

# Crafts Street Elderly Housing with Services

Land Use Presentation

August 9, 2022

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# Sustainability

**Primary Goal:** Passive House Certification

**Challenges:** Elderly Housing Use

- Commercial Kitchen
- Pool
- Central Hot Water
- Electrification

# Preliminary Analysis

## 1. Base Residential Building (HVAC/Envelope)

- Upgraded glazing, insulation, air tightness, HVAC performance, etc.

## 2. Commercial Kitchen

- Operational changes needed.
- Heat recovery in exhaust potentially needed.

## 3. Pool

- Operational changes needed (ventilation, temperature, etc.).

## 4. Hot Water

- Centralized system needed.
- May need heat pump heater to achieve metrics for kitchen and pool.

# Achievable Commitments

## 1. Passive House Level Design for Residential Portions

- Additional insulation, thermal breaks air sealing
- Upgraded triple glazing
- Upgraded HVAC

## 2. Testing and Verification

- PH-level energy use
- PH-level airtightness

## 3. Best-in-Class Design for Kitchen and Pool

- Induction appliances
- Quality pool Equipment

## 4. Central Hot Water

- Future Upgrade Capability

## 5. Electrification

# Testing and Verification

The project team intends to work with the City and Green Newton to establish proposed Council Order conditions to verify that the design and execution of the project meets the following standards:

## Passive House Certifiability of the Residential portions of the project

- Space Heating Demand: less than 4.8 kBtu/ft<sup>2</sup>.yr
- Space Cooling Demand: less than 5.1 kBtu/ft<sup>2</sup>.yr
- EUI: 16 kBtu/ft<sup>2</sup>.yr
- Primary Energy Renewable (PER): less than 19 kBtu/ft<sup>2</sup>.yr (the PER metric considers the EUI metric, while adding the carbon impact of the choice of energy source)
- Airtightness: 0.6ACH @50Pa

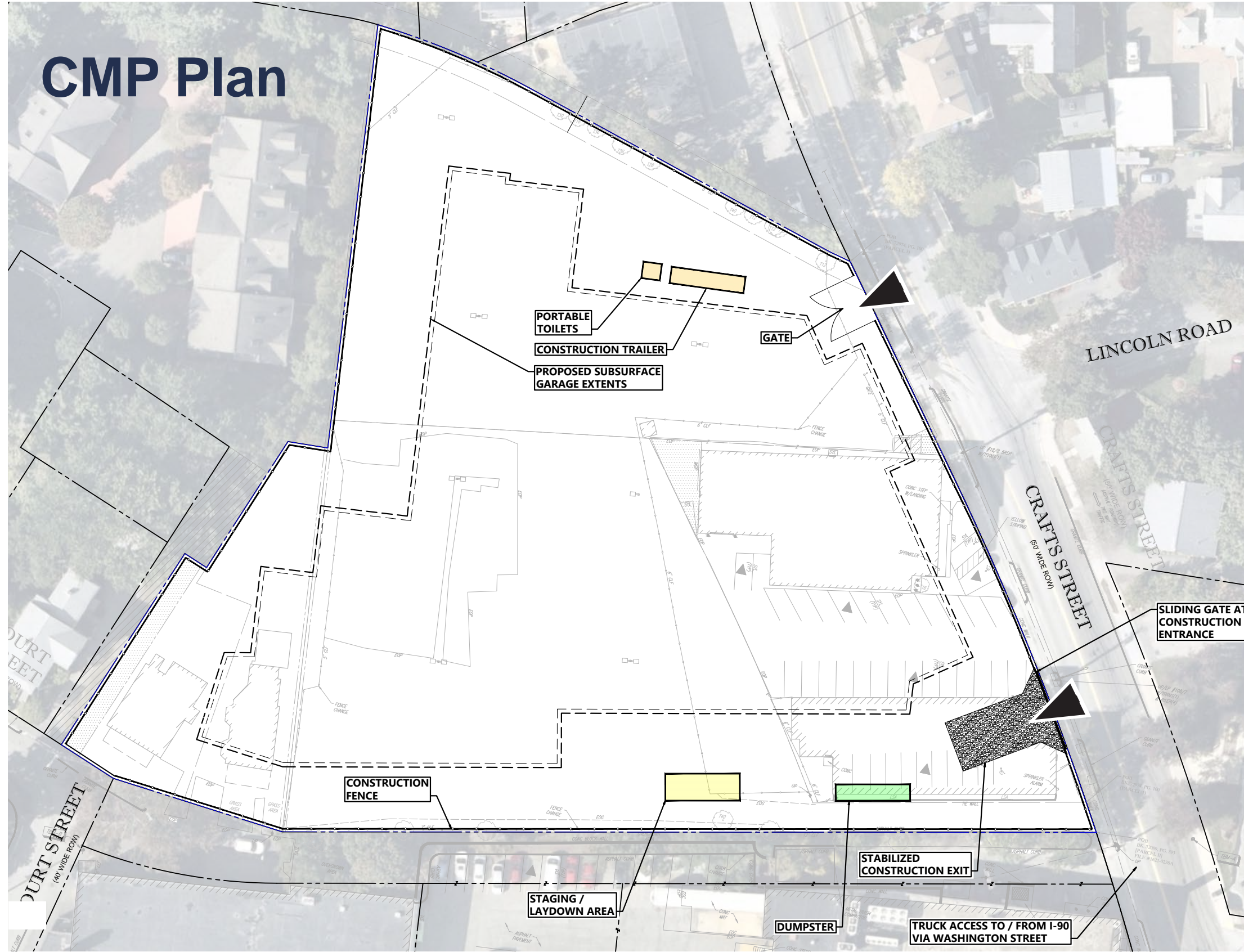
# Construction Management Plan

# Final CMP will include:

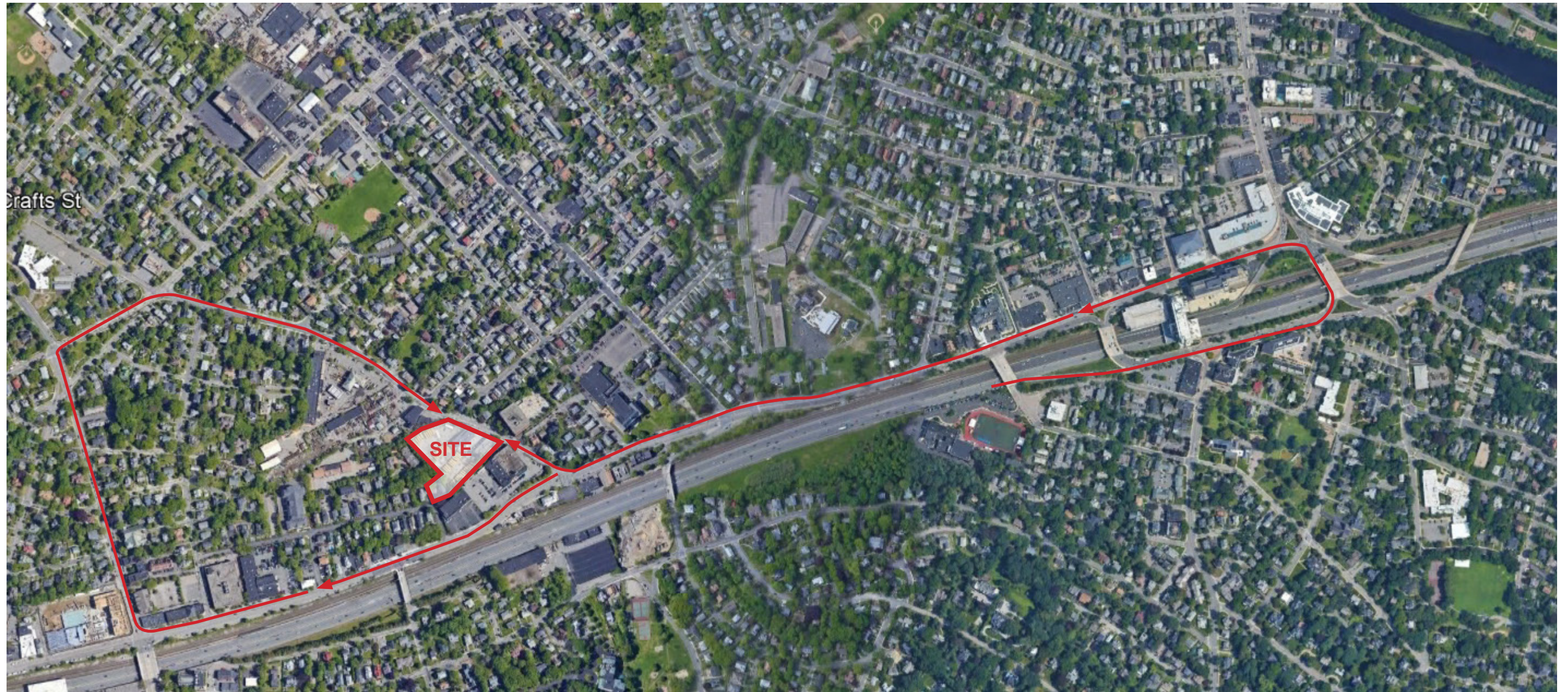
- Contact Information
- Hours of Operation
- Schedule
- Site Plan
- Truck Routing
- Site Security and Safety
- Noise/Vibration Monitoring
- Air Quality and Emissions Monitoring
- Rodent Control Plan
- Tree Protection



# CMP Plan



# Construction Routing



# Hours of Construction

Limitations on Exterior Construction/Heavy Equipment Operation:

**Weekdays** 7:00am - 5:00pm

**Saturdays** 8:00am - 4:00pm

# Construction Worker Parking

- Workers shall park on site and along Washington Street in limited areas.
- Contractor will coordinate potential remote lot areas for parking, if needed.
- No parking on Crafts Street, Court Street, or other neighborhood streets.

# Liaison Committee

To enhance and ensure communication as to the status and progress of the construction of the Project.

To provide a forum for initial presentation of a construction schedule and any significant changes to schedule or changes of plans for which public review is appropriate.

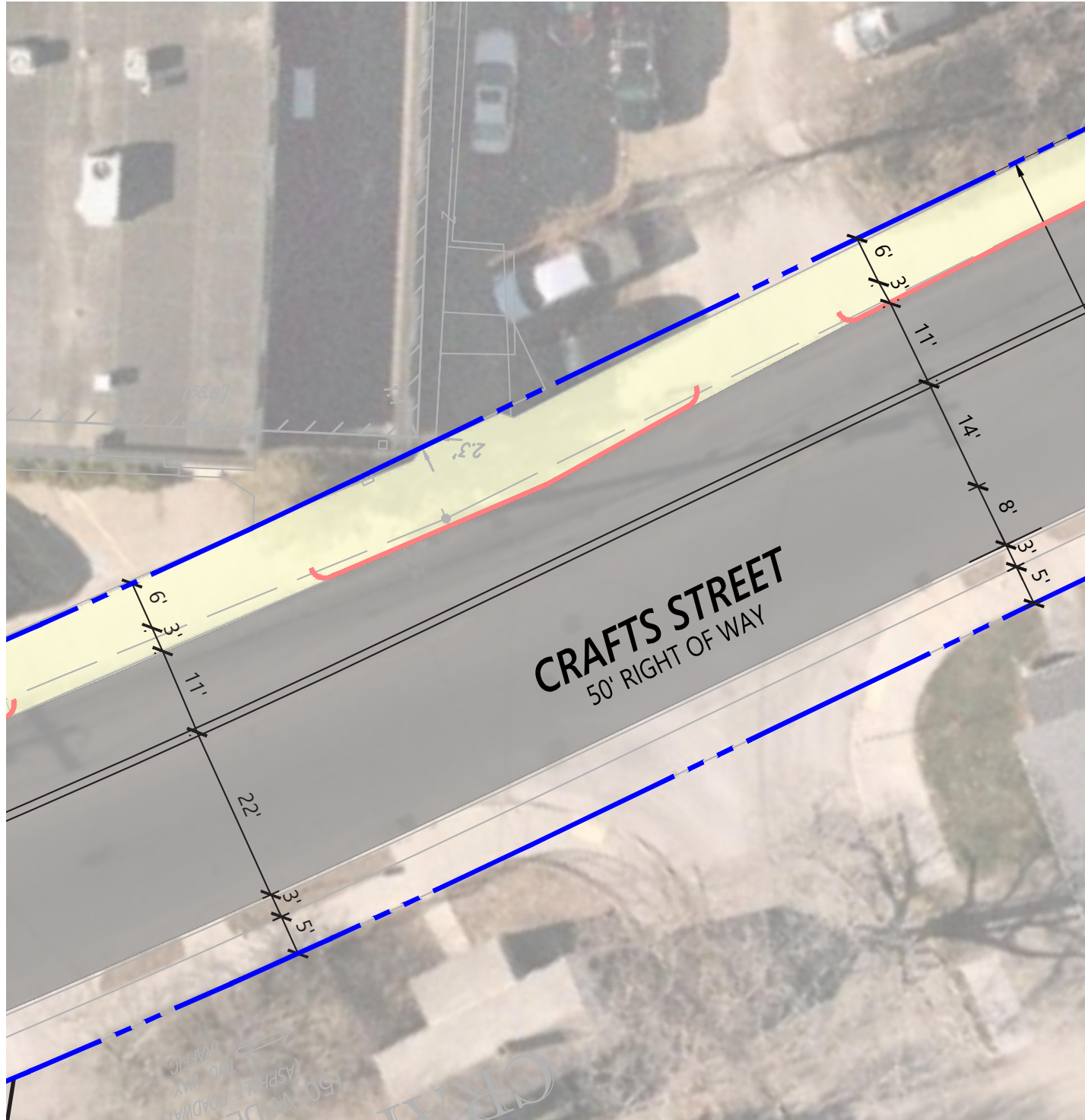
To provide a public forum for presentation of supplementary permit requests to the extent required.

To receive and deal with construction-specific issues including, without limitation, noise, dust, parking and traffic; to monitor implementation of the final Construction Management Plan; and to receive notices and communications from the Department of Inspectional Services and the Planning and Development Department.

# Drop-off & Pick-up Proposal

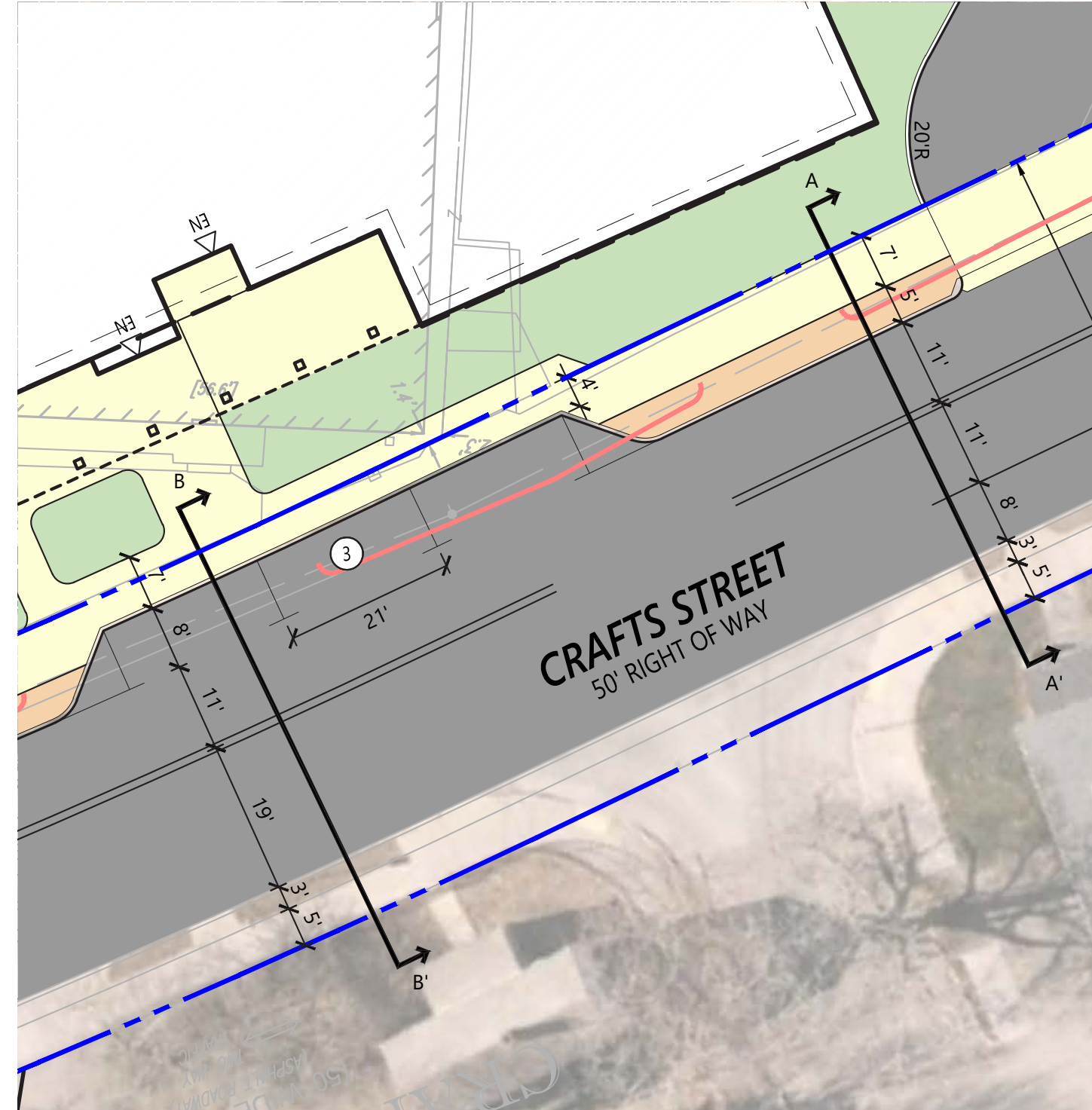
- Revised Proposed Use from Parking to Pick-up/Drop-off
- Promotes Activation of Entry
- Avoids In-lane Stopping
- Expanded Furnishing Zone Similar to TRIO (Maintained by Development)

# Existing



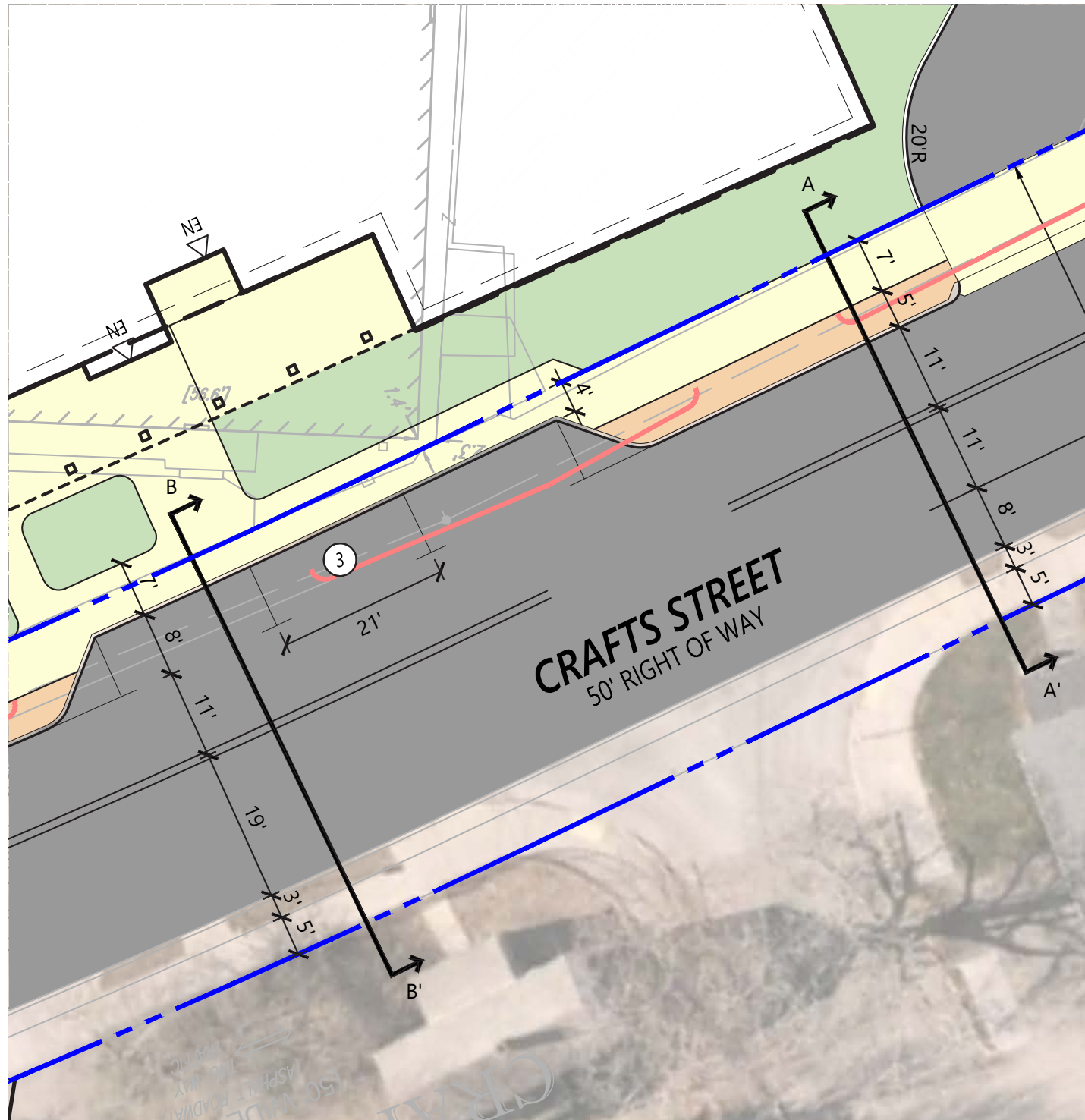
# Originally Proposed

June 16, 2022



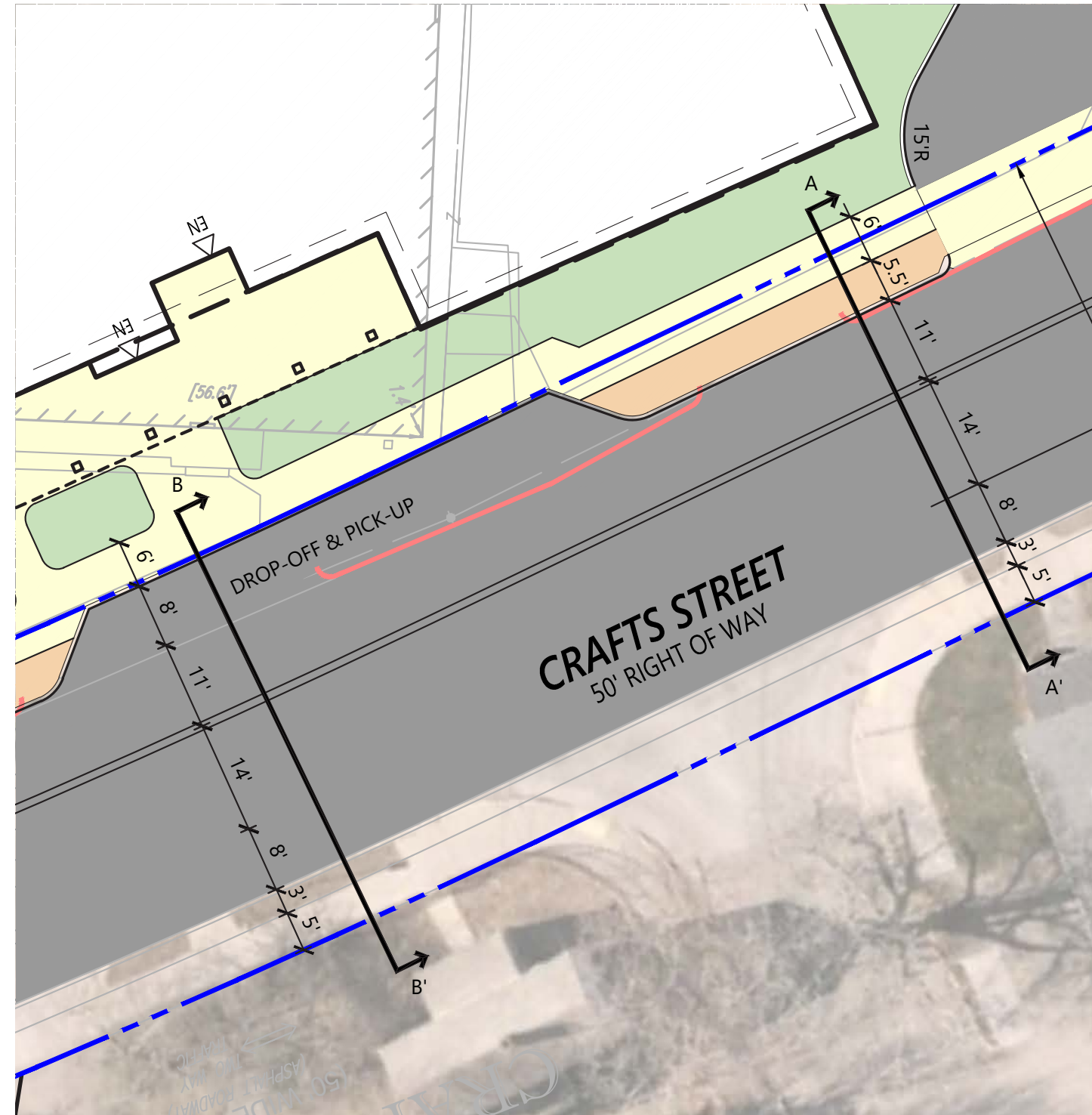
# Originally Proposed

June 16, 2022



# Revised Proposal

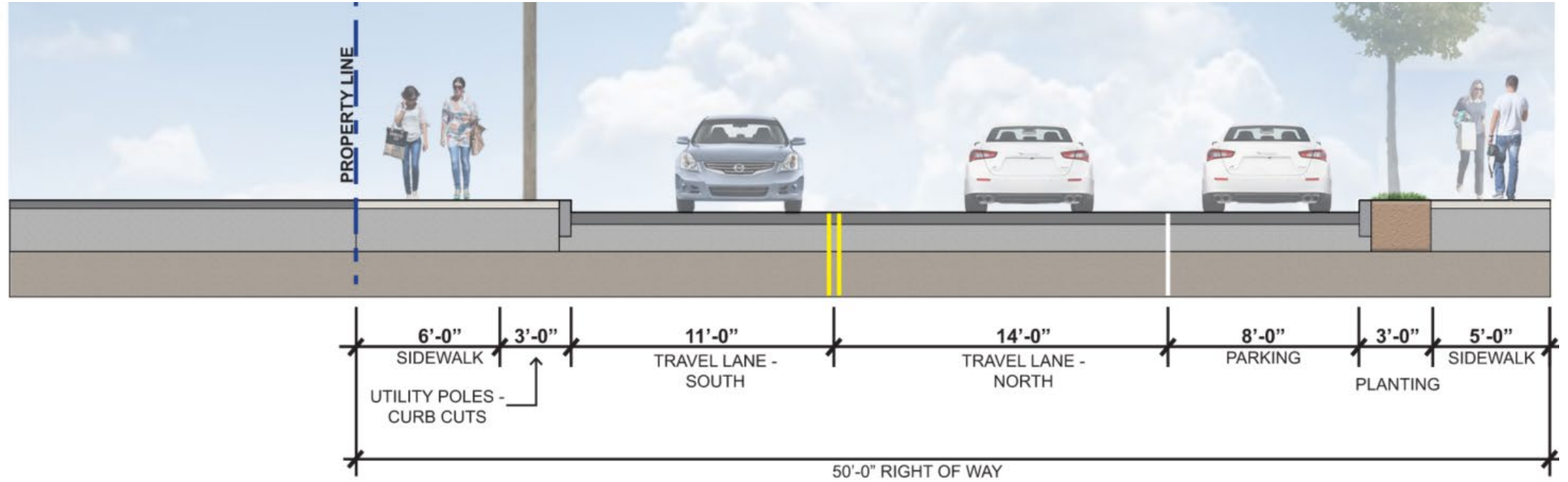
July 26, 2022



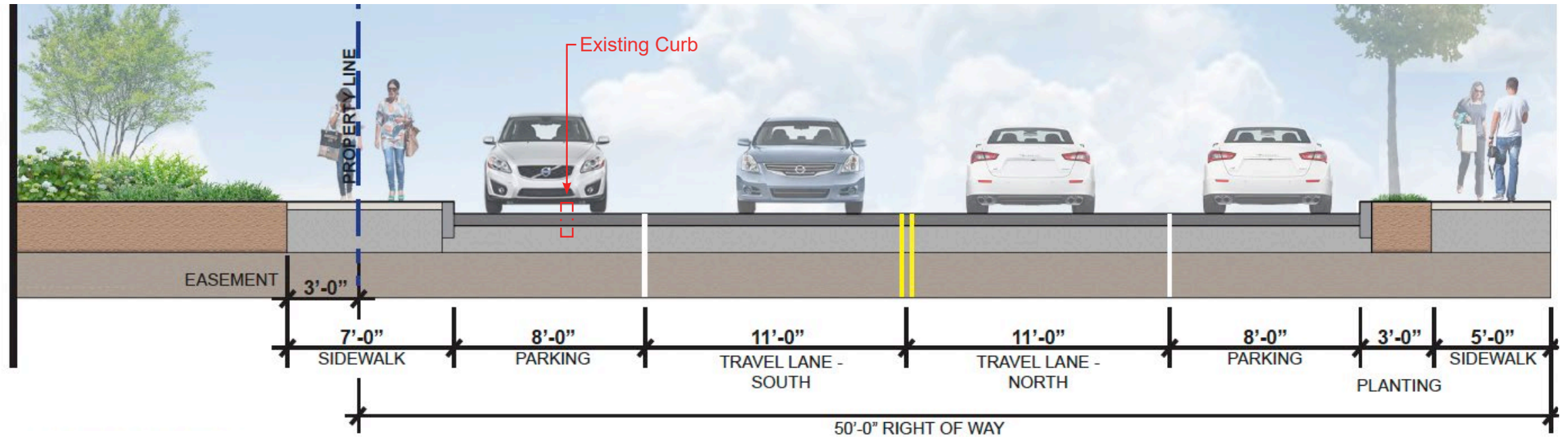


# Crafts Street Section

Existing

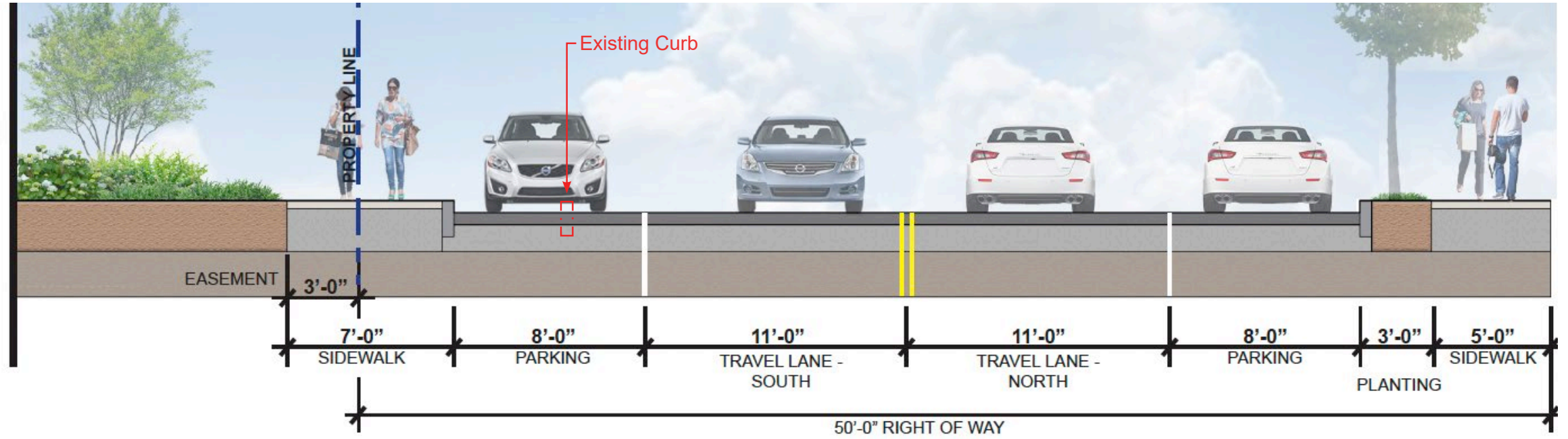


Originally Proposed with Parking

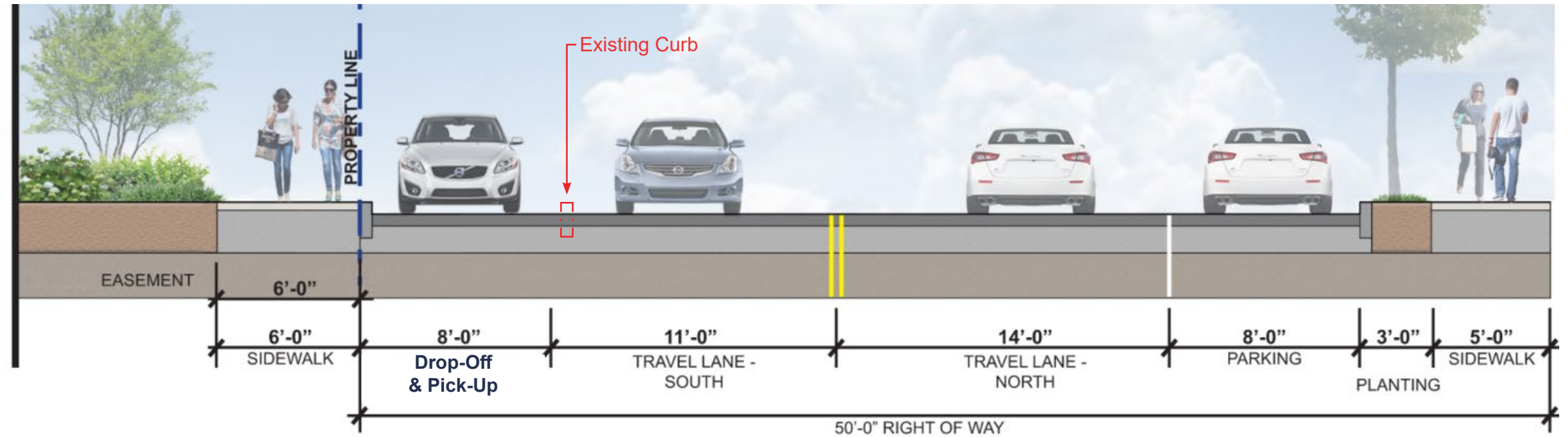


# Crafts Street Section

Originally Proposed with Parking

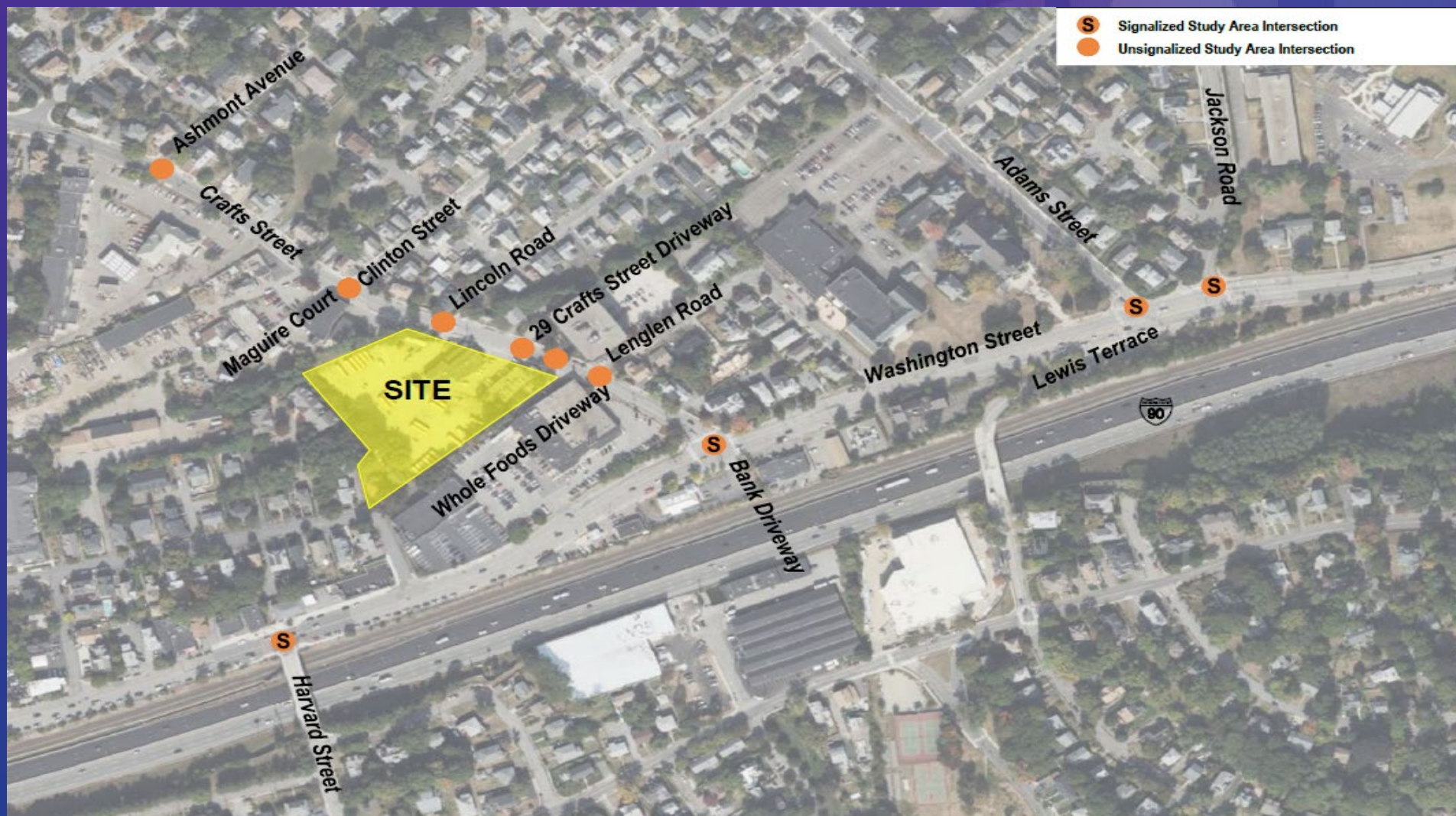


Revised Proposal with Drop-Off & Pick-Up



# Traffic Study

# Traffic Study Area



# Project Program

## **Proposed Program 185 units:**

- **105 units independent living**
- **52 units assisted living**
- **28 units memory care**



# Traffic Generation

**Table 3 Net New Site-Generated Vehicle Trips**

	Existing Site Trips <sup>a</sup>	Proposed Trips <sup>b</sup>	Net New Trips
<b>Weekday Daily <sup>c</sup></b>			
Enter	n/a	307	n/a
<u>Exit</u>	<u>n/a</u>	<u>307</u>	<u>n/a</u>
Total	n/a	614	n/a
<b>Weekday Morning</b>			
Enter	19	30	+11
<u>Exit</u>	<u>9</u>	<u>16</u>	<u>+7</u>
Total	28	46	+18
<b>Weekday Evening</b>			
Enter	6	31	+25
<u>Exit</u>	<u>14</u>	<u>48</u>	<u>+34</u>
Total	20	79	+59

a Based-on traffic counts conducted by VHB in February 2022, as presented in Table 3 of the April 2022 TIA.

b Trip Generation estimate based ITE LUC 255 (Continuing Care Retirement Community) based on regression equations for 185 units.

c Existing site-generated trips only counted during the weekday morning and evening peak hours.

**Site is fully developed today; No credit for existing uses to be removed was taken in analysis of impacts.**



# City Hire Peer Review Firm

- **City Hired BETA to review the updated transportation study**
- **We received initial comments on June 2, 2022**
- **We had a Zoom Meeting with City and Peer Consultant to discuss**
- **VHB has provided written response to the peer comments on June 6, 2022**
- **Comments were generally minor in nature and we believe they have been fully addressed**

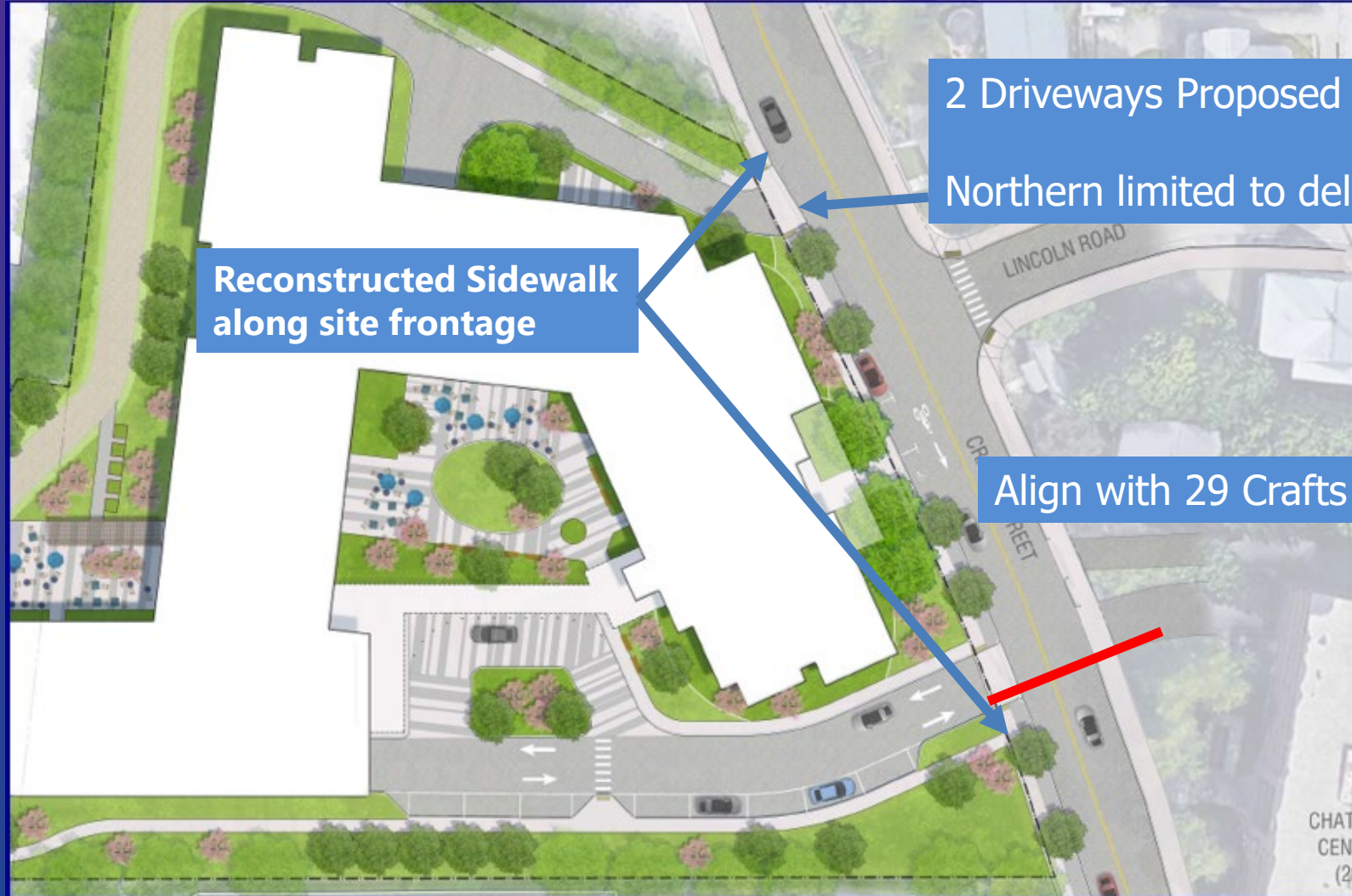


# Redevelopment Access Consolidation





# Redevelopment Access Consolidation



2 Driveways Proposed

Northern limited to delivery only

Reconstructed Sidewalk along site frontage

Align with 29 Crafts Chatham Center



# Parking Demand Study

Parking Spaces	
<b>RESIDENTS</b> Independent Living	55
<b>VISITORS AND OUTSIDE CAREGIVERS</b>	41
<b>STAFF (Main Shift)</b>	48
<b>Total</b>	<b>144 *</b>

\* All parking stalls are 9 FT wide.

# Number of Employees

STAFF POSITIONS	(7AM-4PM)	(4PM-12AM)	(12AM-7AM)
Executive Director	1	0	0
Business Manager	1	0	0
Business Manager Assistants	2	0	0
Human Resource Manager	1	0	0
Marketing	2	0	0
Receptionist	1	1	1
Wellness/Fitness	2	0	0
Food Service	10	4	6
Maintenance Director	1	0	0
Maintenance Support	1	1	1
Housekeeping	5	1	1
AL Kitchen Support	4	0	1
MC Kitchen Support	4	0	1
Director of Nursing	1	0	0
Director of Memory Care	1	0	0
Caregivers	9	7	6
Miscellaneous	2	1	1
<b>Subtotal</b>	<b>48</b>	<b>15</b>	<b>18</b>

Source: SRG, based on comparable built projects.

# Parking Demand

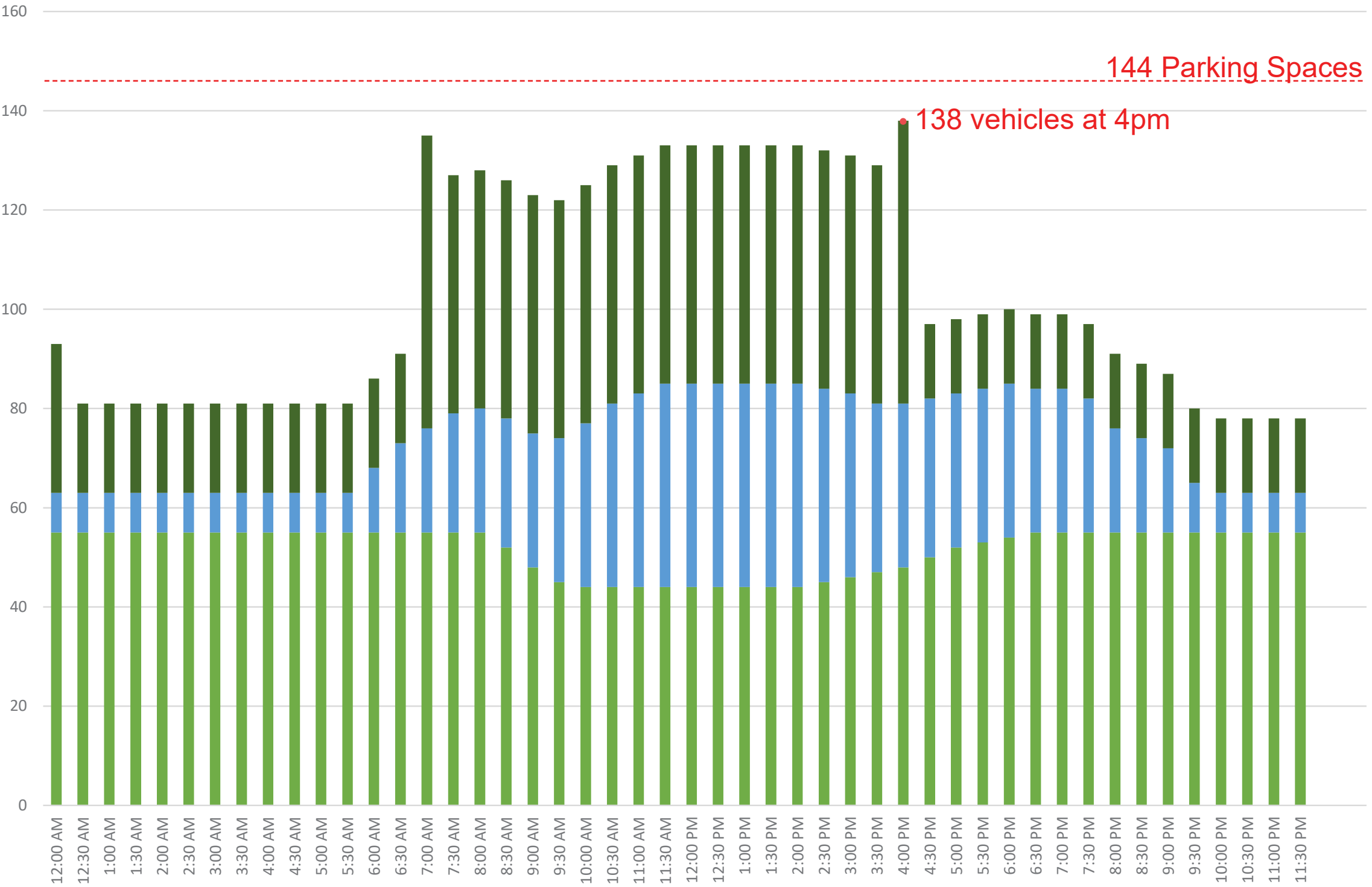
	RESIDENTS	VISITORS + CAREGIVERS	STAFF	TOTAL
12:00 AM	55	8	30 *	93
12:30 AM	55	8	18	81
1:00 AM	55	8	18	81
1:30 AM	55	8	18	81
2:00 AM	55	8	18	81
2:30 AM	55	8	18	81
3:00 AM	55	8	18	81
3:30 AM	55	8	18	81
4:00 AM	55	8	18	81
4:30 AM	55	8	18	81
5:00 AM	55	8	18	81
5:30 AM	55	8	18	81
6:00 AM	55	13	18	86
6:30 AM	55	18	18	91
7:00 AM	55	21	59 *	135
7:30 AM	55	24	48	127
8:00 AM	55	25	48	128
8:30 AM	52	26	48	126
9:00 AM	48	27	48	123
9:30 AM	45	29	48	122
10:00 AM	44	33	48	125
10:30 AM	44	37	48	129
11:00 AM	44	39	48	131
11:30 AM	44	41	48	133

	RESIDENTS	VISITORS + CAREGIVERS	STAFF	TOTAL
12:00 PM	44	41	48	133
12:30 PM	44	41	48	133
1:00 PM	44	41	48	133
1:30 PM	44	41	48	133
2:00 PM	44	41	48	133
2:30 PM	45	39	48	132
3:00 PM	46	37	48	131
3:30 PM	47	34	48	129
4:00 PM	48	33	57 *	138
4:30 PM	50	32	15	97
5:00 PM	52	31	15	98
5:30 PM	53	31	15	99
6:00 PM	54	31	15	100
6:30 PM	55	29	15	99
7:00 PM	55	29	15	99
7:30 PM	55	27	15	97
8:00 PM	55	21	15	91
8:30 PM	55	19	15	89
9:00 PM	55	17	15	87
9:30 PM	55	10	15	80
10:00 PM	55	8	15	78
10:30 PM	55	8	15	78
11:00 PM	55	8	15	78
11:30 PM	55	8	15	78

\*Employee shift changes happen at 7AM, 4PM, and 12AM.

\*\*Source: SRG, based on comparable built projects.

# Parking Demand



- STAFF
- VISITORS + CAREGIVERS
- RESIDENTS

# Transportation Demand Management (TDM)

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- \$60k contribution to TDM measures as determined by the Planning Department, which may include a bus shelter, transit, biking or other measures
- On-Site Shuttle
- Parking (Market Rate, Unbundled)
- Car Share Ready (Space(s) On-Site)
- On-Site TDM Coordinator/TMA Membership
- Bike Parking (approx. double zoning requirement) with Indoor Bike Fix-it Station for Residents
- Bike Shower/Locker

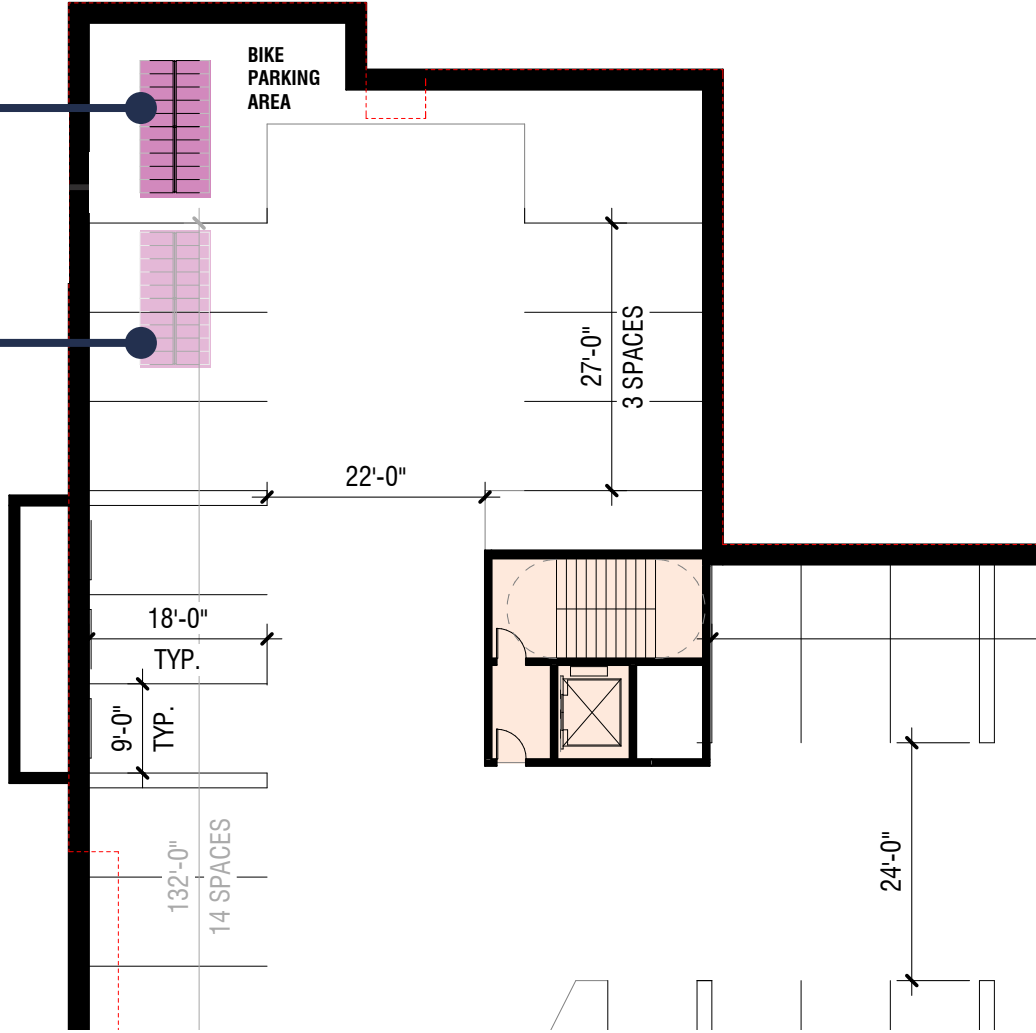


# Interior Bicycle Parking

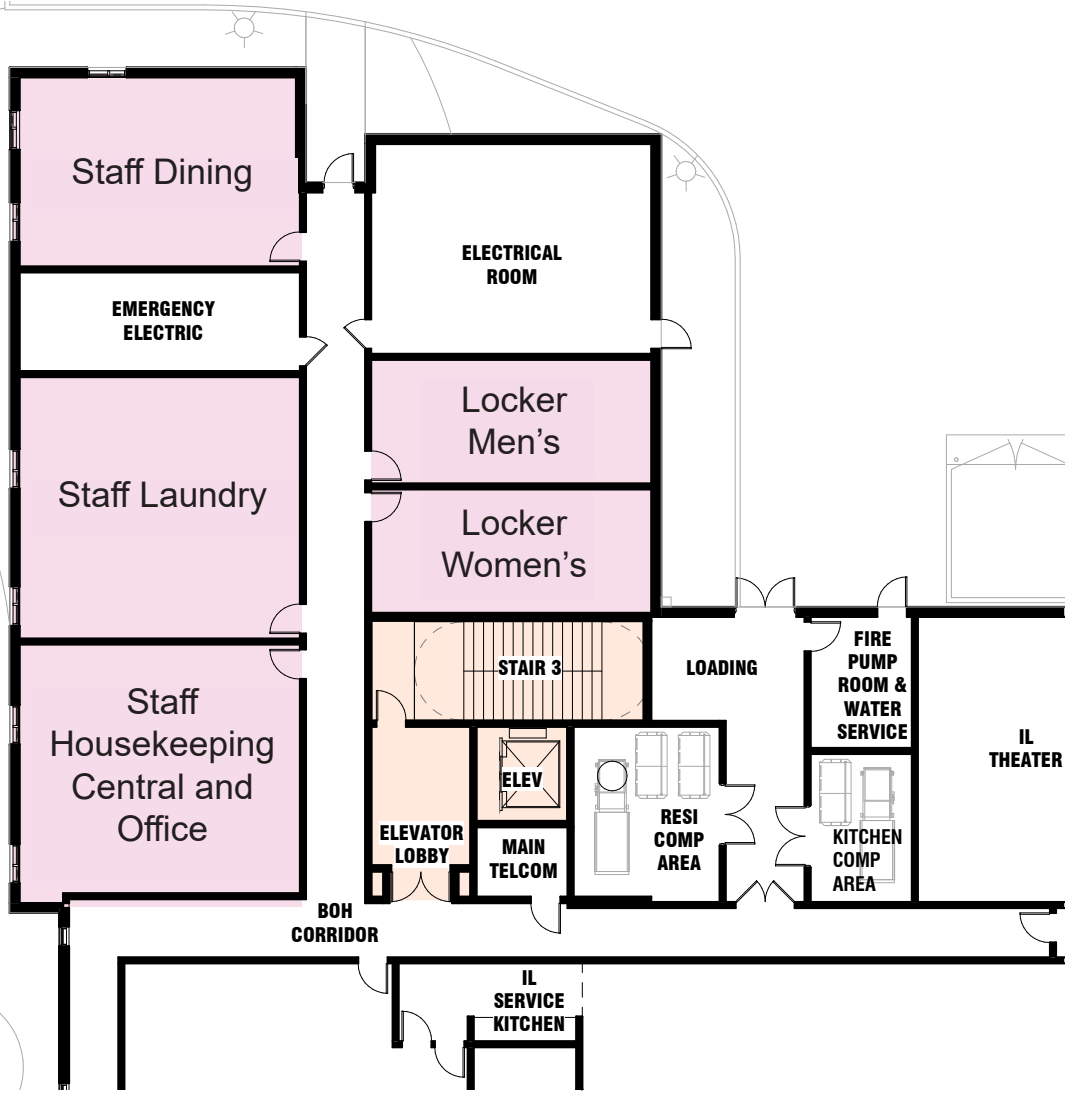
## Garage Plan

20 Bike Parking Spaces

20 Additional Future Bike Parking Spaces, as needed.



## Level 1 Plan



# Exterior Bicycle Parking

