian-friendly design provides programmed and unprogrammed space for play, performance, quiet, and lawn. The design restores the historic house into a cafe that will interpret the history of Odenton to new community members. The reworked Odenton Town Center master plan dedicates the immediate surrounding buildings to the site for commercial and mixed-use. These areas allow for optimal exchange between the green oasis and the residents of Odenton.

The pathway system is organically shaped to circumnavigate the entire site while guiding pedestrians to key areas, such as the historical café and entrances, and secondary paths that allow fluid movement of people within spaces. The main pathways accommodate bicyclists to safely maneuver through the site, with strategically placed bicycle parking at site entrances. All site pathways allow for the safe movement of all pedestrians; main pathways are 10 feet wide and secondary paths are 6 feet wide. The site's main entrance is on the southeast corner. It provides connection to the MARC train station. A 20-foot tall circular structure identifies Odenton and is visible from across MD-175. This structure is framed with a long water feature that is visually appealing and moderates noise from MD-175. The main center pathway leads to the restored cafe that is surrounded by an outdoor gallery space and a plaza. The outdoor gallery provides a platform to display art sculptures that can be changed with the season and includes terraced bioswales that funnel into a display area for seasonal display and a bioretention garden. The plaza provides 25 outdoor tables surrounded by a circular

herb and vegetable garden. Within the plaza, permeable pavers allow proper stormwater runoff. The vegetable garden educates the community, teaching about sustainable living. The natural play area is located on the northeast corner to provide the shortest access to play equipment from the existing Novus Odenton Apartments. Natural equipment such as logs and stones allow children to enjoy being outdoors. There is an interactive water feature that jets water from the ground that people can run through to cool off. The play area will be cushioned by wood chips, and the path around the play water feature is large, flat stones. This space has two pavilions with green roofs to provide seating close to the water feature and nature play. The green roofs collect rainwater before it hits impervious areas, will educate residents on sustainable practices, and be visually engaging for children and visitors. On the northwest corner of the site

is the amphitheater with seating composed of large, irregularly shaped stones that provide natural seating for viewers. Large crowds of up to 230 people may form without negative impacts from MD-175. The memorial is located at the southeast corner closest to MD-175. The small water fountain in the center of the memorial will mitigate noise from the roadway. The custom pavement is engraved with the names historical members of the Odenton community. The center lawn connects all generations to large events for performance, recreational, and athletic activities.



Figure 29. Water



Figure 30. Memorial



Figure 31. Amphitheater



Figure 32. Plaza



Figure 33. Rain Garden



Figure 34. Nature Play



Figure 35. Open Lawn



Figure 36. WaterPlay

Design Plan Detailed by Akin Jaiye, Akira Shephard, Beverly Hernandez, Benjamin Hartmann, Cecilia Tran, Devan Hare, Dong Hyun Kim, Max Berger, Sarah Whiteley, and Sean Quinn



University of Maryland College Park Department of Plant Science and Landscape Architecture | LARC 340 BLA 3rd Year Studio | Professor: Dennis Nola, ASLA |
Teaching Assistant: Mark Dennis | Project Manager: Simone Vitale | Informational Officer & Editor: Devan Hare | Design Team 2: Akin Jaiye, Akira Shepherd Beverly Hernandez,
Benjamin Hartmann, Cecilia Tran, Dong Hyun Kim, Max Berger, Sarah Whiteley, Sean Quinn

Perspectives

Removal of Nevada Avenue

Figure 37. Odenton Plaza: This perspective shows the welcoming and active gathering space that accents the renovated Disney House café. Trees frame the view of plaza as well as the vegetable garden. The vegetable garden gives the space self-sustaining properties, because it feeds the café's desire to provide organic foods as well as demonstrating sustainability.

Figure 38. Amphitheater: This perspective shows the view looking from the site's northwestern portion into the amphitheater and across toward Hale Street. The view shows the performance/gathering space framed by the community surrounding the park as well as by buffering trees. This space is inviting and is a focal point for community engagement.

Figure 39. Rain Garden Pathway: This view shows the raised wooden walkway surrounded by a wildflower rain garden. The background displays the open lawn that is non-programmed space that can be used for different activities, giving the space limitless programming options. The wildflower rain garden can be seen from vehicles as well as by pedestrians passing the site on MD-175.

Figure 40. Odenton Park Gateway: The Odenton Gateway serves not only as a main entrance but one of the park's focal points. It is visible from adjacent streets and accentuates the view of the park from a heavily used pedestrian route, from the MARC train station, as well as heavy car traffic along MD-175. The sculptural gateway is a 25-foot tall polished concrete structure with a 25-foot diameter that includes an interactive naturalistic water feature. Paired with ornamental vegetation, the gateway gives a vertical presence for a grand but inviting entrance. The "O" gateway also frames aesthetic views of the park.



Figure 37. Odenton Plaza (Cecilia Tran)



Figure 38. Amphitheatre (Dong Hyun Kim)



Figure 39. Rain Garden Pathway (Benjamin Hartmann)

Perspectives



Figure 40. Odenton Park Gateway (Akin Jaiye)

Landscape Metrics

Removal of Nevada Avenue

The proposed town center in Odenton brings improvements to the landscape that deliver numerous environmental benefits. The landscape performance metrics quantify specific spatial characteristics and provide a clear contrast between the original and proposed site plan. This information is extremely helpful to county planners, government administrators, and maintenance workers as well as community members.

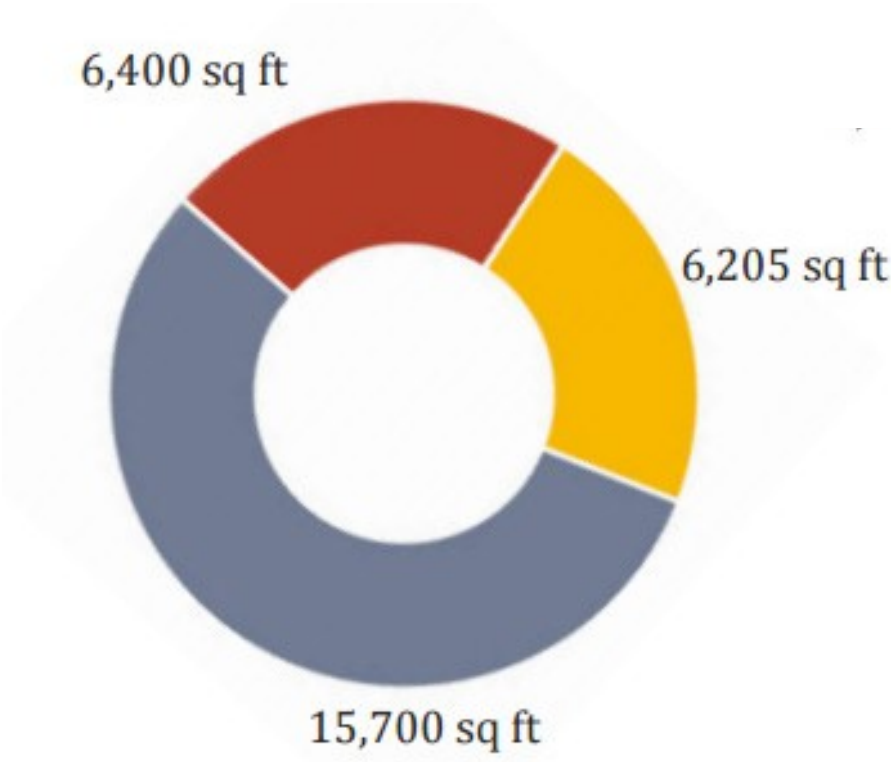


Figure 41. Pre-Development (Max Berger, Sean Quinn)

Pre-Development

Nevada Avenue, an open lawn, the abandoned Disney House and 3 single-family homes define the original site. Roof cover on the site totals 6,205 square feet. Landscape covers 15,700 square feet. Nevada Avenue alone constitutes 6,400 square feet of impervious surface. The site has total of about 13,000 square feet of impervious surface. Rainwater cannot pass through this surface, which drives up maintenance cost, builds up pollutants and increases peak runoff.

Post-Development

To satisfy the surrounding developing community, the proposed site plan for Odenton Town Center introduces many new amenities, both functional and aesthetically pleasing. The largest impact is the removal of Nevada Avenue. This not only reduces the amount of impervious surface, but unites the entire space in a more efficient manner.

The number of proposed trees on site is 94. Of these, 33 are shade trees and 61 will be ornamental trees. This amount of additional tree canopy is beneficial in a number of ways. The trees will shade built structures, filter and purify the air, and provide on-site stormwater management. With an increased number of trees, the space becomes even more attractive and productive.

The total space of proposed permeable surface on-site is 83,231 square feet. Ample space to manage rainwater is an immense environmental benefit. Permeable surfaces allow for infiltration and the removal of pollutants from stormwater. The 6,127 square feet of proposed permeable pavers on site will also be able to help limit the peak discharge rate of water runoff on and off site.

The space can now accommodate pedestrian circulation with the 25,904 square feet of proposed pathway. Hikers, runners and bikers are now able to comfortably move throughout the site. From the MARC station to an apartment home, pedestrians and bikers alike have an efficient route to get from point A to point B.

The proposed play area will serve as a natural play space for children. It will consist of natural, interactive and safe materials that children of all ages will be able to enjoy.

Overall, the proposed site plan will become more efficient, safe and environmentally-friendly, able to accommodate people of all ages. The proposed features aim to successfully make Odenton a more environmentally conscious, sustainable, walkable place.

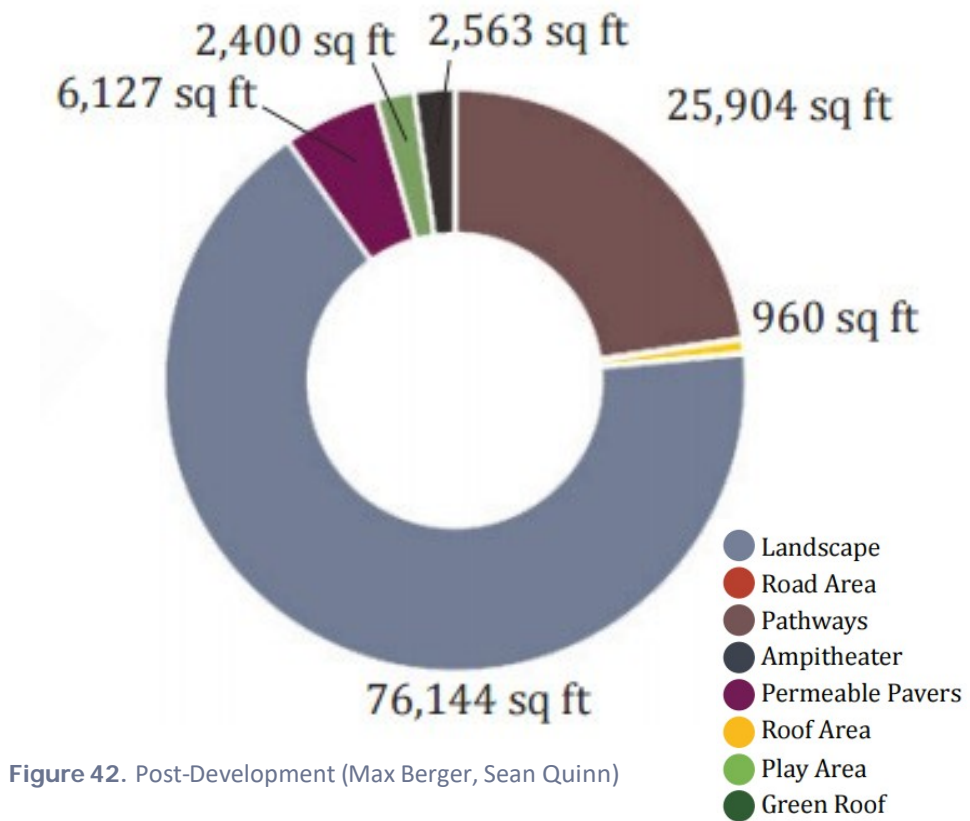


Figure 42. Post-Development (Max Berger, Sean Quinn)

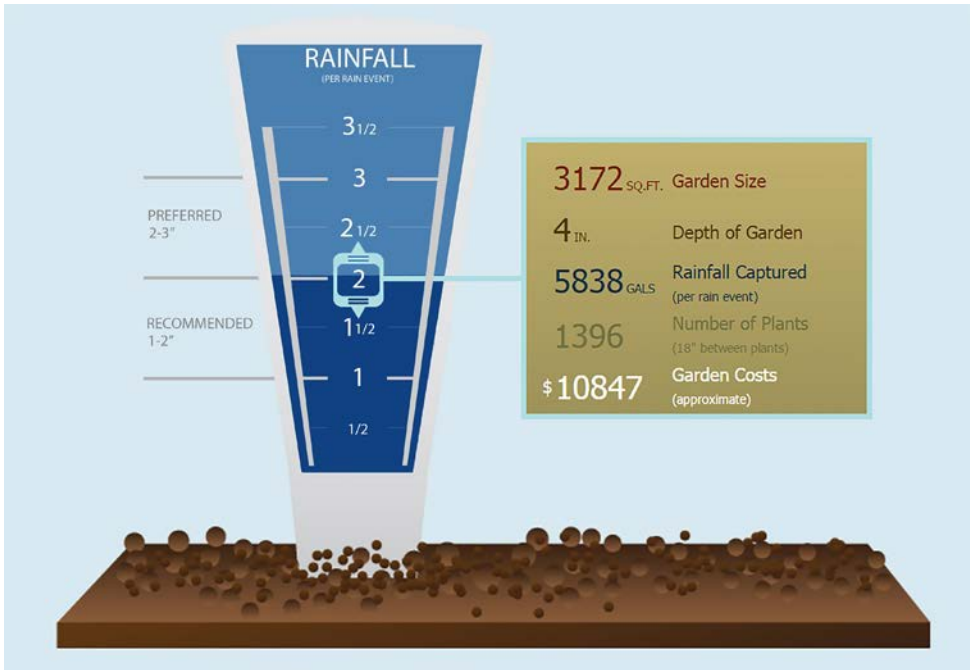


Figure 43. Rainwater Diagram (Max Berger)

Diagrams

Regional Context

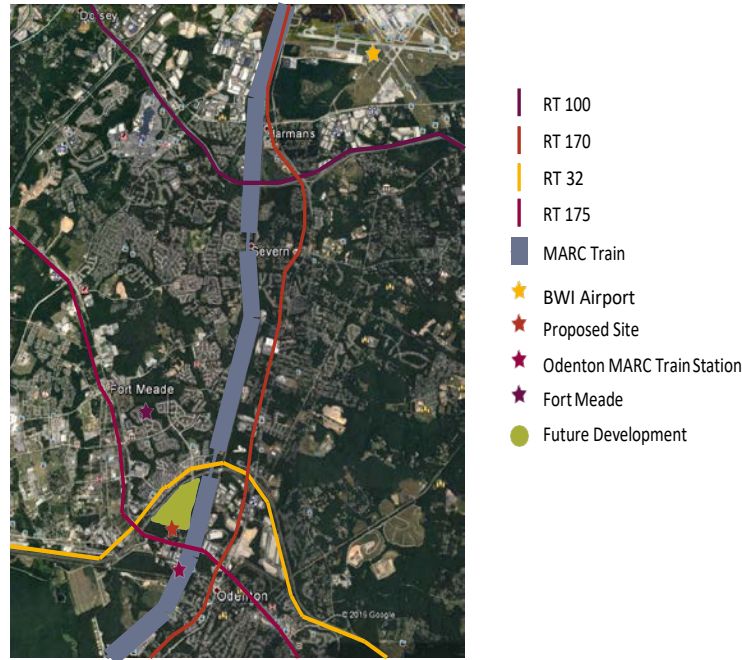


Figure 44. (Christopher Snyder)

The regional concept diagram demonstrates the site's relationship to important surrounding roadways and focal points. These major roadways include MD-175, MD-170, and MD-32. Important focal points around the site are the BWI Airport, the Odenton MARC Station, and Fort Meade.

Circulation Diagram

The circulation diagram simplifies the plan to the design's bare bones and emphasizes the pedestrian and cyclist routes; pedestrians in purple, cyclists in orange. One of the design goals is to encourage cyclists to park their bicycles at the entrances and walk through the park to fully experience it. If cyclists do ride through the park, they are encouraged to use the main pathways to decrease pedestrian-bicycle conflict.

Odenton Context Map



Figure 45. (Benjamin Hartmann)

The Odenton context map outlines the larger circulation system for pedestrians and cyclists. These walkways connect the site to the MARC station and surrounding retail and residential sites.

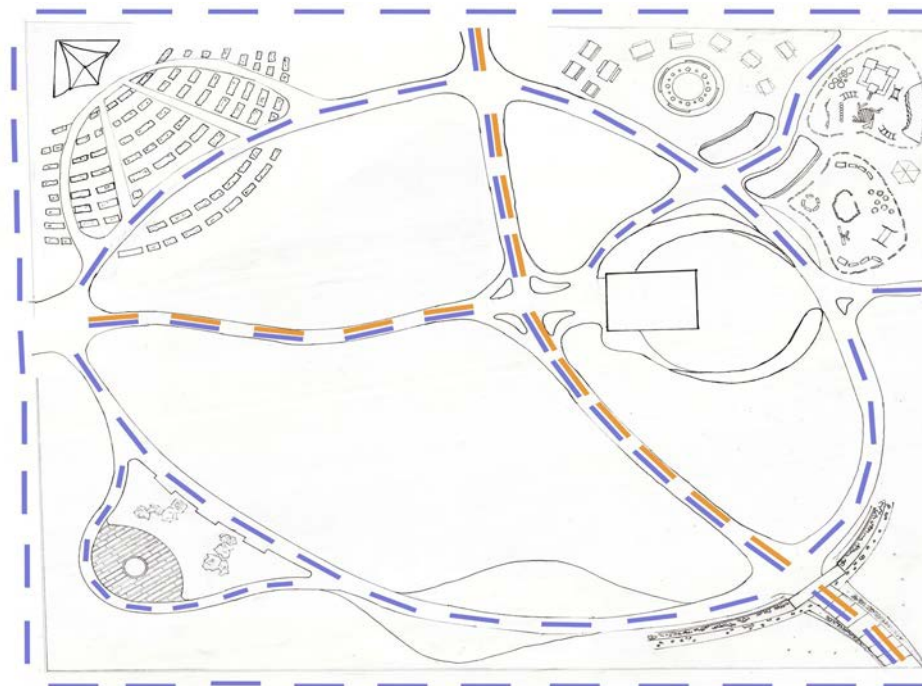


Figure 46. Circulation Diagram (Sarah Whiteley)

Concept Diagram

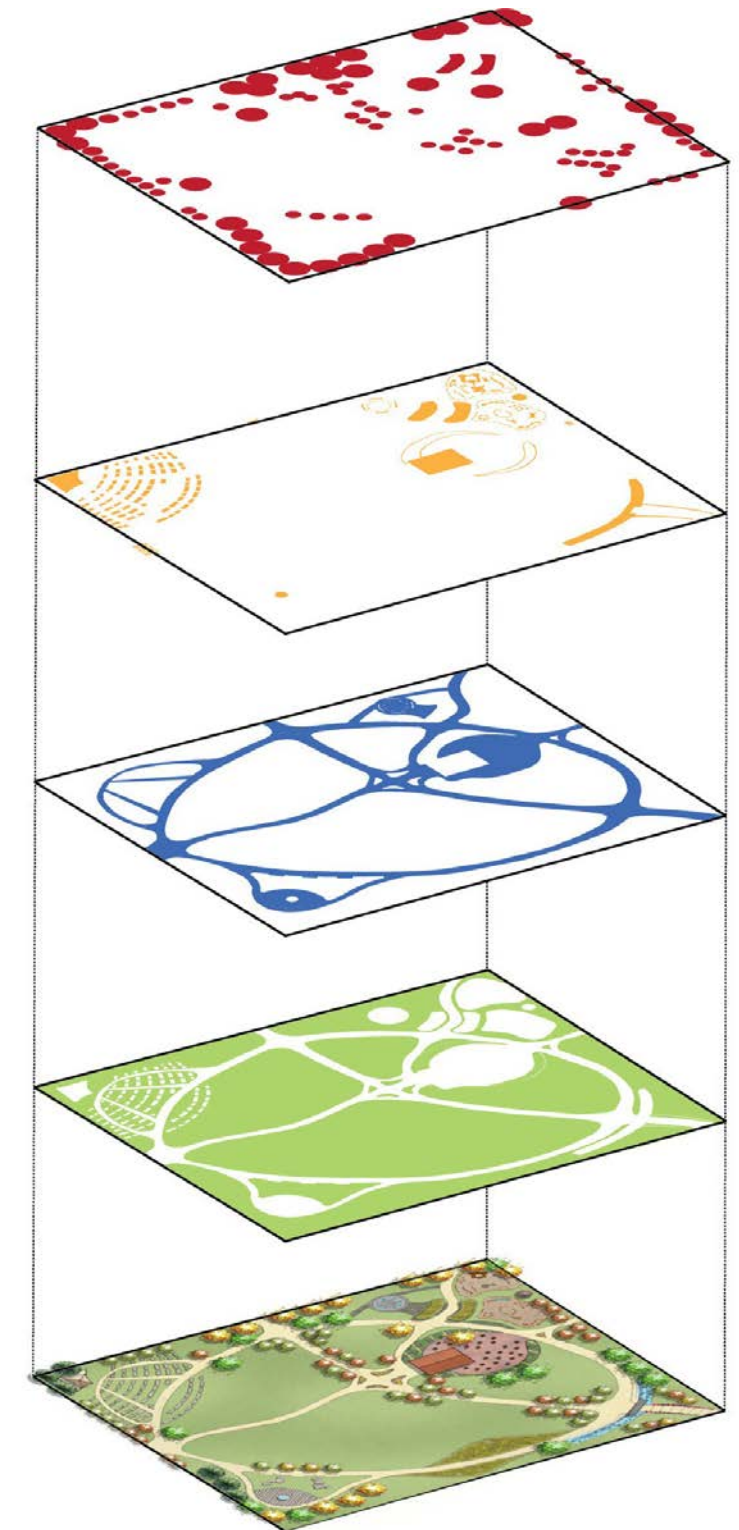


Figure 47. (Akira Shepherd)

Plant Palette

Removal of Nevada Avenue

The plant palette diagram shows the vegetation throughout the site, ranging from large canopy trees to herbaceous and ground cover plants. The palette is composed of native species, which provide more habitat for native wildlife and pollinators. Each plant has been specifically selected, not only for its aesthetics, but also for its larger environmental contribution. The canopy trees include: River Birch, Pin Oak, Silver Maple, and Red Maple. The understory trees include White Fringetree, Sassafras, Eastern Redbud, Sweetbay Magnolia, Pin Cherry, and Ironwood. The shrubs include Witchhazel, American Beautyberry, Wax Myrtle, Arrowwood, Virginia Sweetspire, and Summersweet. Some of the plants in the rain garden are Blackeyed Susan, Turtlehead, White Beardtongue, Pink Azalea, Bee Balm, Blueflag Iris, Goldenrod, and Swamp Milkweed.

Explanation of Concept Diagram

The concept diagram illustrates four different components of the site that, together, form a cohesive site plan. The Vegetation Layer highlights all canopy and ornamental trees within the site. The Built Structures Layer indicates all constructed elements of the design, such as the amphitheater and water features. The Paths Layer illustrates the designed pedestrian and cyclist circulation throughout the site. It also lays out the hardscape, including the café plaza and the memorial area. The fourth layer exhibits the proposed softscapes (grassy areas) throughout the site.



Figure 48. Plant Palette (Devan Hare)



ODONTON

ODONTON

TOWN CENTER

LOGOS

Logos



1



2



3



7



8



9



13



14



15

Logos



4



5



6



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Logos



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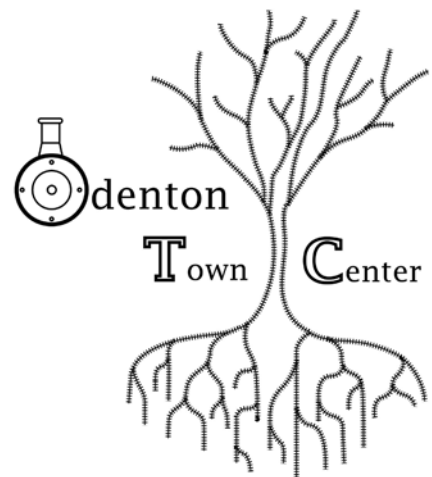


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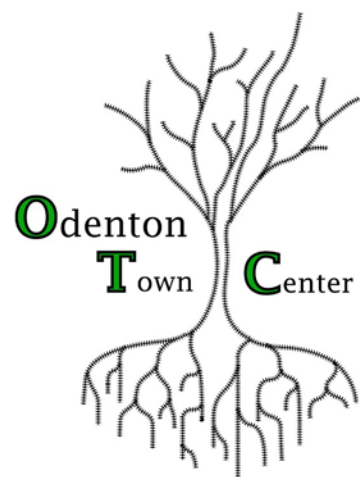


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Logos



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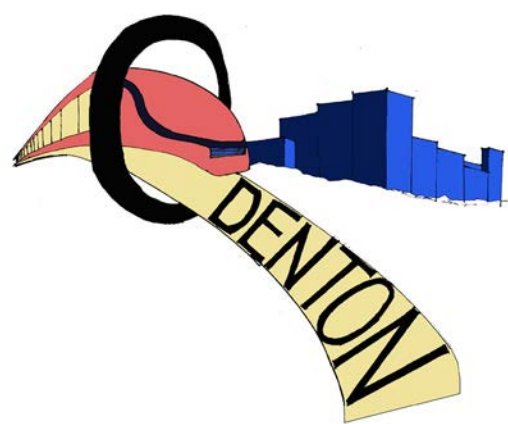
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36

Citations

Figure 1: Taken by Sarah Whiteley

Figure 2: Taken by Sarah Whiteley

Figure 3: Created by Sarah Whiteley and Qi Zhou

Figure 4: US Web Soil Survey

Figure 5: US Web Soil Survey

Figure 6: Google Maps

Figure 7: Created by Cecilia Tran

Figure 8: Created by Christopher Snyder

Figure 9: Created by Benjamin Hartman

Figure 10: Odenton Master Plan Land Use and Zoning Maps

Figure 11: Created by Garrett Foss

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Figure 13: Created by Dong Hyun Kim

Figure 14: <http://www.trainweb.org/oldmainline/wasaer1.htm>

Figure 15: [http://i.ebayimg.com/images/a/\(KGrHqRHJBYE7\)z8-ukgBO-I\)3BWkw~/s-l1600.jpg](http://i.ebayimg.com/images/a/(KGrHqRHJBYE7)z8-ukgBO-I)3BWkw~/s-l1600.jpg)

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Figure 18: Created by Benjamin Hartmann

Figure 19:

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Figure 20: Created by Sara Saernwald

Figure 21: Created by Garrett Foss

Figure 22: Created by Blair Danies

Figure 23: Created by Blair Danies

Figure 24: Created by Christopher Snyder

Figure 25: Created by Benjamin Hartmann

Figure 26: Created by Paul Mayers

Figure 27: Created by Christopher Snyder and James Schwartz

Figure 28: Created by Qi Zhou

Figure 29: http://www.morethanonelife.com/uploads/5/9/5/6/59560435/9_1_orig.png

Figure 30: http://www.fockelegardencompany.com/users/stephaniegordon11907/CRW_1483.jpg

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Figure 37: Created by Cecilia Tran

Figure 38: Created by Dong Hyun Kim

Figure 39: Created by Benjamin Hartman

Figure 40: Created by Akin Jaiye

Figure 41: Created by Max Berger and Sean Quinn

Figure 42: Created by Max Berger and Sean Quinn

Figure 43: (<http://raingardenalliance.org/right/calculator>)

Figure 44: Created by Christopher Snyder

Figure 45: Created by Benjamin Hartmann

Figure 46: Created by Sarah Whiteley

Figure 47: Created by Akira Shephard

Figure 48: Created by Devan Hare

