

BROOKLINE HIGH SCHOOL EXPANSION

TRANSPORTATION BOARD MEETING
October 2, 2019



TRANSPORTATION BOARD MEETING

AGENDA

BHS Expansion Project Streetscape Improvements

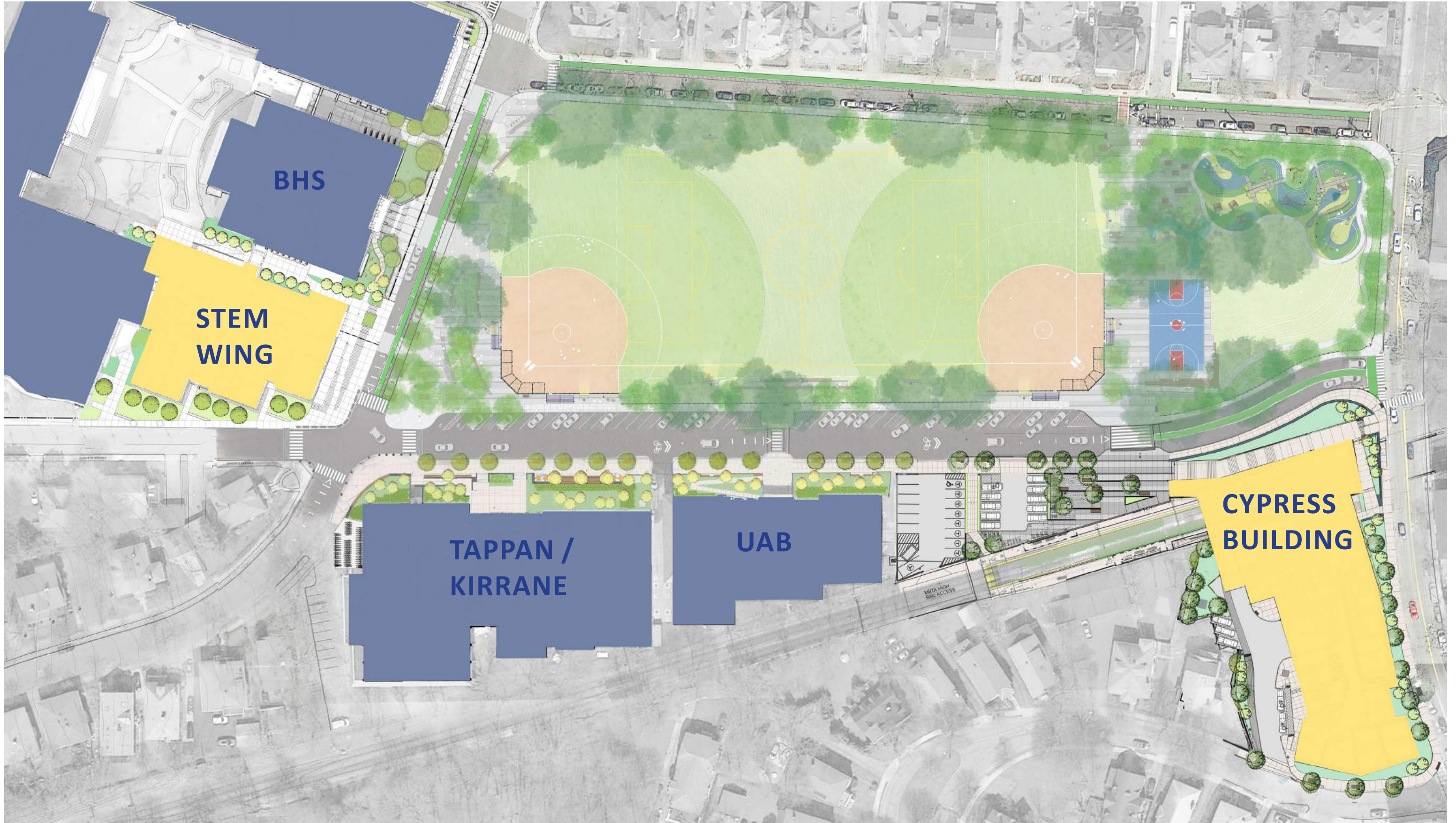
- Pedestrian
- Bicycle
- Vehicular / Parking



BROOKLINE HIGH SCHOOL CAMPUS



CAMPUS PLAN



PEDESTRIAN IMPROVEMENTS

KEY IMPROVEMENTS



1. WIDEN TAPPAN STREET SIDEWALK

A major pedestrian sidewalk links the new Cypress Building with the main high school building.

2. RAISE CROSSWALKS ALONG TAPPAN STREET

Raised crosswalks calm traffic and provide safer crossings at the UAB building and new Cypress Building.

3. DIRECT CONNECTION TO THE MBTA STATION

A direct pedestrian path links Davis Street to the Brookline Hills T station.

4. SEATING AND GATHERING ALONG TAPPAN

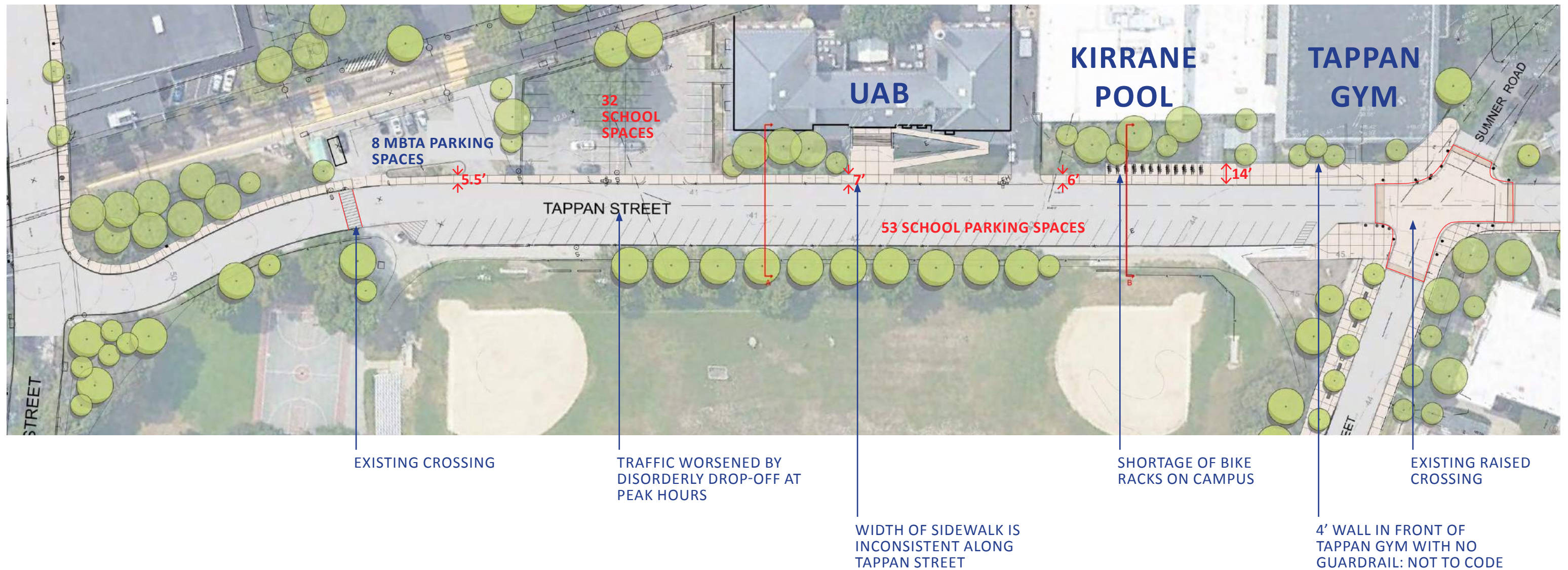
New seating areas at STEM, Tappan/Kirrane, UAB, and the MBTA plaza welcome pedestrians and provide gathering and waiting areas for students, staff, and the community.

5. CURB BULB OUTS ALONG TAPPAN STREET

New curb bulb outs slow traffic and define drop-off areas increasing pedestrian safety.

EXISTING CONDITION: AN INCONSISTENT & UNWELCOMING EXPERIENCE

- Width of sidewalk is inconsistent along Tappan Street
- Current sidewalk width (6' wide generally) will not be sufficient for traffic flow to & from new Cypress Building

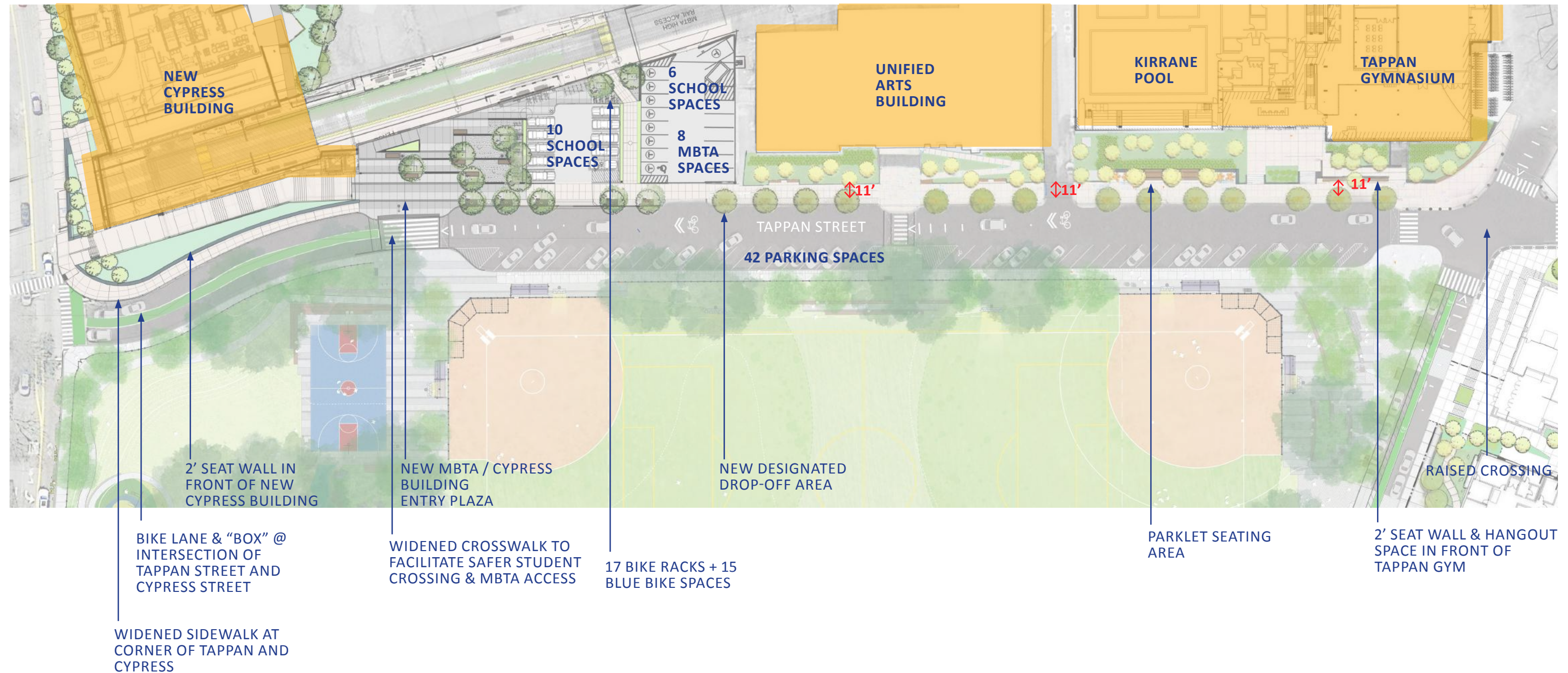


1/64" = 1'-0"



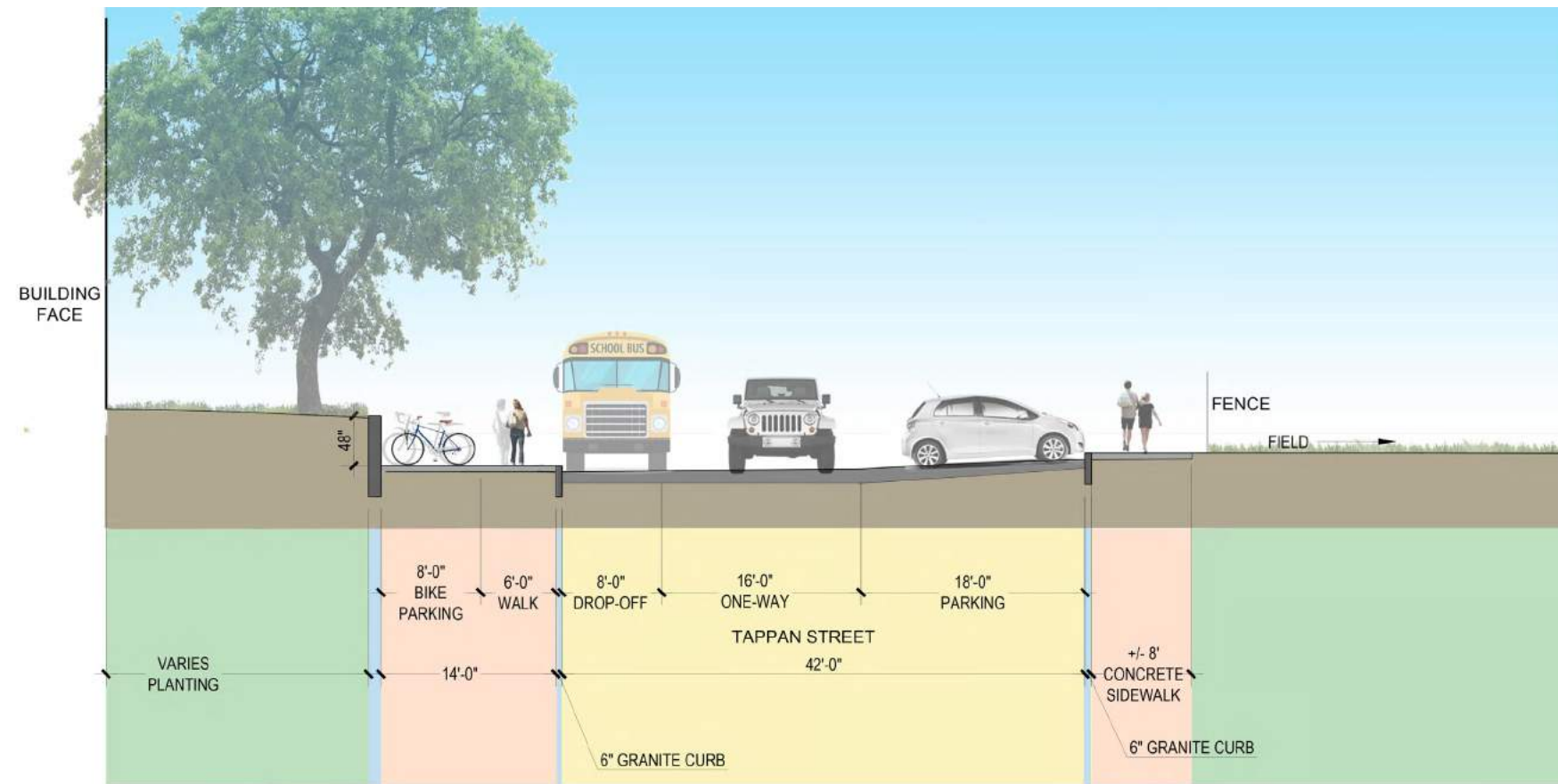
CREATE A UNIFIED CAMPUS: A TRANSFORMED TAPPAN STREETSCAPE

- The sidewalk has been increased from 6' to 11' wide continuously, with an additional 4' of planting and seating zone
- New trees along Tappan Street create continuity with Greenough facades
- Benches along Greenough Street popular with students; concept brought to Tappan Street

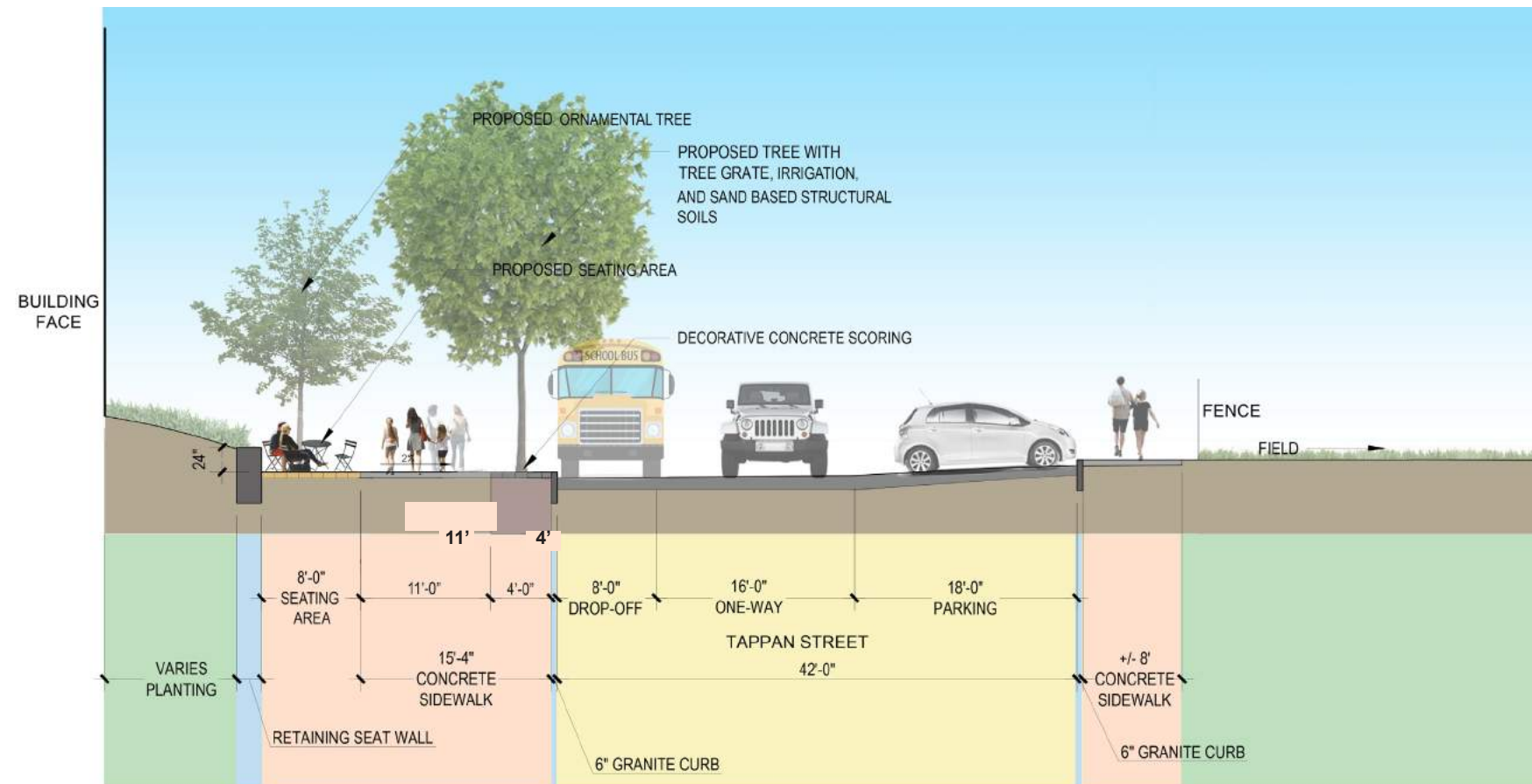


TAPPAN STREET SECTION AT KIRRANE POOL

EXISTING CONDITION



PROPOSED CONDITION

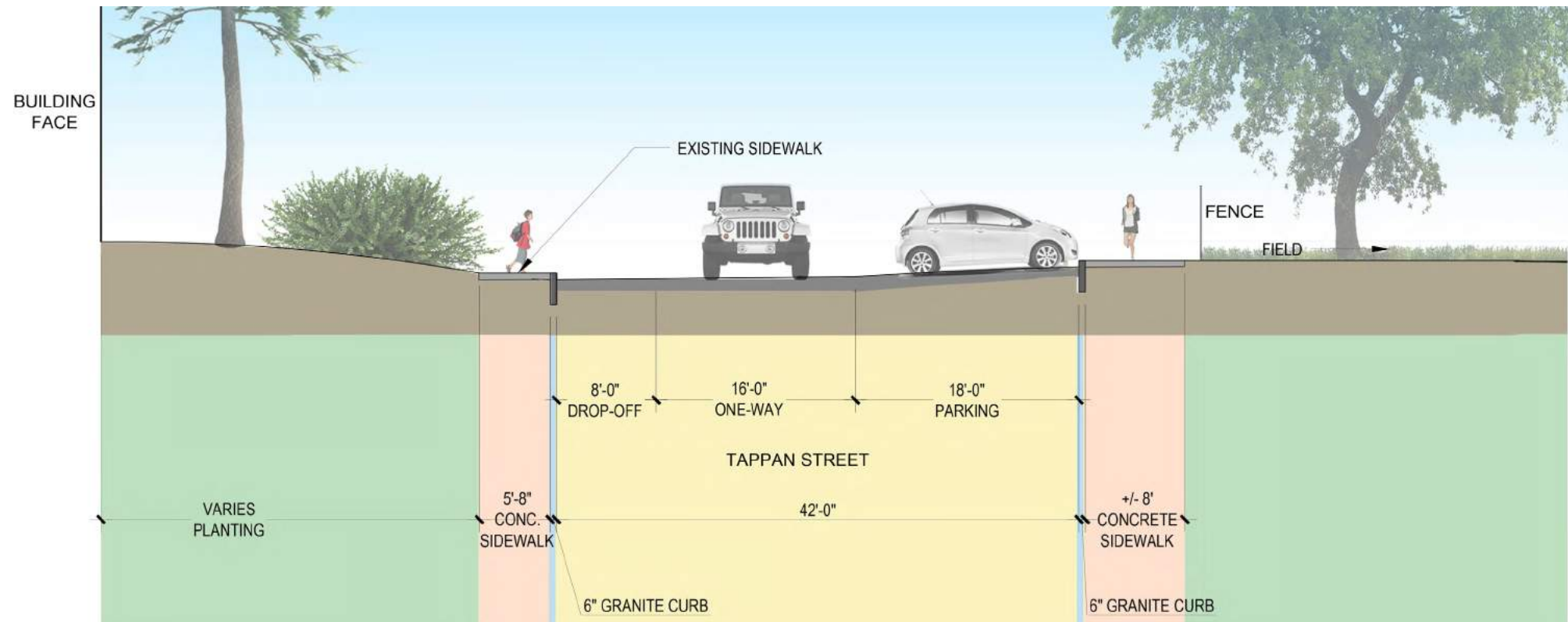


1/16" = 1'-0"

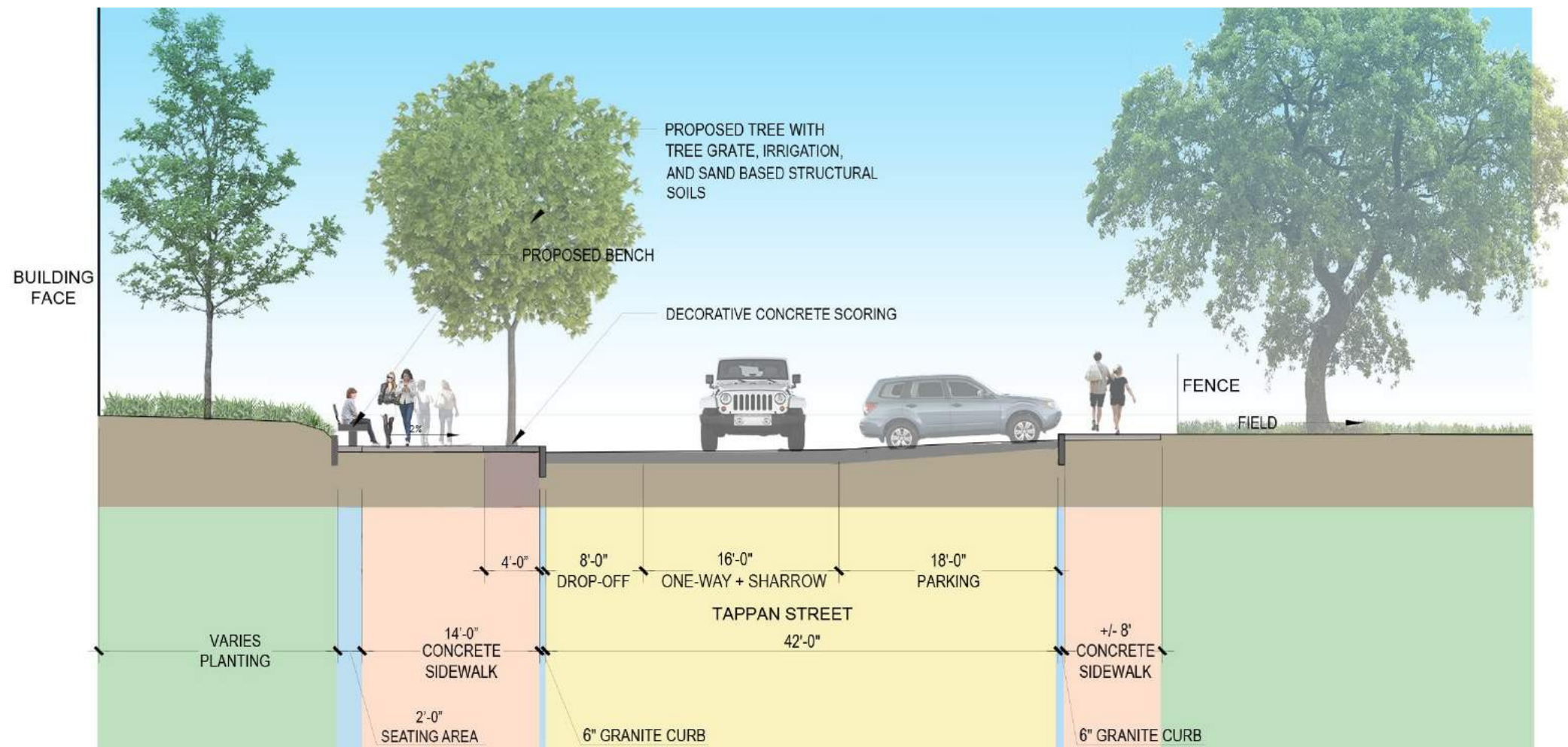


TAPPAN STREET SECTION AT UNIFIED ARTS BUILDING

EXISTING CONDITION



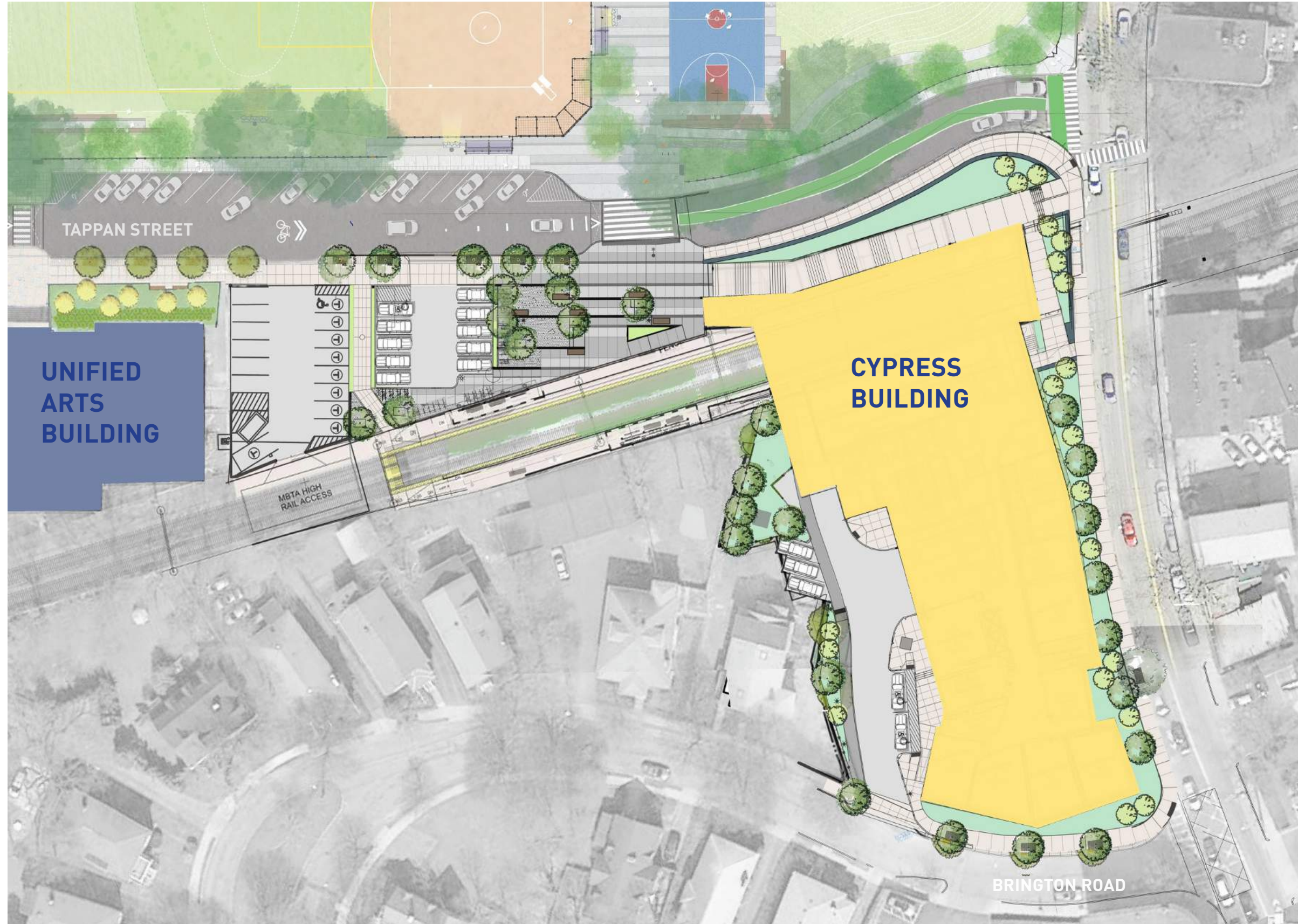
PROPOSED CONDITION



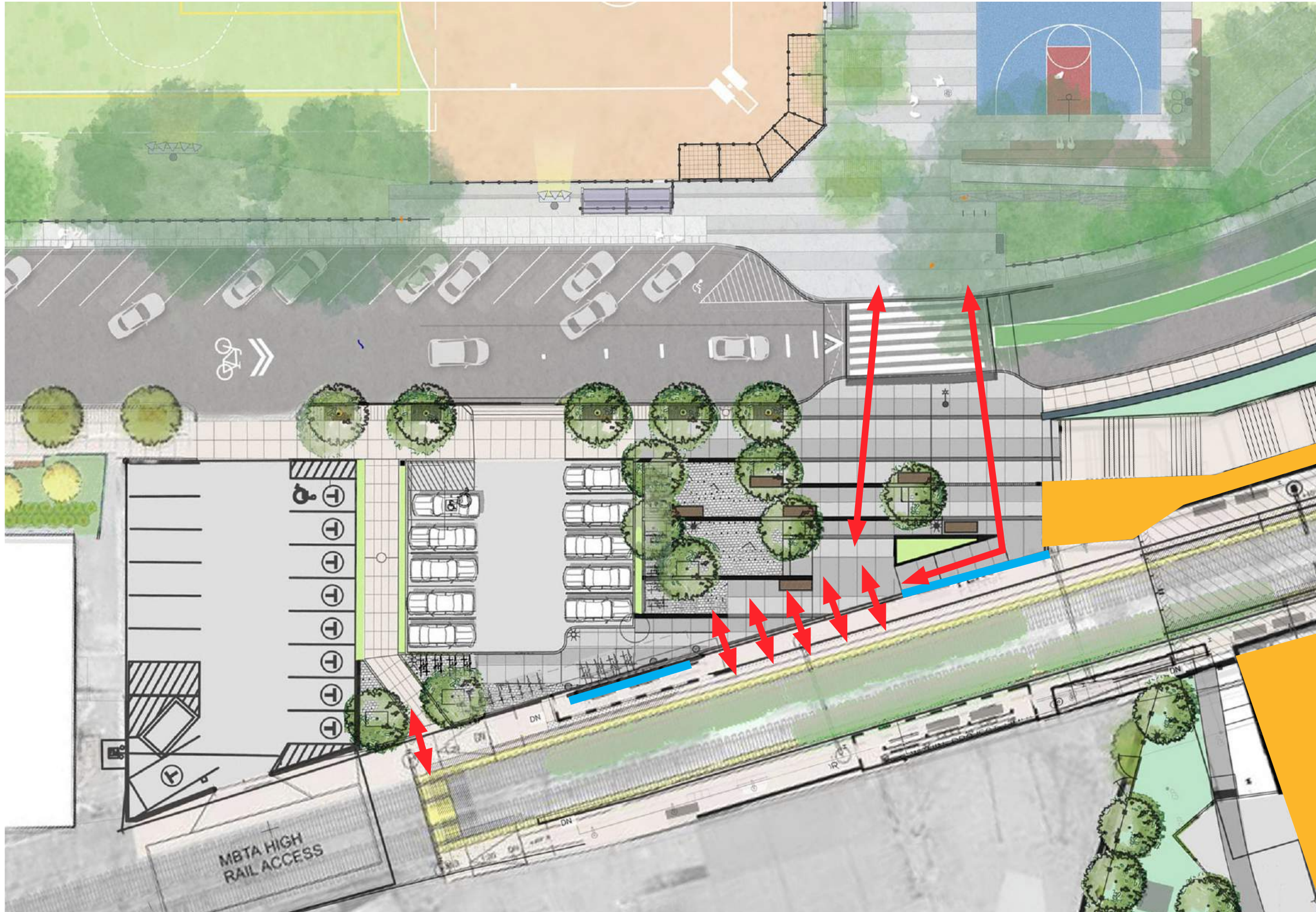
1/16" = 1'-0"



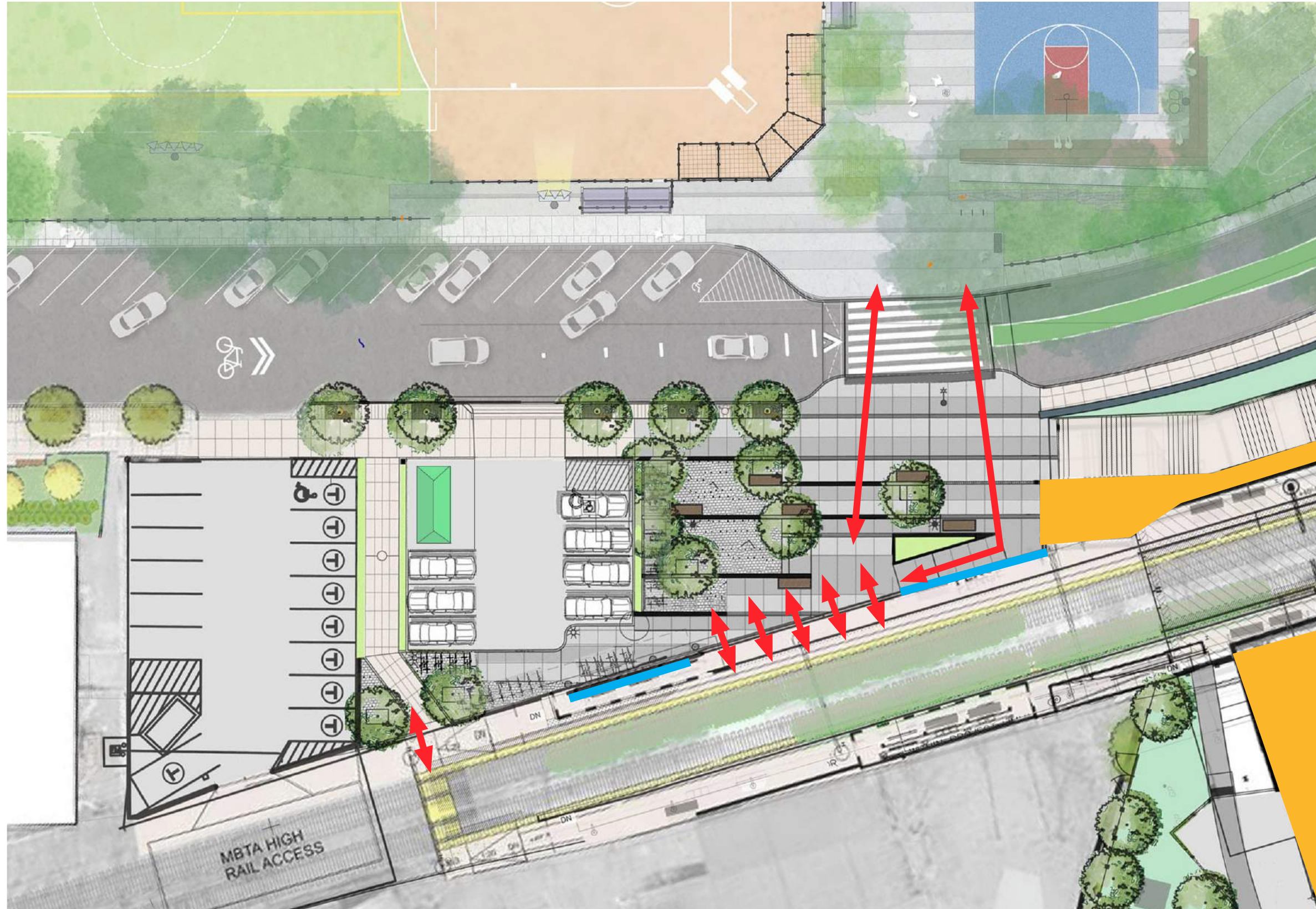
CYPRESS STREET SITE PLAN



MBTA / CYPRESS BUILDING ENTRY PLAZA



TEMPORARY FARE COLLECTION HUT

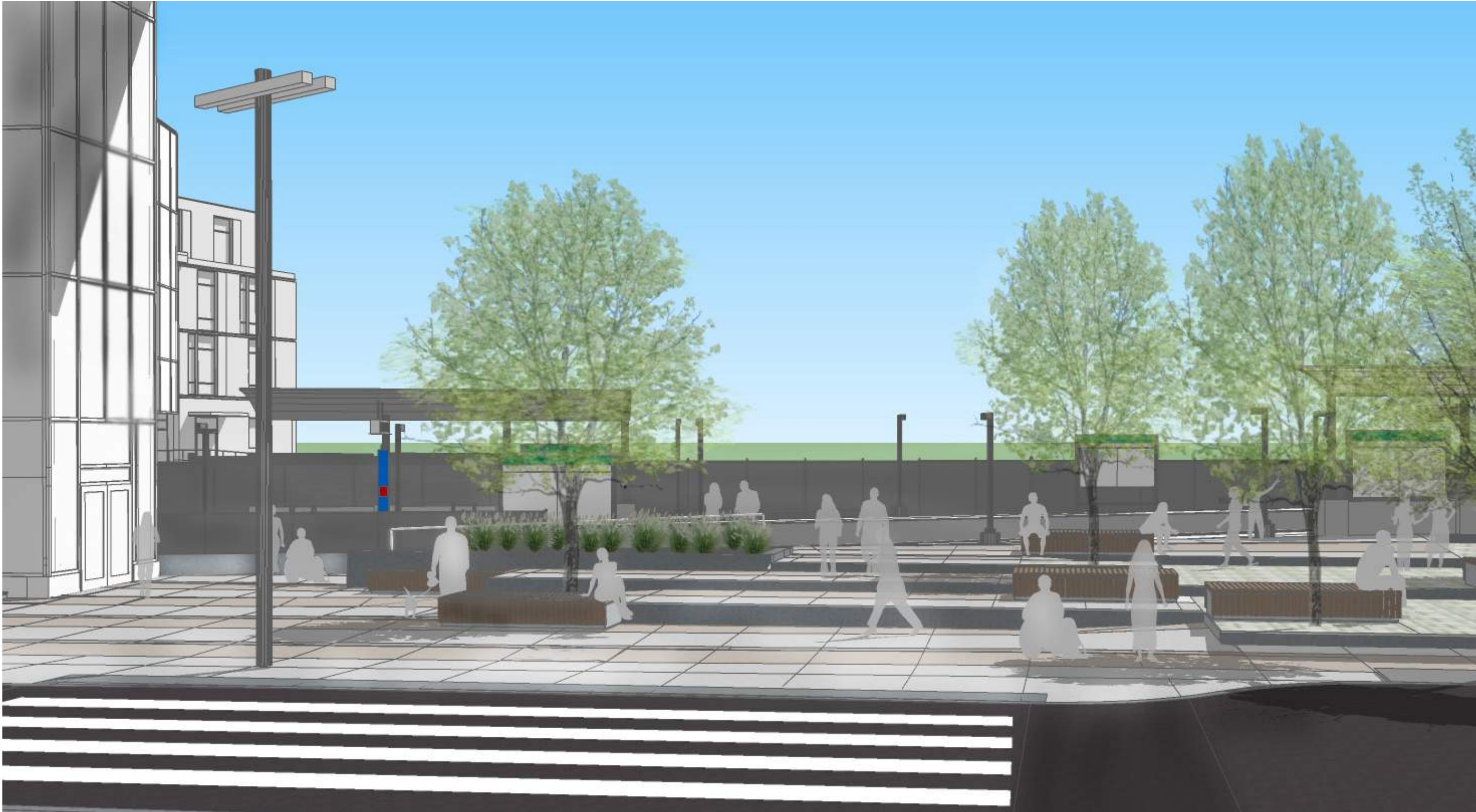


MBTA / CYPRESS BUILDING PLAZA EXISTING CONDITION



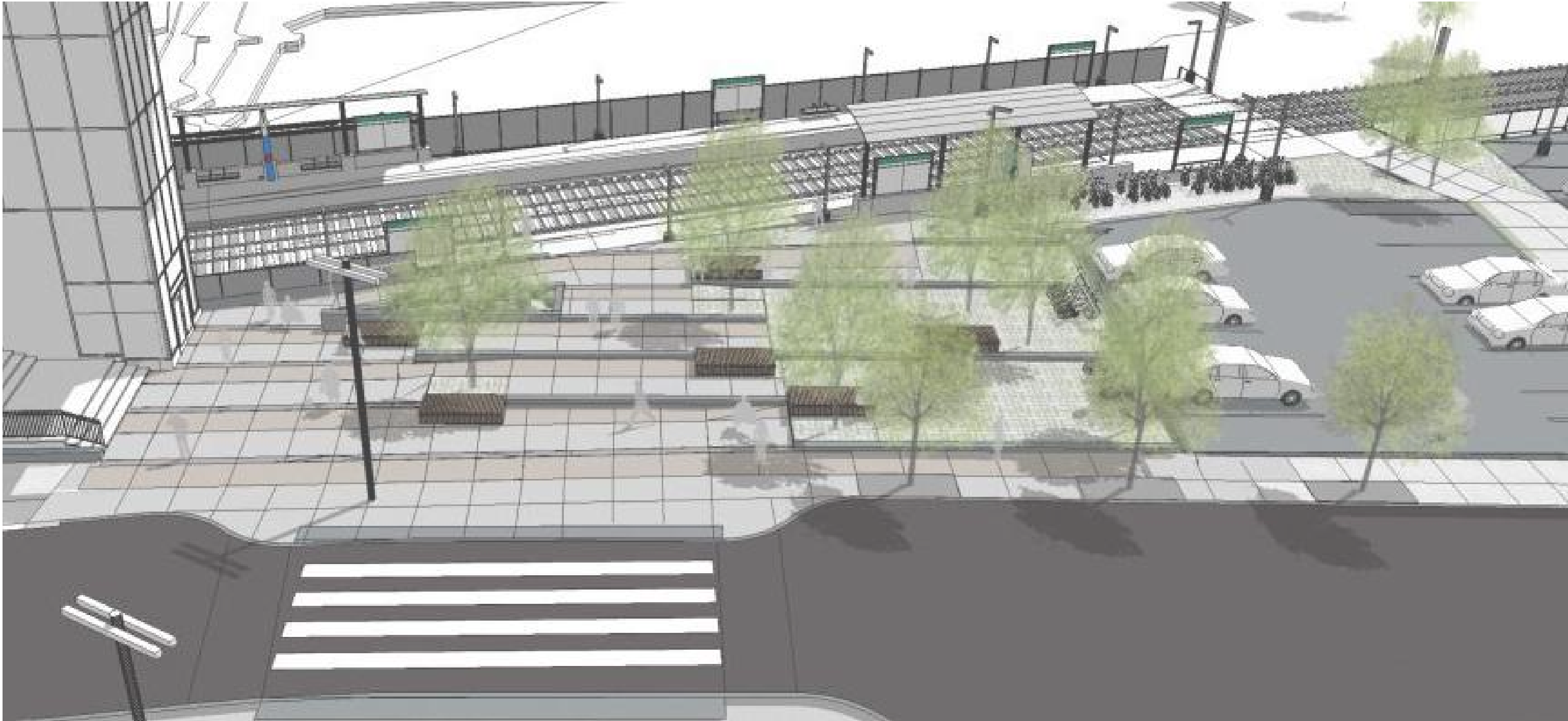
MBTA / CYPRESS BUILDING PLAZA DESIGN UPDATE

VIEW FROM TAPPAN ST CROSSWALK



MBTA / CYPRESS BUILDING PLAZA DESIGN UPDATE

AERIAL VIEW

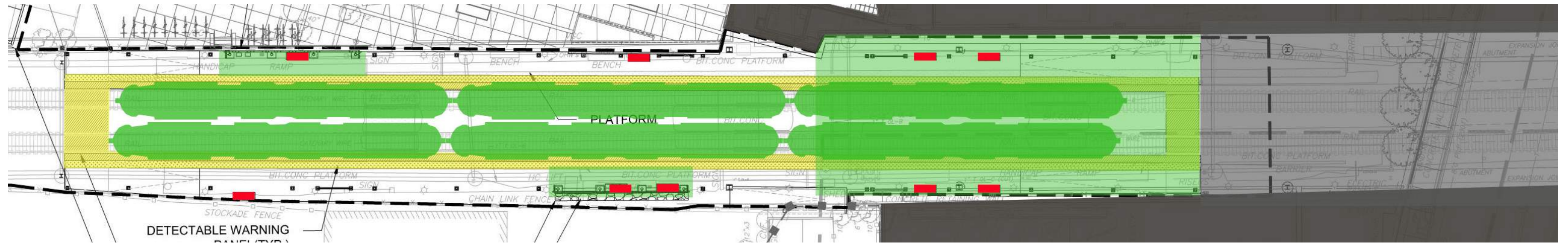


MBTA / CYPRESS BUILDING PLAZA DESIGN UPDATE

VIEW FROM BASE OF THE GRAND STAIRCASE



MBTA PLATFORM IMPROVEMENTS SUMMARY



EXISTING

CURRENT DESIGN

INBOUND PLATFORM

WEATHER PROTECTION SF:
BENCHES:

100 sq ft
18 lin ft

1,155 sq ft
30 lin ft

OUTBOUND PLATFORM

WEATHER PROTECTION:
BENCHES:

180 sq ft
22 lin ft

1,300 sq ft
25 lin ft

BIKE RACKS

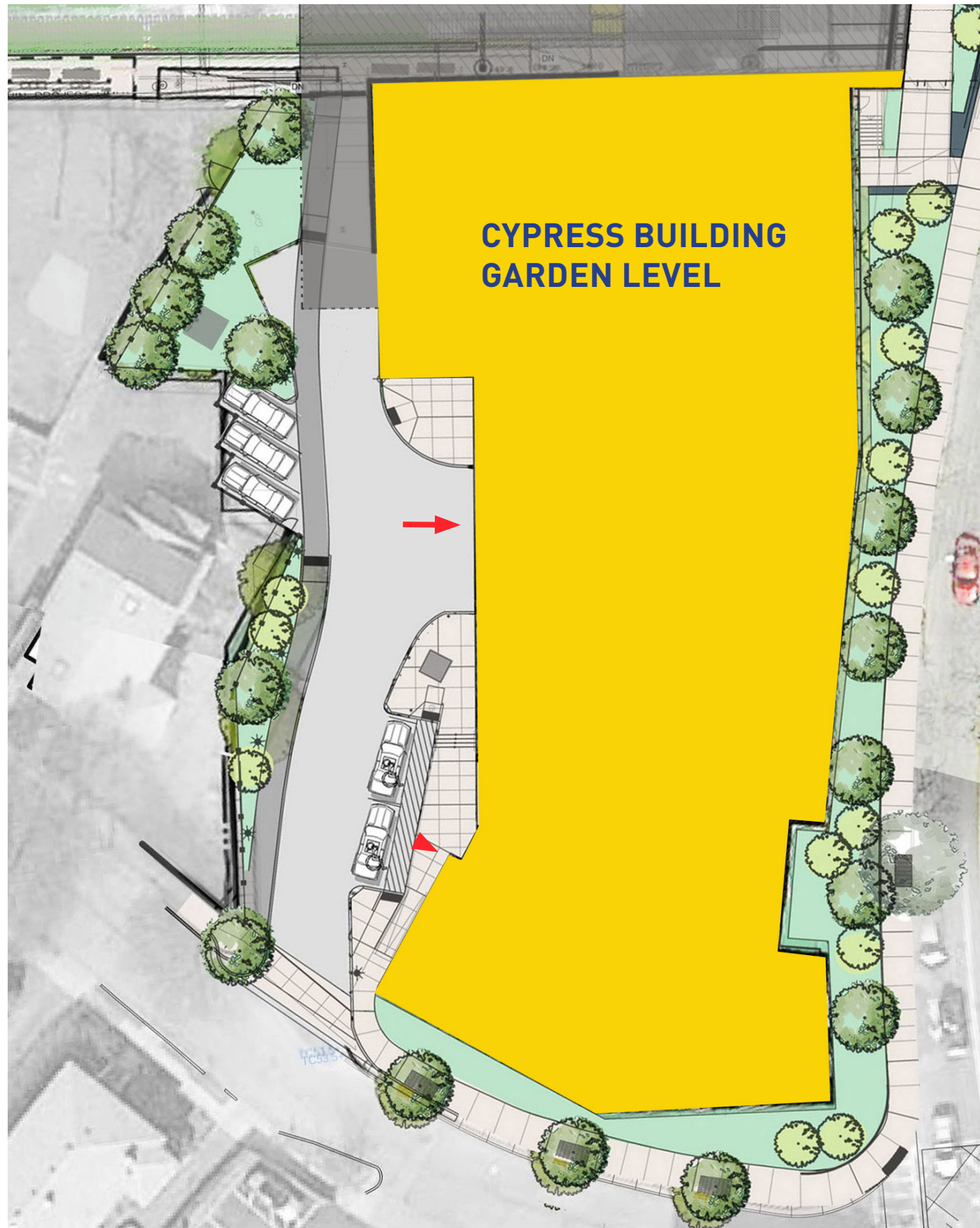
8 BIKES

32 BIKES

**1,225 riders / weekday (2014 MBTA Ridership and Service Statistics - 14th Edition)*



BRINGTON PATH - MBTA PLATFORM EGRESS



KEY IMPROVEMENTS

1. STRAIGHTER ROUTE

The accessible pathway has been straightened.

2. LANDSCAPE BUFFER

A landscape buffer provides more privacy for the neighbors to the west.

3. CURB BULB OUT MAINTAINED

Existing traffic calming curb profile relocated on Brington Rd.

4. ANGLED PARKING

Three deeded parking spaces have been angled for easier access.

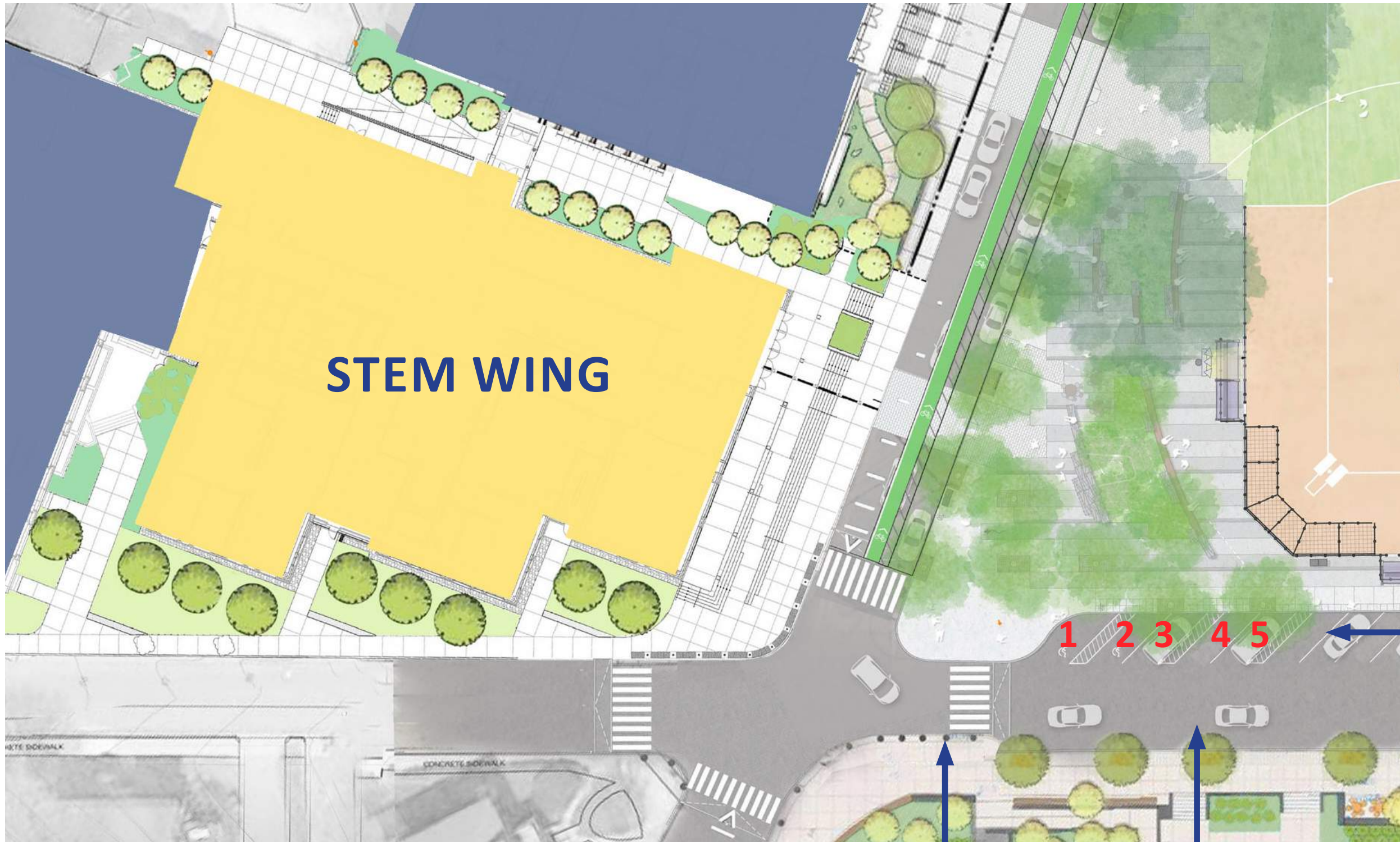
5. LOW LIGHT LEVELS

The lighting design meets code required light levels and provides a safe pedestrian environment at night. Lights are aimed away from the adjacent residence.

BRINGTON PATH / MBTA PLATFORM EGRESS - LIGHTING



TAPPAN AND GREENOUGH STREET INTERSECTION



STEM WING

1 2 3 4 5

**5 ACCESSIBLE
PARKING
SPACES**

**CURB BULB
OUT DEFINES
DROP OFF ZONE**

**PARKING SPACE
REMOVED**



CYCLING IMPROVEMENTS



CYCLING IMPROVEMENTS

KEY IMPROVEMENTS



1. COMPLETE GREEN ROUTES AT BROOKLINE HIGH

Bike lanes on Davis, Greenough, and Tappan link Brookline's Green Routes around Cypress Field

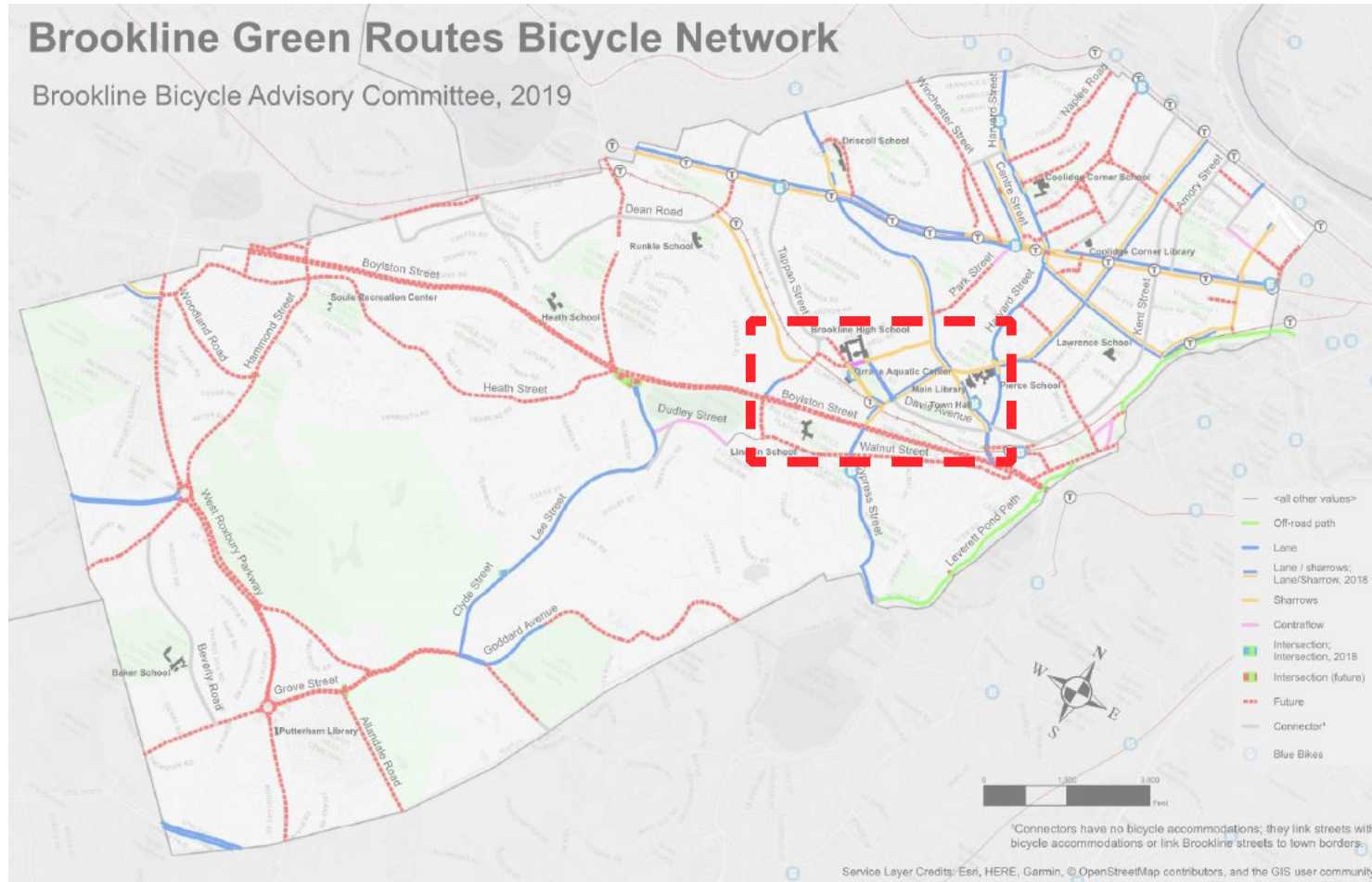
2. IMPROVE BIKE SAFETY ON BHS ROADWAYS FOR THE COMMUNITY





Bike lanes on Davis St, Greenough Street, and Tappan Street improve bicycle safety.

3. INCREASE BIKE PARKING CAPACITY BY 67%

89 bike parking spaces have been added to the BHS campus.

CYCLING IMPROVEMENTS



-  **CONTRAFLOW**
-  **SHARROWS**
-  **LANE**
-  **FUTURE**
- BB** **BLUE BIKES**

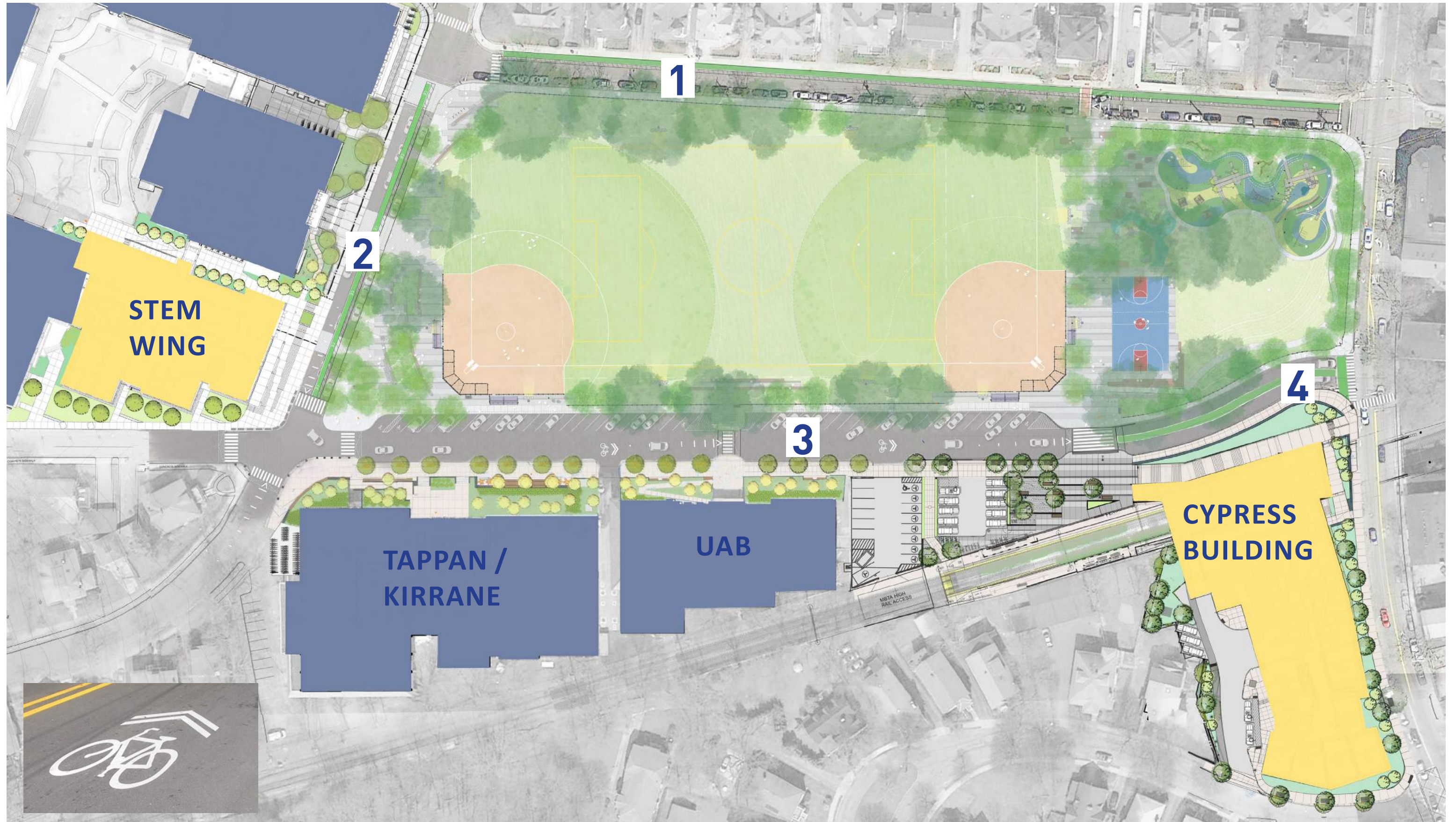


GREEN ROUTES - CURRENT

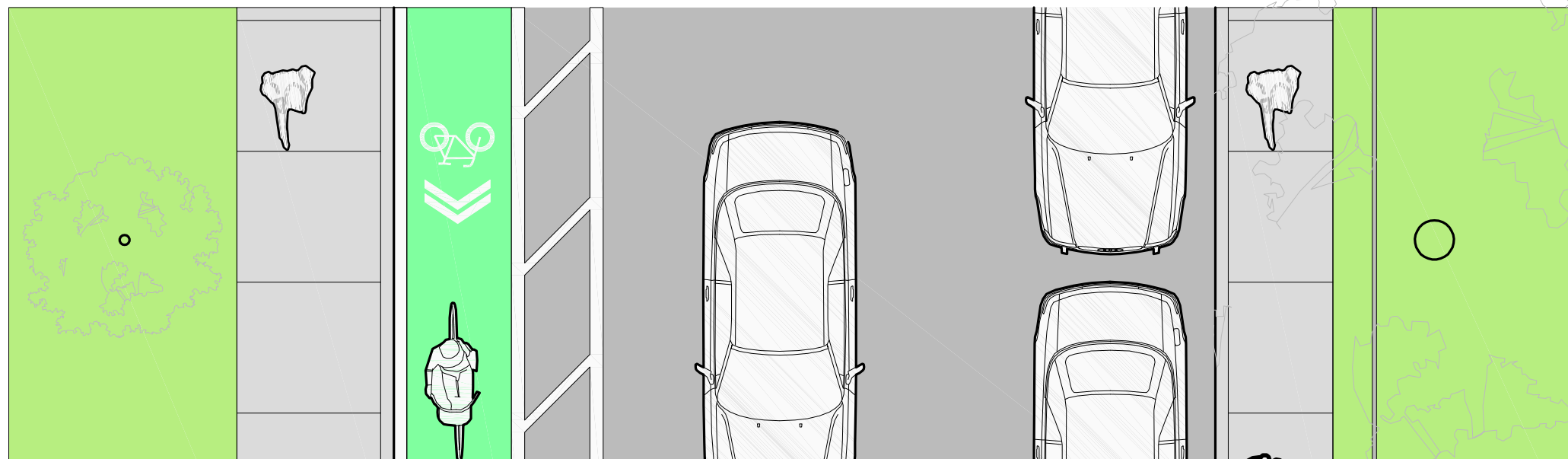
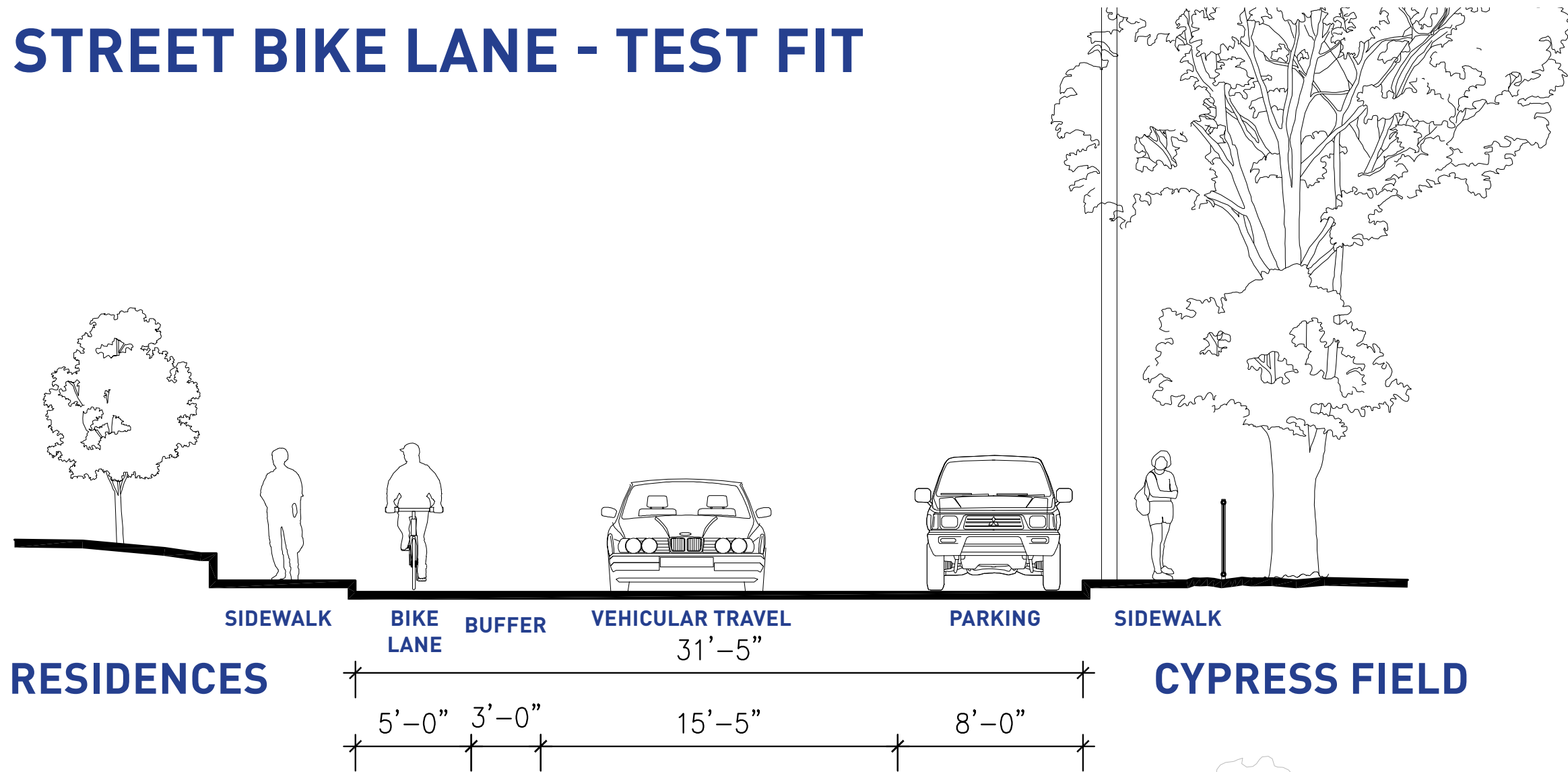


PROPOSED

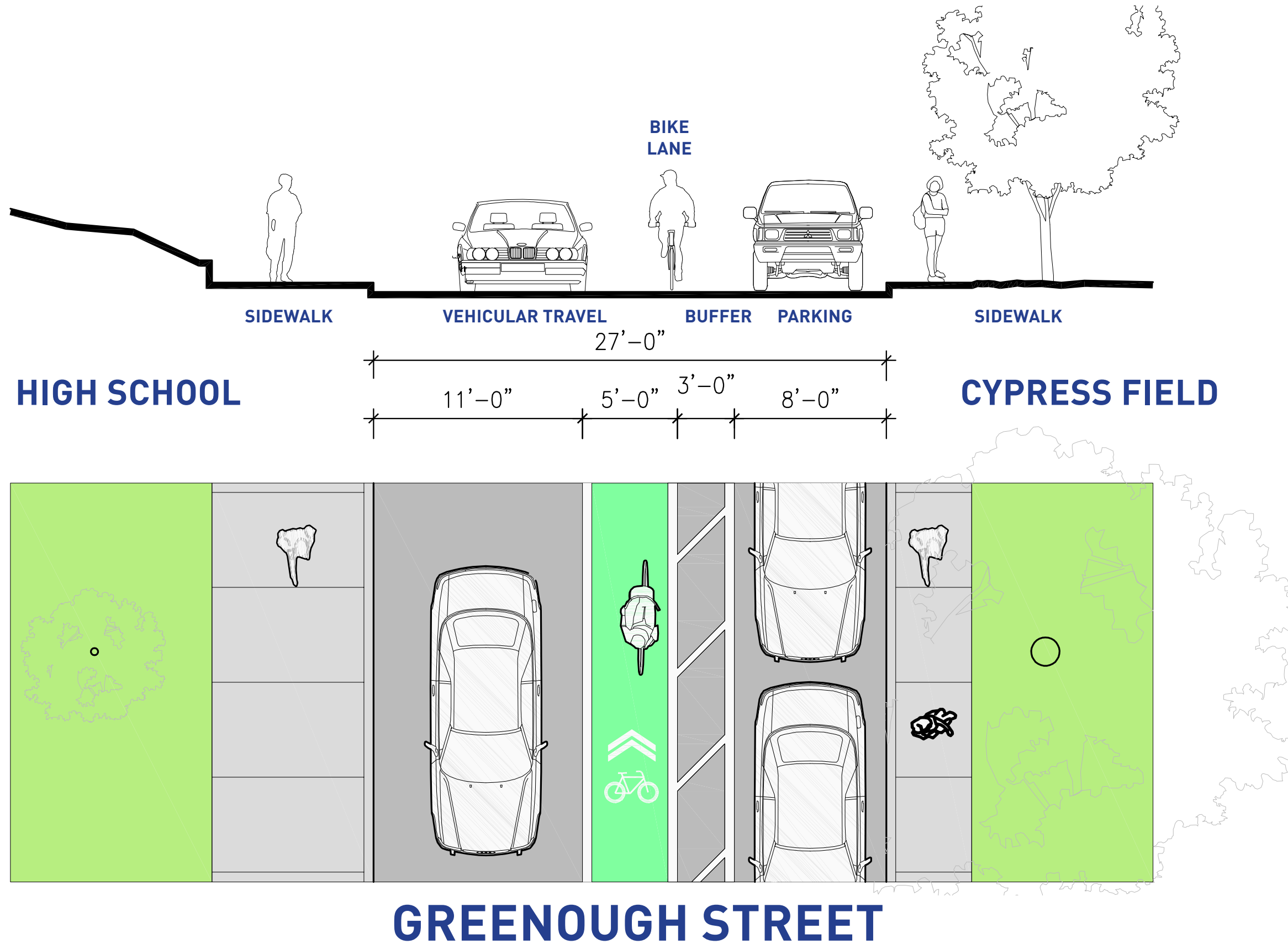
CYCLING IMPROVEMENTS: BIKE LANES



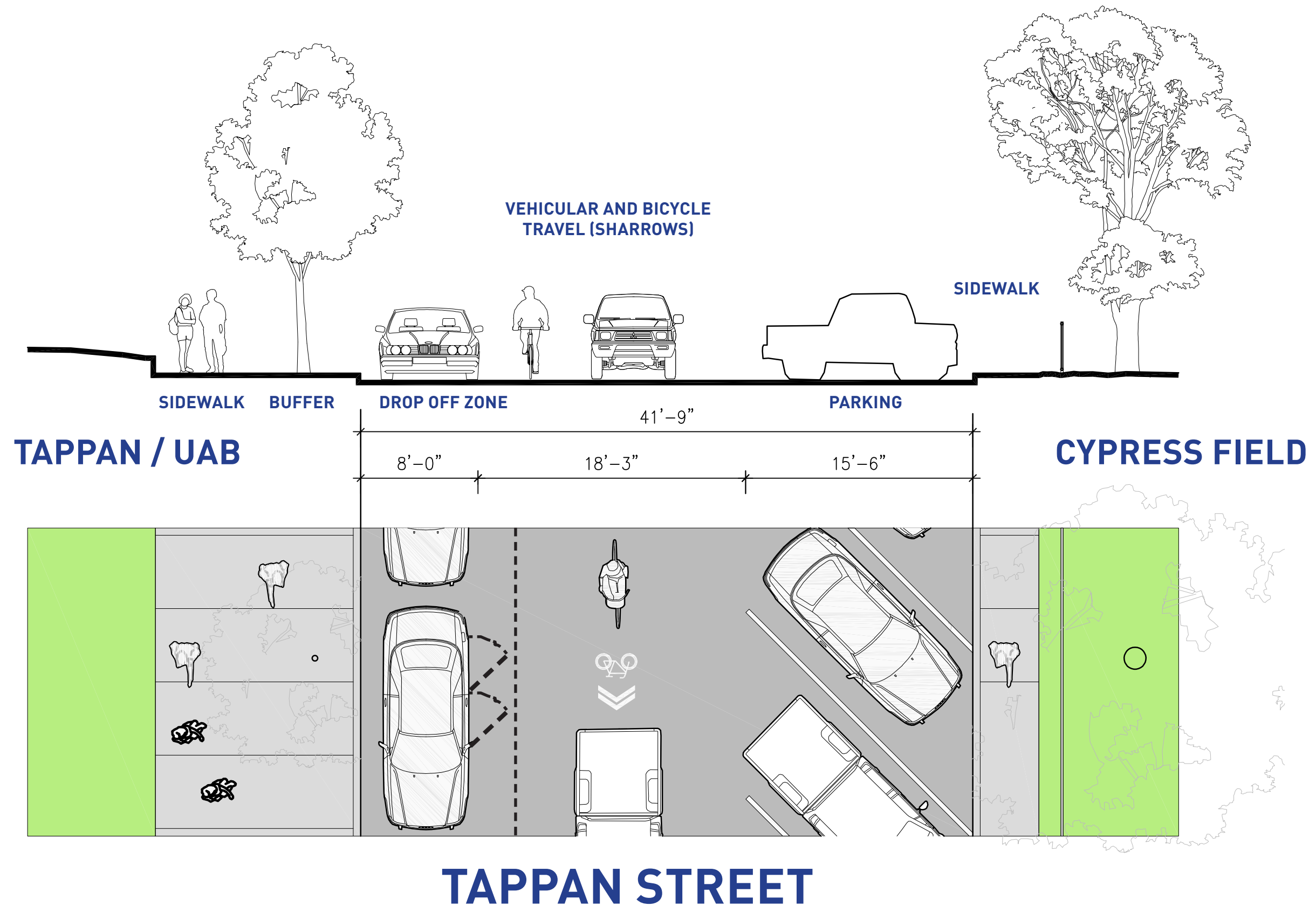
1. DAVIS STREET BIKE LANE - TEST FIT



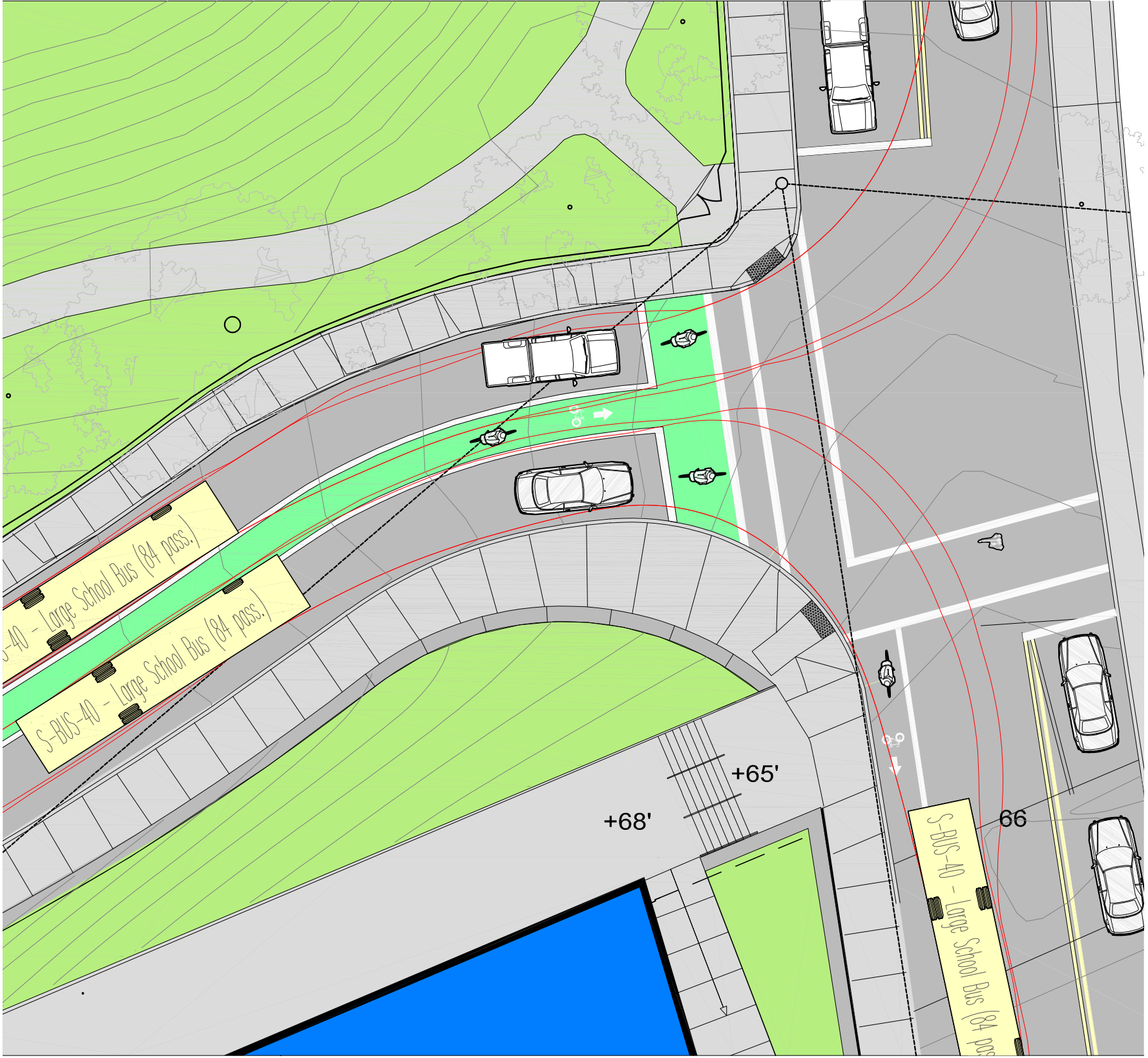
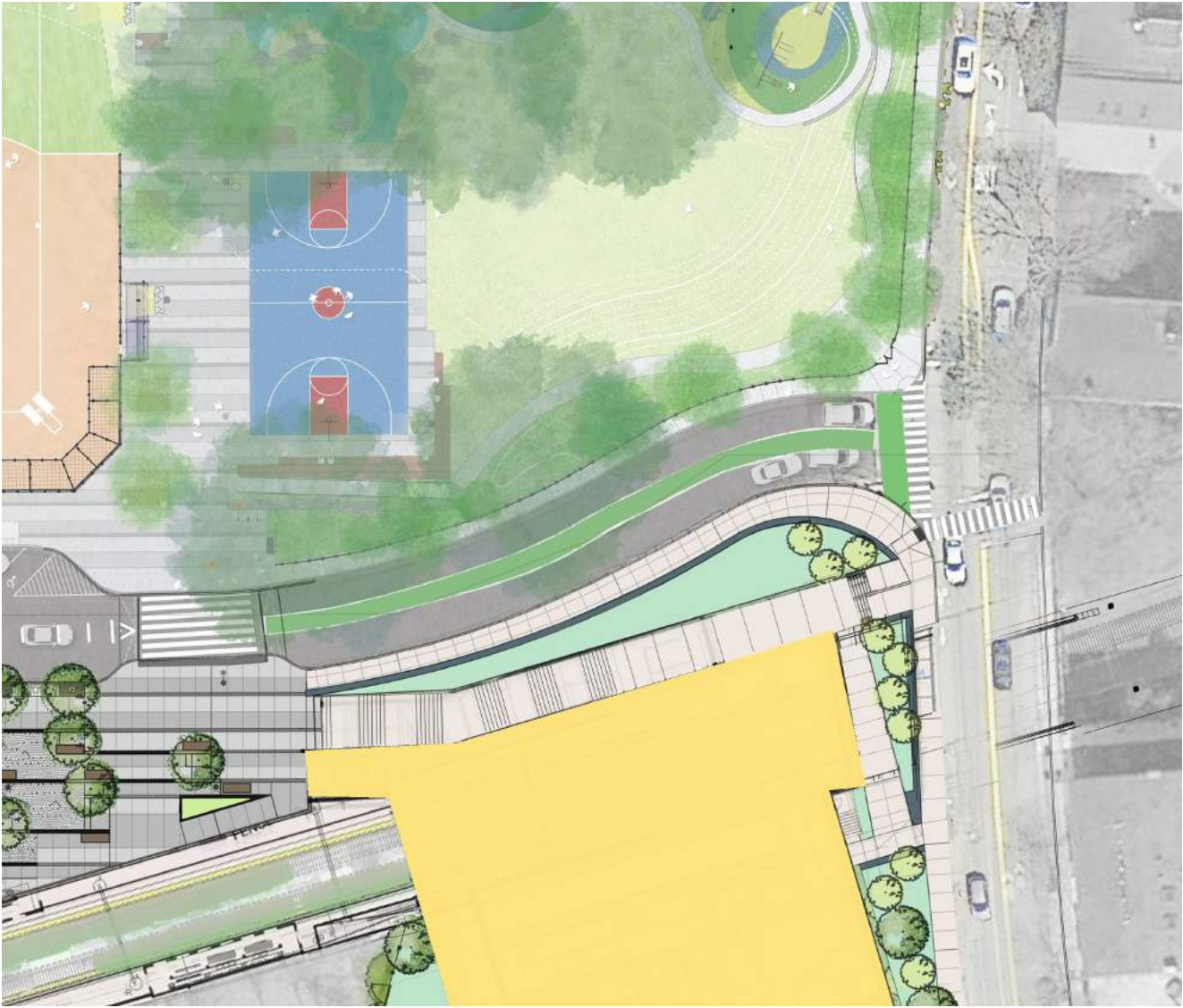
2. GREENOUGH STREET CONTRA FLOW BIKE LANE - TEST FIT



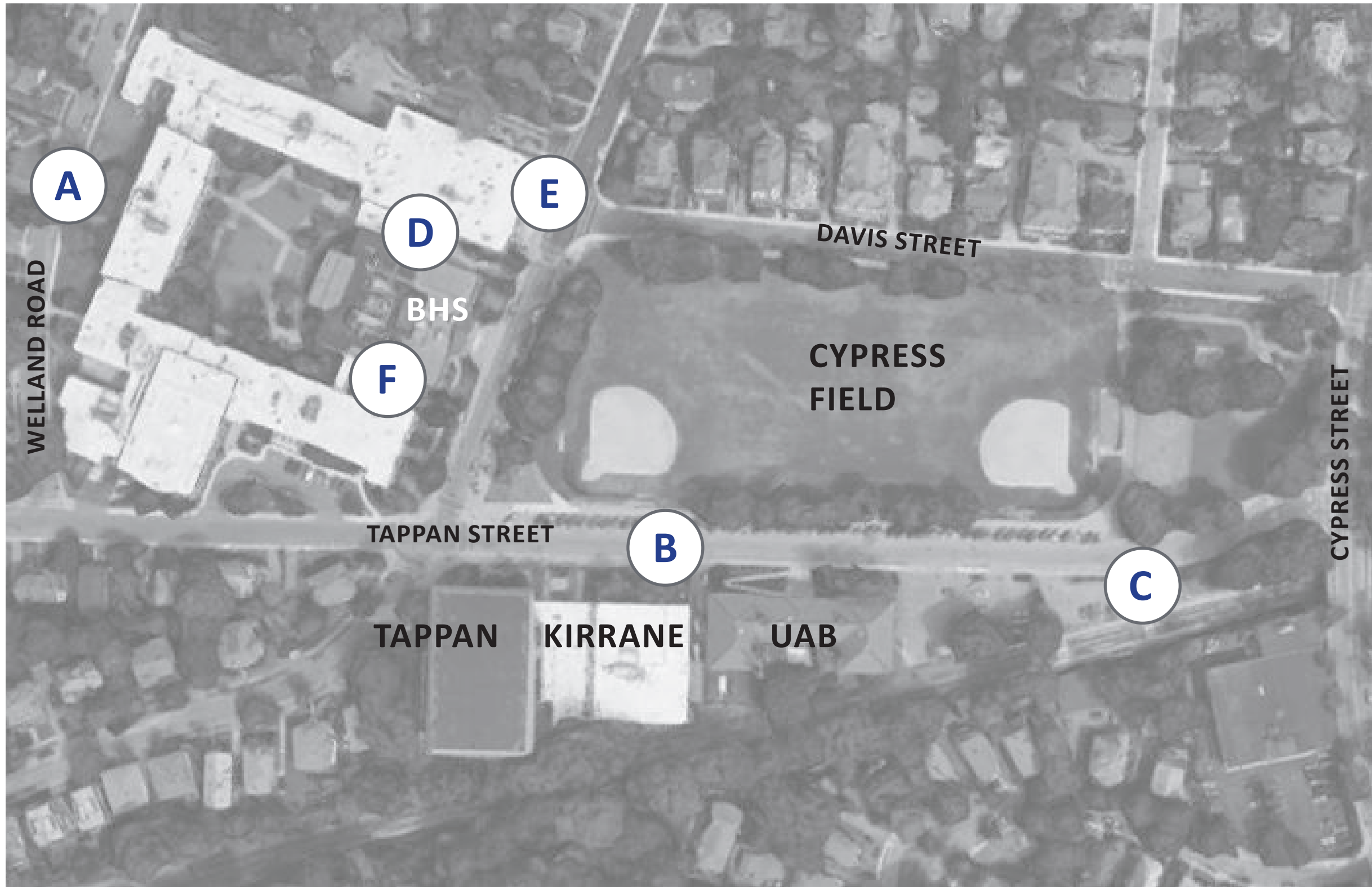
3. TAPPAN STREET BIKE LANE - TEST FIT



4. TAPPAN STREET / CYPRESS STREET INTERSECTION



EXISTING BIKE PARKING AT BHS / MBTA PLAZA / CYPRESS FIELD



- A** 23 BIKES
- B** 22 BIKES*
- C** 9 BIKES
- D** 42 BIKES
- E** 21 BIKES
- F** 18 BIKES

**TOTAL BIKE
PARKING
SPACES:**

135**

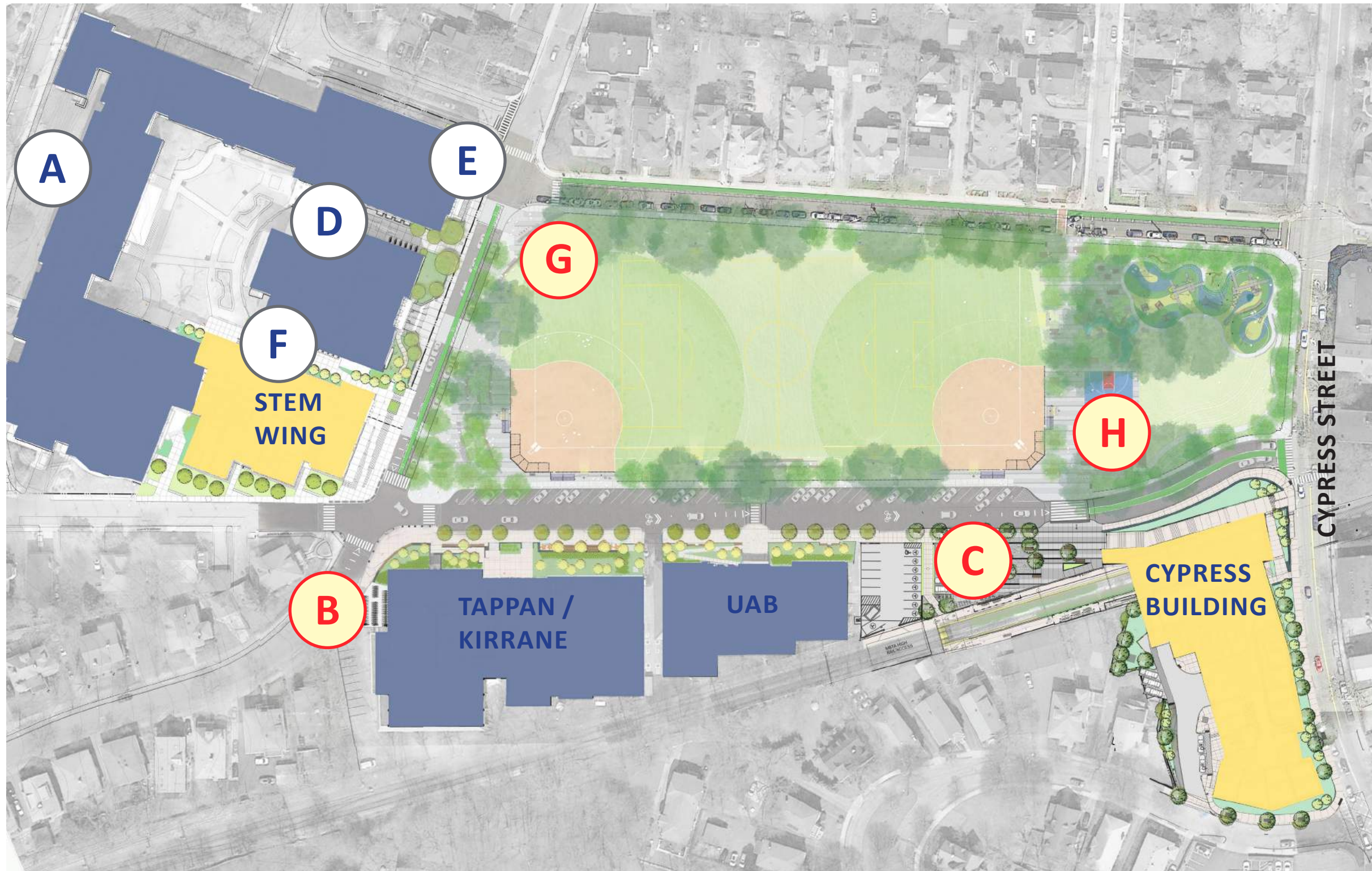
**15 BLUE BIKES IN ADDITION TO 22 BIKES IN FRONT OF KIRRANE POOL*

*** 41% OF BIKE PARKING CAPACITY OBSERVED AT 8:30 AM ON SEPTEMBER 10, 2019 (Location F is off-line due to construction)*

85% OF BIKE PARKING CAPACITY OBSERVED AT 12PM ON SEPTEMBER 18, 2019 (Location F is off-line due to construction)



EXISTING BIKE PARKING AT BHS / MBTA PLAZA / CYPRESS FIELD



- A** 23 BIKES
- B** 72 BIKES
- C** 32 BIKES*
- D** 42 BIKES
- E** 21 BIKES
- F** 18 BIKES
- G** 10 BIKES
- H** 6 BIKES

**TOTAL BIKE
PARKING
SPACES:**

224

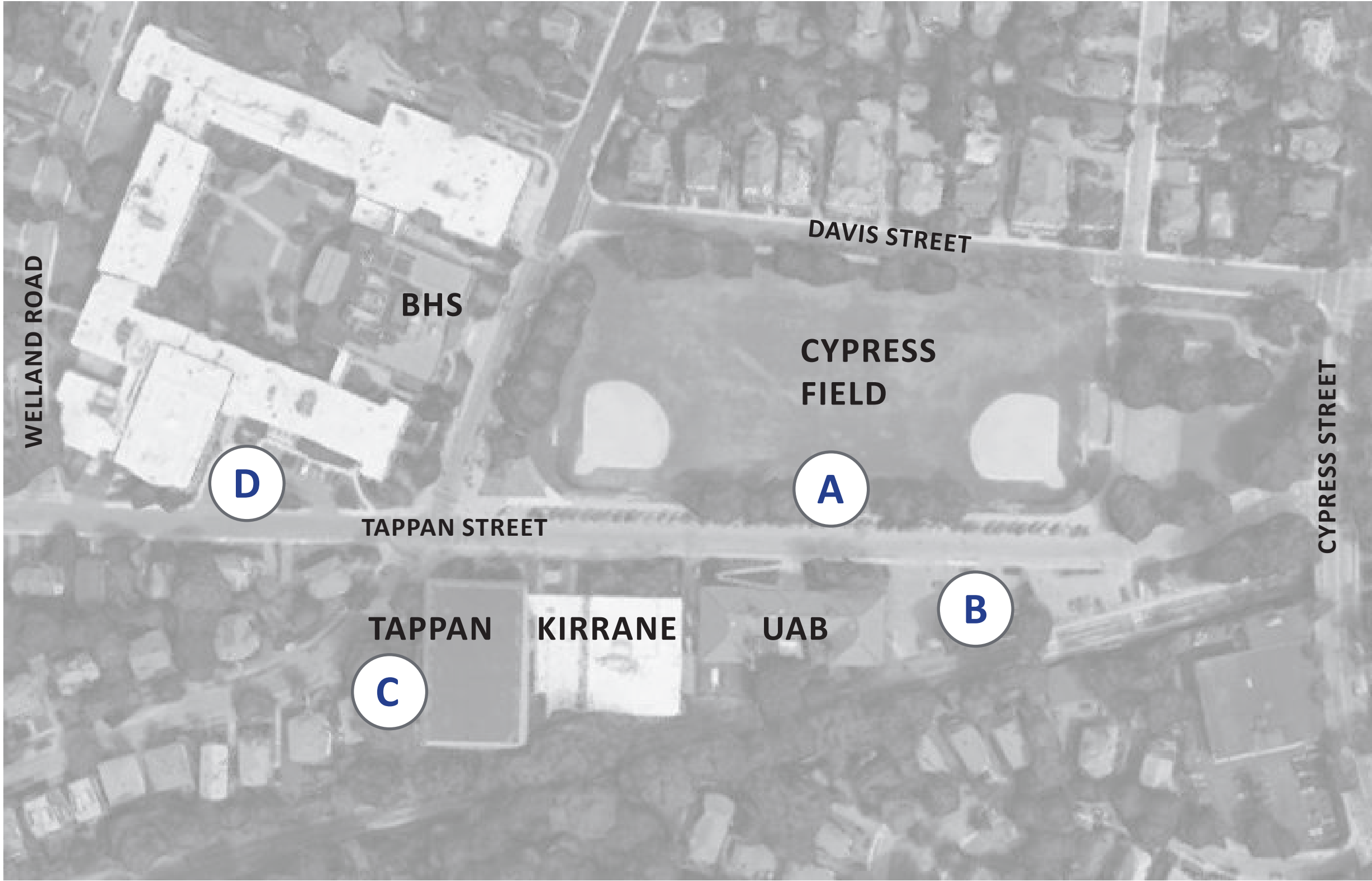
**32 BIKE PARKING SPACES + 15 BLUE BIKES*

G *YELLOW + RED SYMBOL INDICATES NEW BIKE PARKING*

BROOKLINE HIGH SCHOOL PARKING



VEHICULAR PARKING AT BHS PRIOR TO CONSTRUCTION

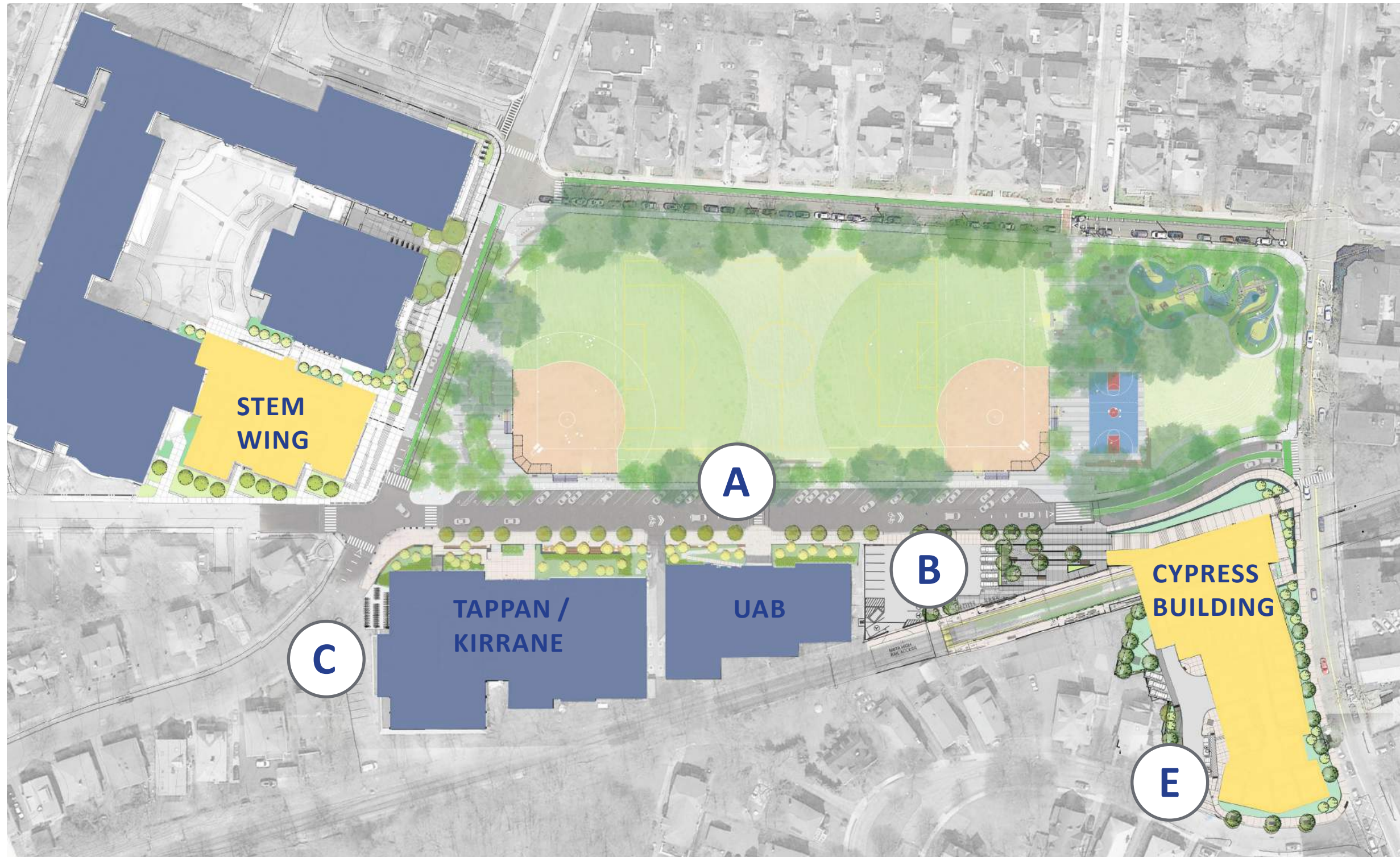


- A** 54 CARS
- B** 32 CARS*
- C** 19 CARS
- D** 10 CARS

**TOTAL
PARKING
SPACES:
115**

**8 MBTA PARKING SPACES NOT INCLUDED*

PROPOSED VEHICULAR PARKING AT BROOKLINE HIGH SCHOOL



- A** 42 CARS
- B** 16 CARS*
- C** 19 CARS
- D** PARKING LOT REMOVED
- E** 2 CARS

**TOTAL
PARKING
SPACES:**

79

**8 MBTA PARKING SPACES NOT INCLUDED*



PARKING AUDIT

Based on current data provided by BHS on September 18, 2019:

BEFORE CONSTRUCTION

2018 / 2019 SCHOOL YEAR

FULL AND PART TIME STAFF:	380
ON CAMPUS PARKING SPACES:	115
NEIGHBORHOOD PARKING SPACES:	160
TOTAL PARKING SPACES:	275

AFTER CONSTRUCTION

FUTURE SCHOOL YEAR STAFF AT MAXIMUM CAPACITY

FULL AND PART TIME STAFF:	425*
ON CAMPUS PARKING SPACES:	79*
NEIGHBORHOOD PARKING SPACES:	160
TOTAL PARKING SPACES:	239

**45 additional staff*

**36 parking spaces removed*



PARKING AUDIT

STAFF INCREASE

INCREASE IN BHS STAFF:	45
# STAFF REQUIRING PARKING (87%):	40
TDM REDUCTION (-10%):	4
PARKING SPACES NEEDED DUE TO STAFF INCREASE	36

LOSS OF PARKING SPACES

EXISTING # OF PARKING SPACES	115
2021 # OF PARKING SPACES	79
PARKING SPACES LOSS:	36
PARKING SPACES NEEDED DUE TO LOSS OF SPACES	36

TOTAL PARKING SPACES NEEDED: 72



END



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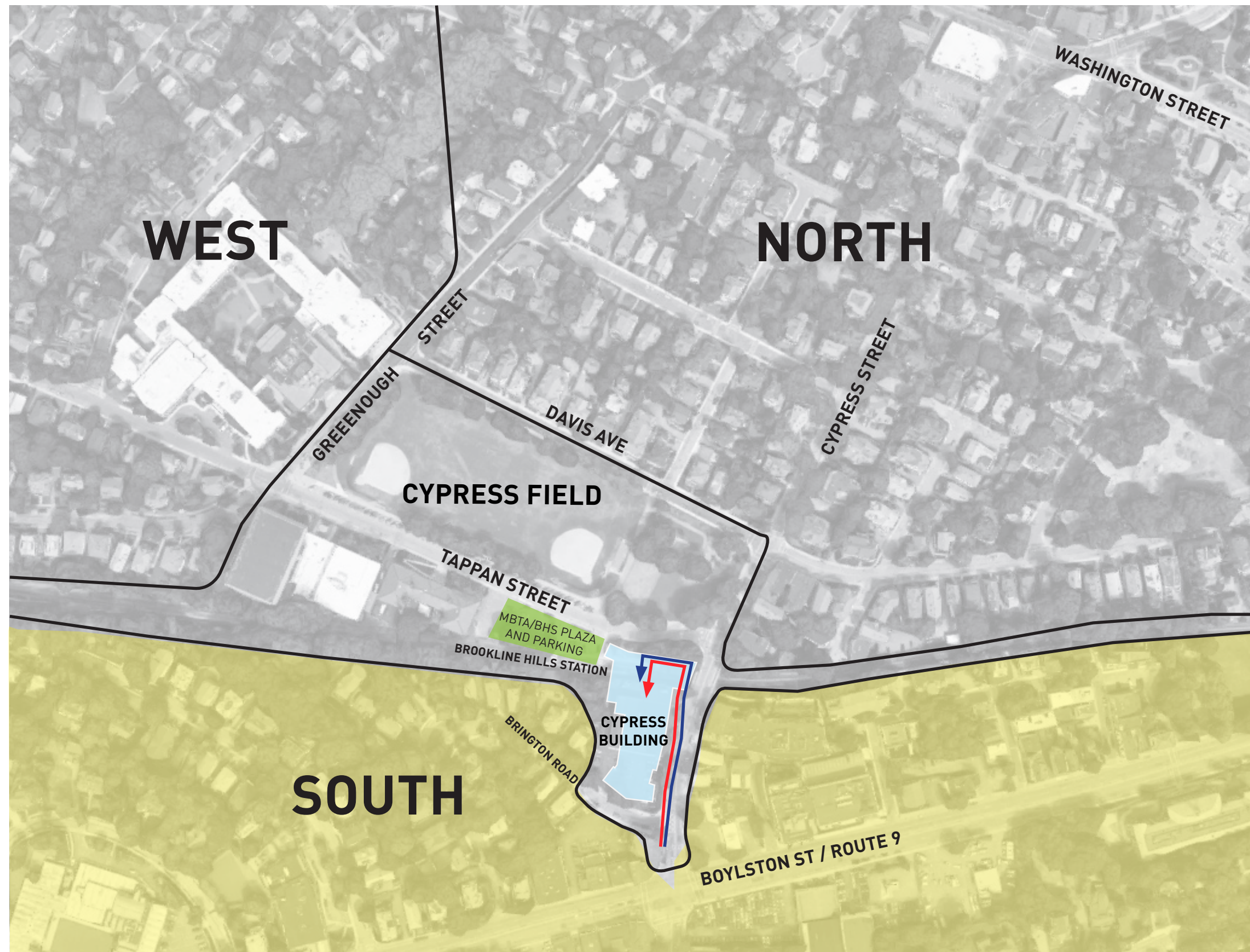
OBJECTIVE: EQUITABLE ACCESS TO THE BUILDING AND THE MBTA PLAZA

**1. BROOKLINE HIGH SCHOOL
STUDENTS / FACULTY / STAFF / VISITORS**



2. MBTA USERS

BROOKLINE HIGH SCHOOL USERS

SHORTEST PEDESTRIAN ROUTE FROM THE SOUTH TO FRONT DOOR



DRAFT

-  SHORTEST ROUTE
-  SHORTEST ACCESSIBLE ROUTE





BROOKLINE HIGH SCHOOL USERS

SHORTEST PEDESTRIAN ROUTE FROM THE NORTH TO FRONT DOOR

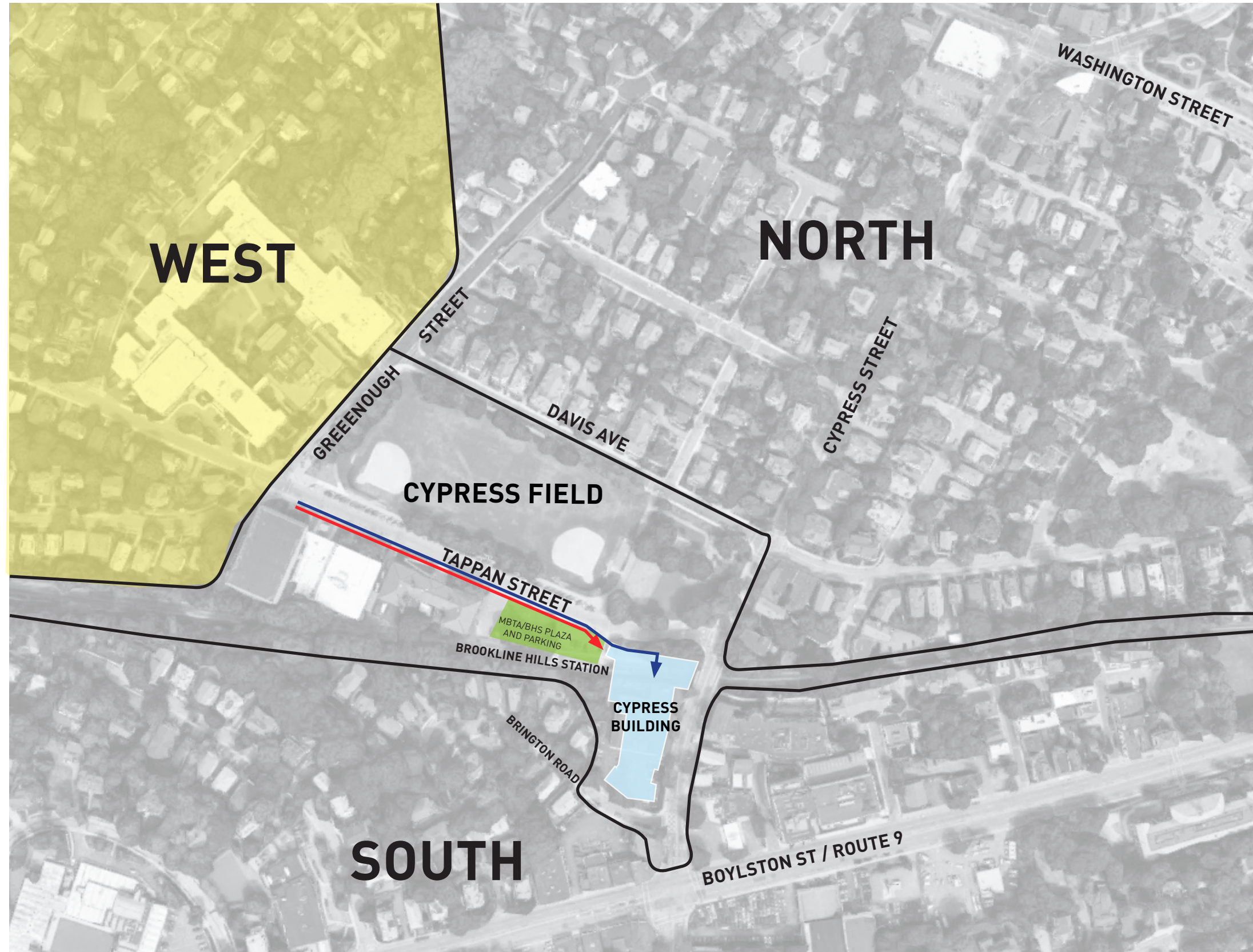


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-  SHORTEST ROUTE
-  SHORTEST ACCESSIBLE ROUTE

BROOKLINE HIGH SCHOOL USERS

SHORTEST PEDESTRIAN ROUTE FROM THE WEST TO FRONT DOOR



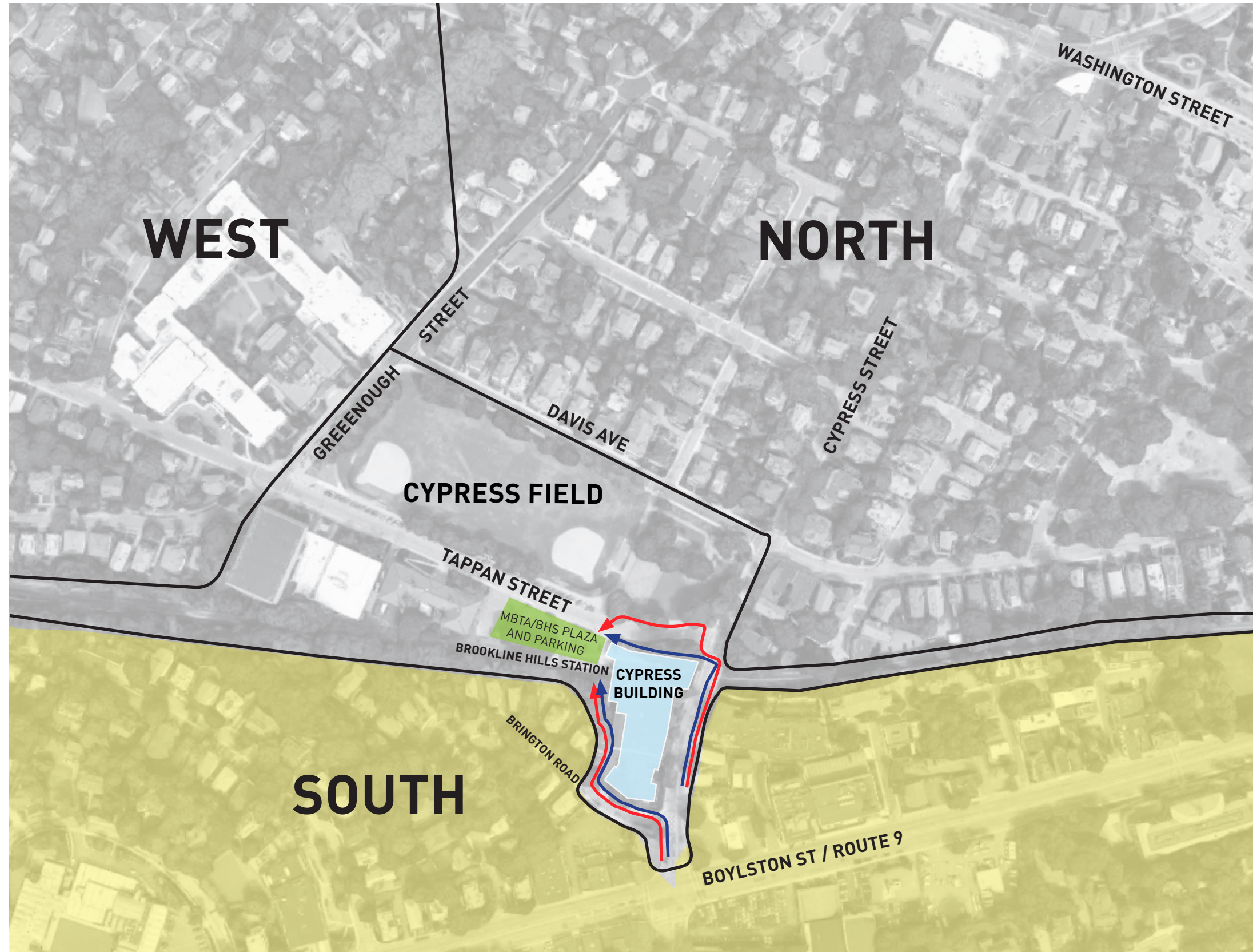
DRAFT

- SHORTEST ROUTE
- SHORTEST ACCESSIBLE ROUTE





MBTA USERS

SHORTEST PEDESTRIAN ROUTE FROM THE SOUTH TO THE BROOKLINE HILLS PLATFORM

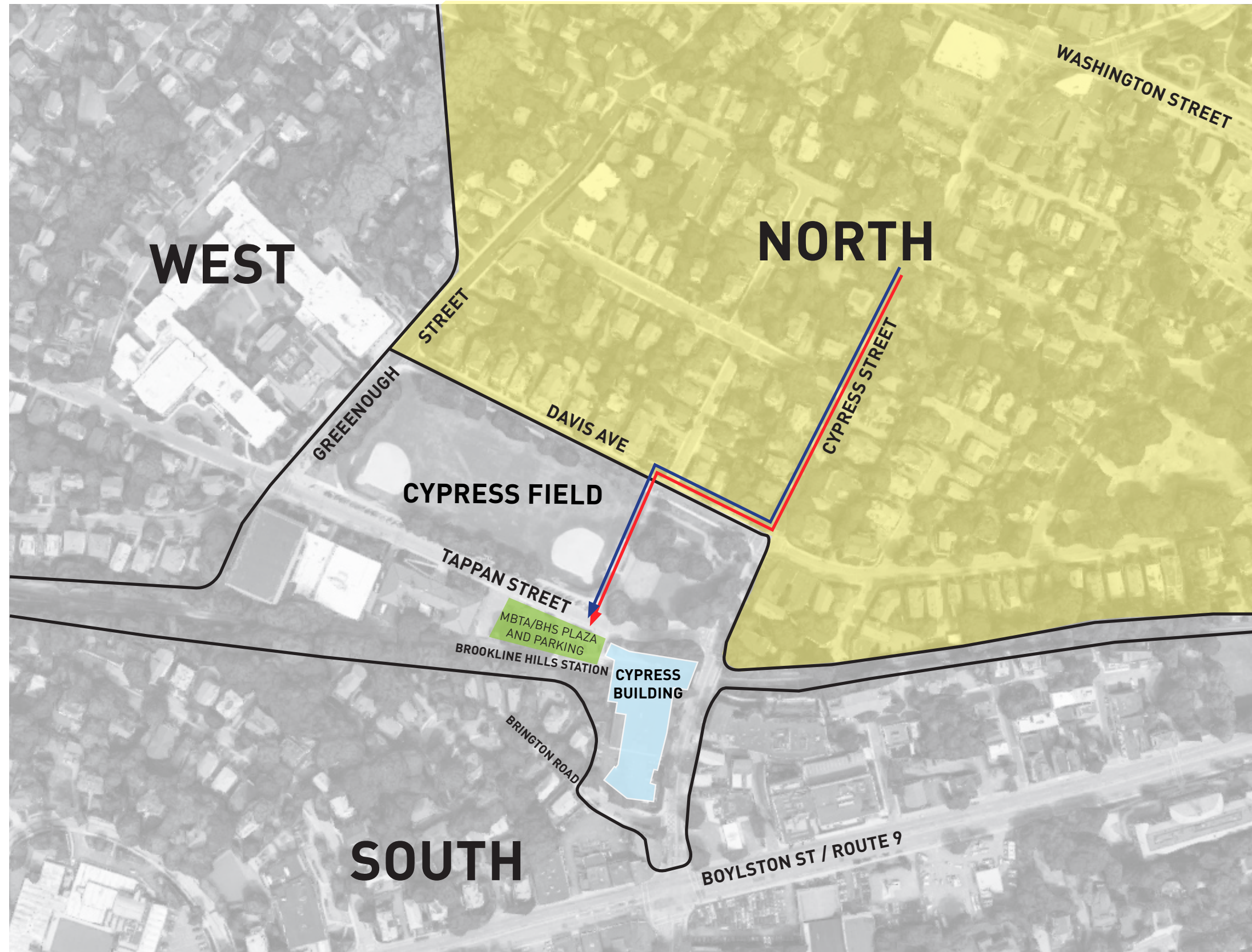


DRAFT

-  **SHORTEST ROUTE**
-  **SHORTEST ACCESSIBLE ROUTE**

MBTA USERS

SHORTEST PEDESTRIAN ROUTE FROM THE NORTH TO THE BROOKLINE HILLS PLATFORM



DRAFT



**SHORTEST
ROUTE**



**SHORTEST
ACCESSIBLE
ROUTE**





MBTA USERS

SHORTEST PEDESTRIAN ROUTE FROM THE WEST TO THE BROOKLINE HILLS PLATFORM



DRAFT

-  **SHORTEST ROUTE**
-  **SHORTEST ACCESSIBLE ROUTE**

