



COMMUNITY MEETING

August 18, 2021

Presenters

ANDY CONDLIN

Roth Jackson Gibbons Condlin, PLC

MICHAEL HALLMARK

GreenCity Partners, LLC

DIANE LINDERMAN

VHB Engineers



Outline

Property Description

Rezoning Process

The GreenCity Plan

Traffic Analysis

Q&A






Outline

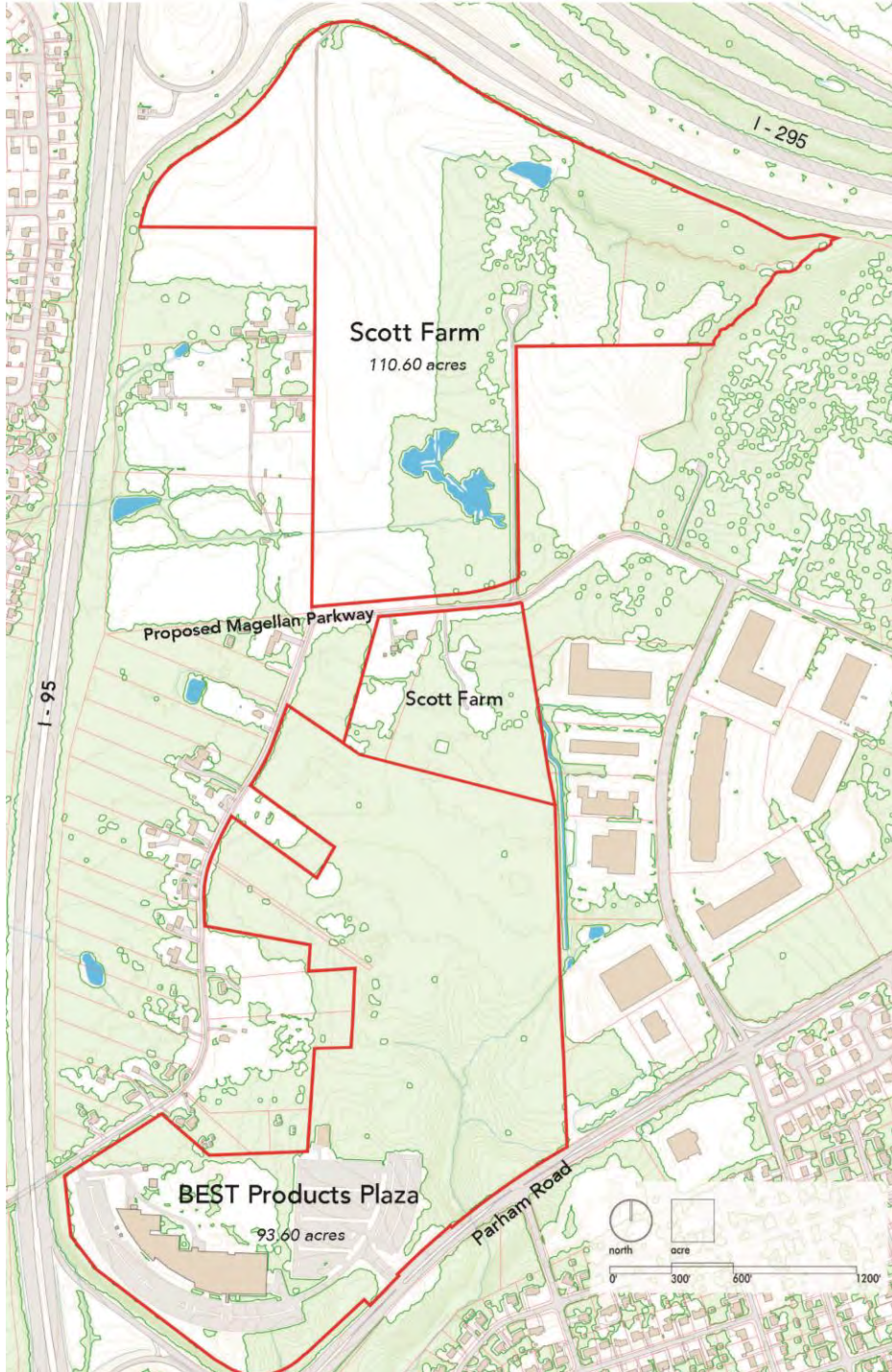
Property Description





Location

-  Boundary
-  Wooded Areas
-  Paved Areas
-  Waterways
-  Structures



Ownership

Scott Farm
110.60 acres

Best Products Plaza
93.60 acres



I-295

Dominion Energy MOC

Proposed Magellan Parkway

Former Best Products Headquarters

Scott Road

I-95

Parham Road

Outline

Property Description

Rezoning Process

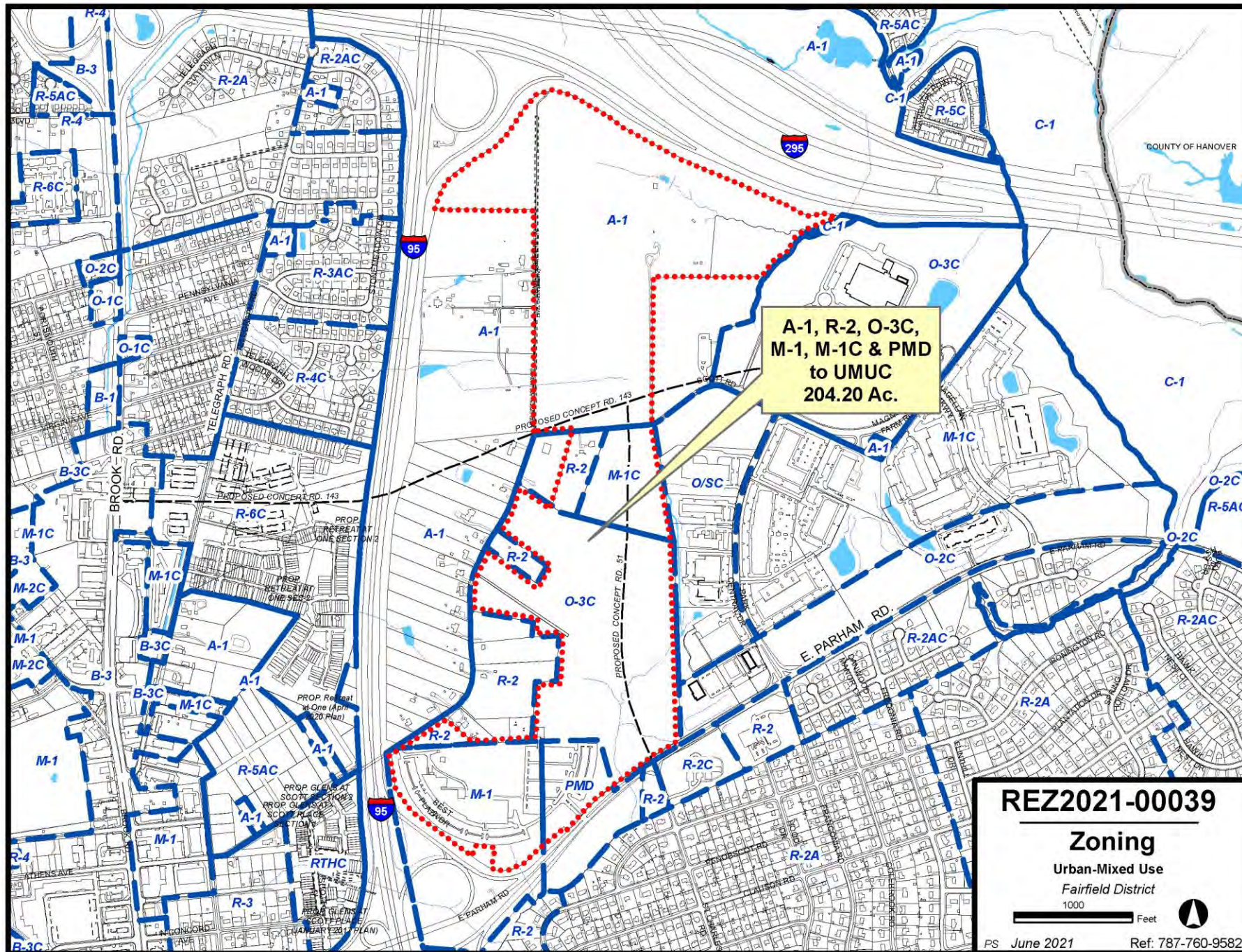
- Where we are in the process
 - Rezoning
 - POD
 - Permitting

Outline

Property Description

Rezoning Process

- Considerations for Rezoning
 - Current Zoning
 - Comprehensive Plan
 - Proposed Rezoning - UMU



REZ2021-00039

Zoning

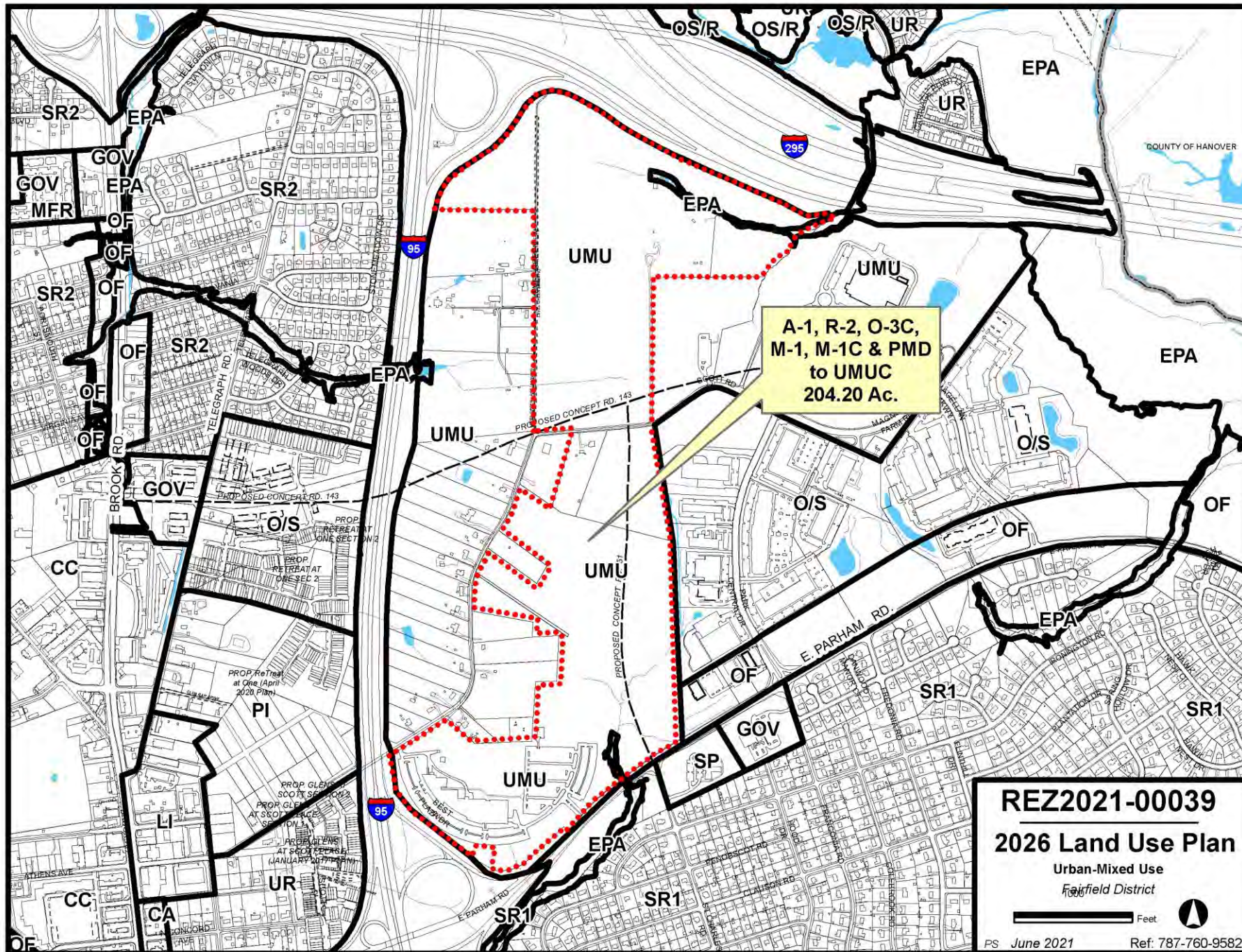
Urban-Mixed Use

Fairfield District

1000

Feet





A-1, R-2, O-3C,
M-1, M-1C & PMD
to UMUC
204.20 Ac.

REZ2021-00039
2026 Land Use Plan
 Urban-Mixed Use
 Fairfield District

Feet

PS June 2021 Ref: 787-760-9582



Henrico County, Virginia

UMU Master Plan Book _06.16.2021

GreenCity Partners, LLC

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Outline

Property Description

Rezoning Process

The Green City Plan



Natural Resources



Ecodistrict Principles

a vision of health, wellness, and equity

Premise

A Holistic Vision for the Henrico Ecodistrict

The Climate Imperative

Ecodistrict: The Opportunity for Place and High-Performance

Place

20-minute living connected to nature

Connecting to Nature - a green ribbon as the foundation for Development

Minute Living - A Variety of Neighborhoods to Live, Work, Play, and visit

Connectivity and Mobility - Local, regional, and future mobility

Performance

A Highly Sustainable + Resilient Community

Energy - a net zero future

Water - a net zero future

Waste - on-site treatment initiatives

Carbon - towards a carbon positive future

Smart City - the network, human interface, and resiliency

The Economic Benefit for County and Residents



1 connection to nature



Protected Wetlands

Connected Park System

Walkable Streets

Biophilic Design

Community Agriculture

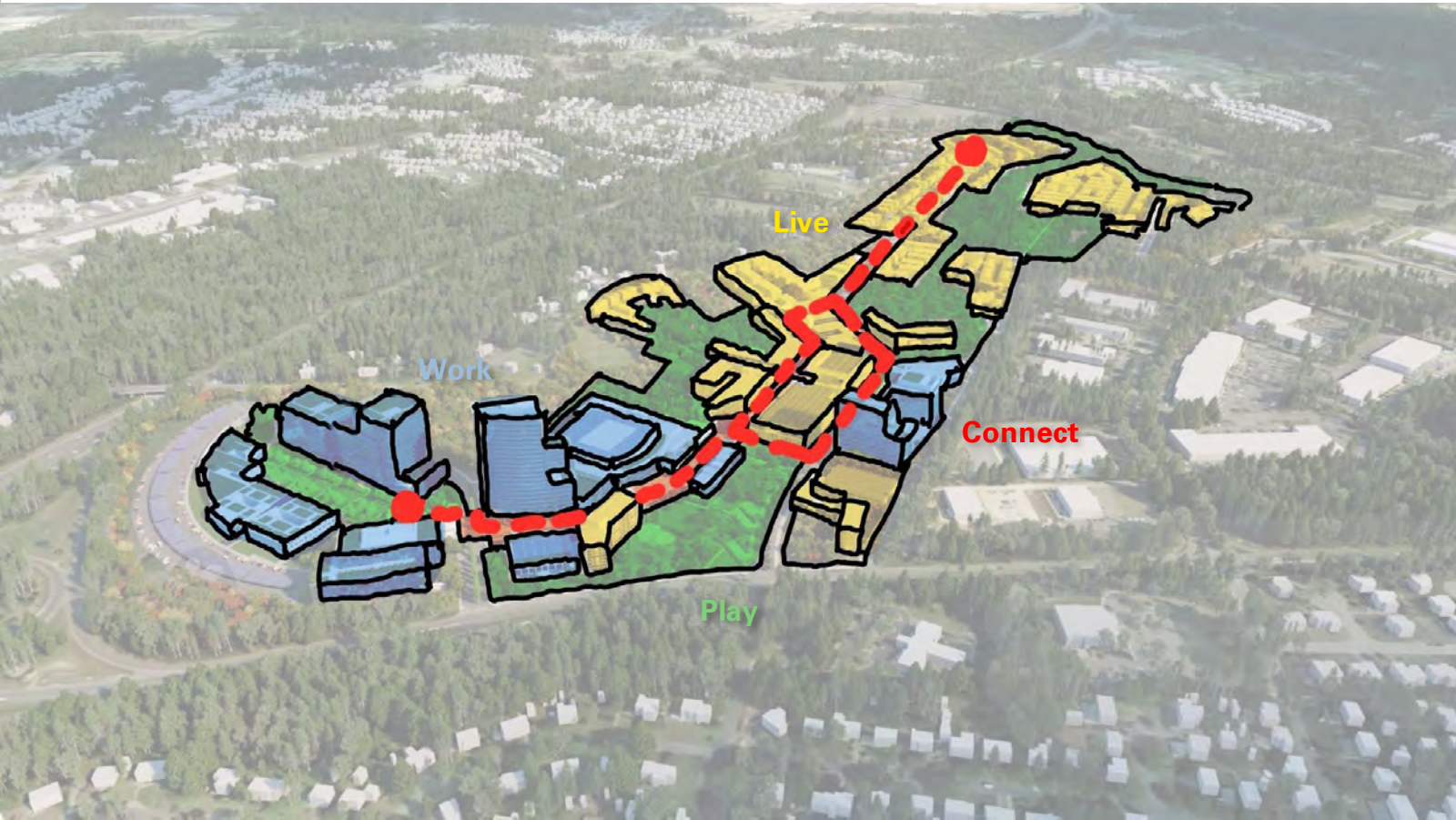
2 twenty-minute living

Broad Mix of Uses

Live-Work-Play

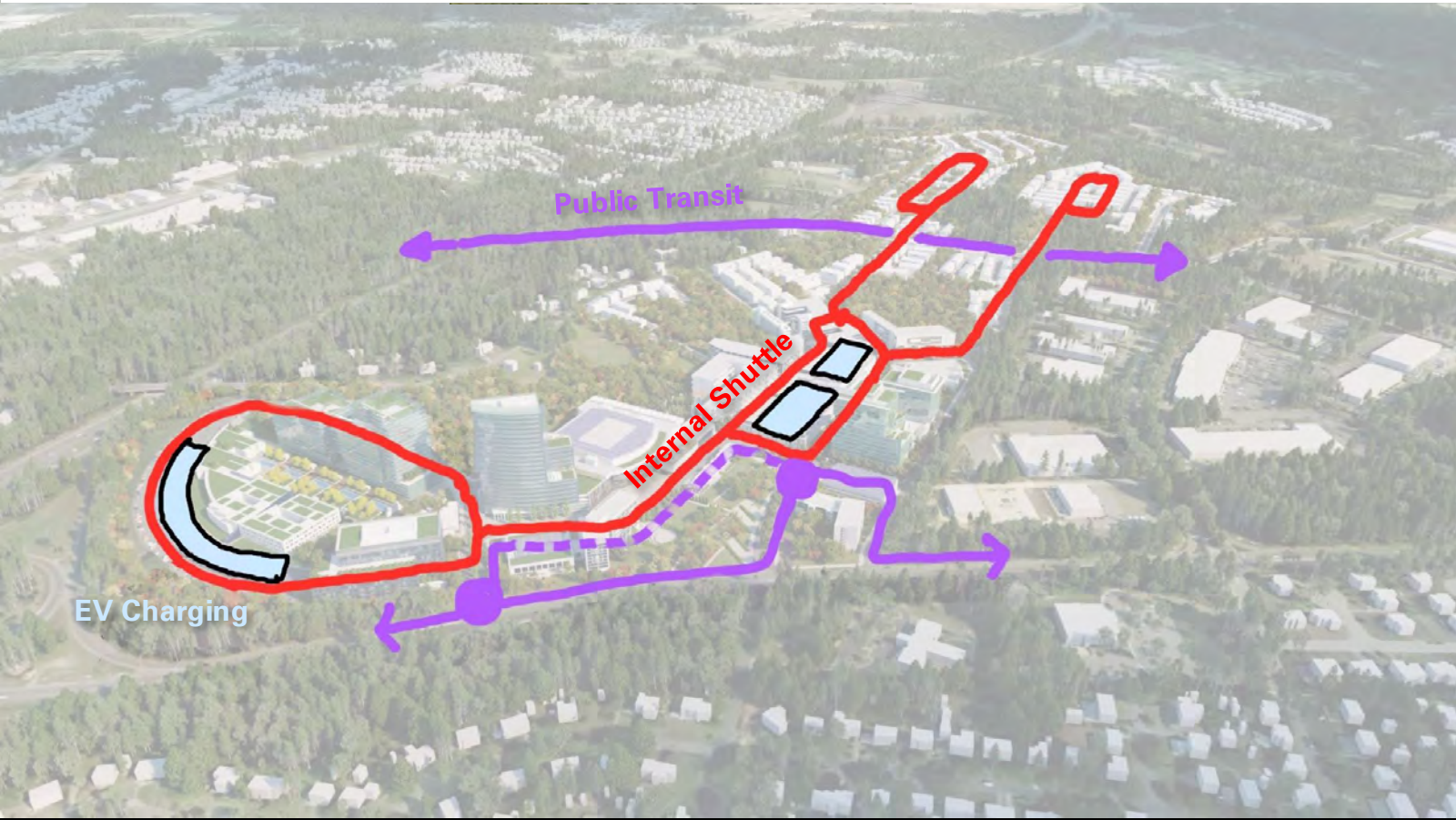
Support for Regional Jobs

Balance of Income Levels



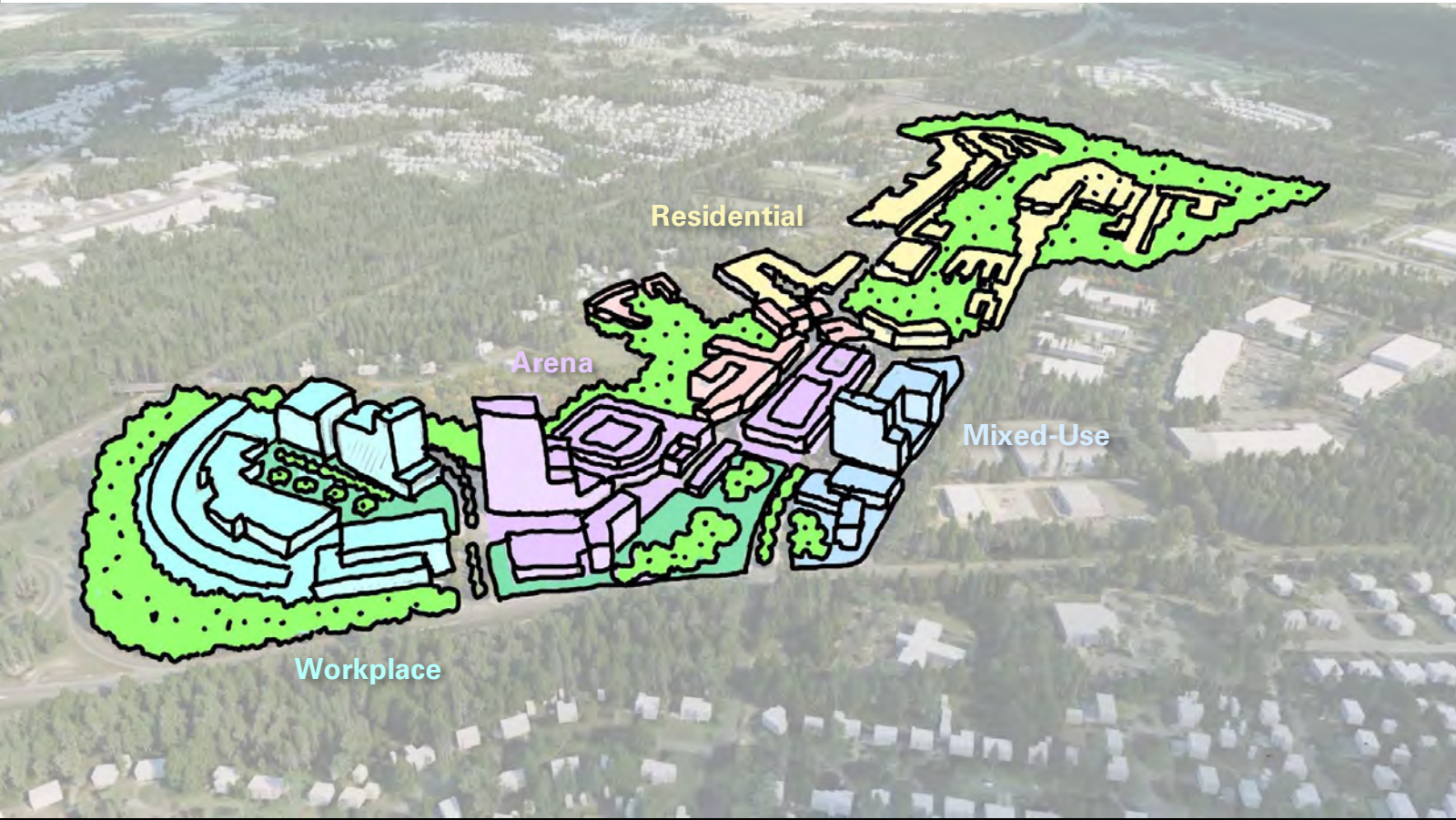


3 mobility



- Connections to Regional Transit
- Local Street & Trail Network
- Prioritize Pedestrians
- Last Mile Mobility
- EV Charging Priorities

4 water

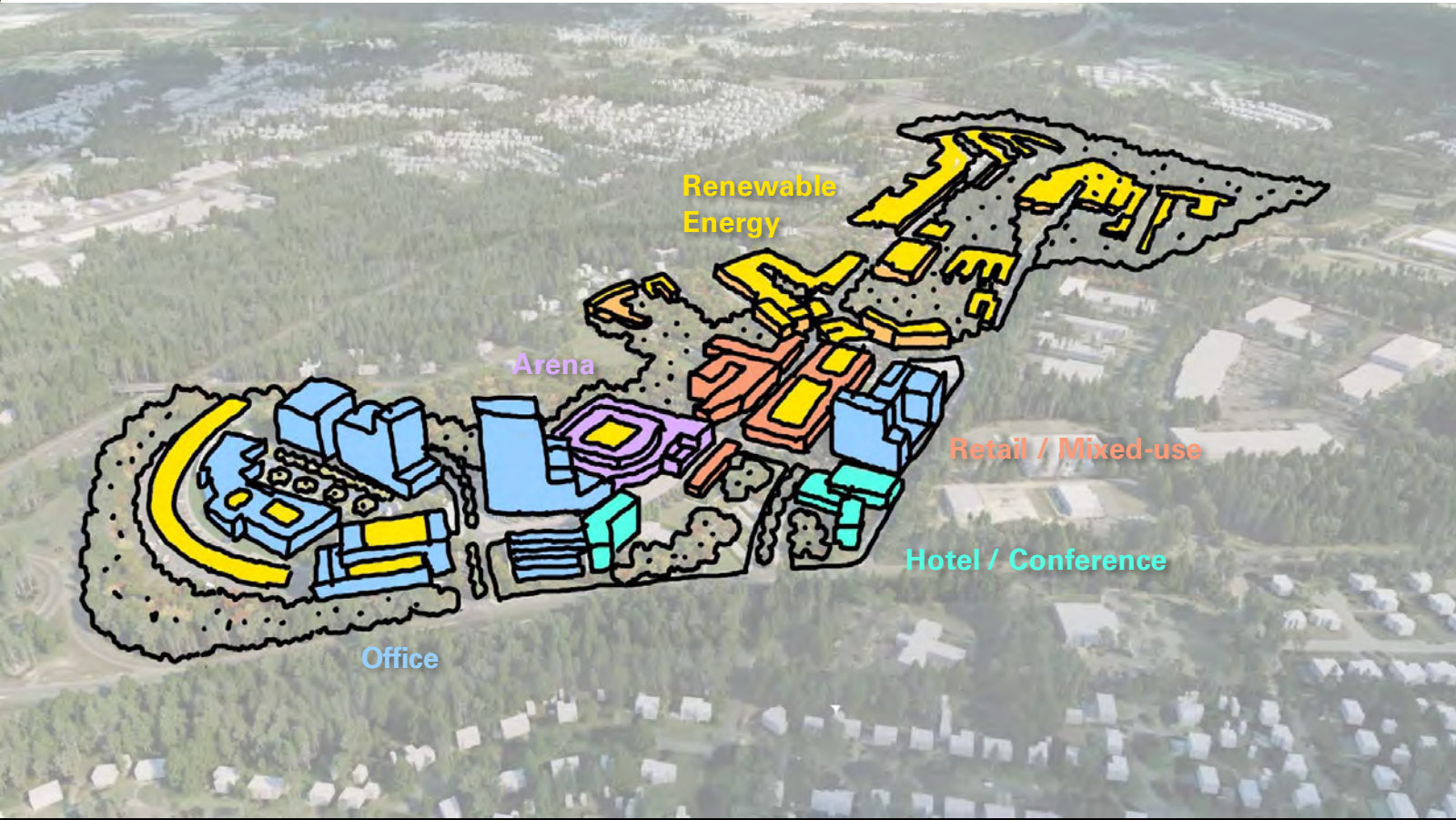


- Rainwater Harvesting
- Runoff to Aquifer Recharge
- Stormwater Collection
- Low-flow Fixtures
- Smart Water Meters & Sensors



GreenCity Principles

5 renewable energy



Net-Zero Energy District-wide

High Performance Buildings

Ground Source Heat Pumps

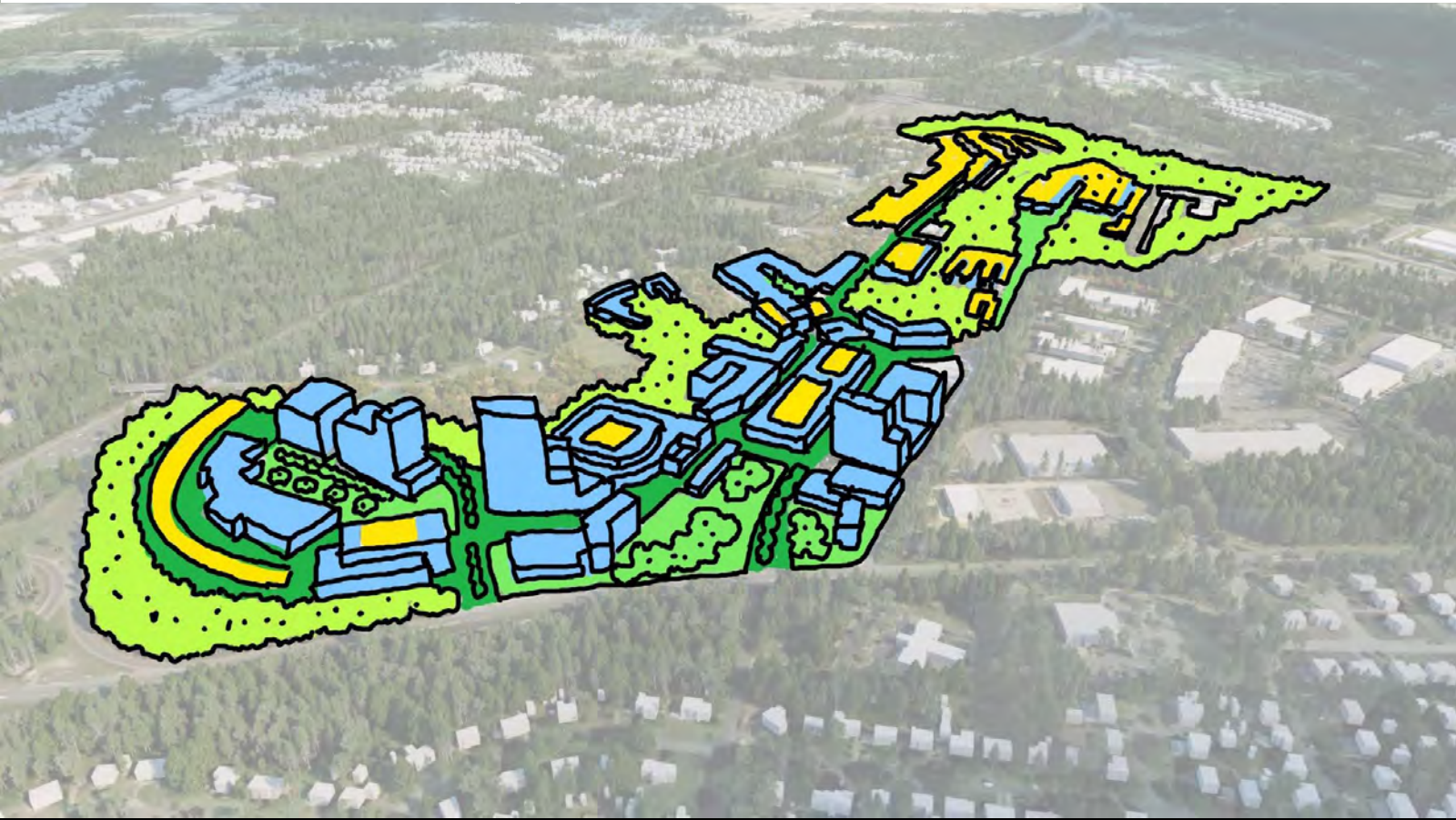
District-wide Rooftop Solar

All-Electric Design

EMS, BMS, Occupancy Controls



6 carbon



Mass Timber and CLT Design

Reforestation Strategies

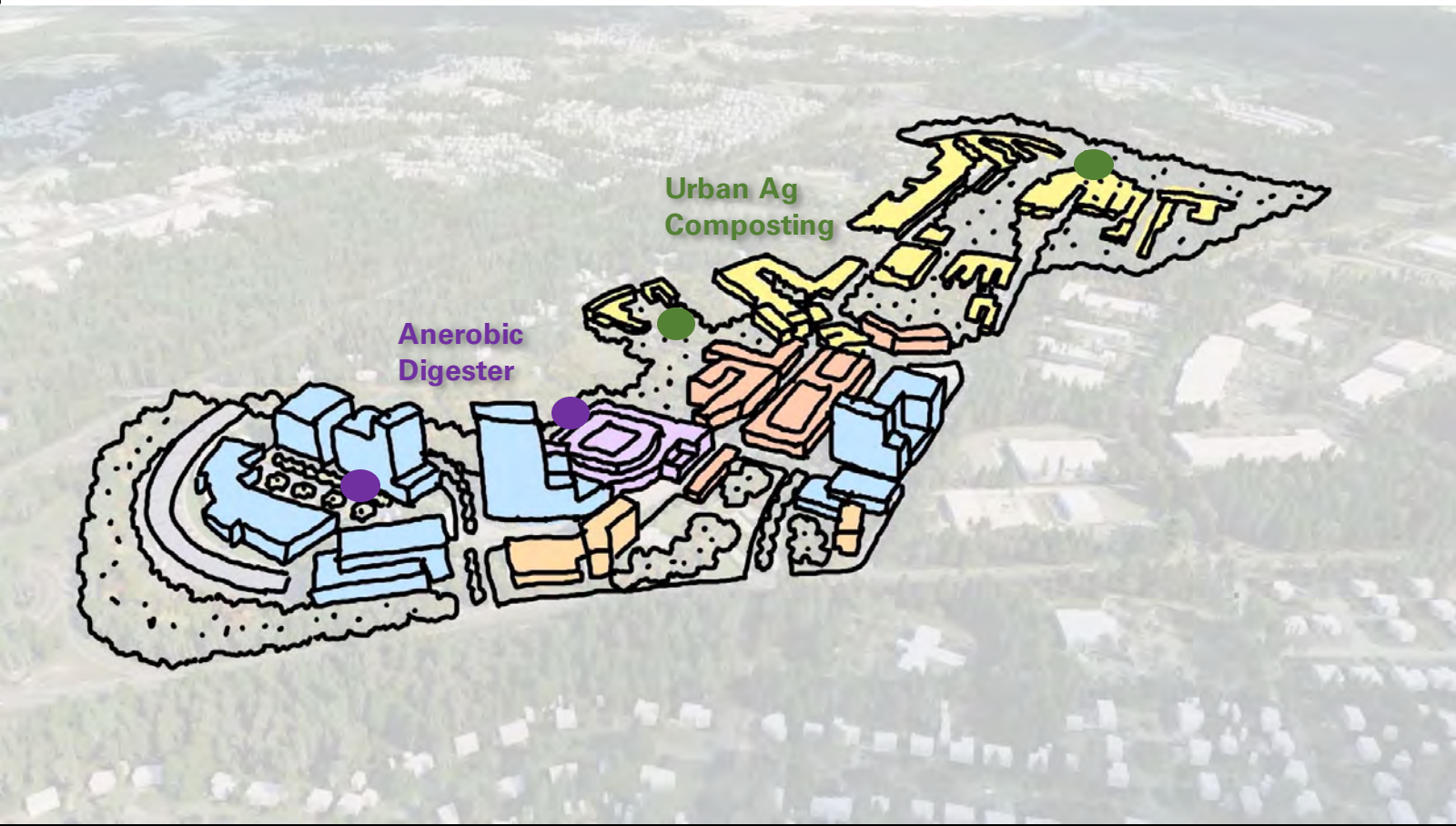
20-Minute Living

All-electric Design

Improved Transit / Transportation



7 waste



90% Diversion by 2035

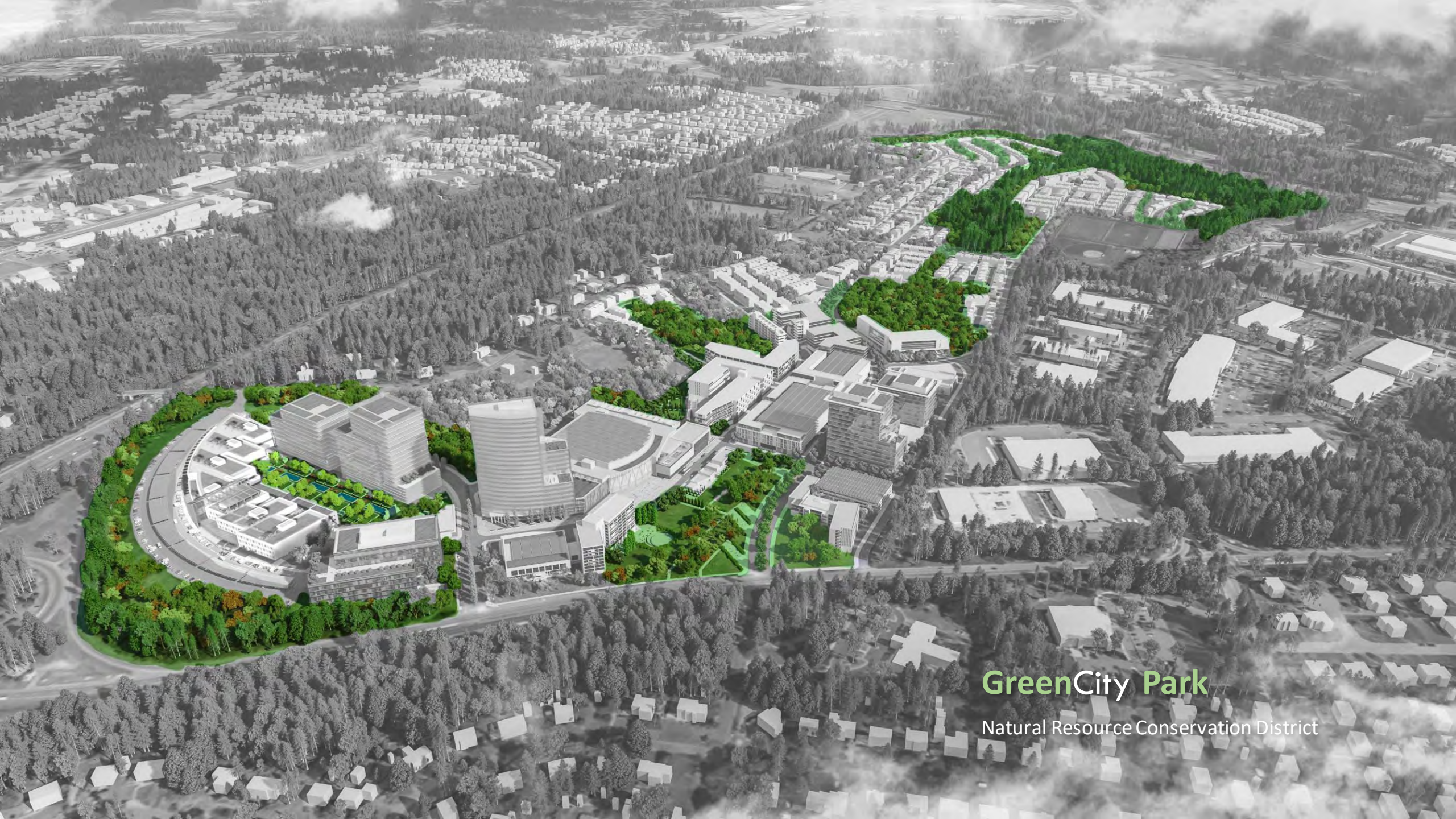
District-wide multi-bin collection

Integrated SmartBin Technology

Organic Waste Treated Onsite







GreenCity Park

Natural Resource Conservation District

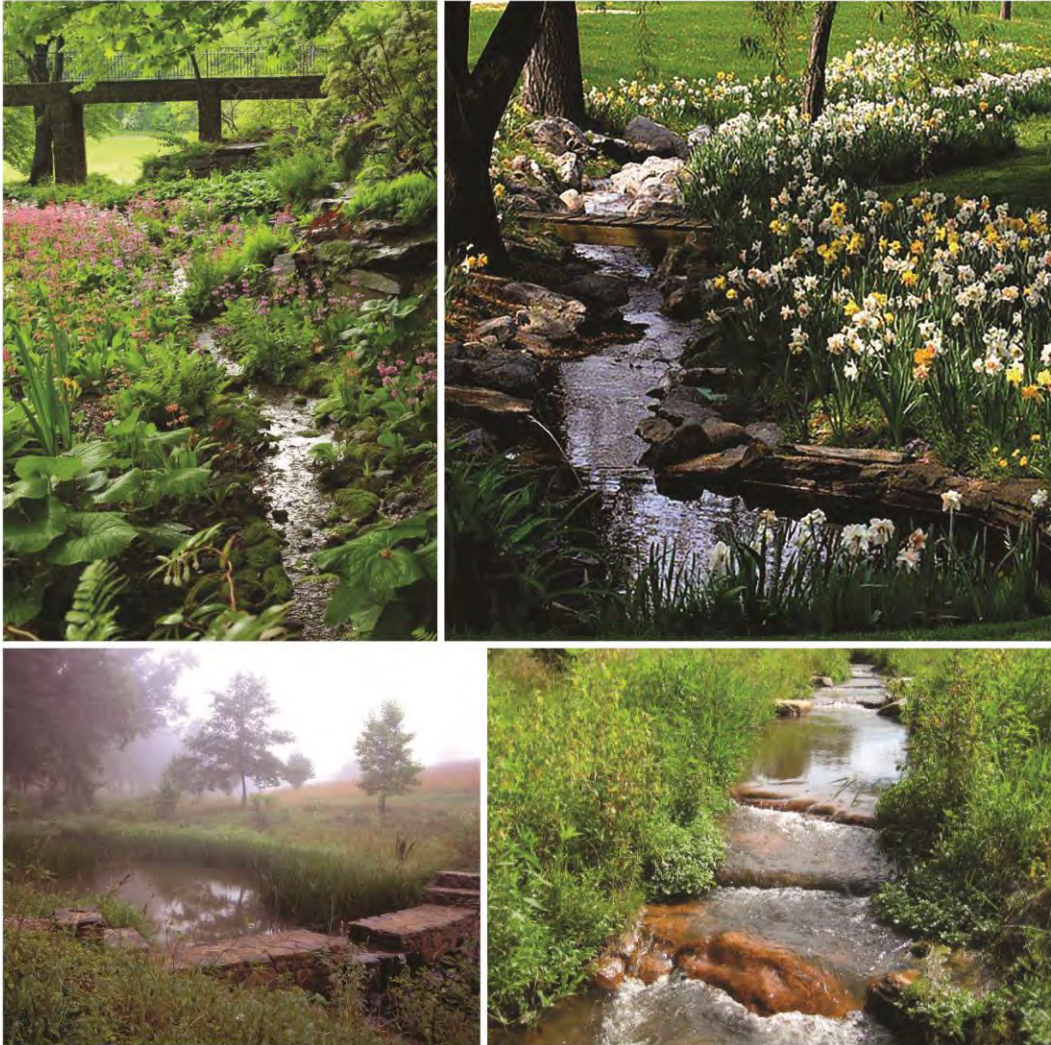
GreenCity Park

FOREST WALK



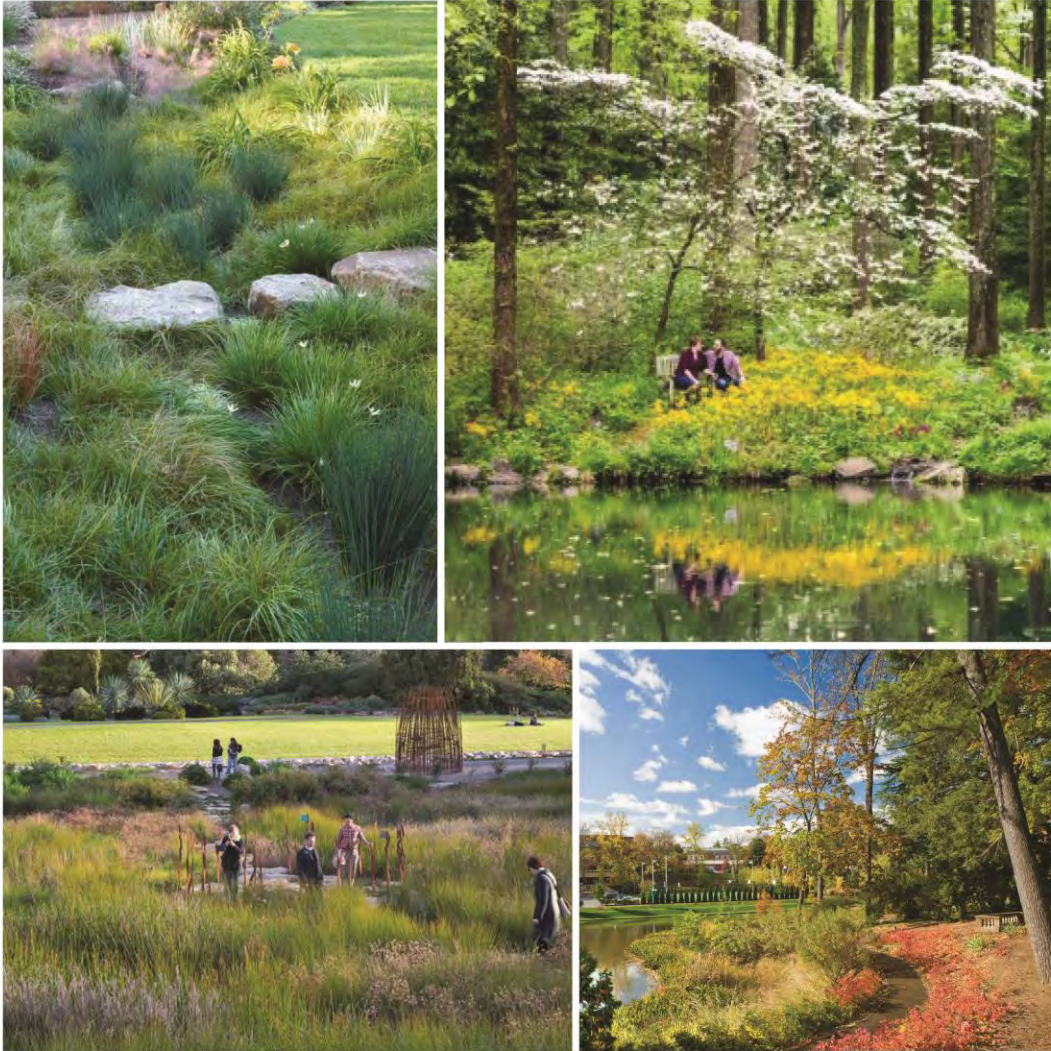
GreenCity Park

RESTORED STREAMBED



GreenCity Park

WETLANDS /
RIPARIAN GARDENS





GreenCity Park

Boardwalks & Pathways

**BOARDWALKS /
PATHWAYS**



GreenCity Park

NATURE PLAY



An aerial rendering of a city development project. The central focus is a cluster of modern, multi-story buildings with various architectural styles, including curved facades and flat roofs. These buildings are surrounded by dense greenery and trees. To the left, there is a large, curved parking lot or road. To the right, there are several large, low-rise industrial or warehouse-style buildings. The background shows a residential area with smaller houses and a road. The overall scene is a mix of urban development and natural green space.

USES

GreenCity



GreenCity Arena

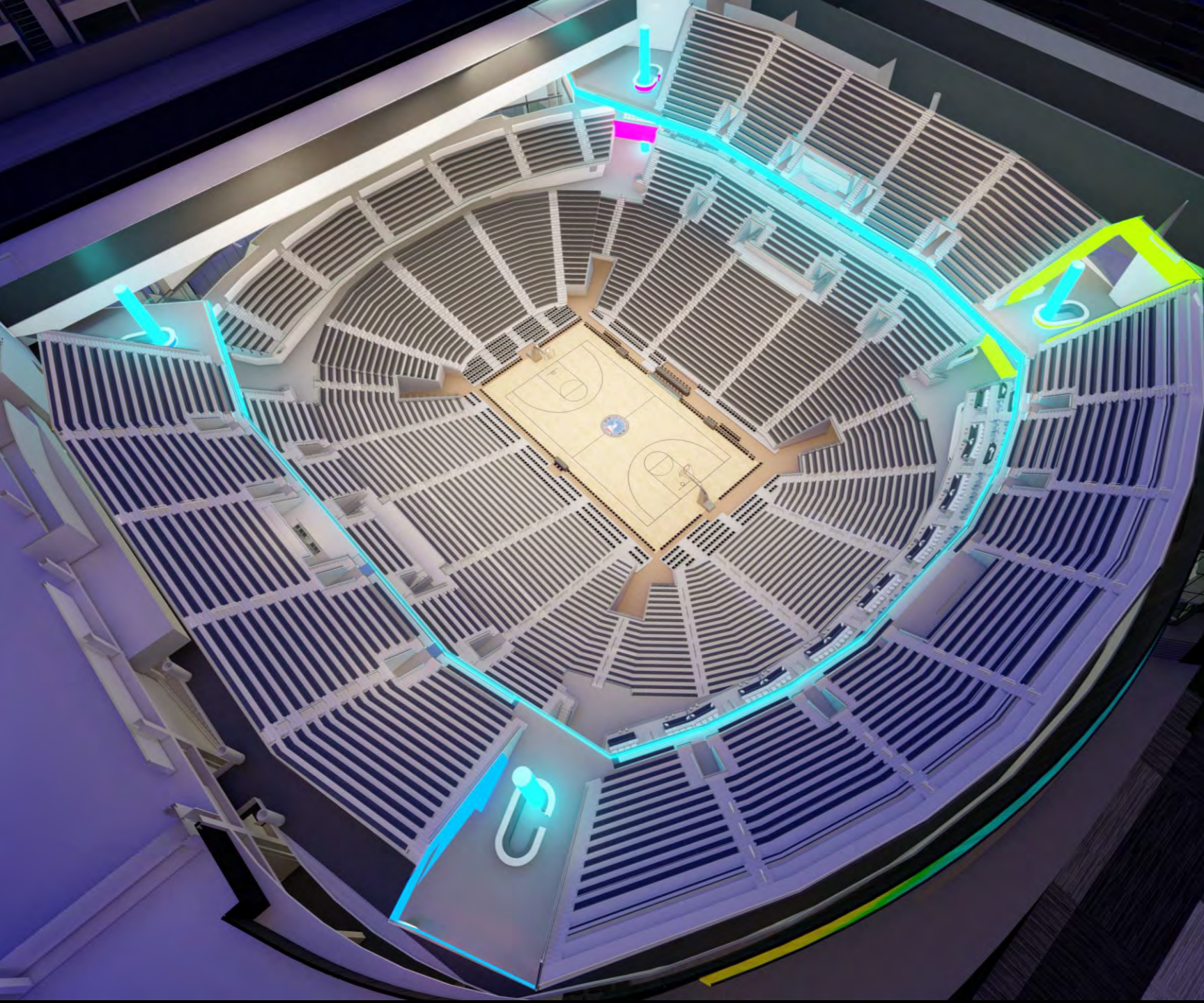
17,000 seats

24 Suites

32 Club Boxes

181 Event Days

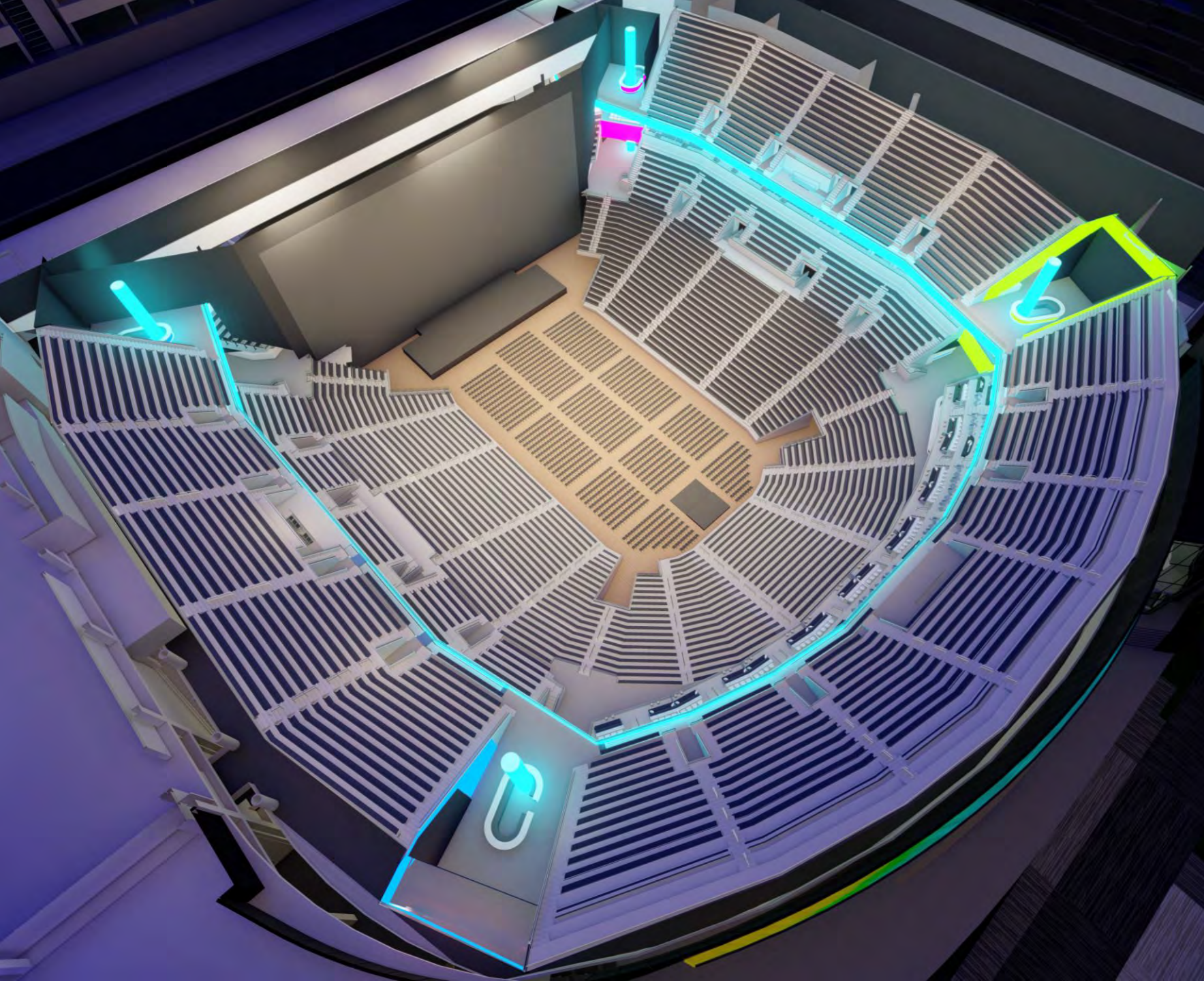
683,000 annual attendance



Basketball

Floor Seating	640
Lower Bowl	8,303
Premium Seating	915
Upper Bowl	6,396

16,254
14,593 JPJ



End Stage Concert

Floor Seating	1,800
Lower Bowl	5,727
Premium Seating	915
Upper Bowl	6,380

14,822
12,467 JPJ



will.i.am



Adelle



The Roots



Perry Farrell



Green Day



Jack Johnson



Maroon 5



Justin Timberlake



Björk



Pearl Jam



U2



Sheryl Crow



Neil Young



Phish



Dave Matthews



Green Artists

Commitments

GreenCity

Phish Created Waterwheel Foundation, Urban Agriculture, Conservation

Alanis Morissette Environmental Education, Sustainable Energy

Coldplay Carbon Neutral CDs, Strengthening Environmental Laws

Moby Climate Change Education

John Legend Sustainable Energy Education, Green tours, Fan Participation

Sheryl Crow Reusable Water Bottles, Compostable Waste Programs

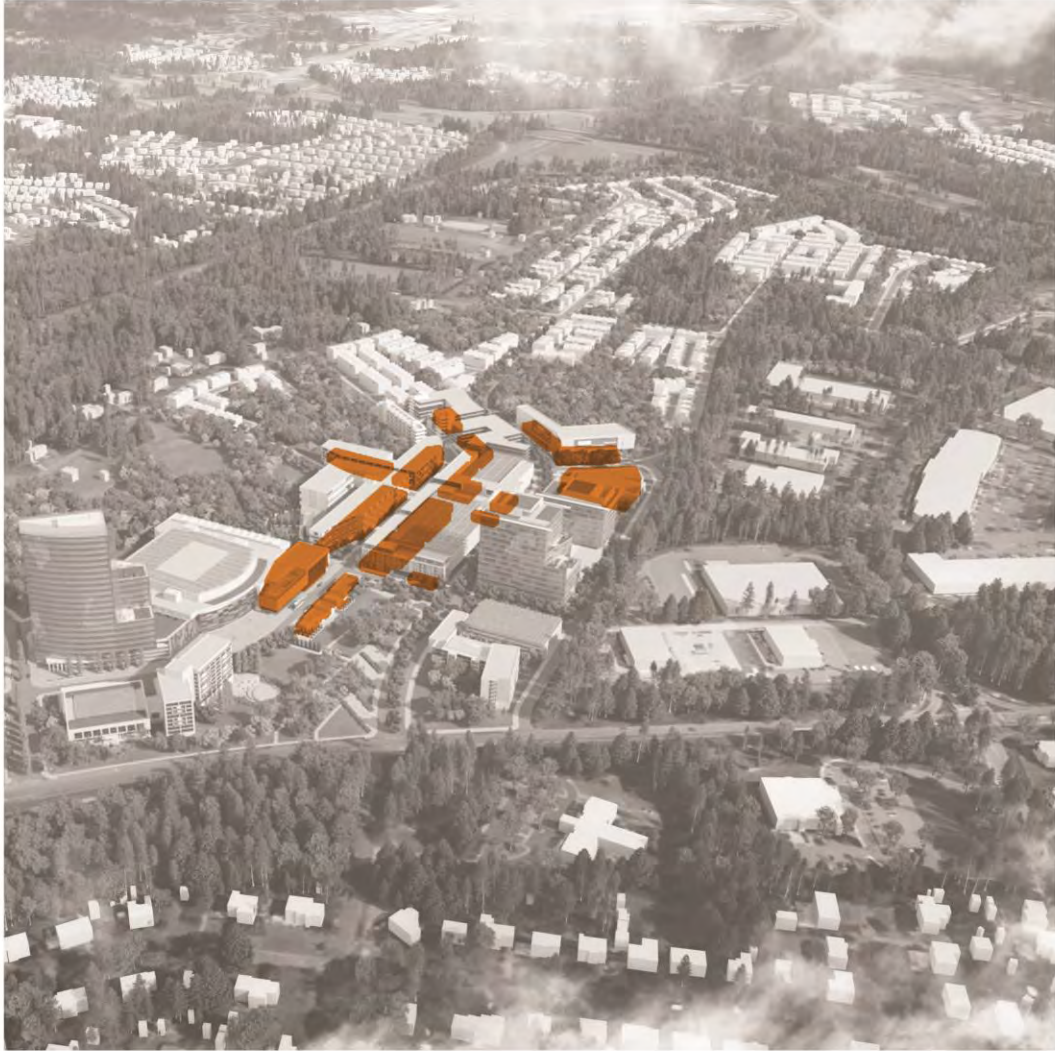
Dave Matthews Band Biodiesel Fuel Tours, Promotes Eco-Innovation

Bonnie Raitt Eco-Villages to Support Green Practices, Supports Green Energy

Jack Johnson Renewable energy, low carbon footprint construction

KT Tunstall Reforestation, Carbon Neutral products

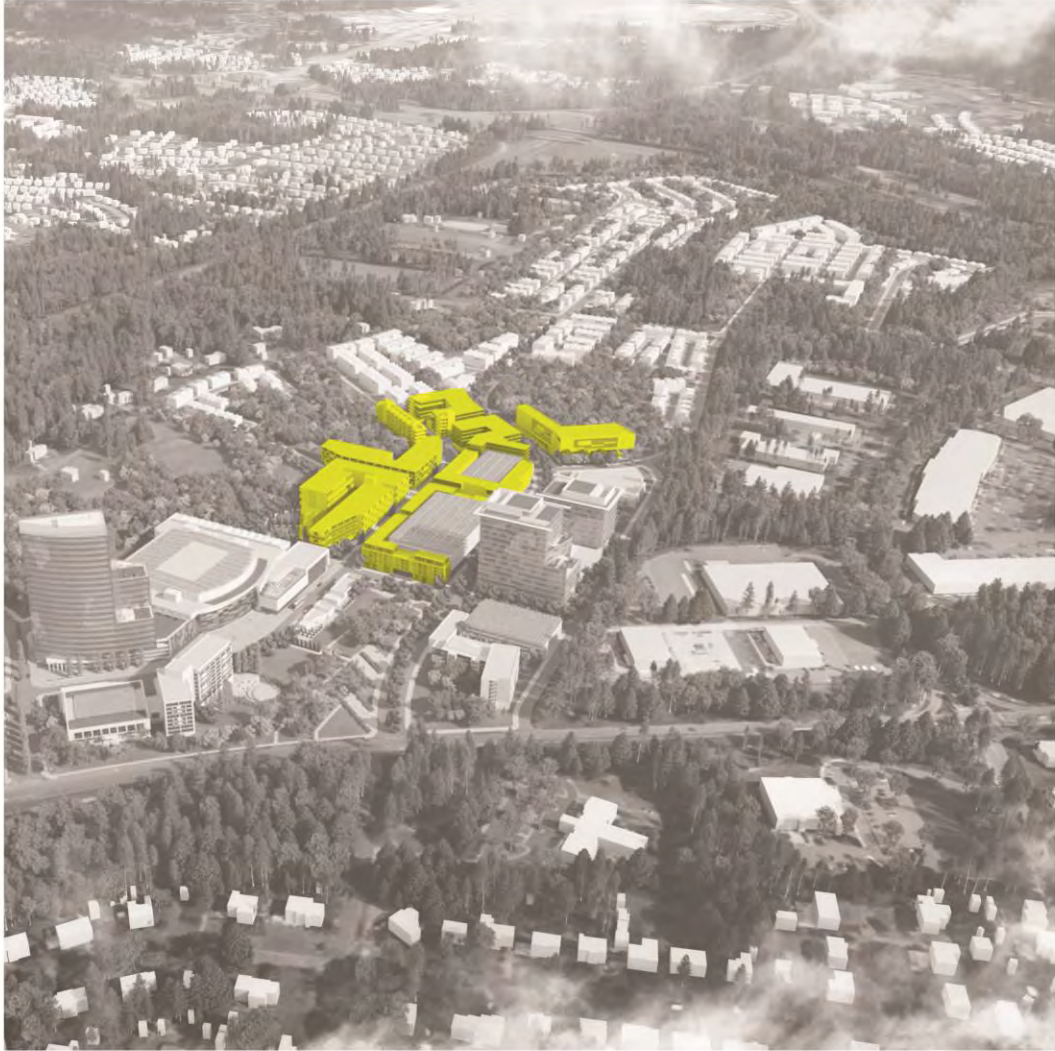
Cloud Cult Cloud Cult – low carbon packaging, geothermal energy sources



GreenCity
Retail

Ground Level Retail

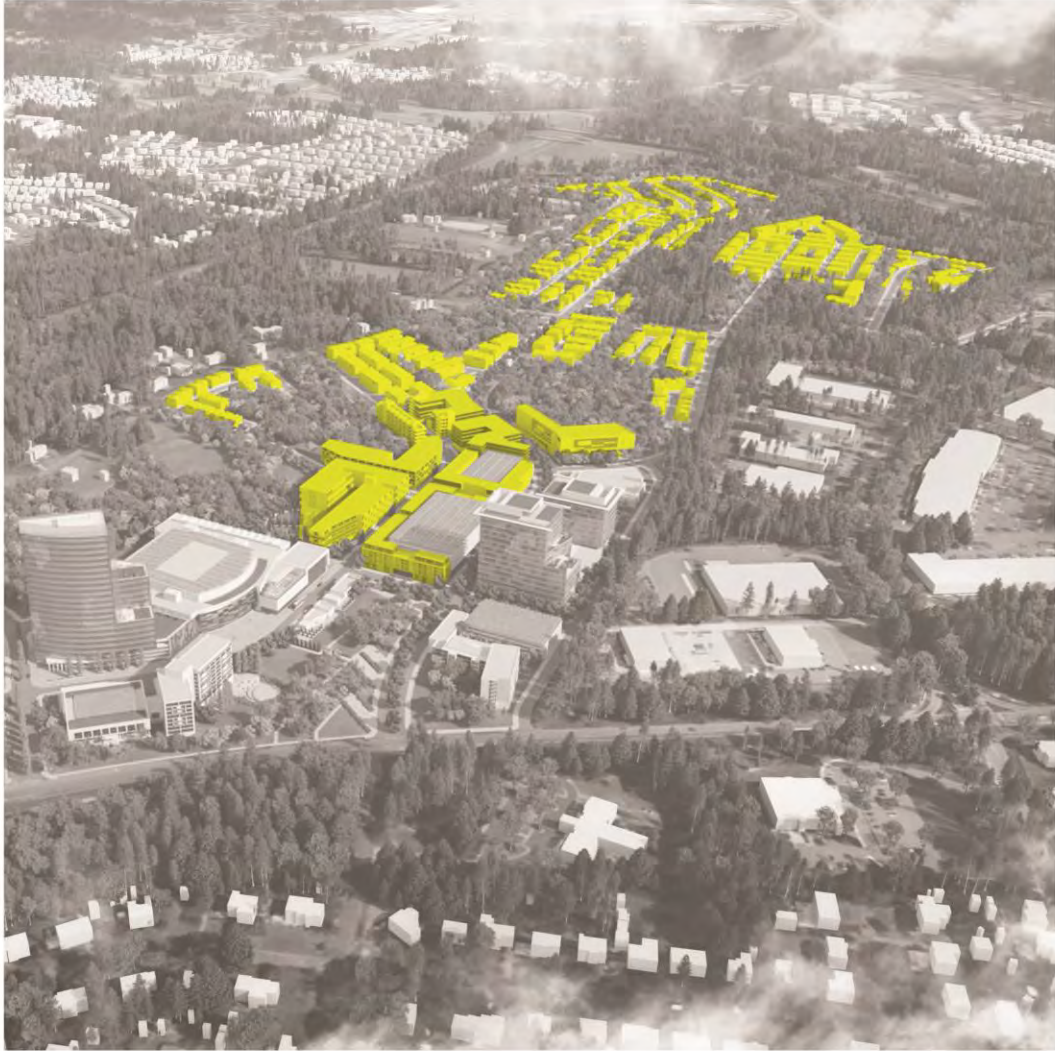
280,000 s.f.



GreenCity
Residential

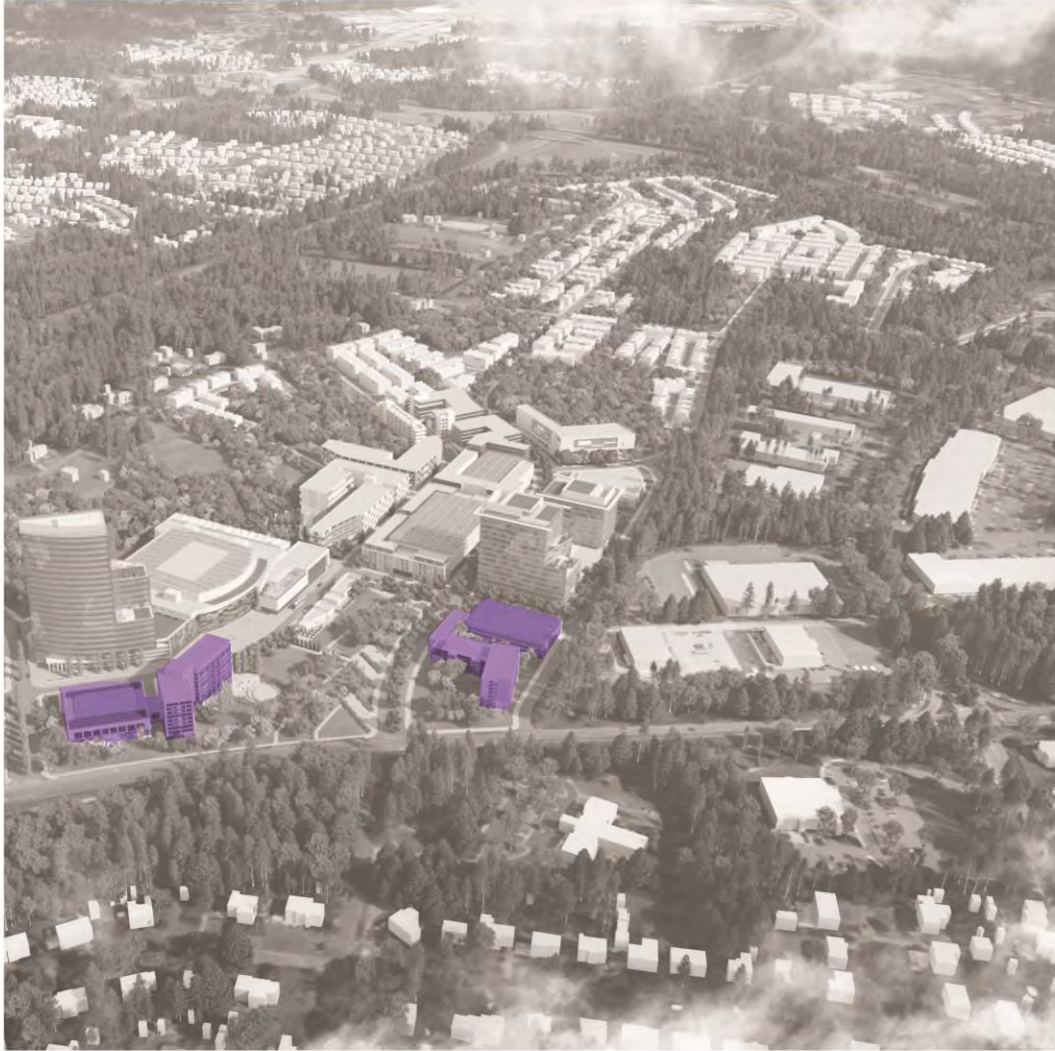
Multi-Family over Retail

1,200 units



GreenCity Residential

- Multi-Family 1,200 units
- Townhomes 320
- Two-Over Two 420
- Villas 140
- Single Family 120
- Senior Multi-Family 120
- Senior Villas 70



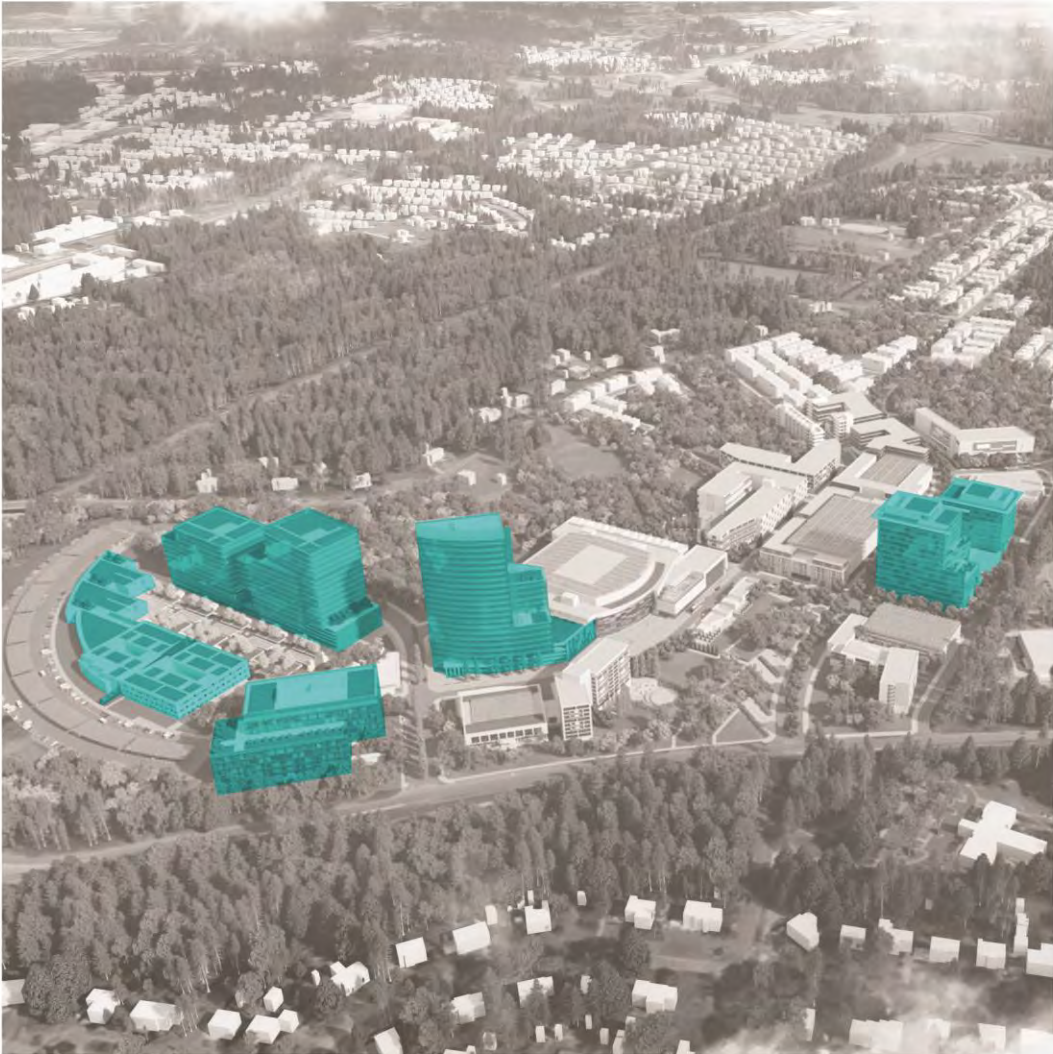
GreenCity
Hotel

Hotel & Conference

300 rooms

Hotel

300 rooms



GreenCity
Office

Commercial Office

2,200,000 s.f.

Green Economy Leadership

GreenCity



Amazon

100 percent renewable energy by 2030
net-zero carbon across its business by 2040
100,000 fully-electric delivery vehicles
Investing \$100 million in reforestation projects around the world



Google

Carbon Neutral since 1998
Operating on Carbon-Free Energy by 2030
Issued \$5.75B in Sustainability Bonds in 2020



Microsoft

Carbon negative by 2030
Remove from the environment more carbon than they have emitted since their founding by 2050



Apple

Carbon-neutral across its entire business, including manufacturing, by 2030

Green Economy Leadership

FACEBOOK

FACEBOOK
Sustainability

2020
**Sustainability
Report**

FACEBOOK

Policy Actions

2017 - joined the “We Are Still” In coalition, pledge support for the Paris Agreement.

2019 - endorsed the Climate Action Now Act (H.R. 9), joined the “2030Vision group”.

Actions in 2020

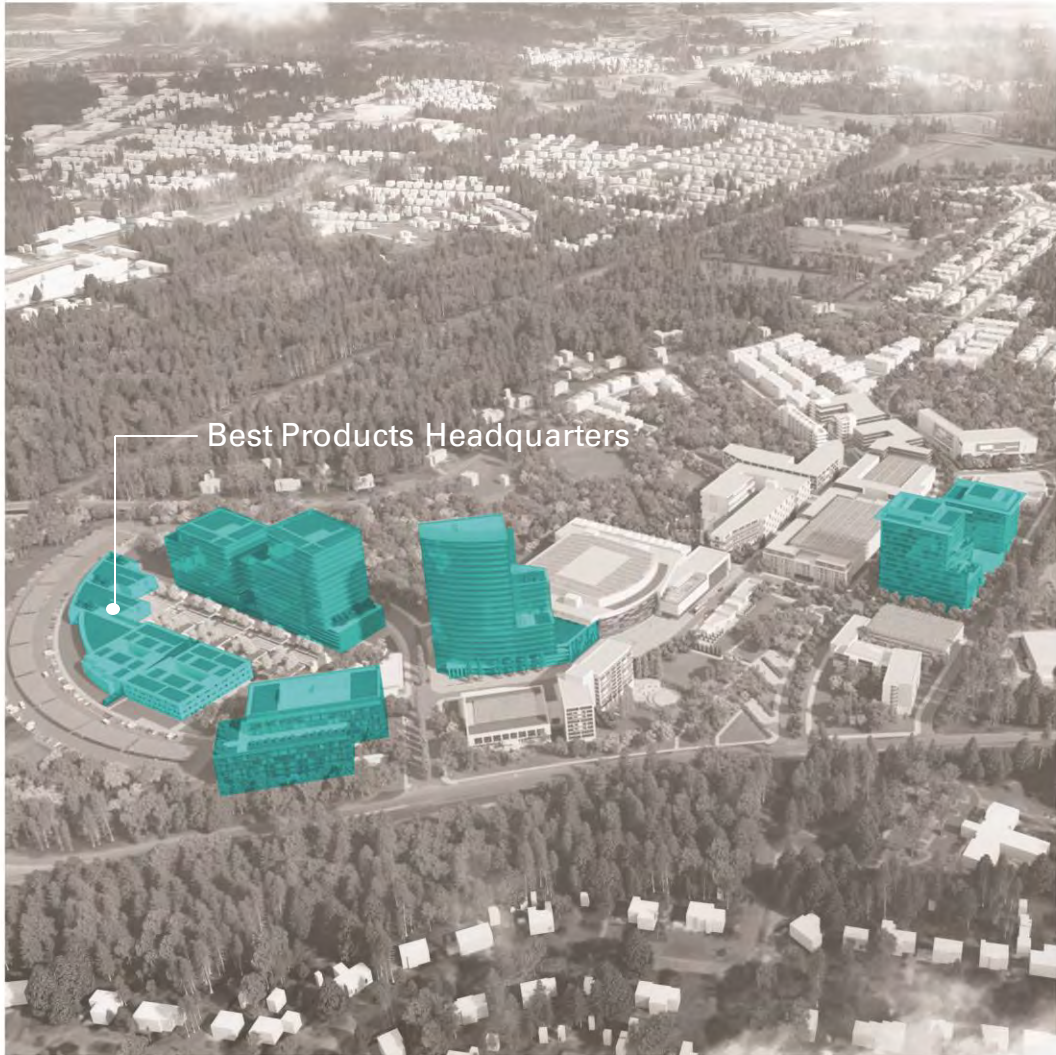
- Joined the UN Race to Zero movement - net zero carbon emissions by 2050.
- Signing a joint letter with peer companies and investors to urge the EU to commit to at least a 55 percent reduction in GHG emissions by 2030.
- Actively supporting the European Green Deal
- Re-establishing our commitment “We Are Still” urging the new Biden administration to support ambitious climate policies to reach the U.S. Paris Agreement targets.

Climate Pledges



Mercedes-Benz





GreenCity
Office

Commercial Office

2,200,000 s.f.

Best Products

300,000 s.f.



Best Products Headquarters Re-Purpose, GreenCity, Henrico Co, VA



GreenCity

Best Products Re-Purpose



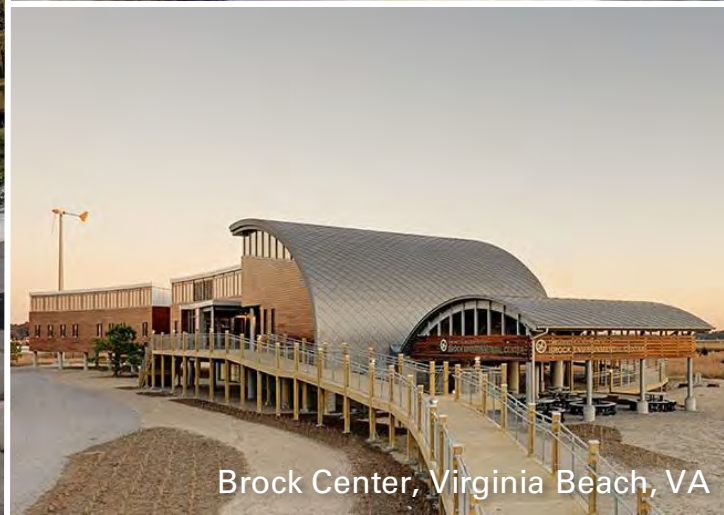
LIVING
BUILDING
CHALLENGESM



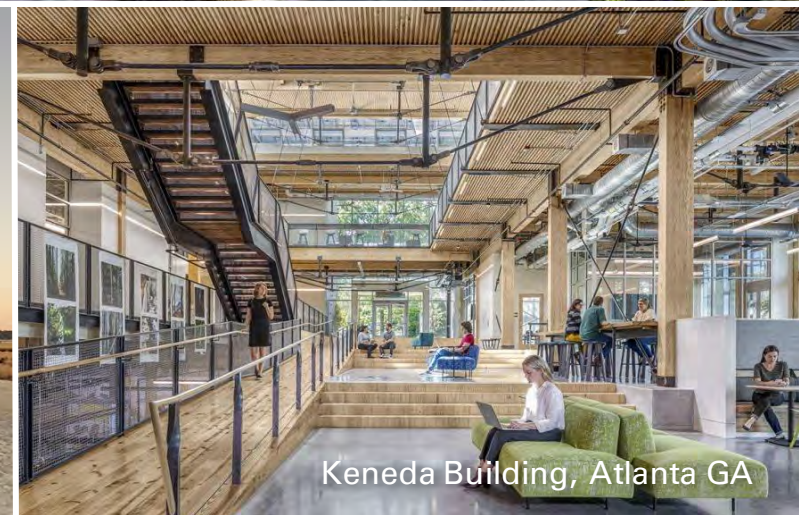
Bullitt Center, Seattle WA



Keneda Building, Atlanta GA



Brock Center, Virginia Beach, VA



Keneda Building, Atlanta GA



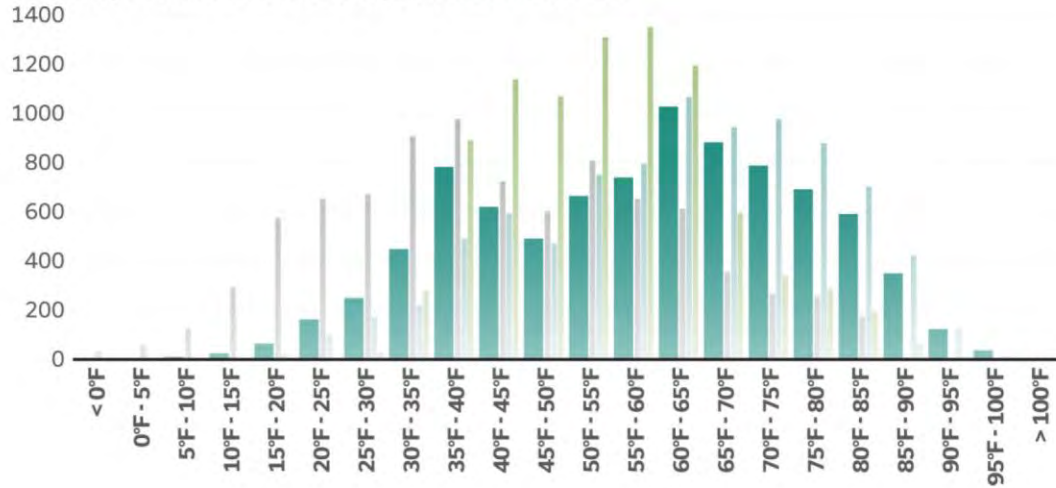
Approach



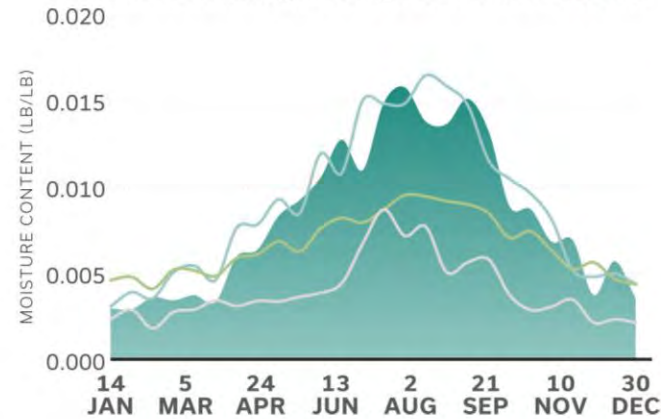
Climate of Richmond

COMPARED TO ATLANTA, BASALT, AND PORTLAND

Temperature Distribution, Number of Hours



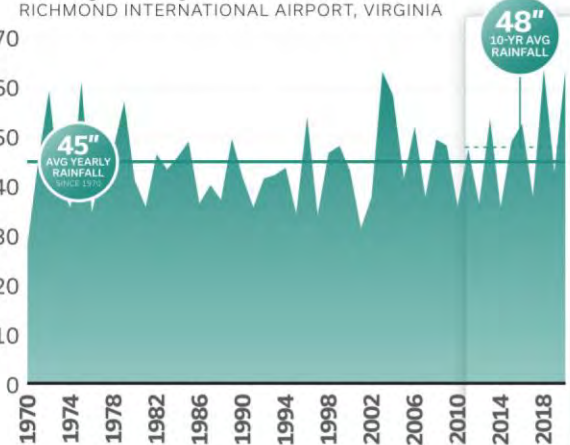
2 Week Rolling Average Moisture Content



Monthly Average Precipitation



Yearly Precipitation



Richmond Basalt Atlanta Portland



GreenCity
VIRGINIA



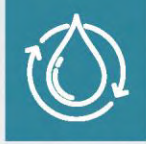
Atlanta
GEORGIA



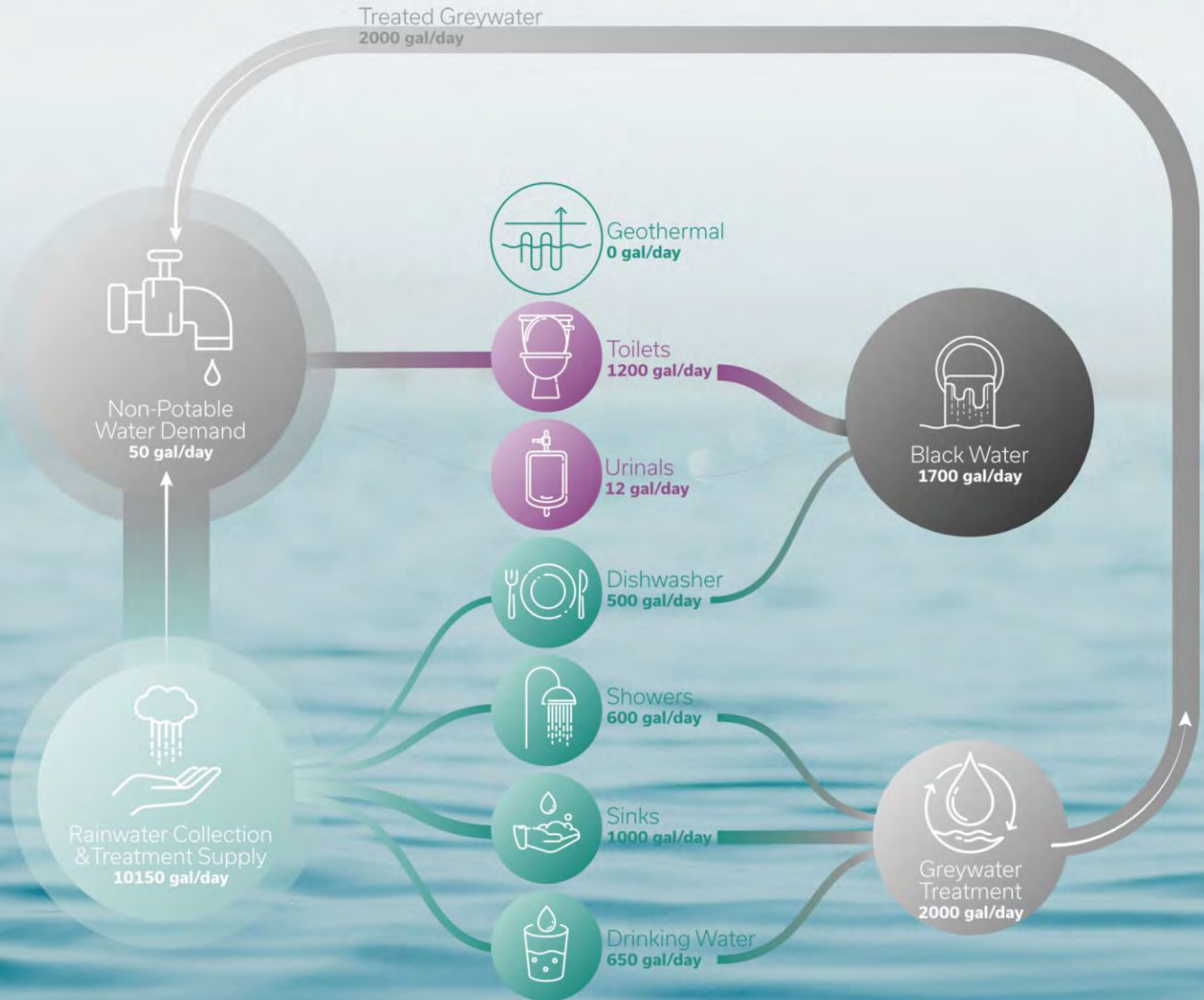
Basalt
COLORADO



Portland
OREGON



GreenCity Water Story



GOING GEOTHERMAL

RAIN CAPTURE



1,328,484
gallons/year
HALF OF ROOF AREA

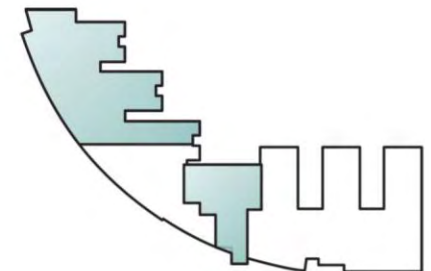
WATER USE



719,680
gallons/year

→ EQUIVALENT TO:

~0.5
ROOF



Achieving Goals



- 19% LIGHTING
- 11% PLUG LOADS
- 37% HEATING
- 14% COOLING
- 2% PUMPS + AUX
- 15% VENT FANS
- 1% WATER SYSTEMS

6%
7%
4%
4%
2%
6%
1%

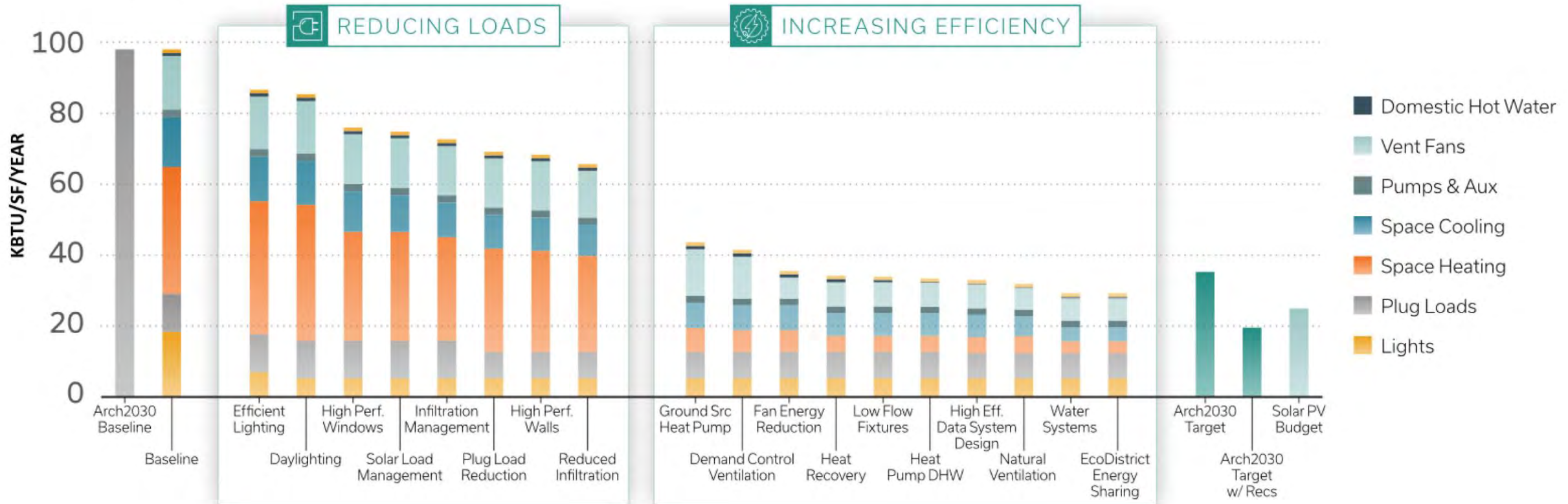
70%
SAVINGS



Evaluating Our Options



Energy Savings Target



An orange circular graphic containing a white icon of a solar panel with a sun above it. Below the icon, the text "20 EUI" is written in a large, bold, white font, and "PV GENERATION" is written in a smaller, white font below it.

20 EUI
PV GENERATION





Outline

Property Description

Rezoning Process

The GreenCity Plan

Traffic Analysis



GreenCity Transportation and Mobility

Presented by

Diane Linderman, PE

Chris Daily, PE

Study Scope

- Study area approved by Henrico County DPW and VDOT
 - E. Parham Road site frontage
 - Internal site intersections adjacent to E. Parham Road
 - Magellan Parkway, including intersections of Brook Road, Telegraph Road, and St. Charles Road
 - Parham Road / I-95 interchange
- Analyzing a 2040 Study Year, which is VDOT's Ch. 527 TIA requirement



Trip Generation

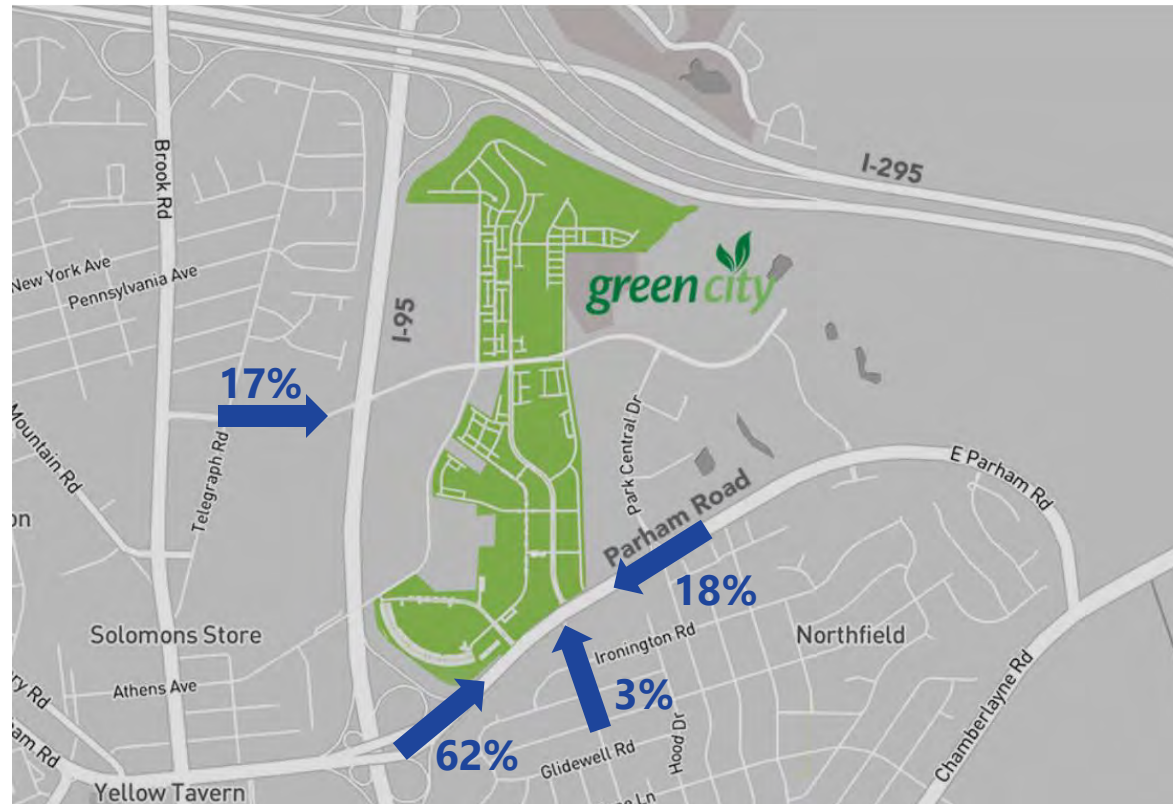
- Methodology agreed upon in VDOT Scoping Document
- Based on industry-wide data sources and VDOT policy
- Assumes internal trips between land uses
- Does not assume regional transit is available option
- Includes traffic generated by the arena for a typical mid-sized event
- External and internal intersections will be designed to accommodate all multimodal demand – vehicles and pedestrians

Land Use Type	Independent Variable	Independent Variable Unit	ITE Code	ITE Land Use	AM Peak Hour (7-9 AM)			PM Peak Hour (4-6 PM)			Weekday Total		
					Trips	Enter	Exit	Trips	Enter	Exit	Trips	Enter	Exit
Residential													
Single-Family Homes	25	Units	210	Single-Family Detached Housing	23	6	17	27	17	10	291	146	146
Attached Villas	168	Units	220	Multifamily Housing (Low-Rise)	79	18	61	94	59	35	1,230	615	615
Multifamily	1,095	Units	221	Multifamily Housing (Mid-Rise)	358	93	265	441	269	172	5,966	2,983	2,983
Two-Over-Two Stacked Townhomes	315	Units	221	Multifamily Housing (Mid-Rise)	106	28	78	134	82	52	1,715	858	858
Full Townhomes	411	Units	221	Multifamily Housing (Mid-Rise)	137	36	101	173	106	67	2,239	1,120	1,120
Residential Subtotal					703	181	522	869	533	336	11,441	5,722	5,722
Hospitality - 430,000 SF													
Hotel 1 (includes convention center)	250	Rooms	310	Hotel	120	71	49	162	83	79	2,090	1,045	1,045
Hotel 2 (no convention space)	250	Rooms	312	Business Hotel	98	41	57	80	44	36	1,005	503	503
Hospitality Subtotal					218	112	106	242	127	115	3,095	1,548	1,548
Commercial													
Office	1,950,000	SF	710	General Office Building	1,860	1,600	260	1,914	306	1,608	18,927	9,464	9,464
Retail	200,000	SF	820	Shopping Center	252	156	96	908	436	472	9,633	4,817	4,817
Commercial Subtotal					2,112	1,756	356	2,822	742	2,080	28,560	14,281	14,281
Arena - 435,000 SF													
Arena	17,000	Seats	ITE Not Applicable - See Appendix B		0	0	0	100	100	0	6,752	3,376	3,376
All Land Uses Total					3,033	2,049	984	4,033	1,502	2,531	49,848	24,927	24,927
Internal Capture													
Residential Trips to Office	5%				-35	-9	-26	-43	-27	-17	-572	-286	-286
Retail Trips to Residential	5%	AM Only	15%	Daily Only	-13	-8	-5	0	0	0	-1,445	-723	-723
Residential Trips to Retail	10%	PM Only	15%	Daily Only	0	0	0	-91	-44	-47	0	0	0
Hotel Trips to Office	10%				-22	-11	-11	-24	-13	-12	-310	-155	-155
Retail Trips to Office	5%				-13	-8	-5	-45	-22	-24	-482	-241	-241
Total					-83	-36	-47	-203	-106	-100	-2,809	-1,405	-1,405
Net External Trips													
Residential					668	172	496	735	462	272	10,869	5,436	5,436
Hotel					196	101	95	218	114	103	2,785	1,393	1,393
Office					1,860	1,600	260	1,914	306	1,608	18,927	9,464	9,464
Retail					226	140	86	863	414	448	7,706	3,853	3,853
Arena					0	0	0	100	100	0	6,752	3,376	3,376
Total					2,950	2,013	937	3,830	1,396	2,431	47,039	23,522	23,522
Pass-By and Diverted Trips													
Retail Pass-By	15%			Trips on Parham Road	-34	-21	-13	-129	-62	-67	-1,156	-578	-578
Retail Diverted	15%			Trips on I-95 and Brook Road	-34	-21	-13	-129	-62	-67	-1,156	-578	-578
Net New Trips on Network													
Retail					158	98	60	605	290	314	5,394	2,697	2,697
Total					2,882	1,971	911	3,572	1,272	2,297	44,727	22,366	22,366

	AM Peak Hour (7-9 AM)			PM Peak Hour (4-6 PM)			Weekday Total		
	Trips	Enter	Exit	Trips	Enter	Exit	Trips	Enter	Exit
External Trip Total (Including Pass-By)	2,950	2,013	937	3,830	1,396	2,431	47,039	23,522	23,522

Distribution of Traffic Volumes

- Henrico County and VDOT approved
- Based on Regional Travel Demand Model (TDM)
- Primary focus of traffic volumes along E. Parham Road



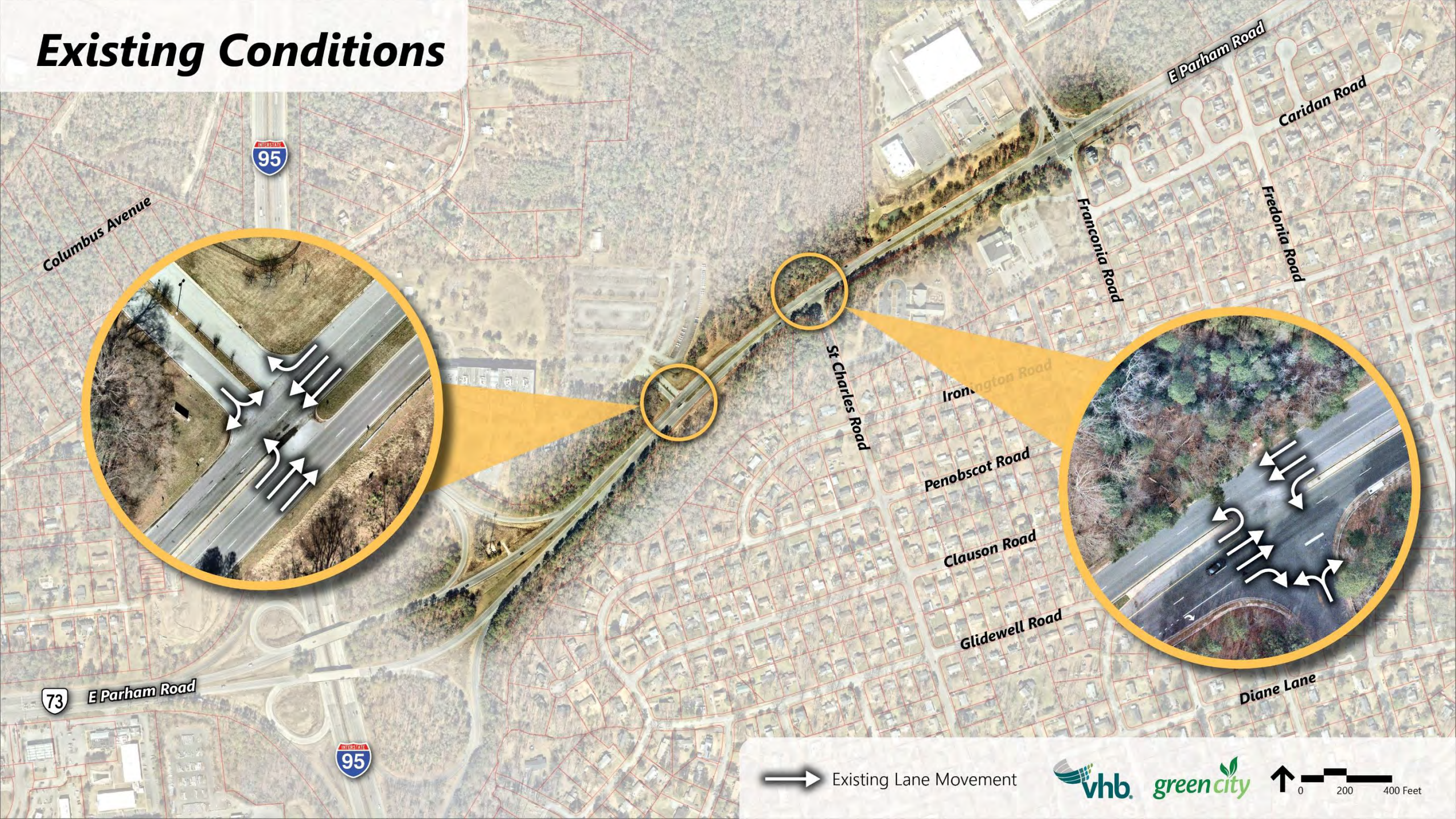
Assumes Magellan Parkway is built across I-95 by 2040

Projected 2040 Traffic Volumes

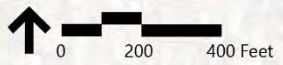
- Resources for background traffic projections:
 - Richmond Regional Demand Model
 - Traffic volumes counted in June 2021
 - VDOT Planning Forecasts
- Development traffic
 - Parking Deck Access
 - Land Use Location



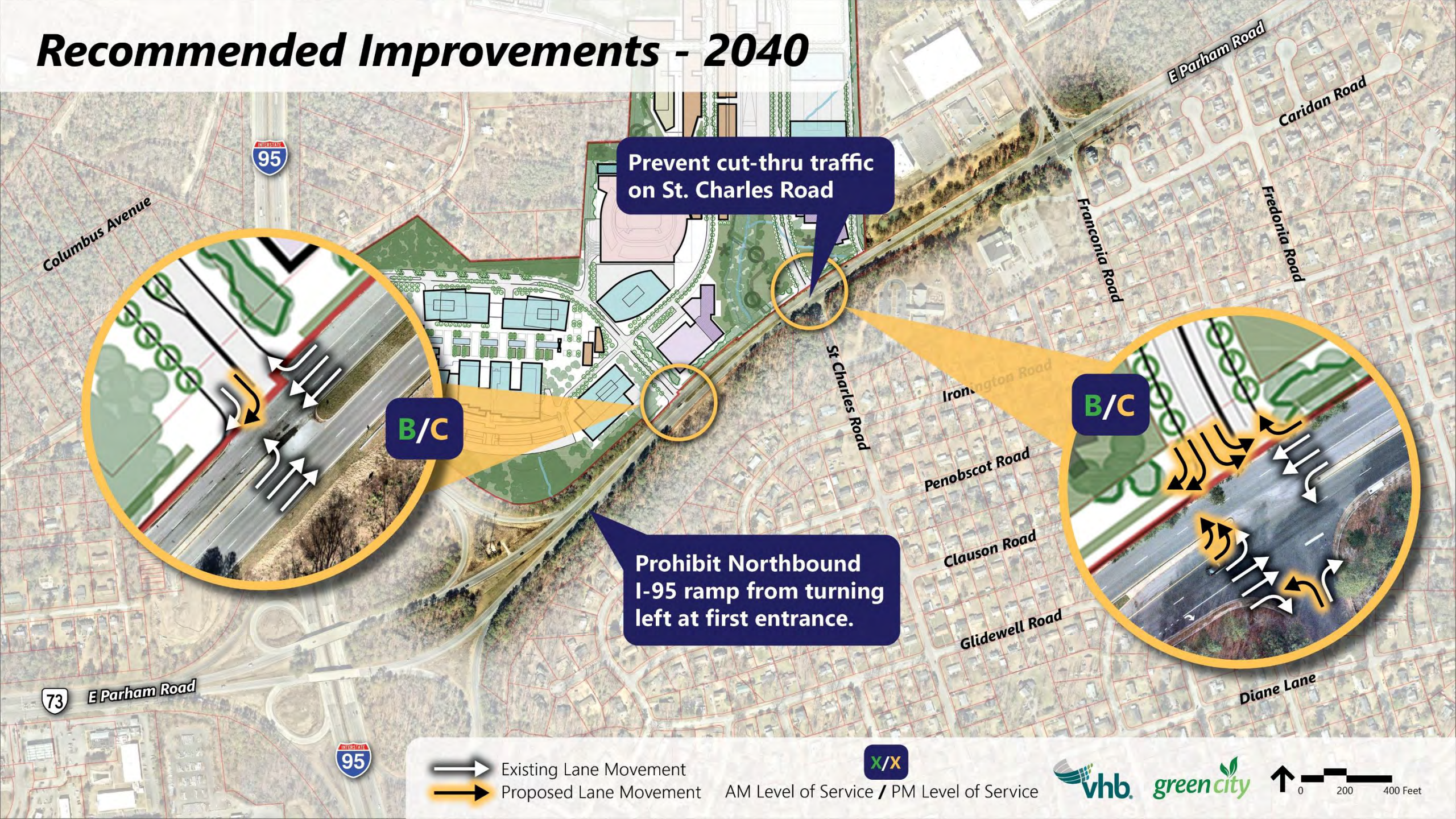
Existing Conditions



→ Existing Lane Movement



Recommended Improvements - 2040





Prevent cut-thru traffic on St. Charles Road

B/C

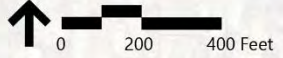
Prohibit Northbound I-95 ramp from turning left at first entrance.

B/C

 Existing Lane Movement
 Proposed Lane Movement

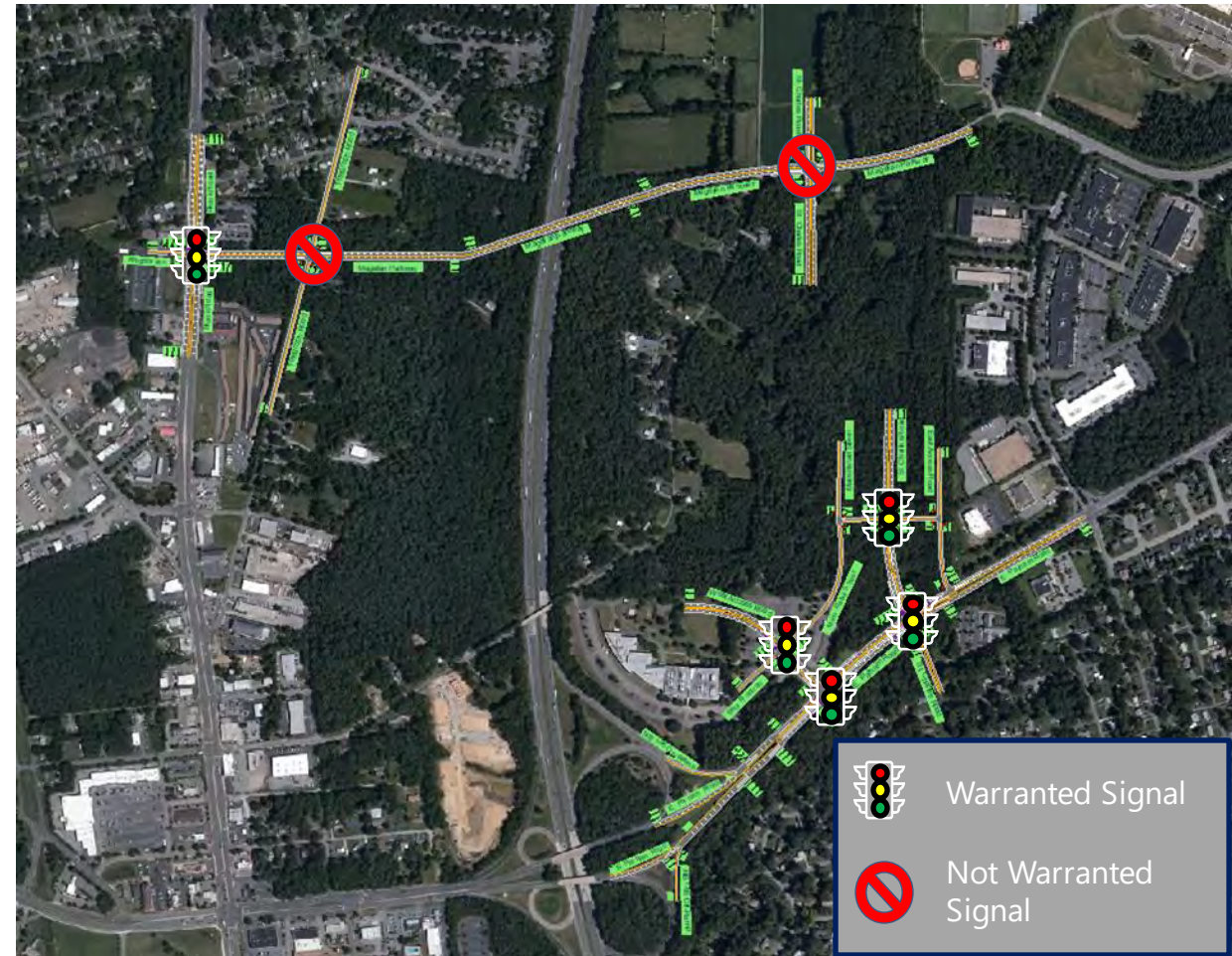
 AM Level of Service / PM Level of Service

 0 200 400 Feet

Signal Warrants

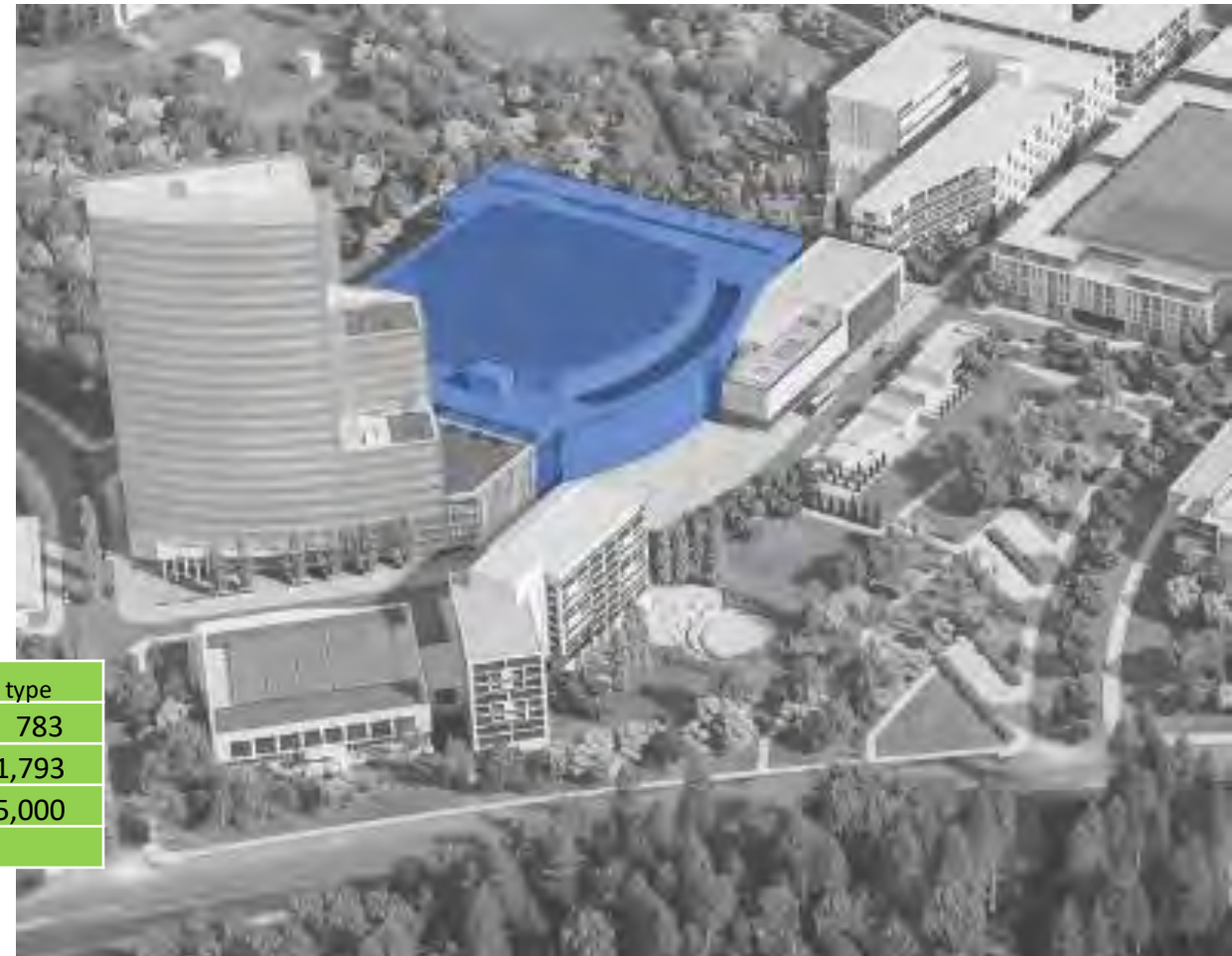
- Evaluated whether certain intersections met the requirements for future signal control
- Warranted Intersections
 - E. Parham Road and Best Product Access
 - E. Parham Road and St. Charles Road
 - Best Product Access and Internal Roadway
 - St. Charles Road and Internal Roadway
 - Brook Road and Magellan Parkway
- Not Warranted Intersections
 - Magellan Parkway and Telegraph Road
 - Magellan Parkway and St. Charles Road



Arena Event Traffic and Parking Management

- Event management planning
 - Parking
 - Traffic
- Majority of event traffic generated is not during the weekday peak hours
- Special event traffic and parking plans will be developed for large events

Event Type	Event Days	Average Attendance	# of Cars per event type
Small Events (<5,000)	130	2,350	783
Mid-size Events (5,000-10,000)	46	5,380	1,793
Large Events (>10,000)	5	15,000	5,000
Total Events	181		



Outline

Property Description

Rezoning Process

The GreenCity Plan

Traffic Analysis

Q&A

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