

Safety & Capacity Improvement Study for 5-Point Intersection

OR, the Maryland/Monroe/MLK Study
Stakeholders Meeting, November 5, 2020


















Stakeholders Meeting

November 5, 2020

AGENDA

- ❖ Review of Transportation Alternatives (A,B,C,D)
- ❖ DTC Monroe Street Feasibility Study/Master Plan
- ❖ Next Steps

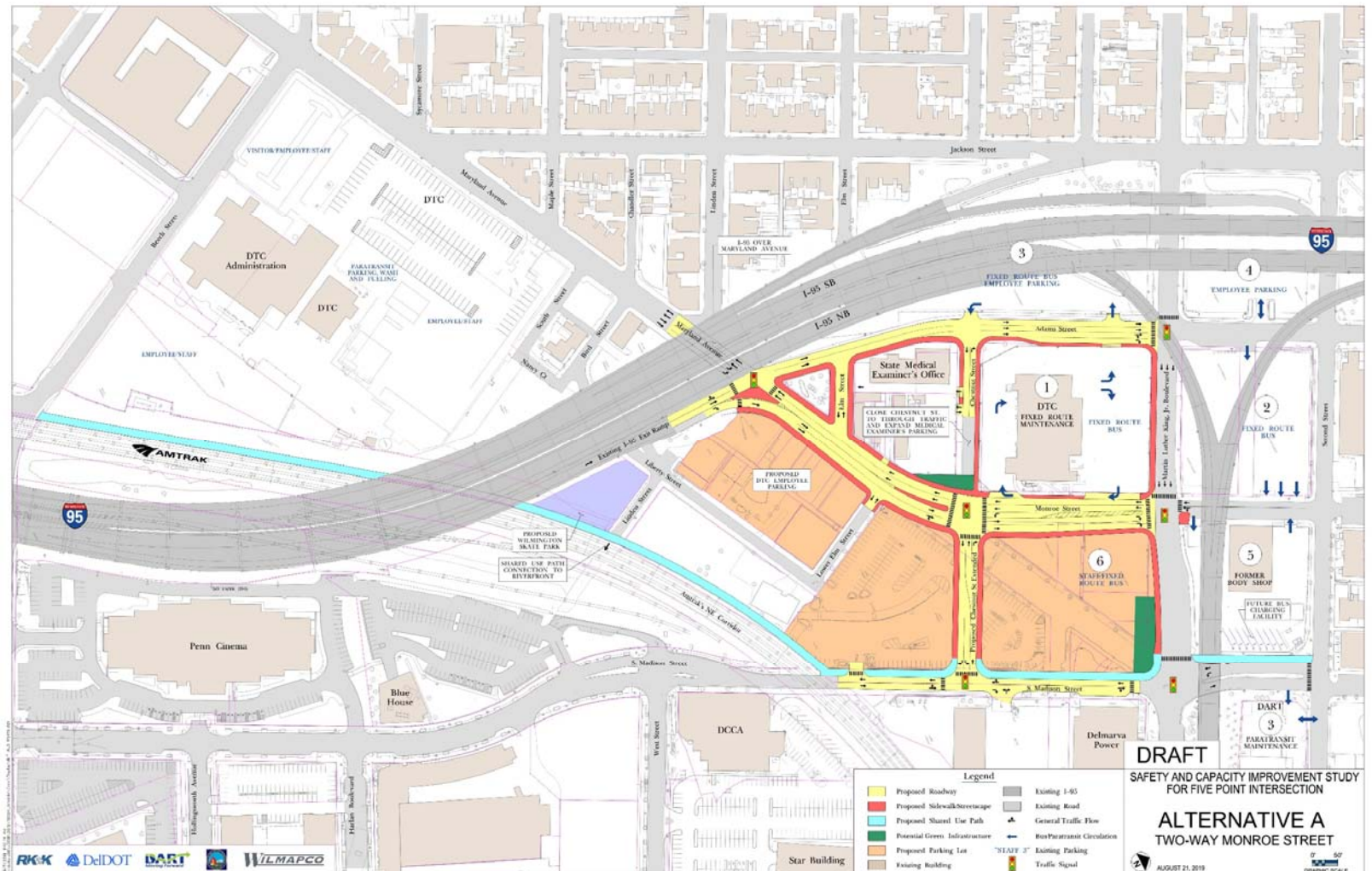
CRITERIA MATRIX

CRITERIA	TRANSPORTATION						LAND USE	STAKEHOLDER CONCERNS			GATEWAY ENHANCEMENT OPPORTUNITIES		ENVIRONMENTAL			COST
Measure	Vehicle Conflicts and Crash Potential	I-95 Ramp Congestion and Queues During Peak Hour(s)	City Streets Congestion and Queues During Peak Hour(s)	Efficient Transportation Grid	Pedestrian Network	Bicycle Network	Opportunities for Economic Development	DTC Operations and Parking	Delmarva Access, Circulation and Customer Parking	Medical Examiner Parking	Wayfinding/Destination Signage	Aesthetics/Lighting	Historic	Social/Environmental Justice	Green Infrastructure Opportunities	Cost Estimate
No Improvements																
Alt. A Two-way Monroe St.							 ¹	  *	 ¹	 ¹						 \$7.6M
Alt. B One-way Monroe St. with Chestnut St. extended								  *								 \$8.4M
Alt. C Private Monroe St. / Two-way Maryland Ave.								  *								 \$7.8M
Alt. D I-95 Split Ramp								  *								 \$35.6M

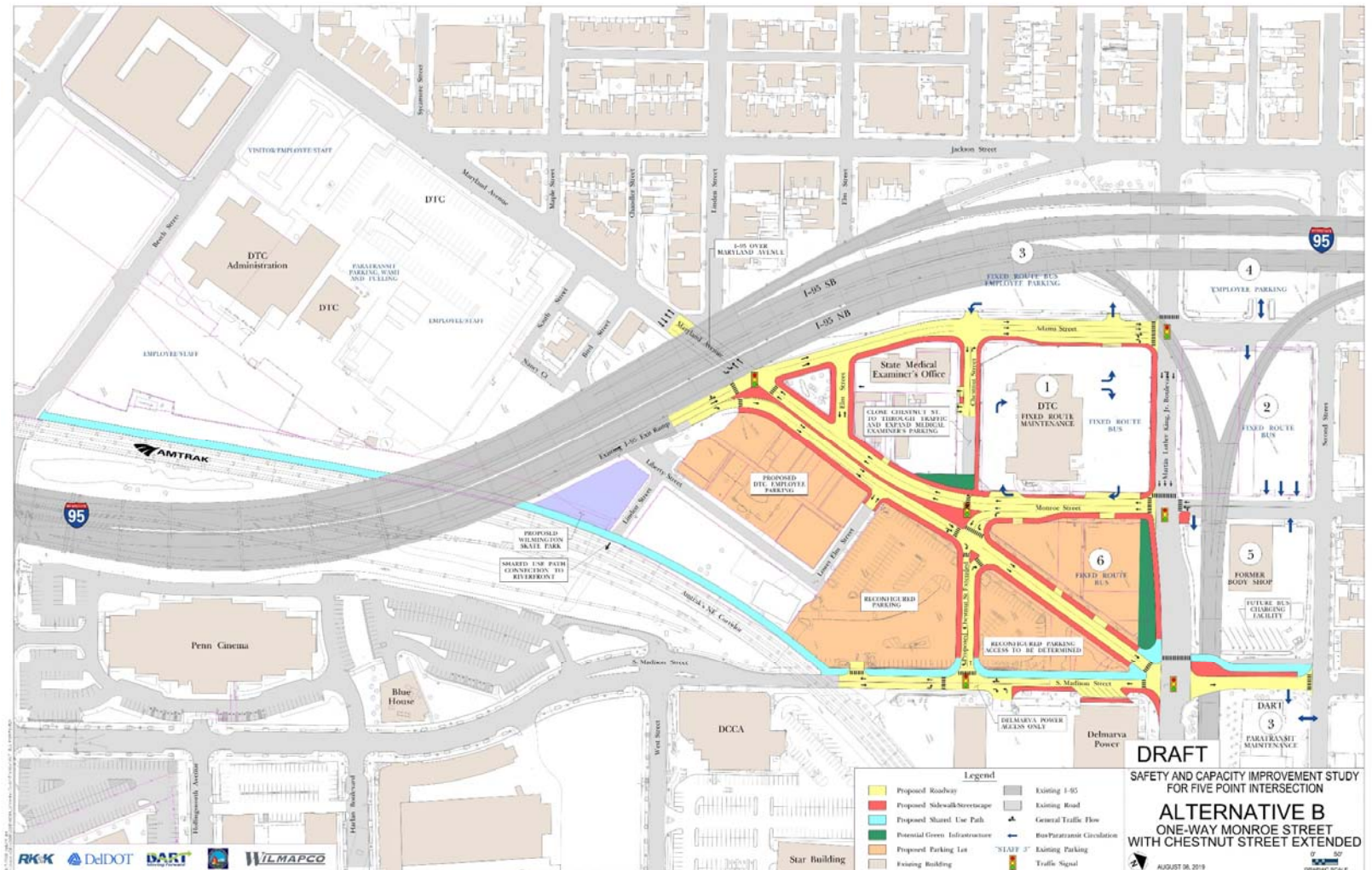
1 - Dependent on Concept from DTC Study

* with Structured Parking

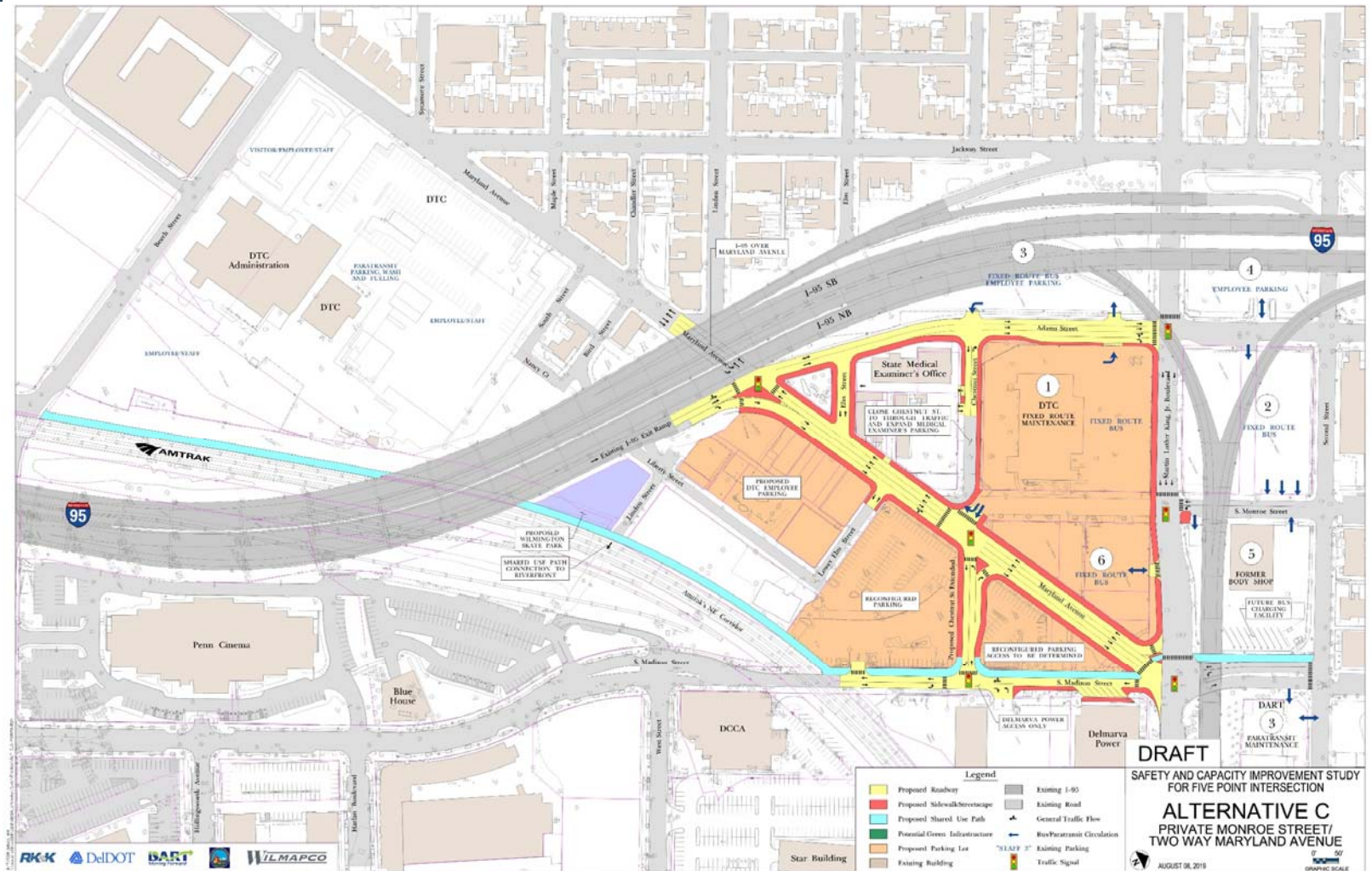
Alternative A: Two-Way Monroe Street



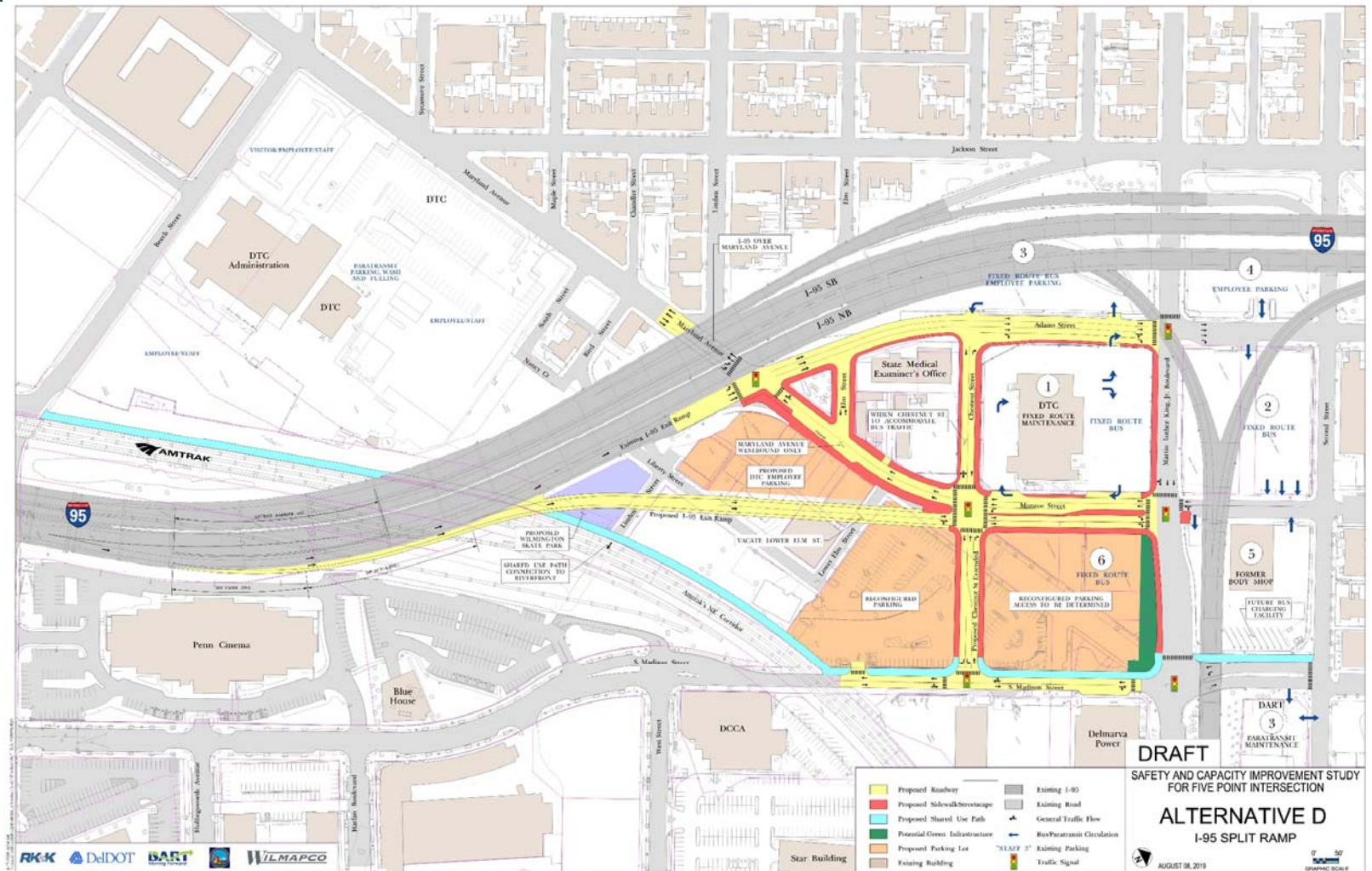
**Alternative B:
One-Way
Monroe
Street with
Chestnut
Street
Extended**



**Alternative C:
Private
Monroe
Street/
Two-Way
Maryland
Avenue**



Alternative D: I-95 Split Ramp

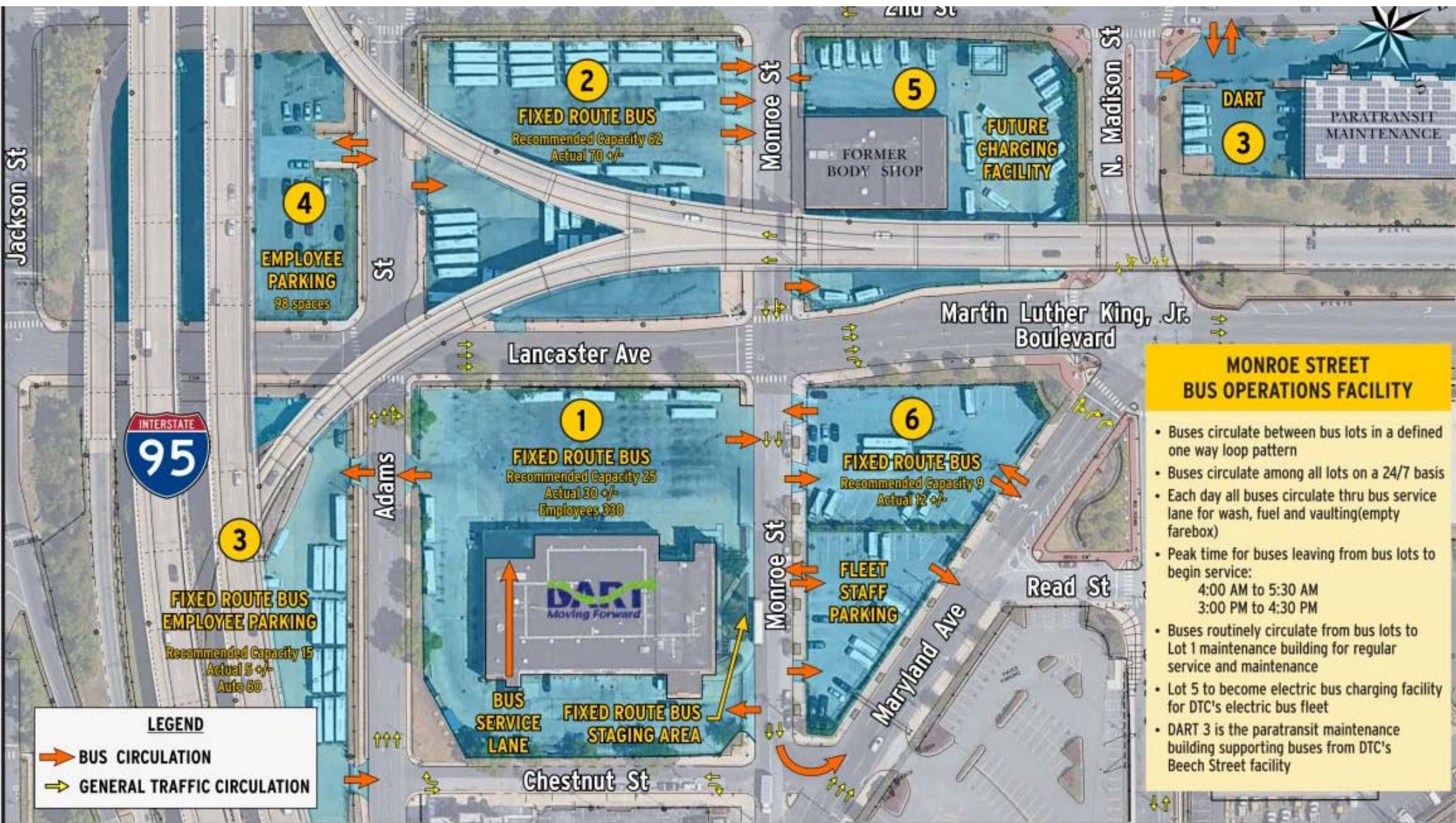


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1 - Dependent on Concept from DTC Study

* with Structured Parking



DTC Monroe Street Feasibility Study/Master Plan

❖ Site Circulation / Parking

- Address site circulation once Monroe St. becomes 2 way divided
- Separate bus park, vault, fuel/wash from maintenance traffic
- Provide parking for 125 +/- buses (preferably in one area)
- Provide covered parking for buses
- Provide parking for DTC employees and support vehicles
- Provide parking for Delmarva employees
- Consider decked structure

❖ Building Program

- Consider phasing
- Increase Maintenance bay widths
- Provide more tire storage (interior) next to work area
- Provide additional Break Room and Locker Room area
- Provide additional support space for offices (copy, training,)

DTC Monroe Street Feasibility Study/Master Plan

❖ Developed Parking/Garage/Access Concepts (Used Alternative A as base alternative)

- Concept 1: Decking over Lot 1 and Lot 6; Surface Parking on lot west of Chestnut Extended
- Concept 2: Decking over Lot 6 and lot west of Chestnut Extended; Surface Parking on Lot 1 (Not developed in more detail)
- Concept 3: Decking over Delmarva and Reybold lots west of Chestnut St; Surface parking Lots 2 and 6
- Concept 4: Surface Bus Parking on Lot 1; New Maintenance Building on Lot 6. Concept included with or without employee garage

❖ Developed Proposed Building Program - 47,900 SF (on 2 floors) vs. 29,200 SF Existing

- Maintenance Building: 27,000 sf footprint
- Fuel/ Wash: 2 bays
- Operations Offices: Increased SF
- Breakroom/ Lockers : Increased SF and lockers

DTC Monroe Facility**Cost Estimates**

16-Jun-20

	Concept 1		Concept 3		Concept 4	Concept 4 w/ Employee Garage
	Bus Parking on Top	Bus Parking on Bottom	Bus Parking on Top	Bus Parking on Bottom		
Buildings	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890
Parking Structure	\$30,921,660	\$30,921,660	\$25,821,180	\$25,821,180	\$0	\$17,123,040
80% Solar Panel Cover	\$21,859,200	\$0	\$18,899,100	\$0	\$0	\$0
Other Site Costs	\$10,813,250	\$10,812,450	\$12,008,830	\$12,007,930	\$9,829,110	\$9,831,070
Total Cost Estimate	\$99,725,000	\$77,865,000	\$92,860,000	\$73,960,000	\$45,960,000	\$63,085,000
Bus Parking Spaces	110 +/-	120 +/-	146 +/-	127 +/-	140 +/-	140 +/-
Employee Parking Spaces	520 +/-	380 +/-	460 +/-	400 +/-	159 +/-	300 +/-

*Assumes Solar Panels not needed for Bus Parking on Bottom since buses will be covered, but could be added later for energy reasons

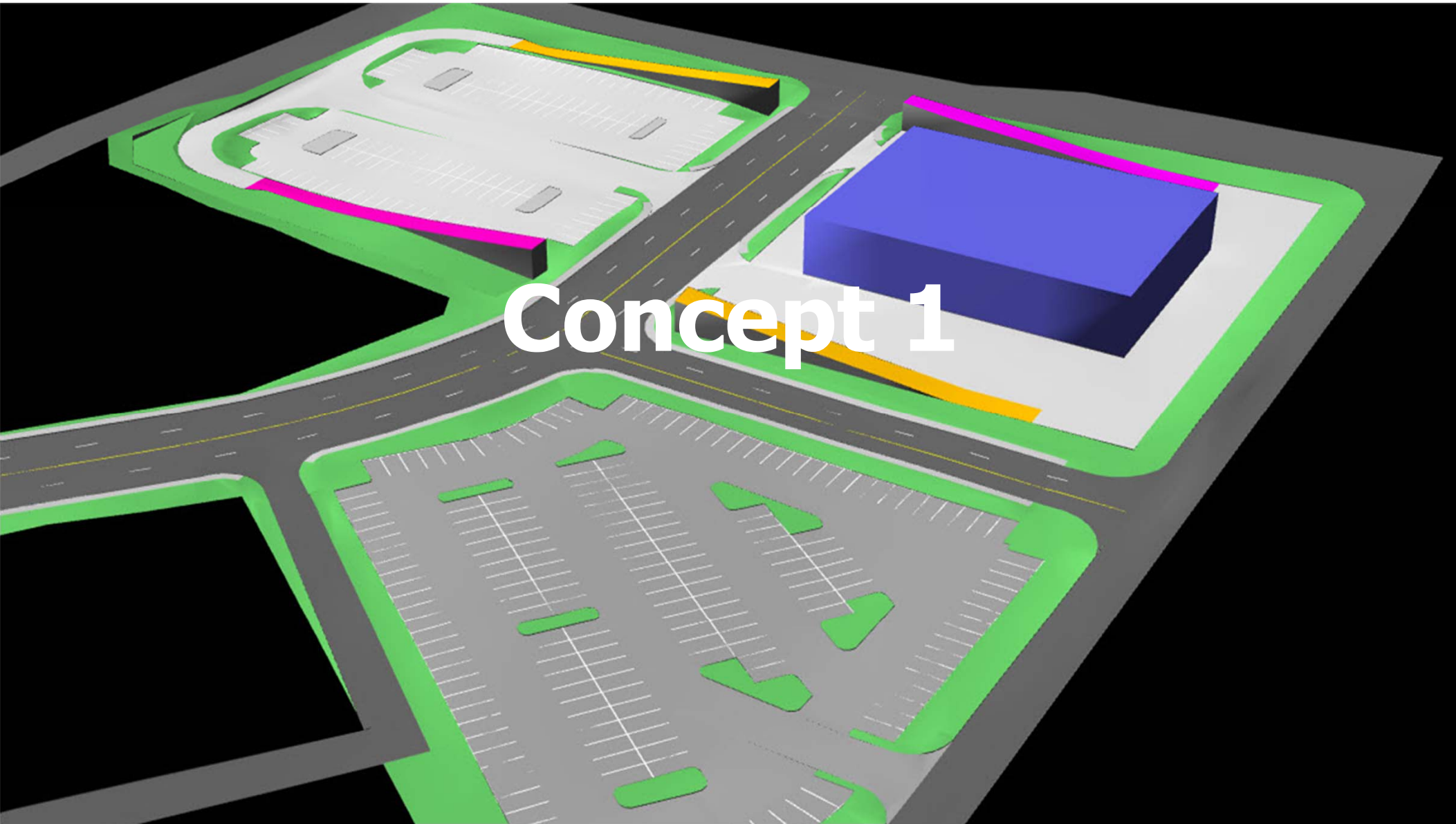
*If Concept 4 is modified to allow two way access to Lot 1 from Chestnut Street, then Bus Parking Spaces are reduced 5-10 spaces

*Delmarva needs 225 +/- Employee Parking Spaces

*DTC needs 100+ Employee Parking Spaces

*Total Cost Estimate does not Include real estate costs

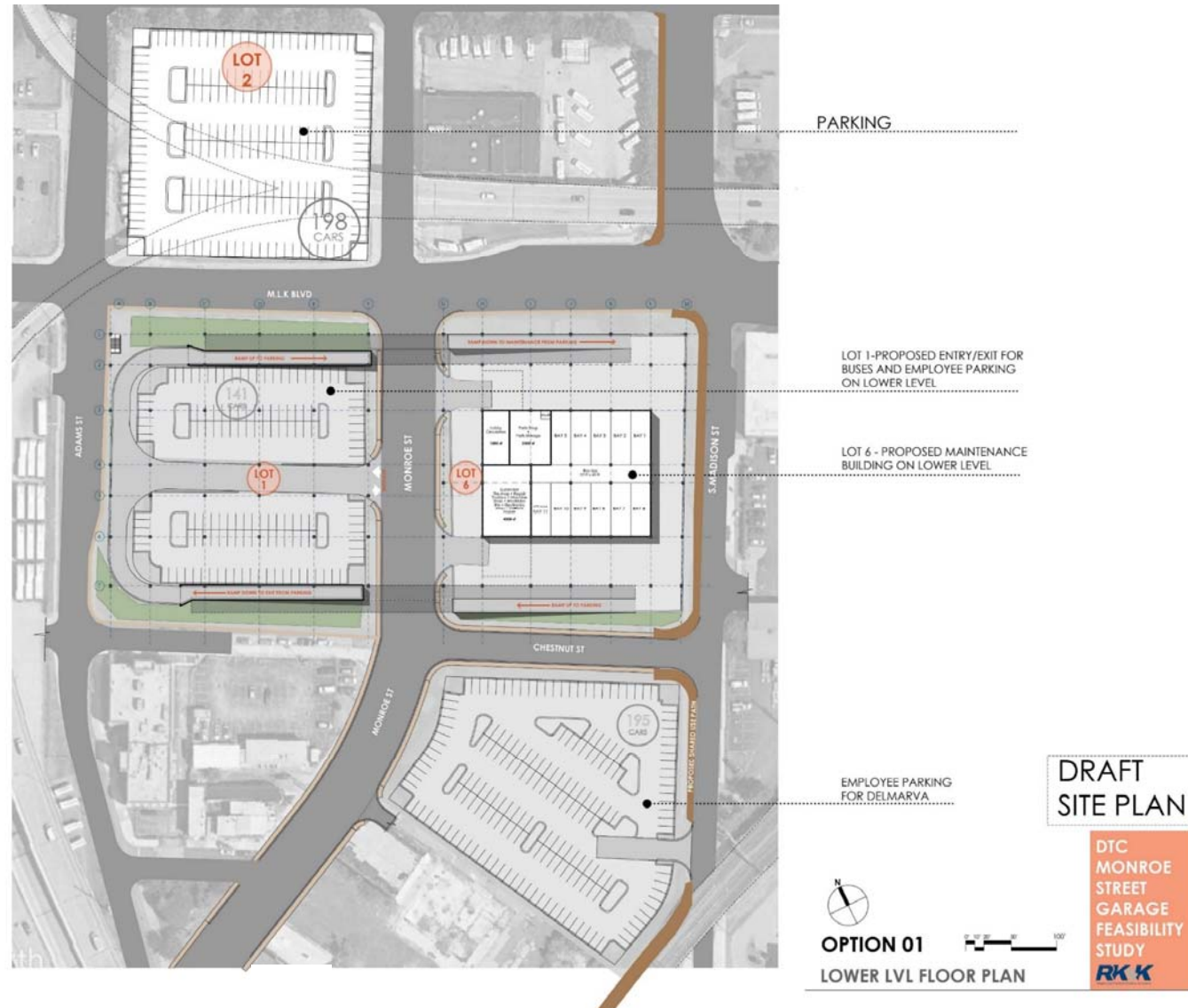
Concept 1



Concept 1

- Provide Deck over Lot 1 and Lot 6 (in phased construction)
- Maintenance Building Lower Level Lot 6
- Fuel/ Wash / Vault on Upper Level Deck
- Bus Parking on Upper Level Deck
- 2 sets of ramps to circulate without crossing Monroe Street
- Surface parking for DTC employees on Lot 1, Delmarva employees Lot w of Chestnut, DTC support vehicles on Lot 2

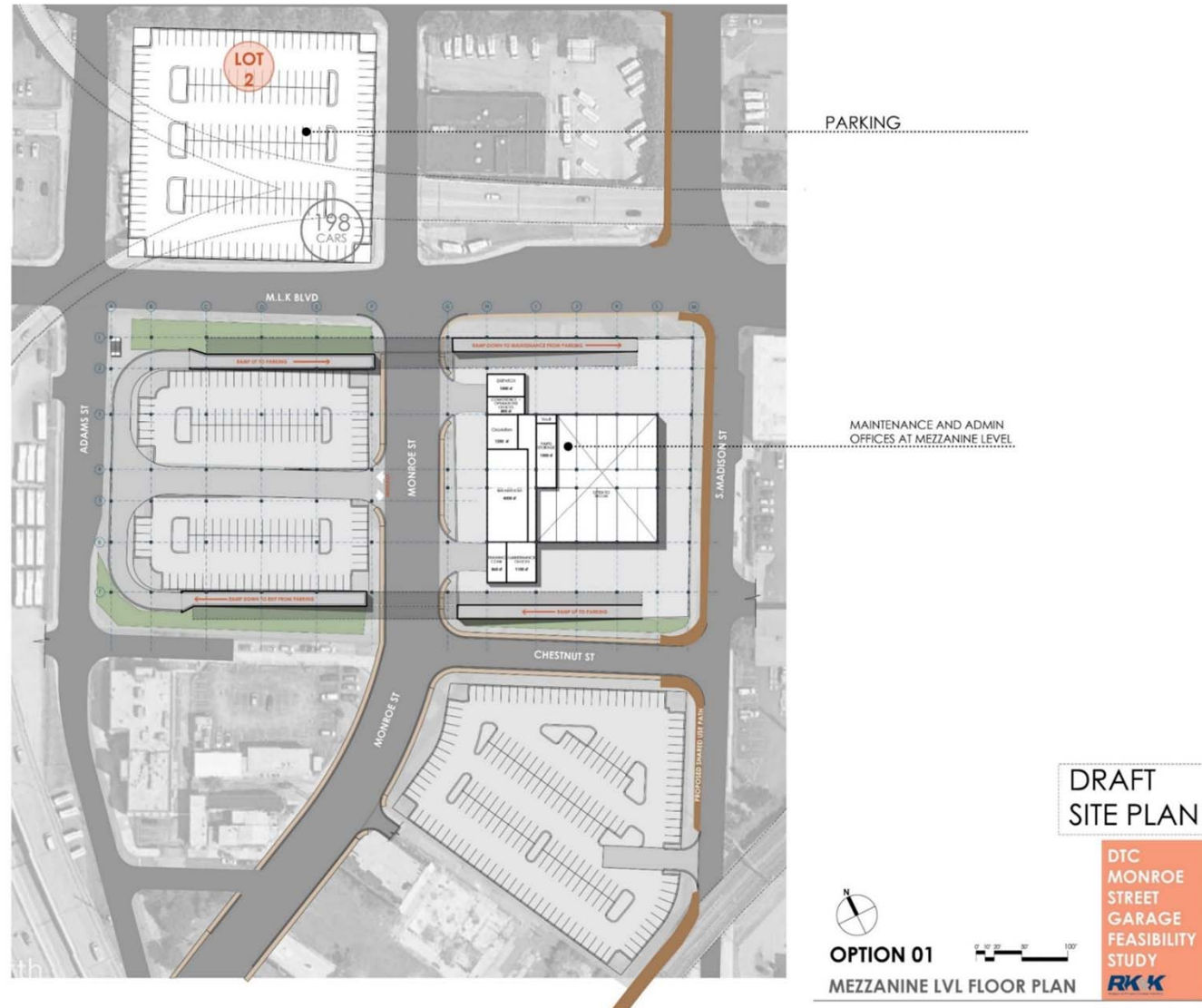
NOTE: Graphics show concept of bus parking mainly on upper level deck. Concept can be flipped to instead have bus parking mainly on lower level



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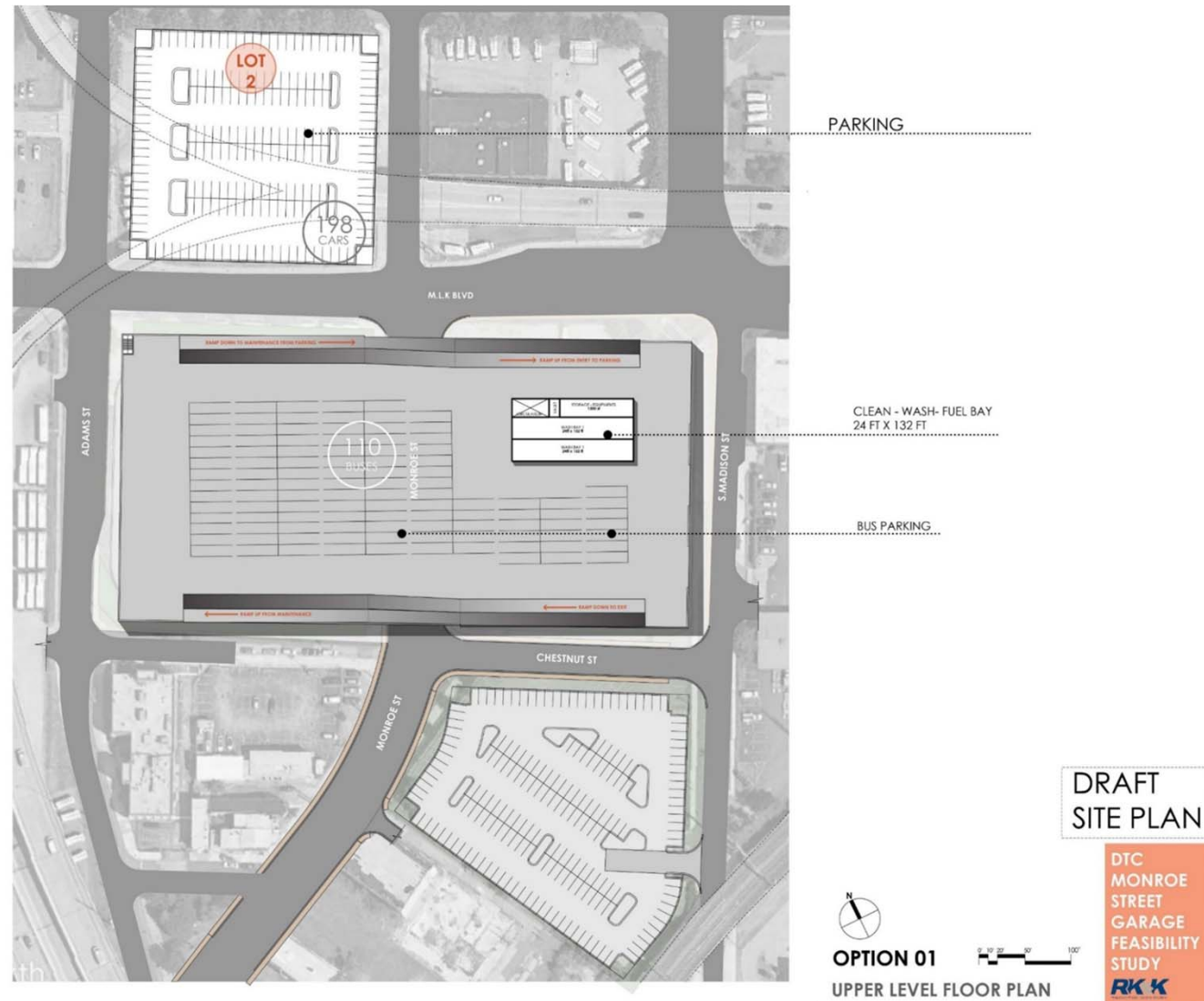
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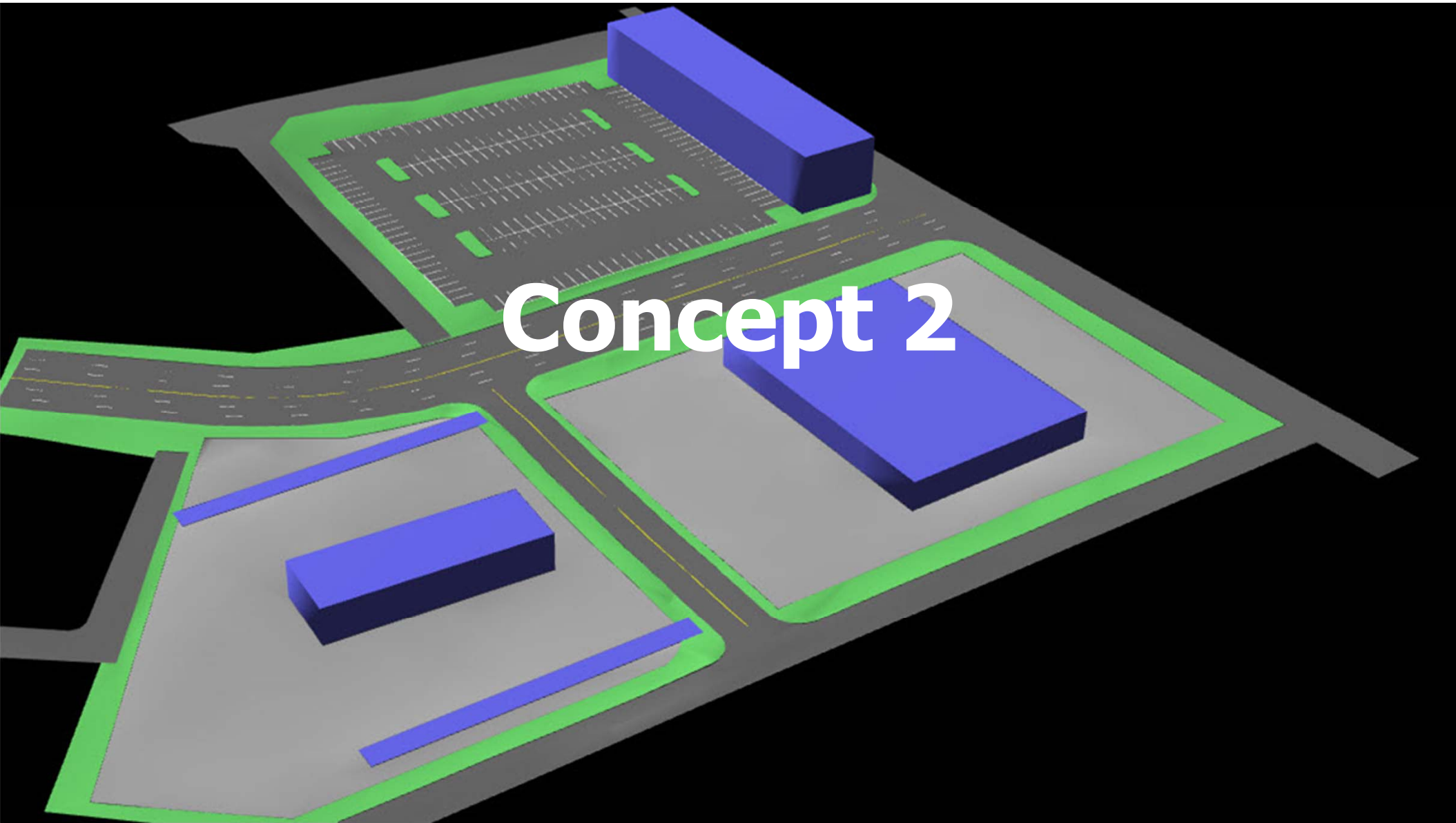
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Concept 1: Construction Phasing

- Monroe Street Operations/Maintenance maintained during construction
- Most aspects of Transportation Grid Reconfiguration will likely need to be constructed before the new DTC Building/Garage construction is started
- Challenges during construction will be access along Monroe Street and parking (bus and employee)
- Construction Timeline: Approximate 24 – 36 months completion

Concept 2

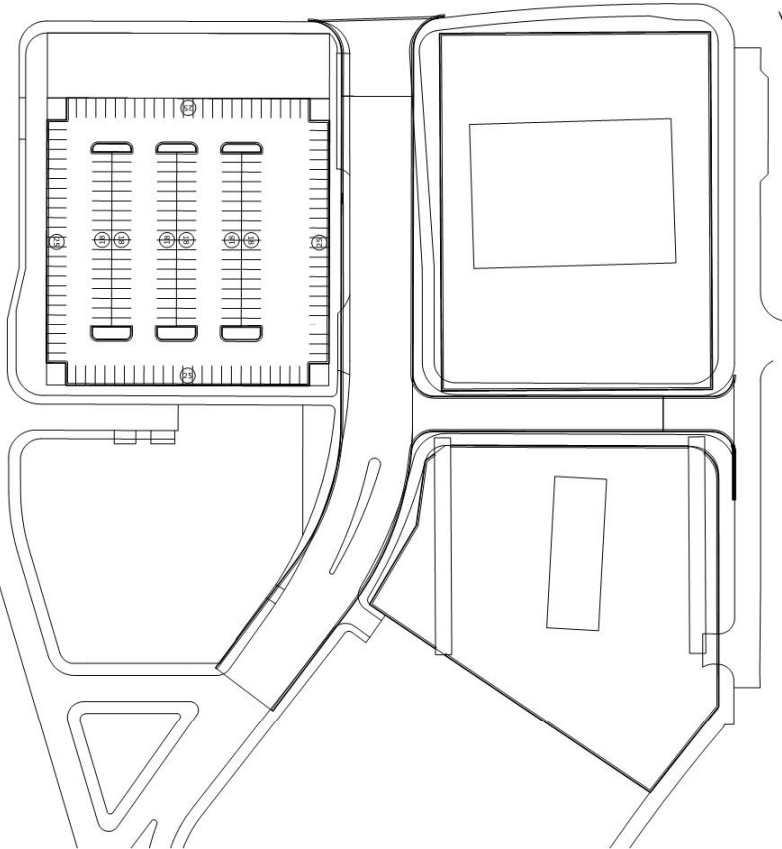


Concept 2:

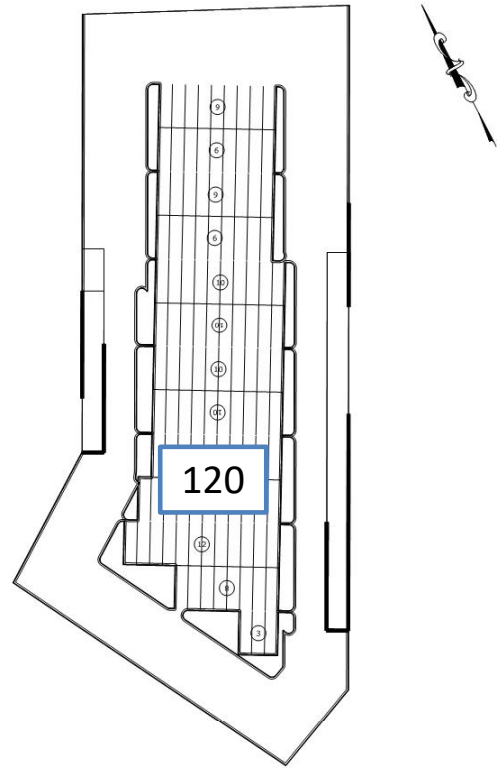
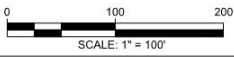
- Provide Deck over Lot 6 and Lot west of Chestnut
- Maintenance Building on Lower Level Lot 6
- Fuel/ Wash / Vault on Lower Level at west lot (on area where current combined sewer is located-possible relocation)
- Bus Parking on upper deck level
- Buses enter site and circulate across Chestnut
- Surface parking for employees, Delmarva, support vehicles on Lot 1 and lot west of Chestnut
- **CONCEPT TWO WAS NOT RECOMMENDED FOR FURTHER STUDY AND THEREFORE WAS NOT DEVELOPED IN MORE DETAIL**



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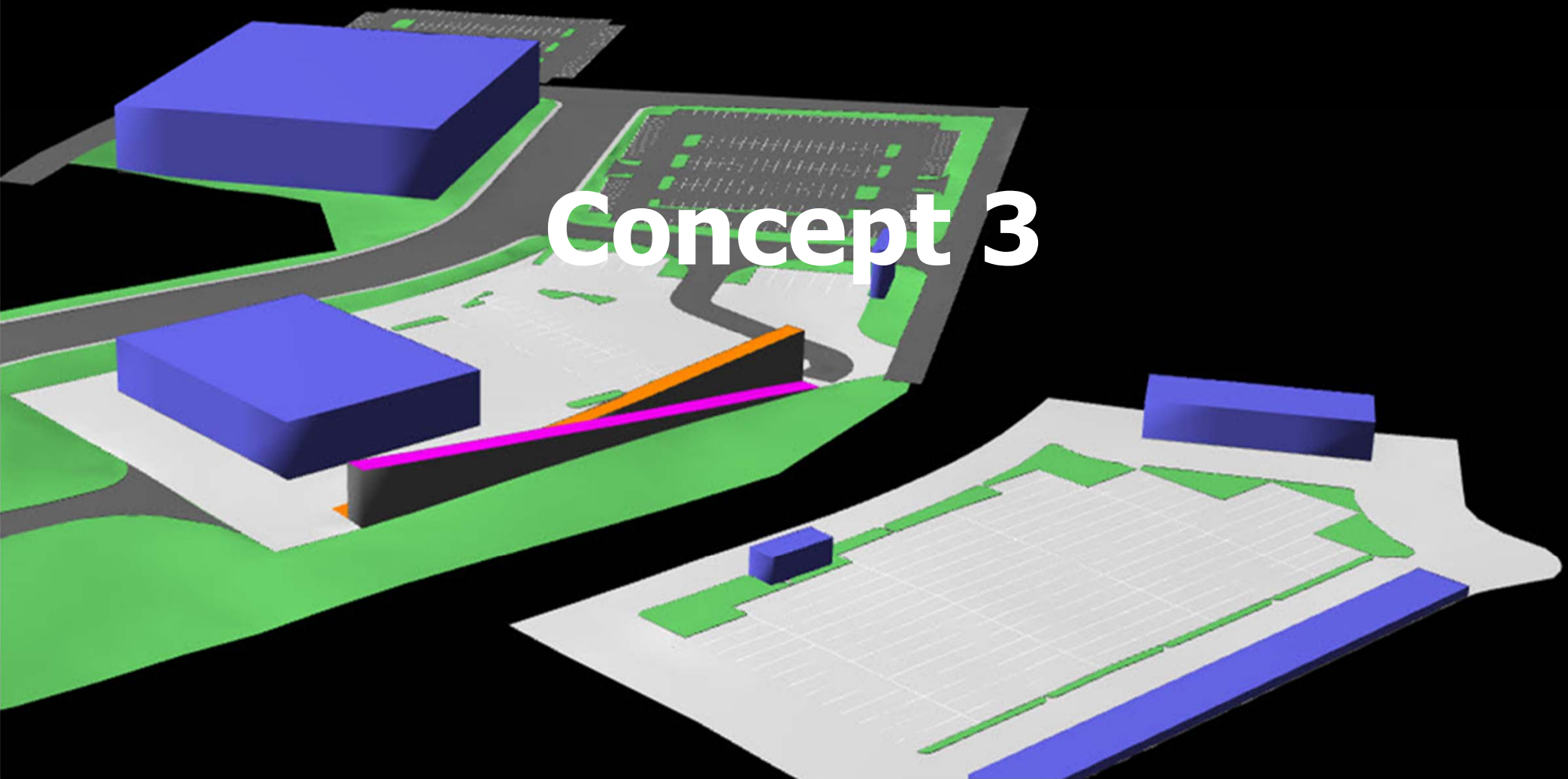
SITE LAYOUT
SCALE: 1" = 100'



UPPER DECK LAYOUT
SCALE: 1" = 100'

PT GARAGE		OP-2	
OPTION 2			
DESIGNED: _____ -		DATE: 03/24/20	
DRAWN BY: _____ -		SCALE: 1" = 100'	
CHECKED BY: _____ -		SHEET: 2 OF 2	

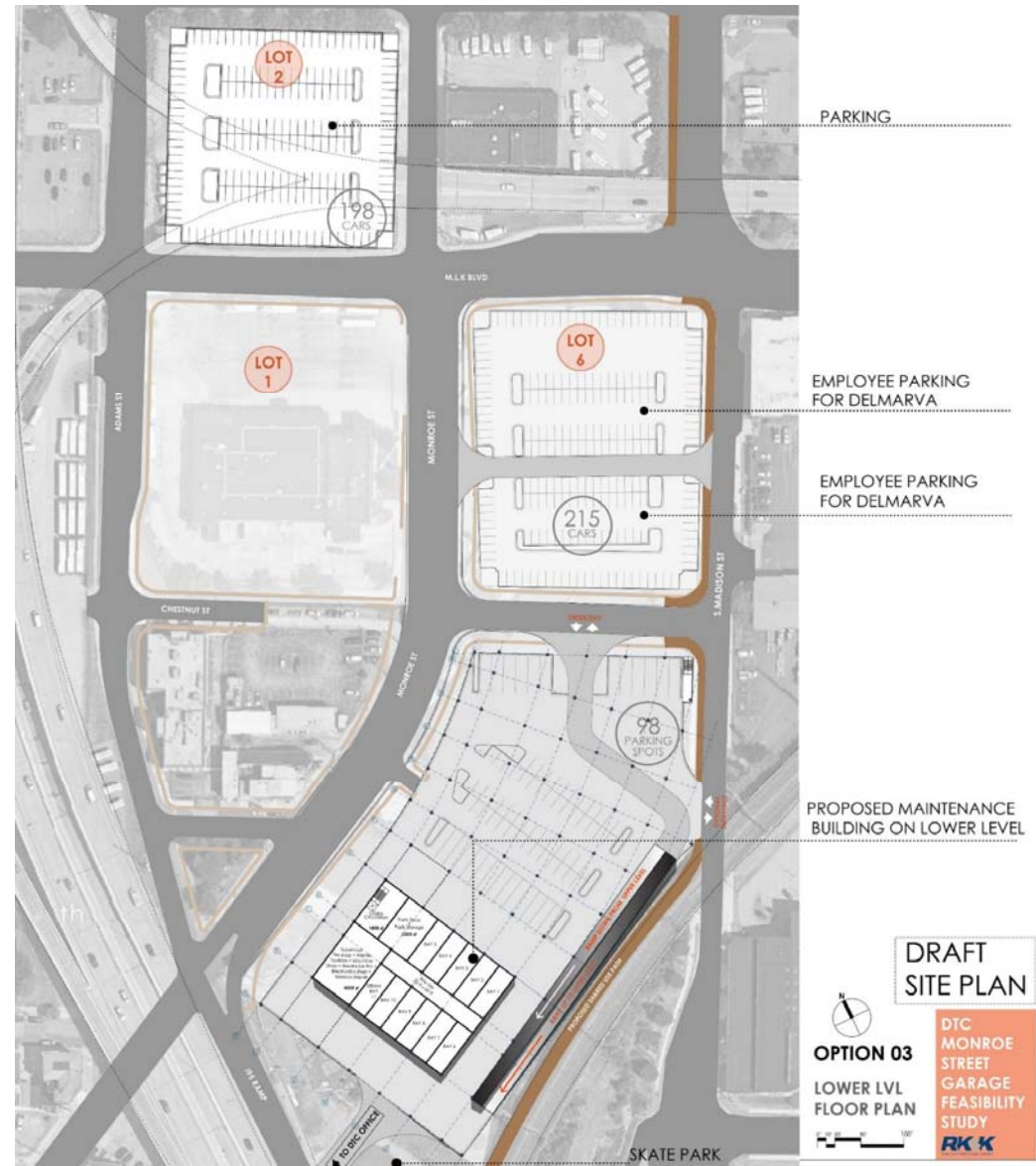
Concept 3



Concept 3

- Provide deck over Delmarva and Reybold properties west of Chestnut St
- Buses enter site on Chestnut St and/or Madison St.
- Access to DTC Beech St from Liberty Street
- Maintenance Building on lower level of Reybold Property
- Bus Parking on upper deck level
- Fuel/ Wash / Vault on Upper Level
- Surface parking for DTC support vehicles on lower level
- DTC employee/Delmarva parking on Lot 2 and Lot 6
- Provides potential land swap opportunity with Reybold for Lot 1

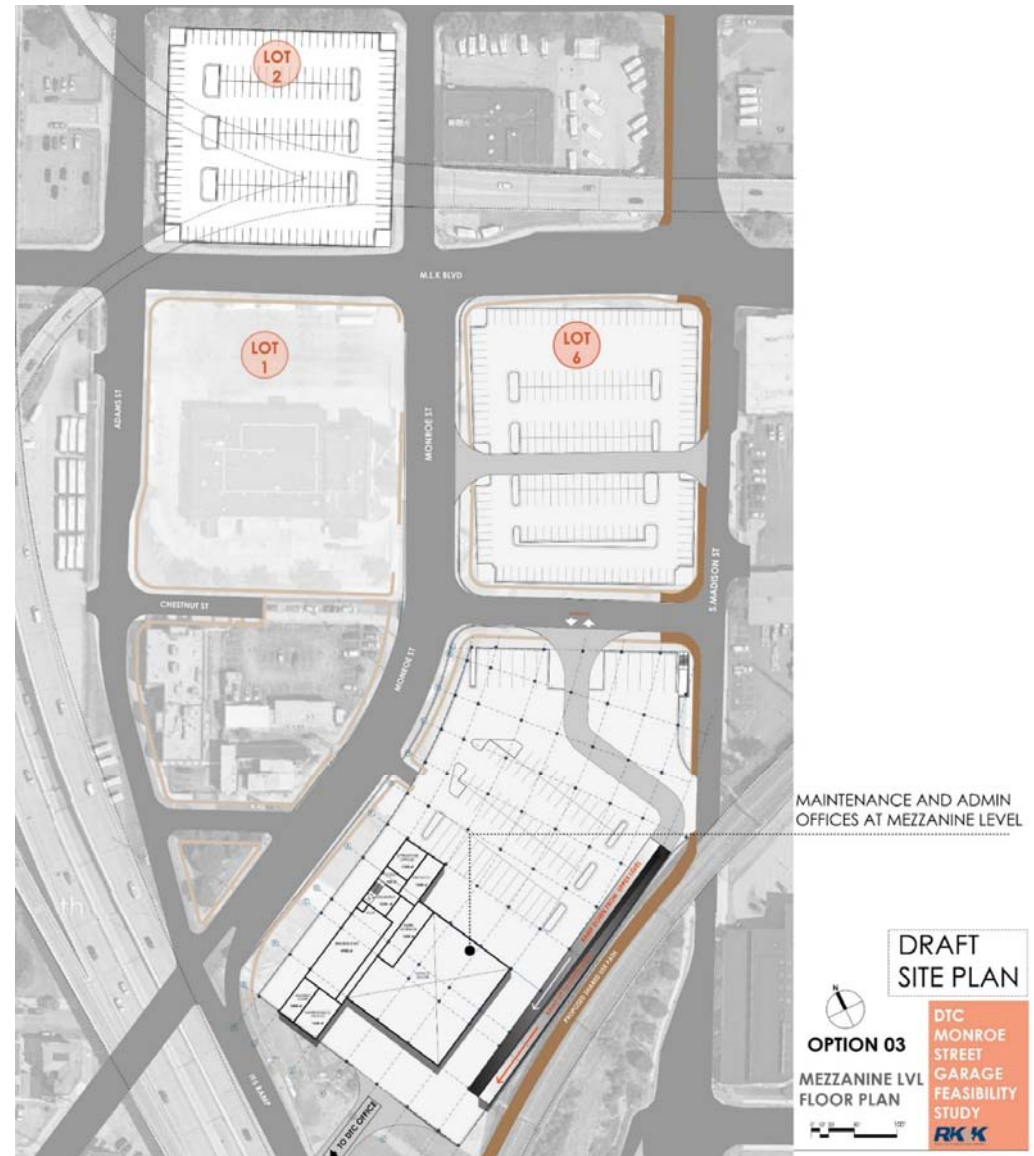
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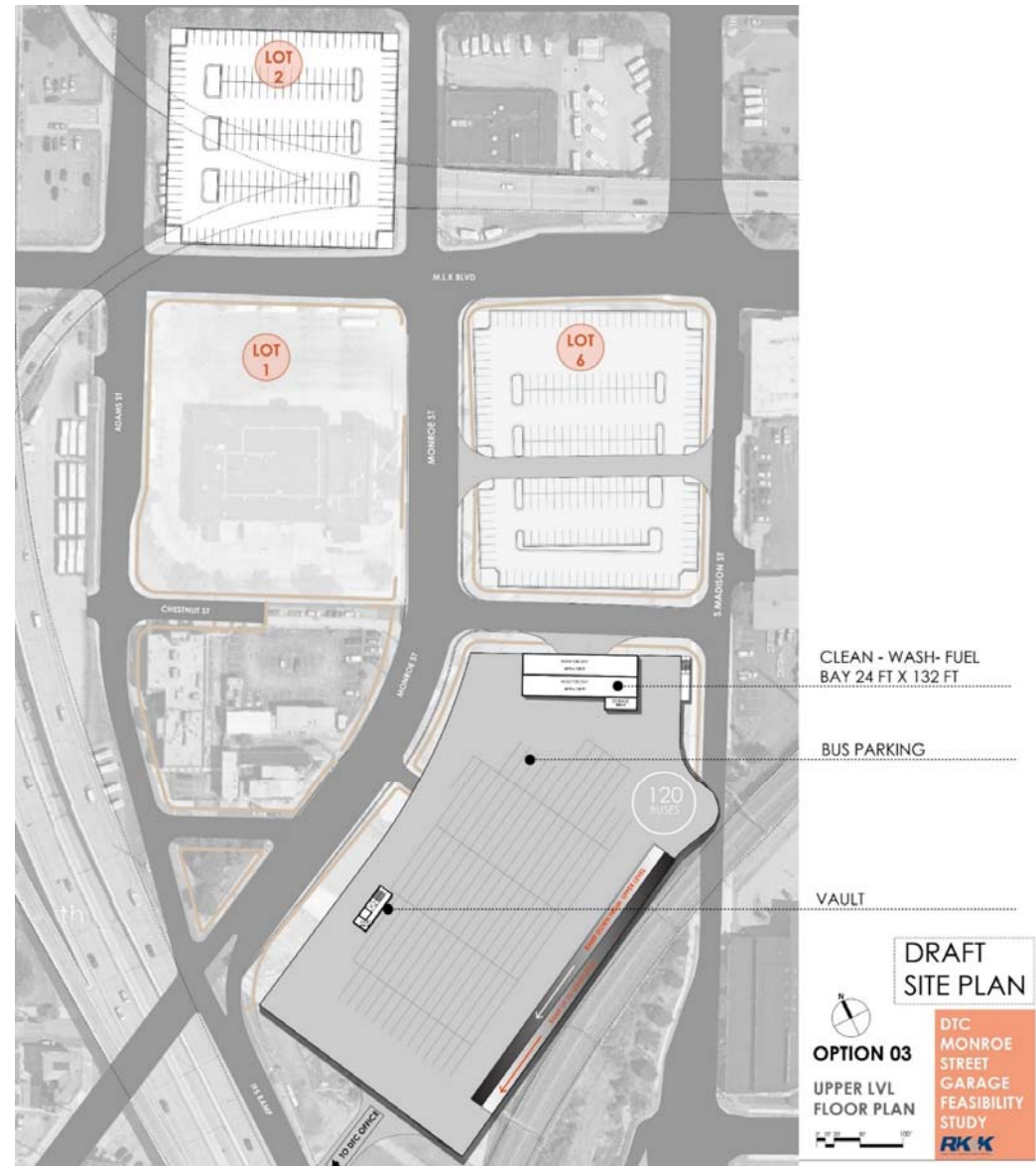
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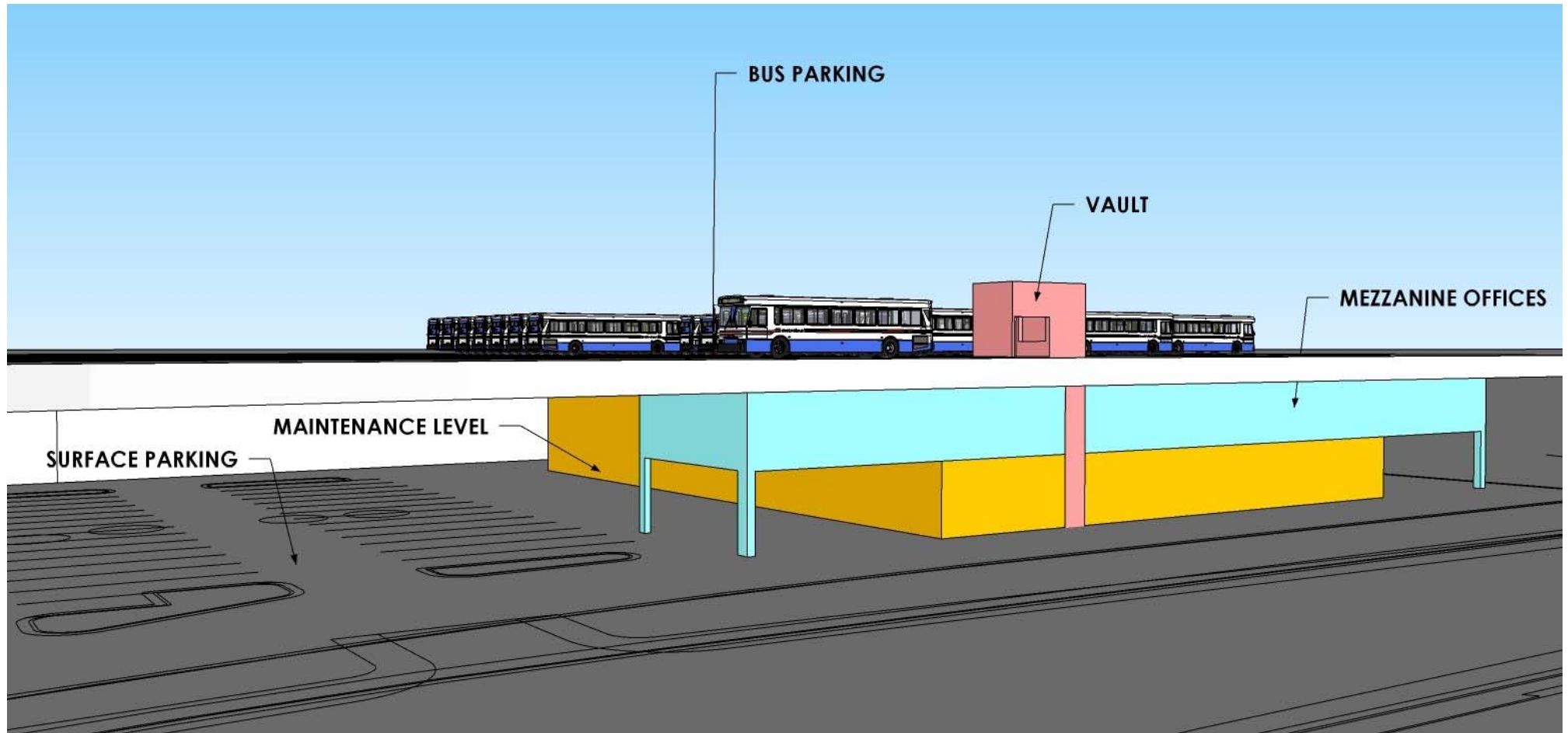
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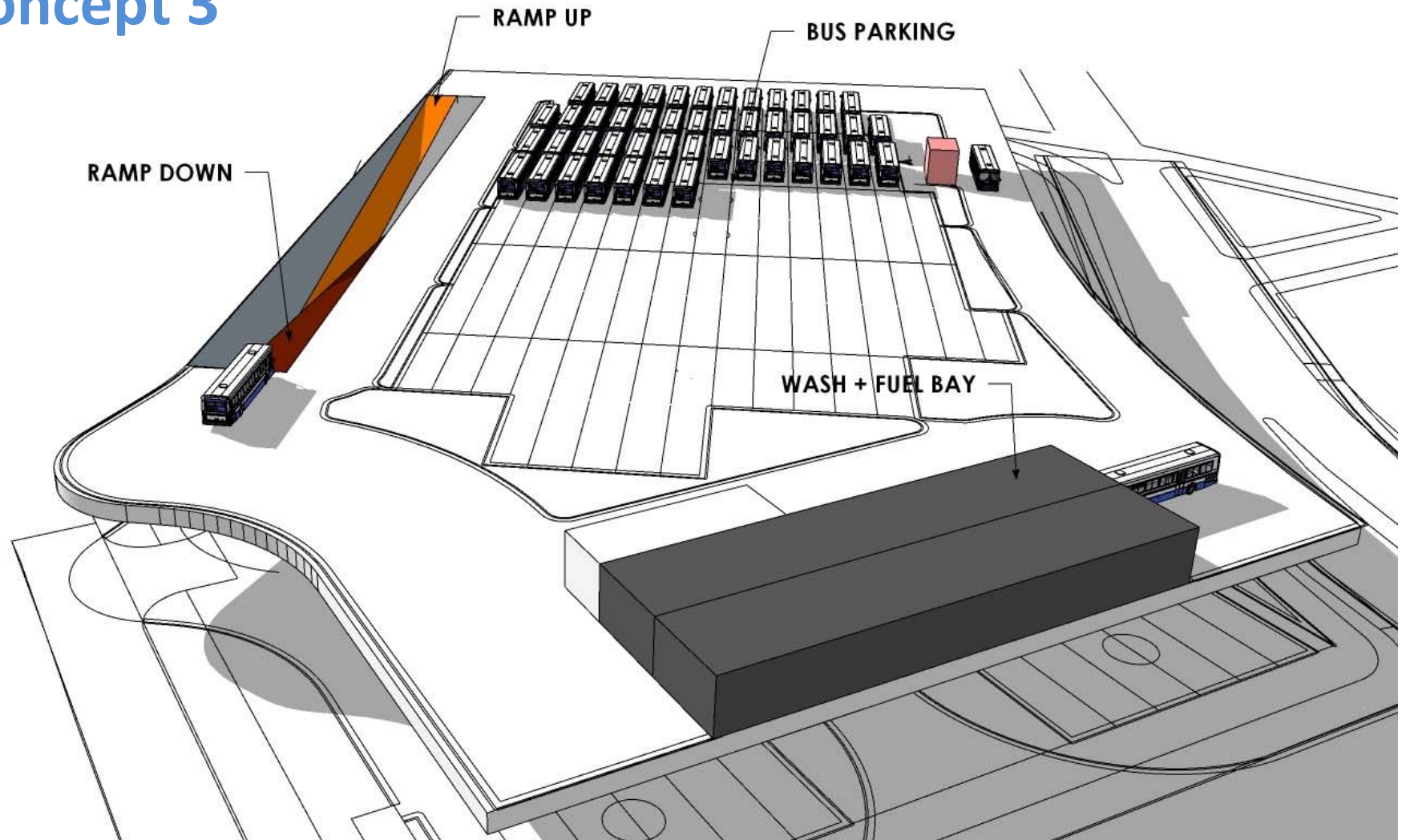
Concept 3: Construction Phasing

- Monroe Street Operations/Maintenance maintained during construction
- Site can be developed with minimal impacts to DTC Operations
- Transportation Grid Reconfiguration can be constructed after DTC Building/Garage is completed
- Construction Timeline: Approximate 24 – 36 months completion

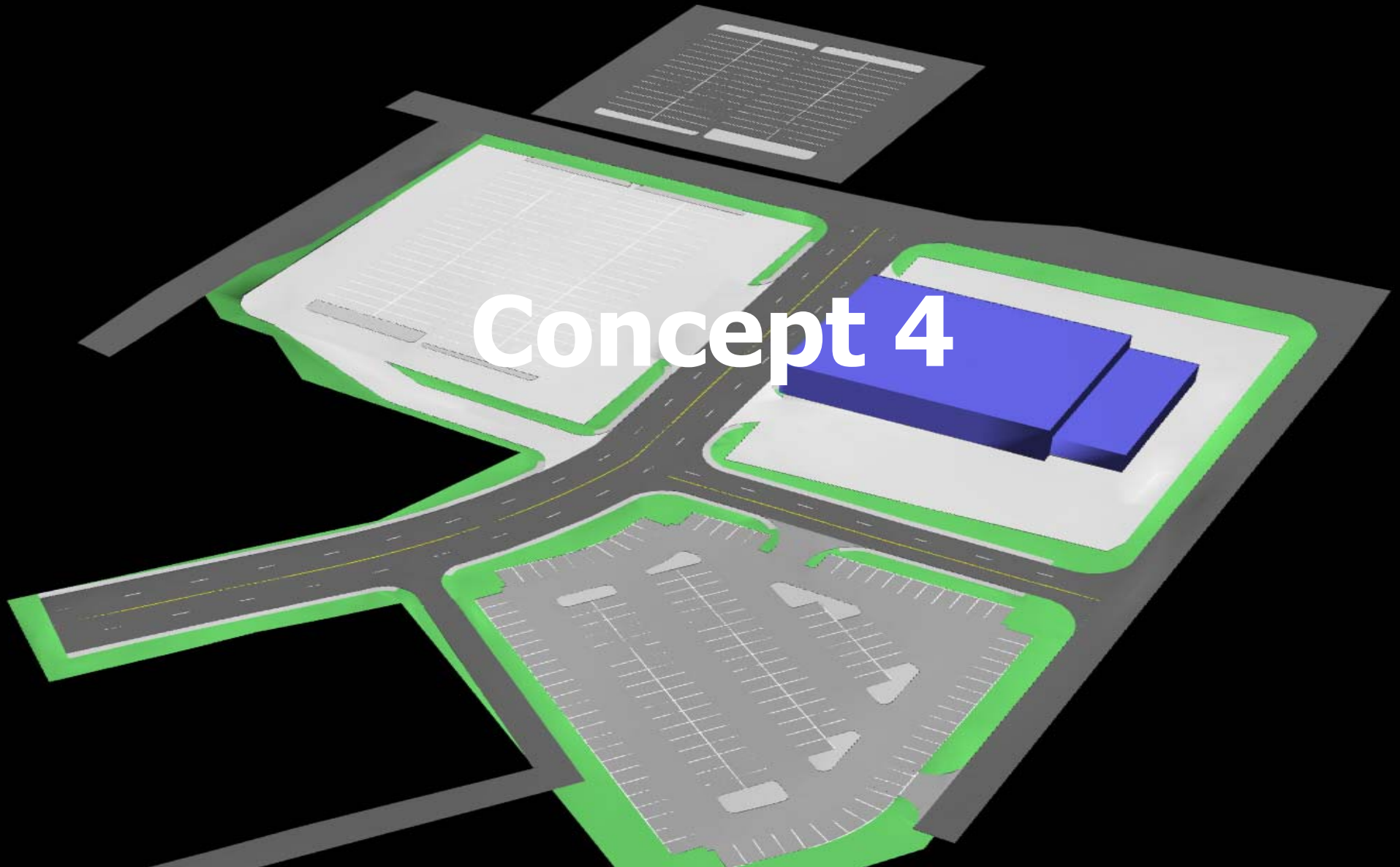


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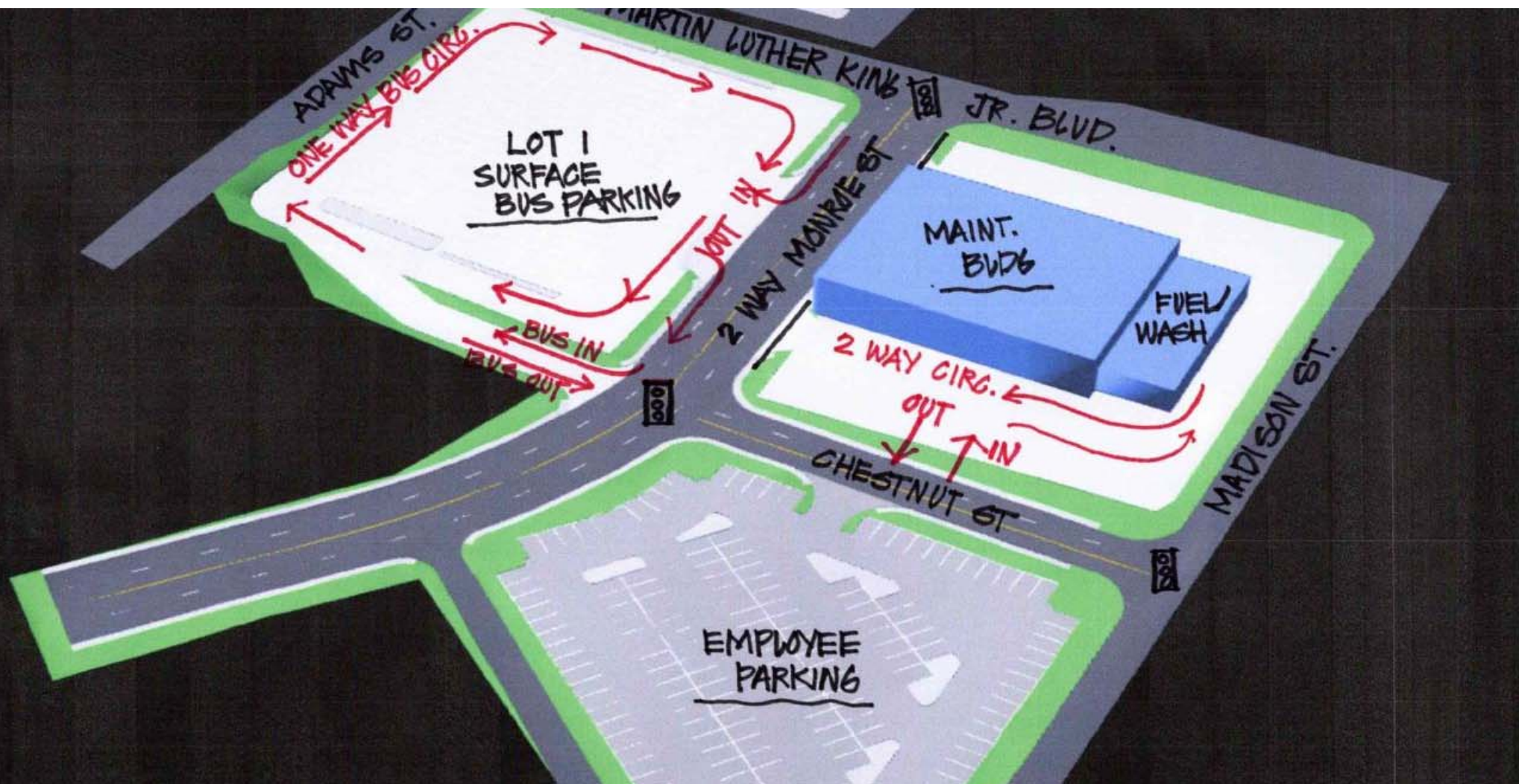
Concept 3



Concept 4



Concept 4



Concept 4: Construction Phasing

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DTC Monroe Facility**Cost Estimates**

16-Jun-20

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Next Steps

- ❖ Finalize Study Recommendations
- ❖ Develop Report
- ❖ Review report with Wilmington Initiatives (PMC)