

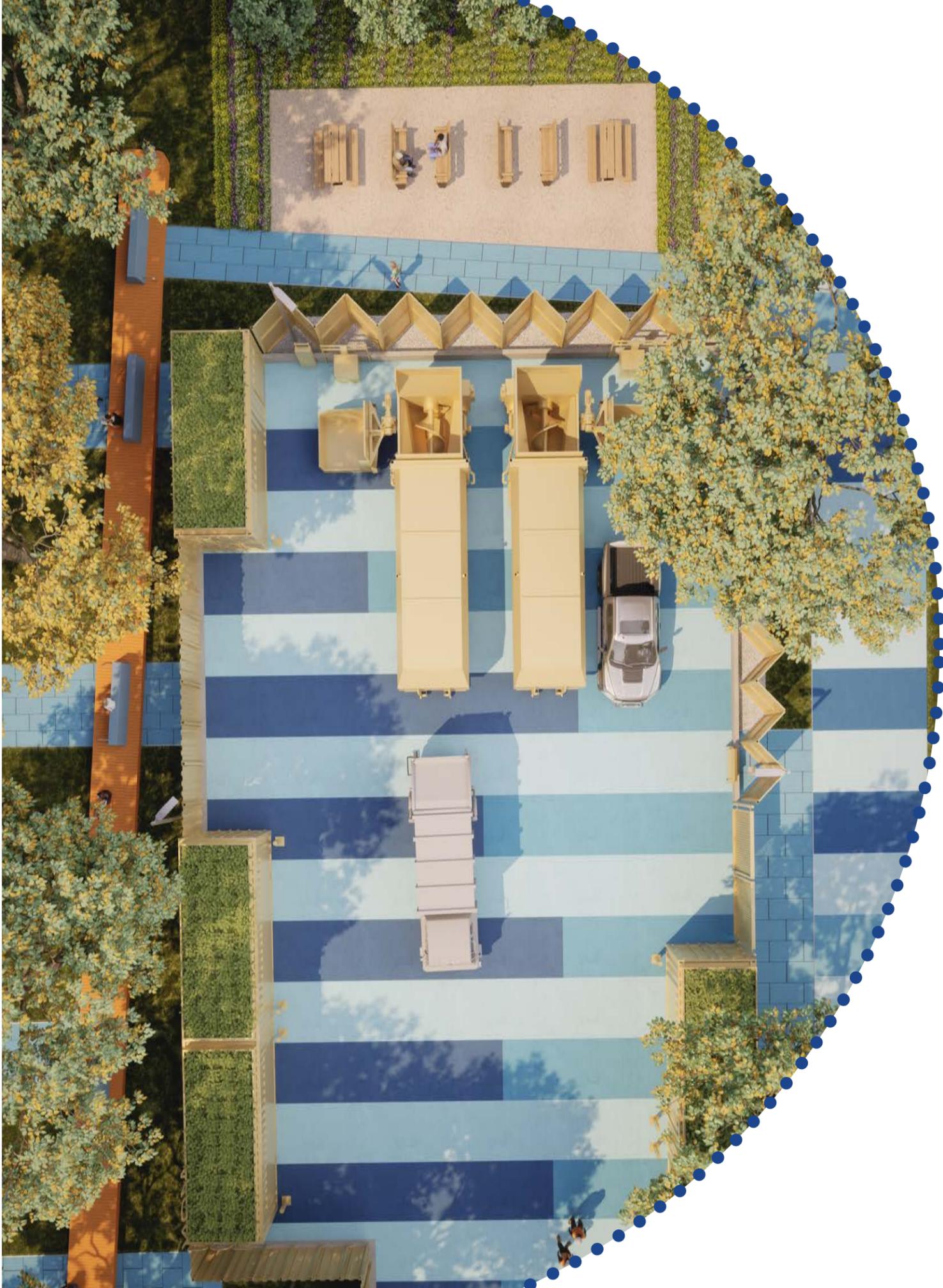
NYCHA Waste Yard Redesign

KIT OF PARTS



NDNY | ARCHITECTURE + DESIGN + PLD

grain collective



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FEASIBILITY STUDY

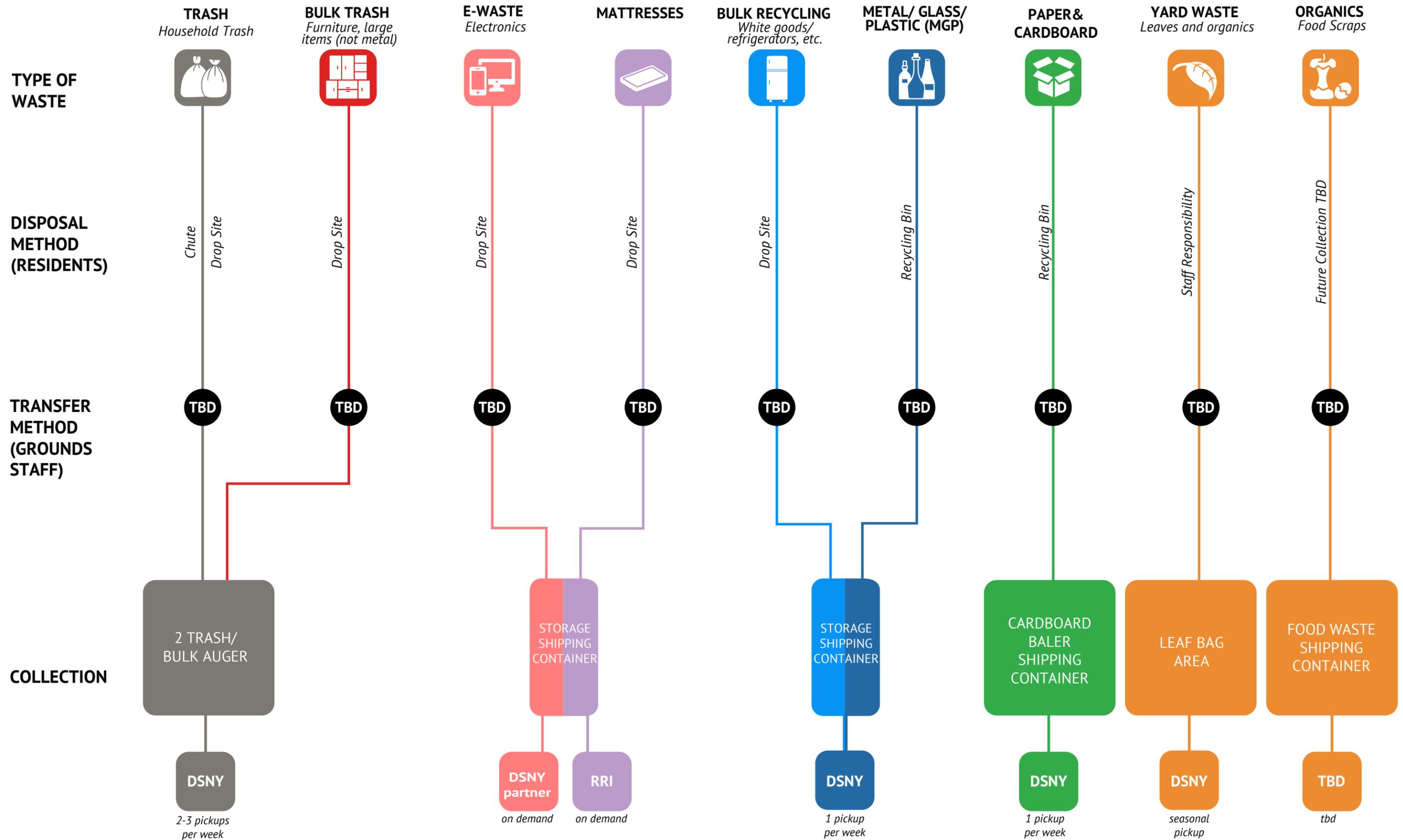
1 WASTE MANAGEMENT

a. Waste Calculation

| Size | Tons/week of trash from NYCHA waste information* | Auger for trash and bulk | Collections/ week (assuming 120% trash to include bulk, and under 10 tons / pickup) | Metal, Glass & Plastic Recycling Storage | Cardboard Recycling Storage | Organic Waste Storage | Mattress and e-waste storage |
|--------------------|--|---|---|--|---|--|------------------------------|
| Small Site | Under 16 tons | 2 x 32 CY | up to 2 pickups/ week | 20' shipping container | 20' insulated shipping container with baler, unless part of cluster | 20' insulated shipping container with utilities | 20' container |
| Medium Site | 16 to 28 tons | 2 x 40 CY (or 32 CY if space constrained) | 3-4 pickups / week | 40' shipping container or Roll-Off "dog-house" container | 20' insulated shipping container with baler, unless part of cluster | 20' insulated shipping container with utilities | 20' container |
| Large Site | 28 to 45 tons | 2 x 40 CY | 4-6 pickups /week | Roll-Off "dog-house" container | as above or roll-off cardboard compactor | 20' or 40' insulated shipping container with utilities | 20' container |

1 WASTE MANAGEMENT

b. Proposed Waste Flow



1 WASTE MANAGEMENT

c. Proposed Waste Equipment

| Waste type | Equipment | Basis of Design | Electrical | Water | Sanitary | Data TBD |
|---|--|--|--|--------------|----------------|-----------------------|
| Trash and Bulk | Stationary auger compactor | Komar Industries EM 40-G | 480 V with step-up transformer, 3 phase, 4 wire 200 amps (as per NYCHA specs to be provided by the manufacturer) | n/a | n/a | BMS connection |
| | 32-40 CY receiving container | | n/a | n/a | n/a | n/a |
| | Waste Dumper | Fork Style Dumper (custom version similar to this) | TBD | n/a | n/a | n/a |
| Metal, Glass, Plastic (including Bulk metal) | 40' shipping container | Standard shipping container with custom roll doors on long side | n/a | n/a | n/a | n/a |
| Metal, Glass, Plastic (including Bulk metal) | 20' shipping container | Standard shipping container with custom roll doors on long side | n/a | n/a | n/a | n/a |
| Metal, Glass, Plastic (including Bulk metal) | 30 CY roll-off container with recycling lid | CooperTank Recycling BarnRoof Container | n/a | n/a | n/a | n/a |
| Cardboard and Paper | 20' insulated shipping container with roll gate and baler | Orwak 3120 | Single Phase 230 V, 50 Hz, 10 A | n/a | n/a | BMS connection |
| Cardboard and Paper | 20' shipping container with roll gate and electricity supply for baler | Standard shipping container with custom roll doors on long side | Single Phase 230 V, 50 Hz, 10 A | n/a | n/a | BMS connection |
| Food Waste (future equipment, provide utilities to support) | 20' insulated shipping container with roll gate | D1000 WasteStation Pulper | 208V / 3 Phase / 16 amps | cold 0.6" | yes | yes |
| | | Harp CX 5 | 208V / 3 Phase / 63 amp | n/a | for condensate | n/a |
| | | Utility sink and water heater | | hot and cold | plumbing | |
| E-waste and Mattresses | 20' shipping container with roll gate | | n/a | n/a | n/a | n/a |

1 WASTE MANAGEMENT

c. Proposed Waste Equipment



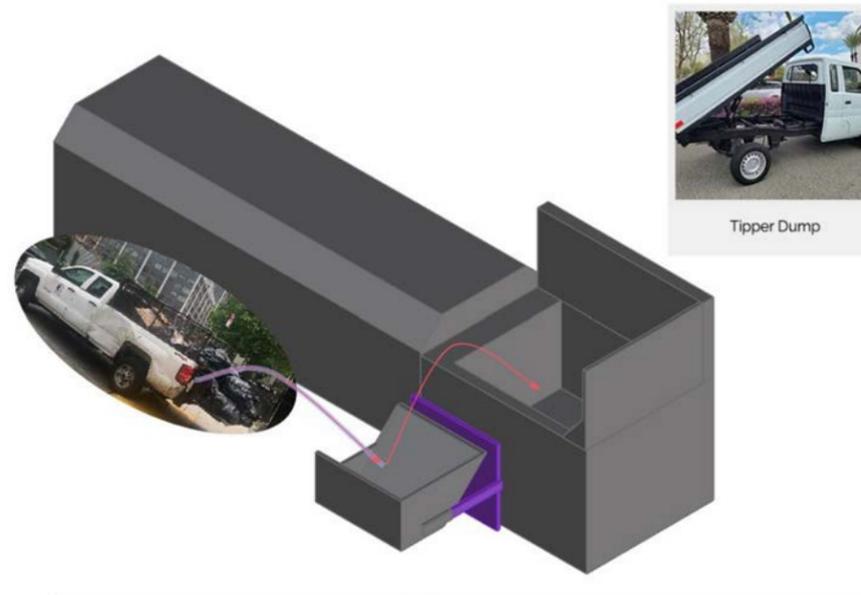
Shipping Container Storage



Qr Code For Auger Video



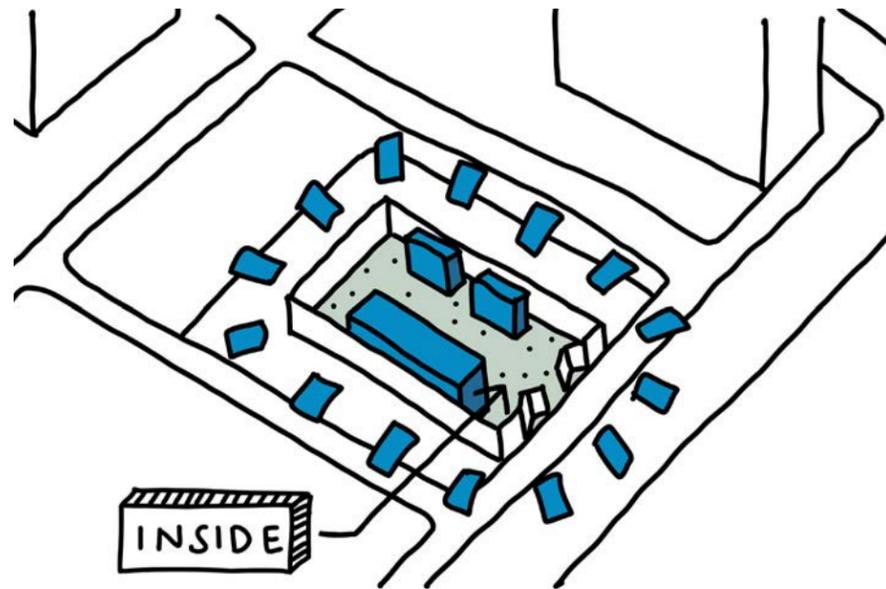
Auger Compactor (Bulk + Trash)



MGP Roll off- 'doghouse'

2 DESIGN SCOPE & STRATEGY

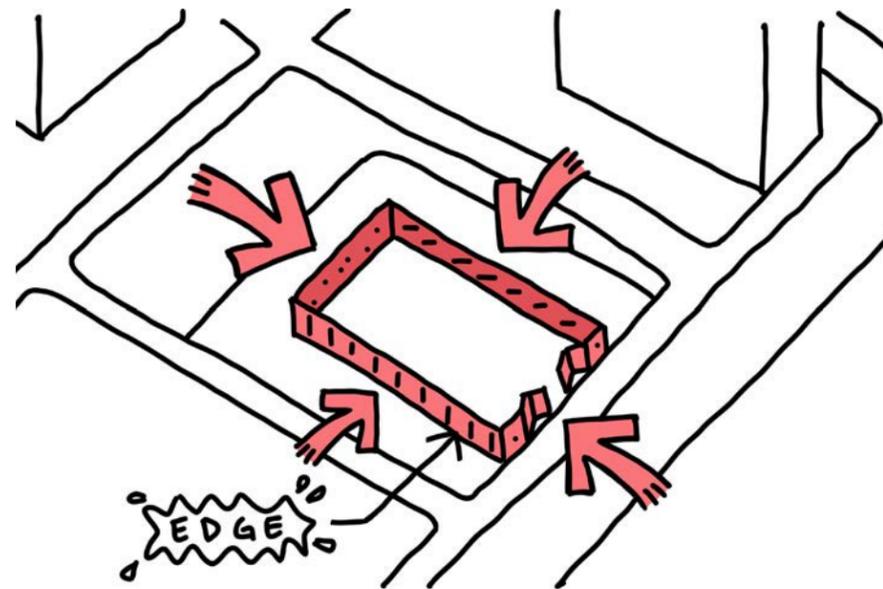
a. Interventions



INSIDE YARD IMPROVEMENTS

- Equipment upgrades
- Increased capacity for waste
- Improved Internal circulation (NYCHA Staff & DSNY)

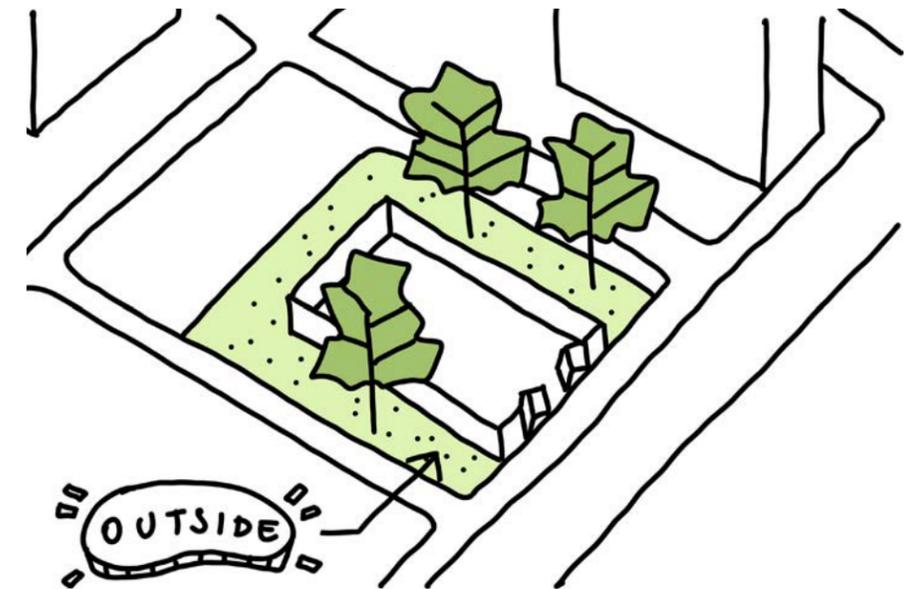
*Design in process and in conversation with DSNY, NYCHA Operations, and Property Management Team



EDGE IMPROVEMENTS

- Visual Appeal
- Safety and Security
- Signage/ Branding
- Visibility
- Community Pride

*Resident Input Needed



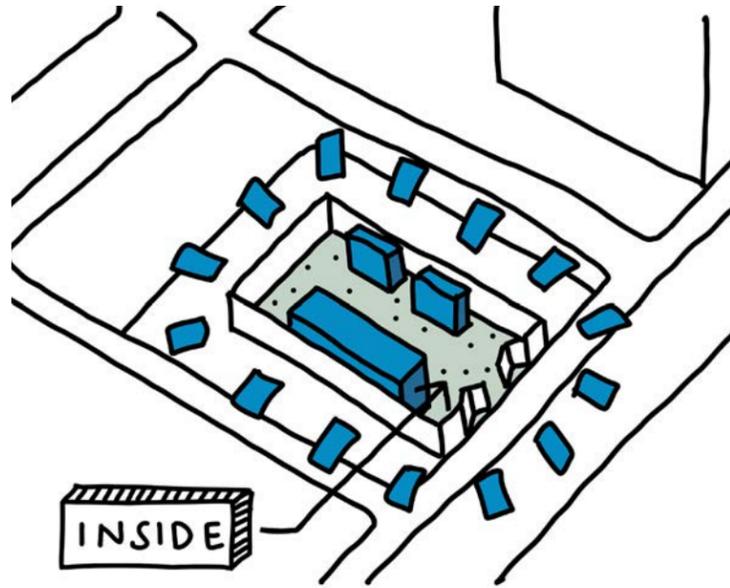
OUTSIDE YARD IMPROVEMENTS

- New and Improved Spaces
- Resident Amenities
- Eyes on the Street

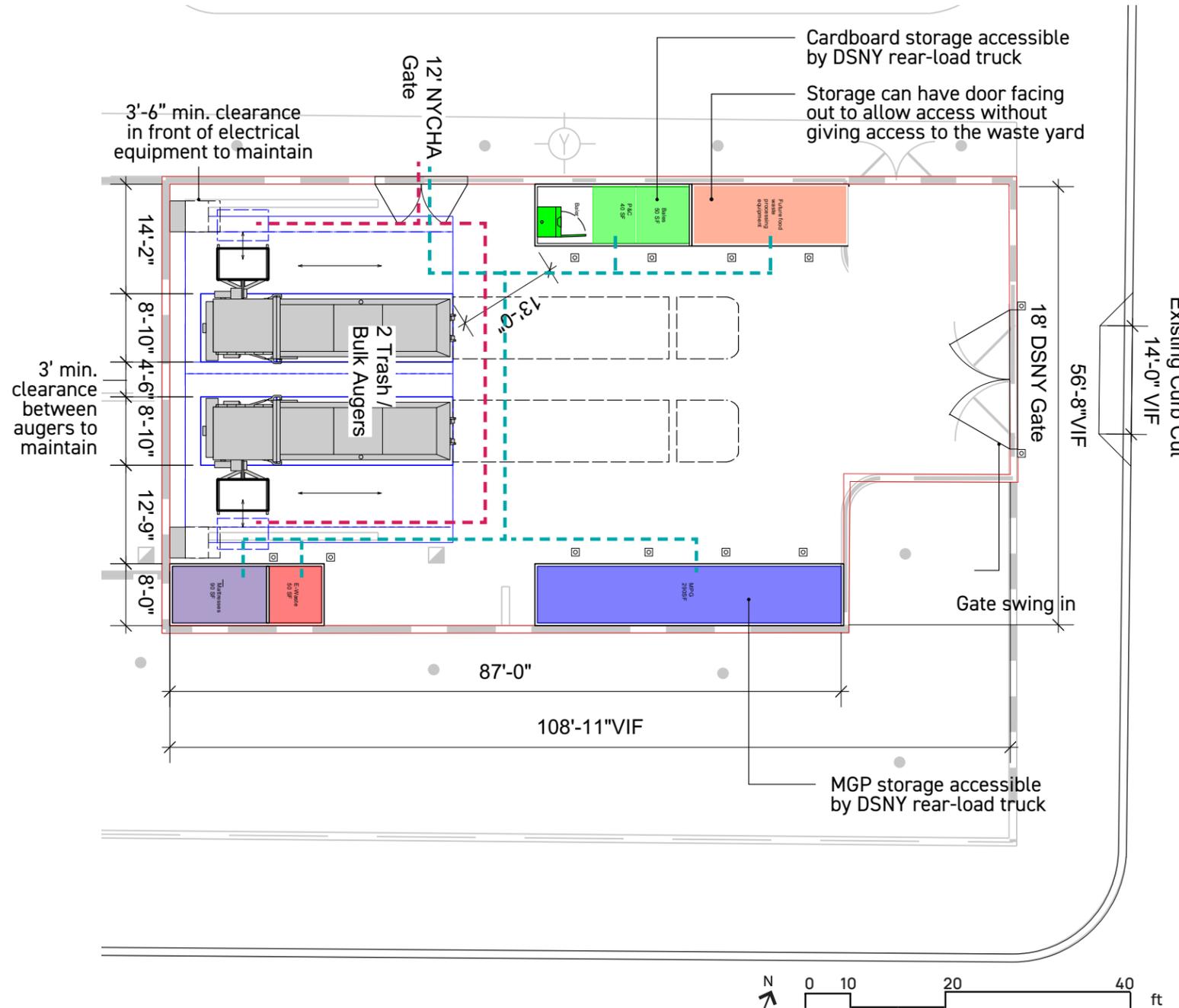
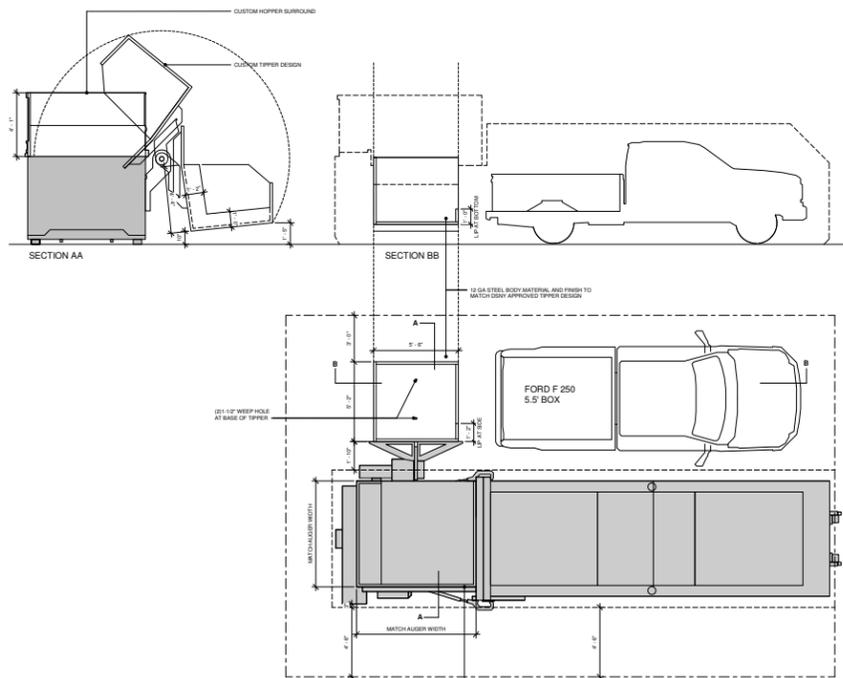
*Resident Input Needed

2 DESIGN SCOPE & STRATEGY

b. Inside Yard Improvements



AUGER COMPACTOR WITH CUSTOM TIPPER



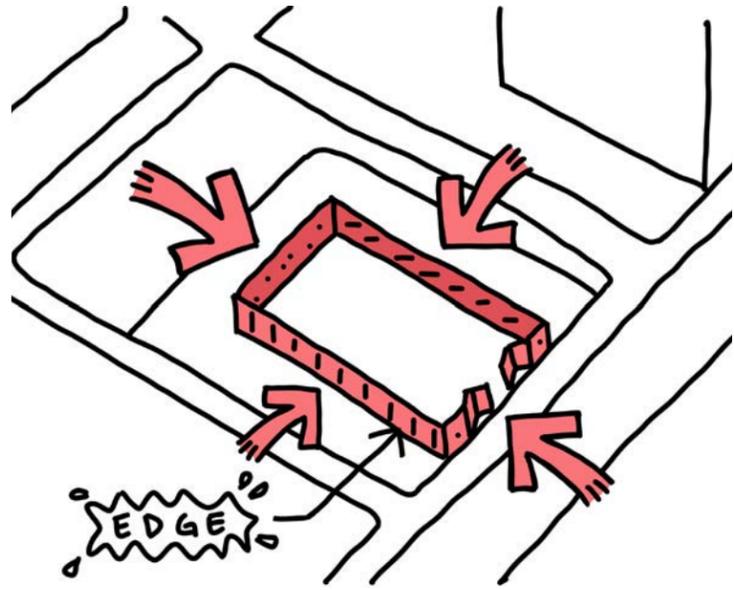
- Notes:
1. Locking system and electrified rolling doors will be provided at each container.
 2. BMS system that is compatible to the existing system will be provided.

LEGEND

- FOOD WASTE PROCESSING EQUIPMENT
- BALES PAPER, CARDBOARD
- CARDBOARD BALER
- MATTRESS STORAGE
- E-WASTE STORAGE
- MGP
- AUGER COMPACTOR
- NYCHA TRUCK ROUTE FOR AUGER AND MGP DOGHOUSE
- NYCHA TRUCK ROUTE FOR CONTAINER STORAGE

2 DESIGN SCOPE & STRATEGY

c. Edge Improvements



Corrugated fence



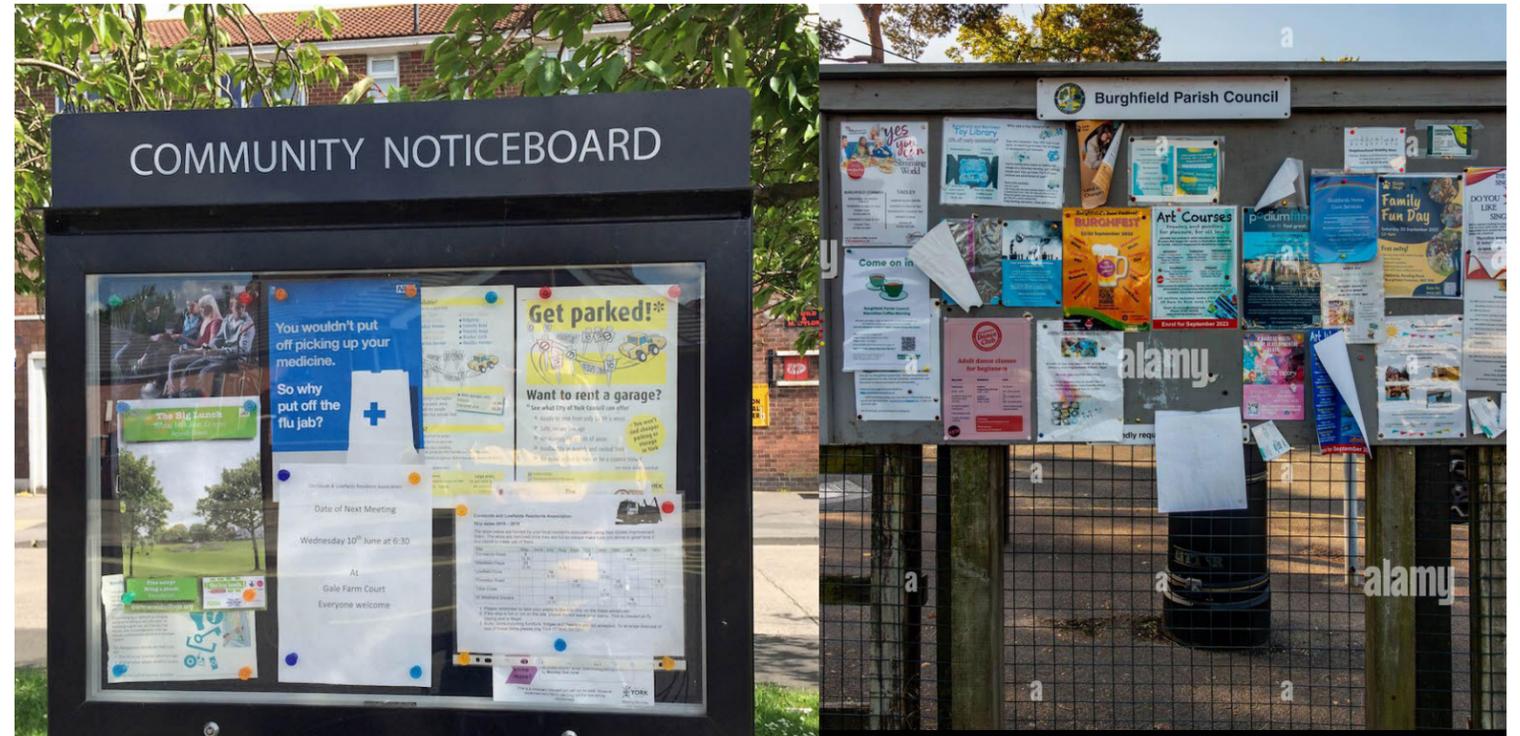
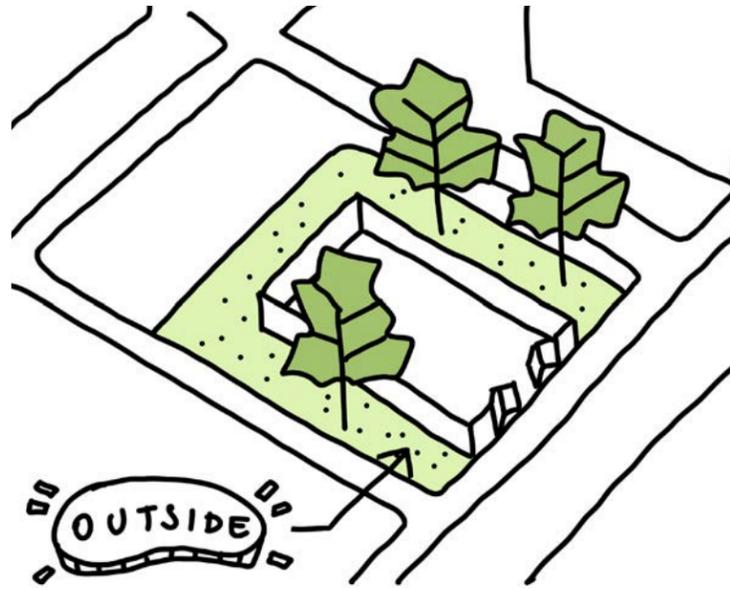
Folded fence



Branding on shipping container facade

DESIGN SCOPE & STRATEGY

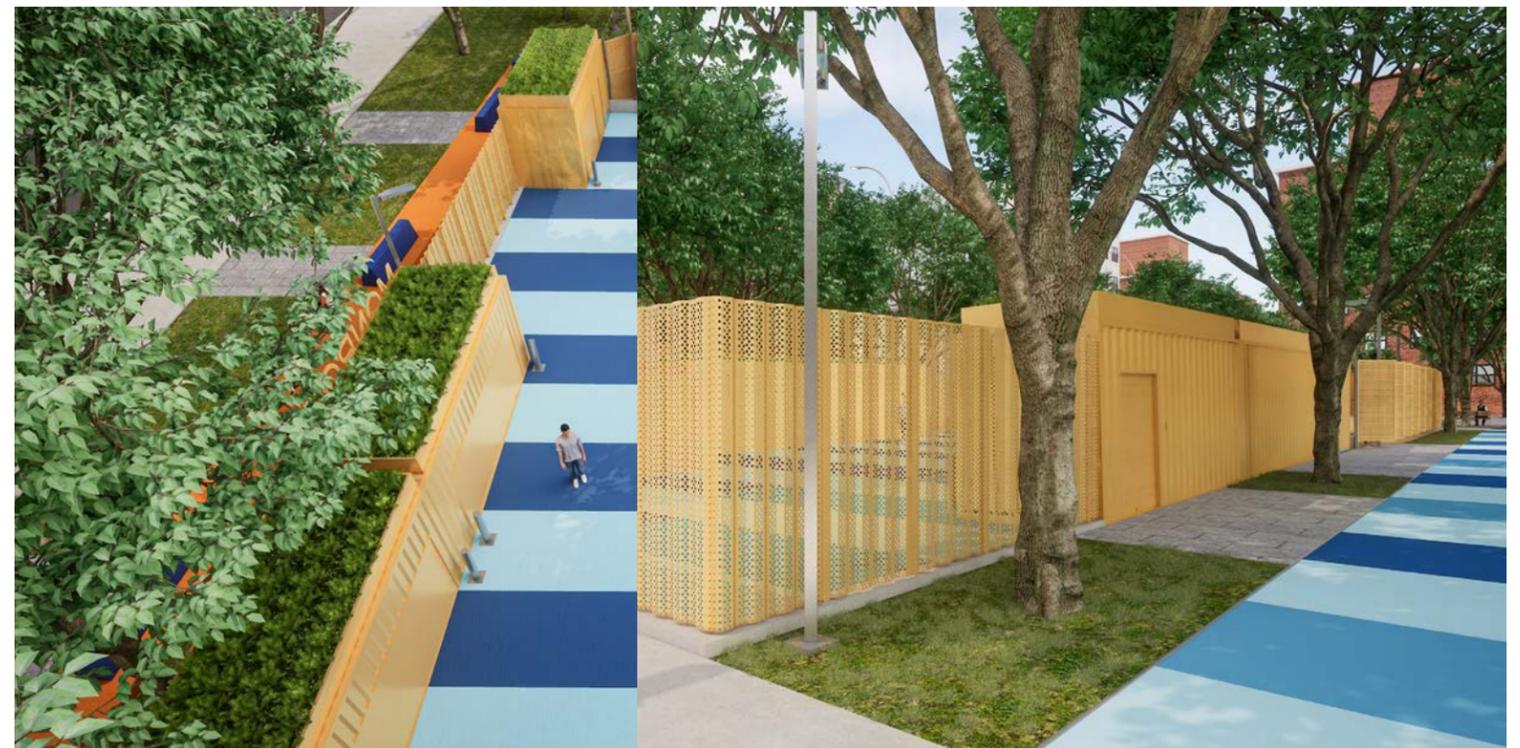
d. Outside Yard Improvements (Where Applicable)



Interactive/ Informational Boards



Seating/Lounging



Green/Planting