



# Grand Street Safety Improvement Project Recommendations

[www.alamedaca.gov/grand](http://www.alamedaca.gov/grand)

City Council Meeting  
July 18, 2023

# Background

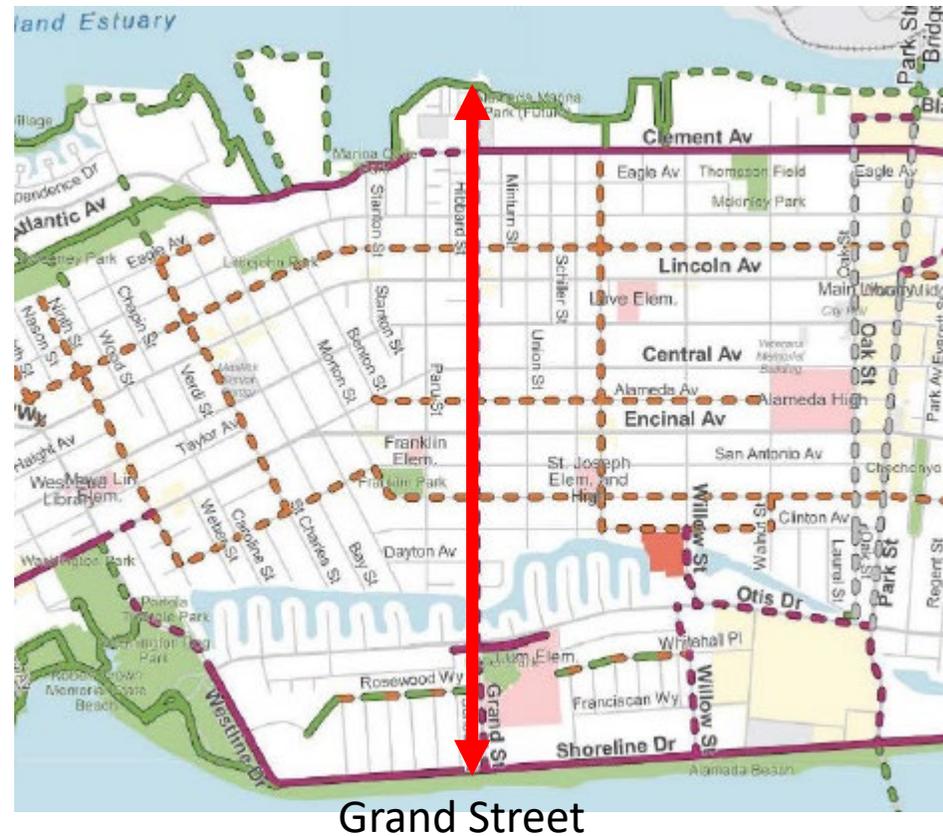
## **November 2022 – City Council Approved:**

- 2-way bikeway on east side next to Wood School (Shore Line to Otis)
- 1-way parking/bollard-protected bikeways on each side of street (Otis to Encinal)
- No decision on segment from Encinal to Clement

## **January - July 2023 - Staff retained new transportation consultant & engaged community:**

- Considered design for final half of Grand from Encinal to Clement
- Developed options without budget and curb-to-curb constraints used with 2022 work
- Developed four design options for the entire corridor
- Held two workshops: one in-person, one virtual. Solicited comments online.
- Transportation Commission met and endorsed staff recommendation

# Why is Grand Street important?



A critical connector:

- Northern to southern waterfront
  - One of only two north/south streets between Eighth St and Park St
- Cross Alameda Trail and Shore Line Dr, two major east-west, low stress bikeways (both two-way bikeways)

# Important Link in Citywide Low Stress Network



## 2030 Low Stress Backbone Network

Connected network of low-stress facilities (shared use paths, separated bike lanes, and neighborhood greenways) prioritized for construction by 2030. Subset of Low Stress Bikeway Vision Network.

- |                |   |
|----------------|---|
| Amtrak Station | Schools and Libraries                   |
| BART Station   | Parks                                   |
| Ferry Terminal | Parks (future)                          |
|                | Shopping Centers and Business Districts |
|                | Hospital                                |
|                | Municipal and Other                     |

### Bicycle Facilities

#### Existing

- Shared-use path or separate walking and biking paths
- Separated Bike Lane
- Buffered Bike Lane on low speed and volume street
- Neighborhood Greenway

#### Proposed

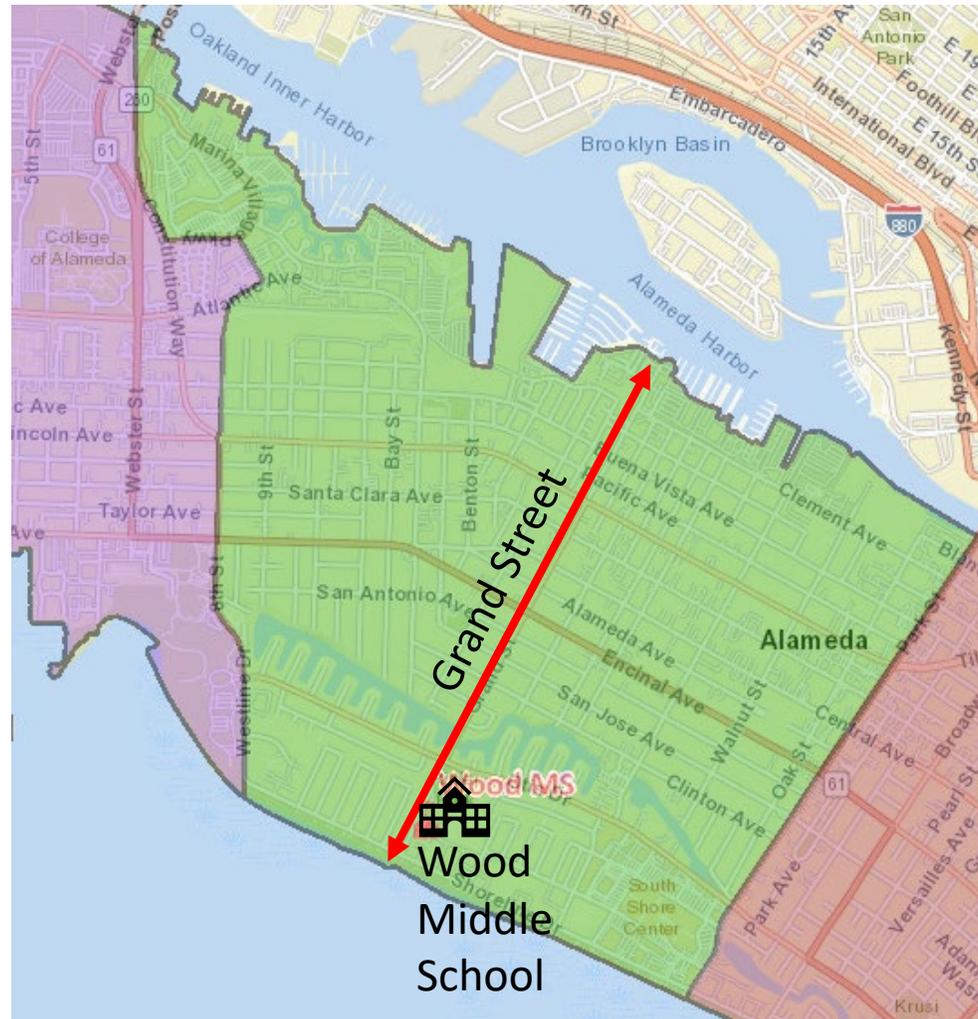
- Shared-use path or separate walking and biking paths
- Separated Bike Lane
- Buffered Bike Lane on low speed and volume street
- Neighborhood Greenway
- Low Stress Bikeway on Park or Oak – Type TBD

All City of Alameda bikeway projects planned for construction through 2024 are marked as existing.



# A Key School Access Route

Grand St travels through the center of Wood Middle School enrollment area (shown in green)



Map of AUSD middle school enrollment areas

# A High Injury Corridor

- **City of Alameda, *Vision Zero Action Plan***
- **Countywide, *Alameda CTC Countywide Active Transportation Plan***
- **Region, *MTC regional High Injury Network***

**Collisions on Grand St disproportionately affect youth and elders. 2013 -2022 data:**

- 39% of bicyclists injured in collisions were youth under age 18
- 86% of pedestrians injured or killed in collisions were elders age 65+



# Staff Recommendation

- Approve design for continuous 2-way bikeway on Grand St from Shore Line Dr to Clement Ave
- Appropriate \$4,675,000 (\$3,375k in *new funding*) to complete design and construction of 2-way bikeway, pedestrian & intersection improvements from Shore Line Dr to Encinal Ave
  - Begin construction:
    - 2024: Shore Line to Otis
    - 2025: Otis to Encinal

# Corridor Study Results: 4 Options Considered

## 1) Council-Approved Design (November 2022):

- *Segment A: Shoreline to Otis:*
  - 2-way bikeway on east side next to Wood School
- *Segment B: Otis to Encinal:*
  - 1-way parking/bollard-protected bikeways on each side of street
- *Segment C: Encinal to Clement: TBD with further study*

2) **Alternative #1:** 2-way bikeway for whole corridor (Shore Line to Clement)

3) **Alternative #2:** 1-way raised bikeways on each side of street (Otis to Clement)

4) **Alternative #3:** Enhanced raised 1-way bikeway (Otis to Clement)

# Alternatives are similar in many ways

	Council Approved Design	Alternative 1	Alternative 2	Alternative 3
2 travel lanes	✓	✓	✓	✓
Pedestrian improvements	✓	✓	✓	✓
Low stress, separated bike lanes	✓	✓	✓	✓
Bikeway raised to sidewalk level (Otis to Clement only)		✓	✓	✓
Auto parking on both sides of street, at the curbs		✓	✓	✓
Curb to curb street width narrowed (Otis to Clement only)		✓	✓	✓

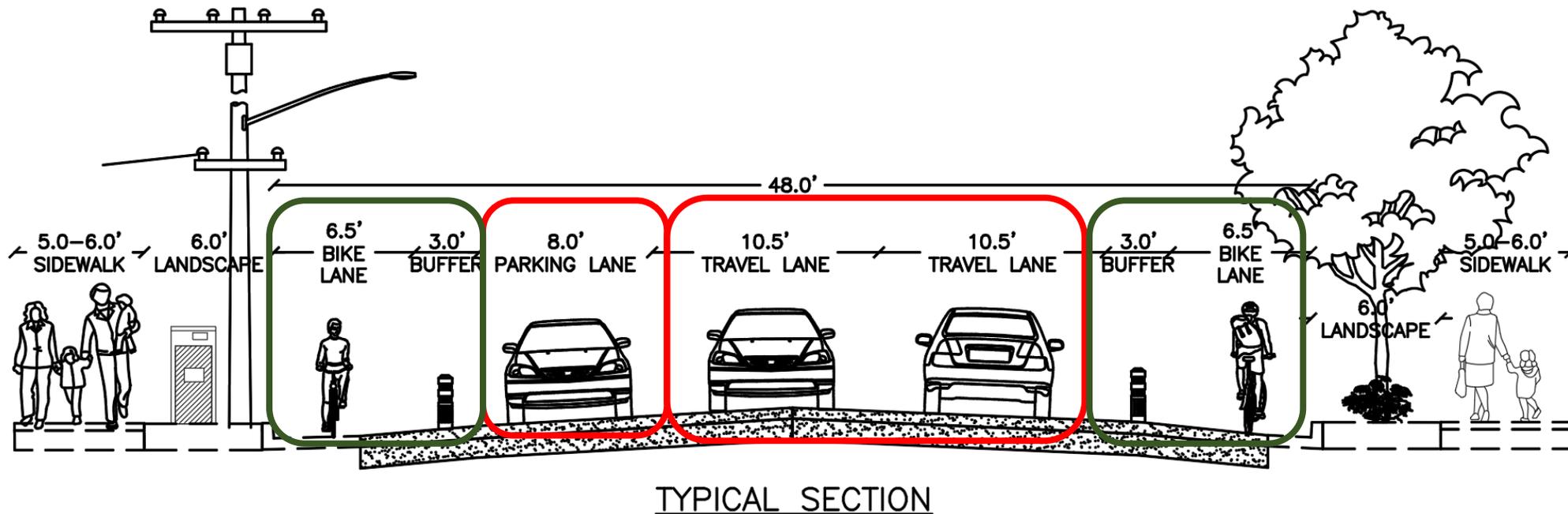
# Council-Approved design for Shore Line to Otis (Segment A) 2-way bikeway on east side

Recommended  
by Staff



- Approved by Council in 2022
- Parking/bollard-protected, on east side of street, next to Wood School
- Fully funded using \$827,000 grant funding (+ local funds)
- Will be ready for construction in 2024
- Strong community support
- No changes recommended

# Council-Approved design for Otis to Encinal (Segment B) 1-way bikeways



- Bikeways on both sides of street, protected by parked cars or bollards
- Parking for half blocks only, on each side of street ("chicane")
- Can be ready for construction in 2024

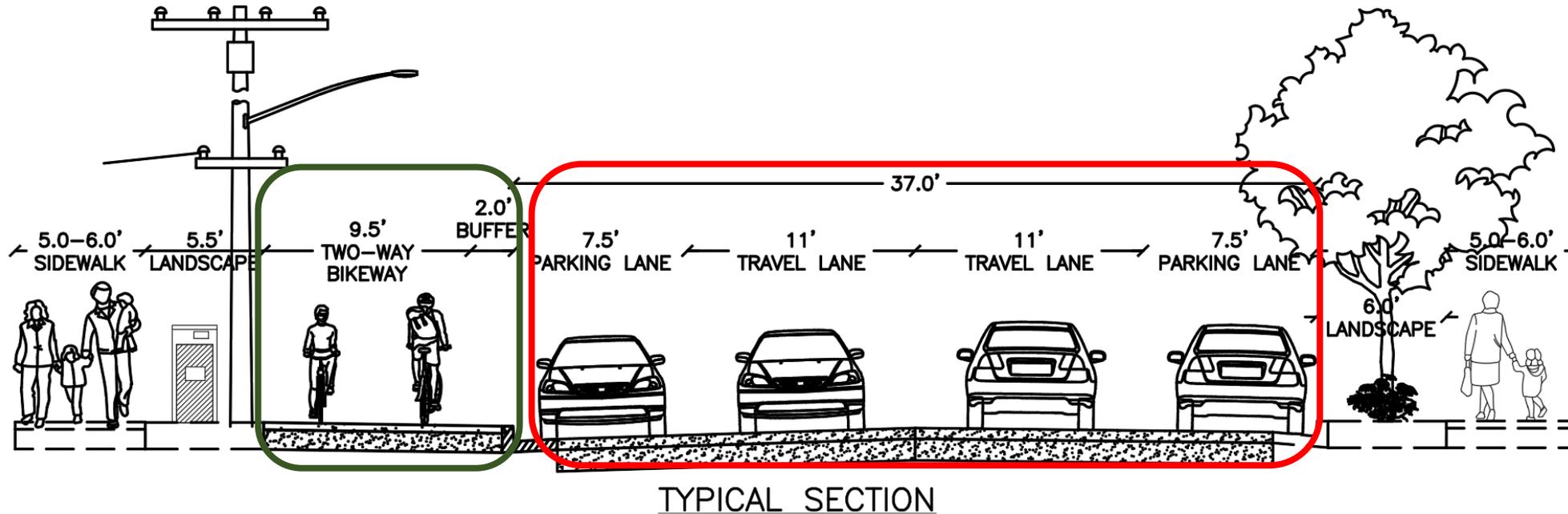
# Council-Approved design *extended North Encinal to Clement (Segment C)* 1-way bikeways

- Bikeways on both sides of street, protected by parked cars or bollards
- 60-75% parking loss
- More frequent driveways in Segment C, so more parking impacts than Segment B



# Alternative #1 Otis to Clement Raised 2-way Bikeway on east side

Recommended  
by Staff



- Moves curb 11 ft. to create 2-way raised bikeway on east side of Grand
- Street width curb to curb is reduced from 48' to 37' wide
- Parking on both sides, at curb

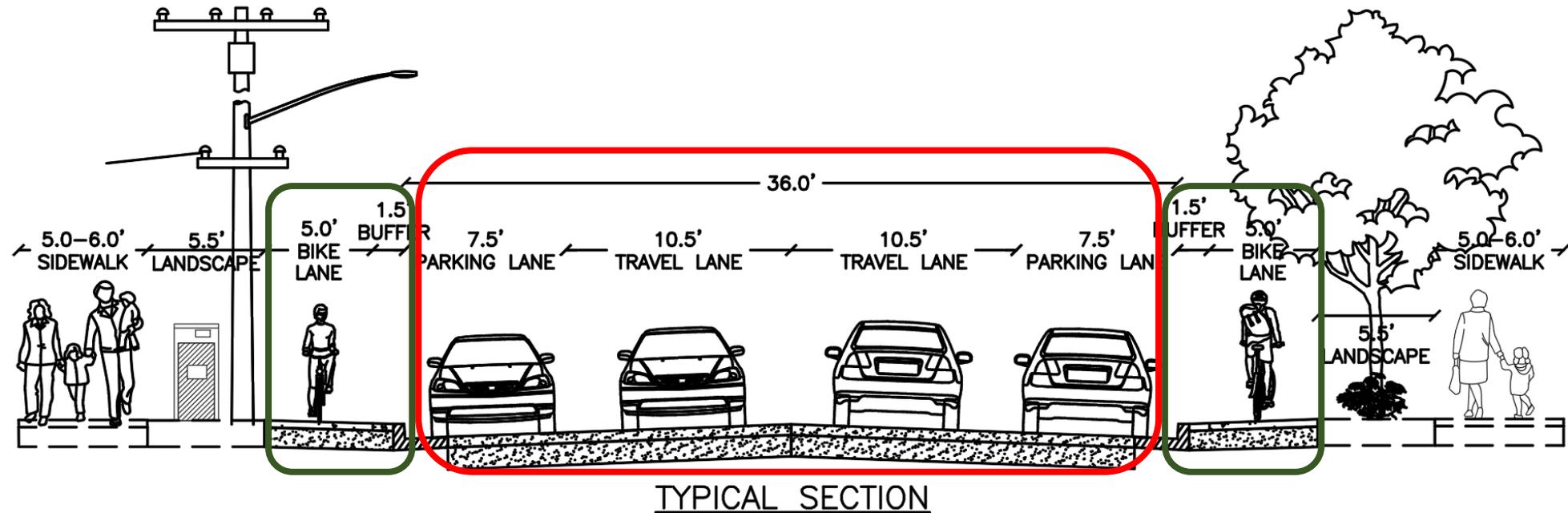
# Alternative #1: Raised 2-way Bikeway



# Benefits of Continuous 2-way Bikeway

- Creates continuous bikeway type for full Grand St corridor
- Allows people biking to pass one another while riding in same direction
- Allows children to ride side-by-side on way to/from school
- Protects people biking with curb separation between parked cars and bikeway
- New intersection improvements will reduce conflicts between turning motorists and bicyclists at signalized and un-signalized crossings
- Less striping and plastic bollards
- Parking is at curbs, not floating
- Less parking loss (5% to 15% total reduction)

# Alternative #2: Raised 1-way Bikeways



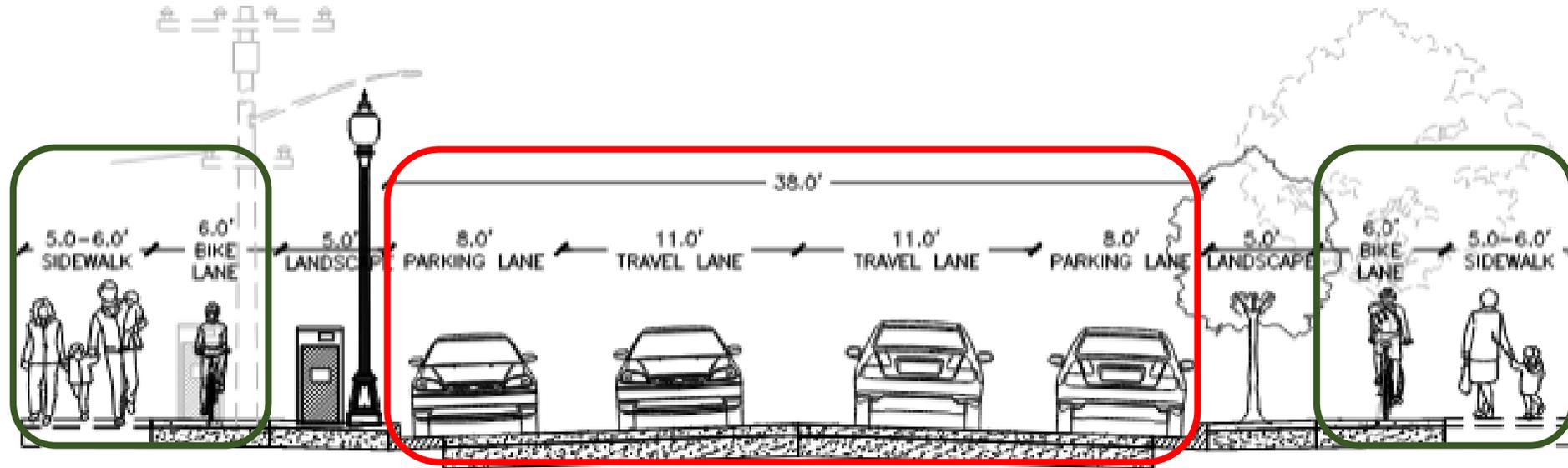
- Moves curbs 6' on both sides of street, for 1-way raised bikeway on each side of street
- Street is reduced from 48' to 36' wide
- Parking on both sides, at curbs

# Alternative #2: Raised 1-way Bikeways



- Intersection/driveway crossings more intuitive than 2-way bikeway
- Narrowest bikeways of all Alternatives
- Narrowest curb to curb width (for cars)
- More expensive and more parking loss than Alternative #1

# Alternative #3: Enhanced Raised 1-way Bikeways



- Moves curb 5' on each side of street, reducing street from 48' to 38' wide
- Moves all utilities and replaces mature trees to allow for 1-way bikeways next to sidewalks
- Most expensive and takes longest to build of all alternatives

# Alternative #3: Enhanced Raised 1-way Bikeways

- Most separation between bicyclists and cars
- Intersection/driveway crossings more intuitive than 2-way bikeway
- Parking at curbs
- Less parking loss (10-30%) than Council-Approved, but more than Alternative #1
- Most expensive and longest to build of all alternatives
- Removes all mature trees, and replaces with younger, smaller trees



Grand Street with  
mature trees

# Cost to Implement Staff Recommendation: Alternative #1

- Total project cost (Shore Line to Clement) = \$14,830,000
- Shore Line to Encinal **only** = \$7,110,000
  - Previously allocated to project = \$3,735,000
  - **Tonight's recommendation: Increase total project allocation by \$3,375,000**
    - Includes appropriating \$2,000,000 from General Fund Residual Fund Balance
- Encinal to Clement **only** = \$7,720,000
  - Staff to seek grant funding

# Recommendation

<b>Fund/Project</b>	<b>Amount</b>
C13000 Traffic Signals and Systems	
Reduce Contractual Services Expense and Reallocate	<b>\$150,000</b>
CIP C65100 Otis Drive Safety Improvements	
Reduce Contractual Services Expense and Reallocate	<b>\$75,000</b>
Fund 100 - General Fund	
Appropriate from Residual Fund Balance	<b>\$2,000,000</b>
Fund 231 - Measure BB Local Streets and Roads	
Appropriate from Fund Balance	<b>\$1,150,000</b>
<b>Subtotal New Funding</b>	<b>\$3,375,000</b>
CIP C61000 Street Safety - General Funds	
Reduce Contractual Services Expense and Reallocate*	<b>\$1,300,000</b>
<b>CIP C11000- Grand Street Increase Contractual Services Expense Total</b>	<b>\$4,675,000</b>

# Recommendation

- Approve an updated design for Grand Street Safety Improvement Project for a continuous two-way bikeway from Shore Line Dr to Clement Ave
- Invalidate and set aside all prior decisions regarding Grand Street Safety Improvement Project concept and plan previously made at Council meetings on 10/4/22, 10/18/22 + 11/01/22
- Adopt Resolution increasing revenue and expenditure appropriations for FY 2023-24 in the Grand Street project by \$4,675,000 for design and construction of 2-way bikeway, pedestrian and intersection improvements on Grand St from Shore Line Dr to Encinal Ave
  - Begin construction of Segment A in 2024; and Segment B in 2025