

Middlefield Road Improvement Project

*Department of Public Works
Status / Update
BPAC February 17, 2022*



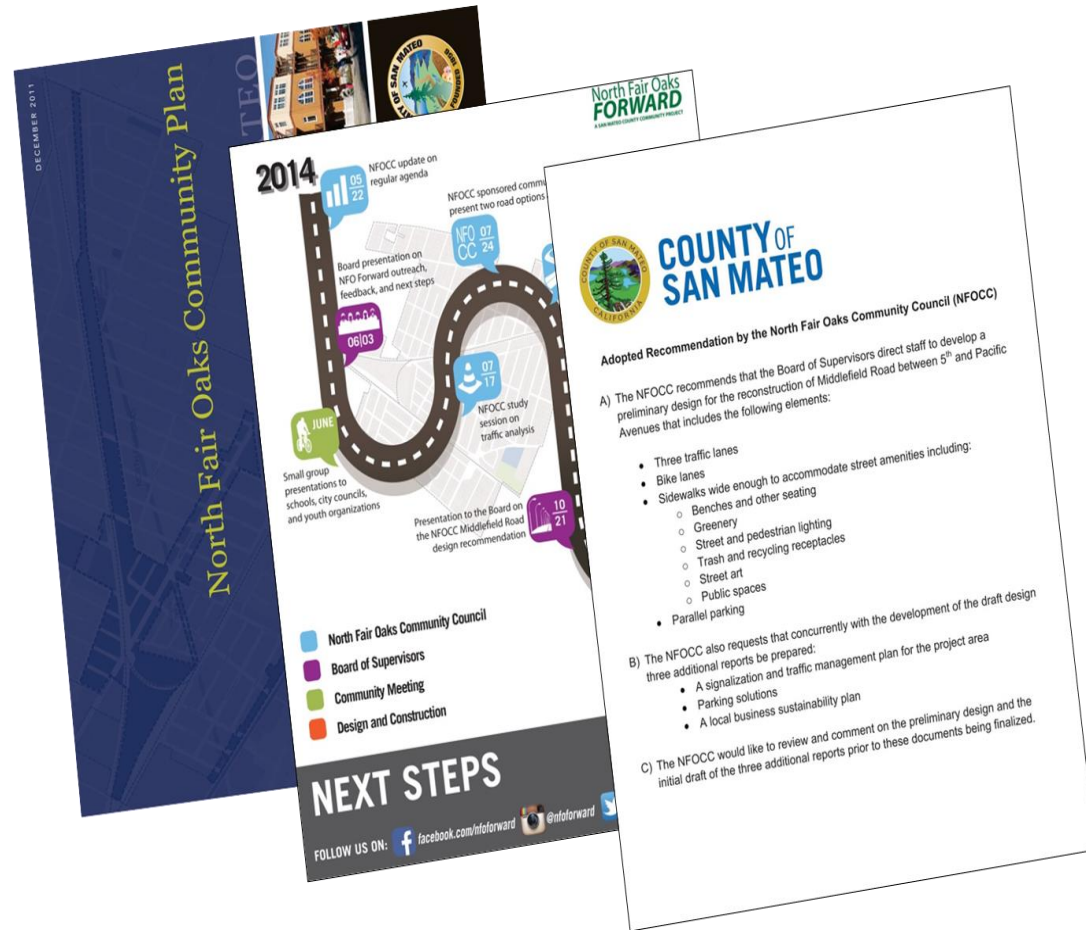
Overview

- **Work to Date**
- **Goals of the Project**
- **General Layout**
- **Pedestrian Improvements**
- **Bicycle Improvements**
- **Challenges/Lessons Learned**
- **Timeline**
- **Cost**
- **Questions**



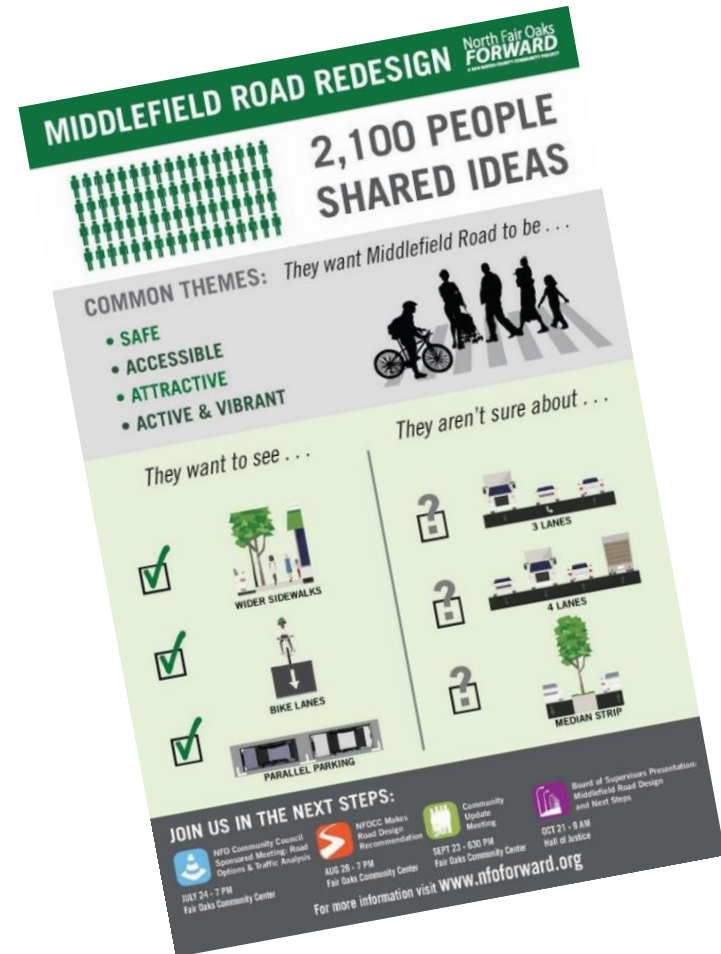
Building on All the Work to Date

- North Fair Oaks Community Plan
- North Fair Oaks Forward
- North Fair Oaks Community Council Recommendations



Goals of the Project

- Improve pedestrian facilities and provide new facilities (sidewalks, trees, furniture, etc.)
- Preserve local motorized vehicle access, while encouraging slower speeds
- Creating a more walkable, bikeable community connection
- Improve travel and transit connections, that are safe, accessible, and convenient



Project Limits and Key Components

Roadway Improvements:

- Pacific Avenue to Fifth Avenue (0.5 mi)

Utility Undergrounding:

- MacArthur Avenue to and Fifth Avenue

Sanitary Sewer Replacement:

- Douglas Avenue to Sixth Avenue



General Layout and Elements

- New lane configuration: 1 lane in each direction
- **Widened Sidewalks**
- **Street Lights**
- **Buffered Bike Lanes**
- **High Visibility Crosswalks**
- **Rectangular Rapid Flash Beacon (RRFB)**
- **Traffic Signals**
- **Street Trees**
- **Bike Racks, Benches**
- **Trash Receptacles**
- **Undergrounding Overhead Utilities**
- **Green Infrastructure/stormwater treatment features**



Pedestrian Focused Improvements

- **Widened Sidewalks with Bulb Outs**

All intersection will include new bulb outs to allow for shorter crossings where crosswalks are installed and allow for installation of green infrastructure

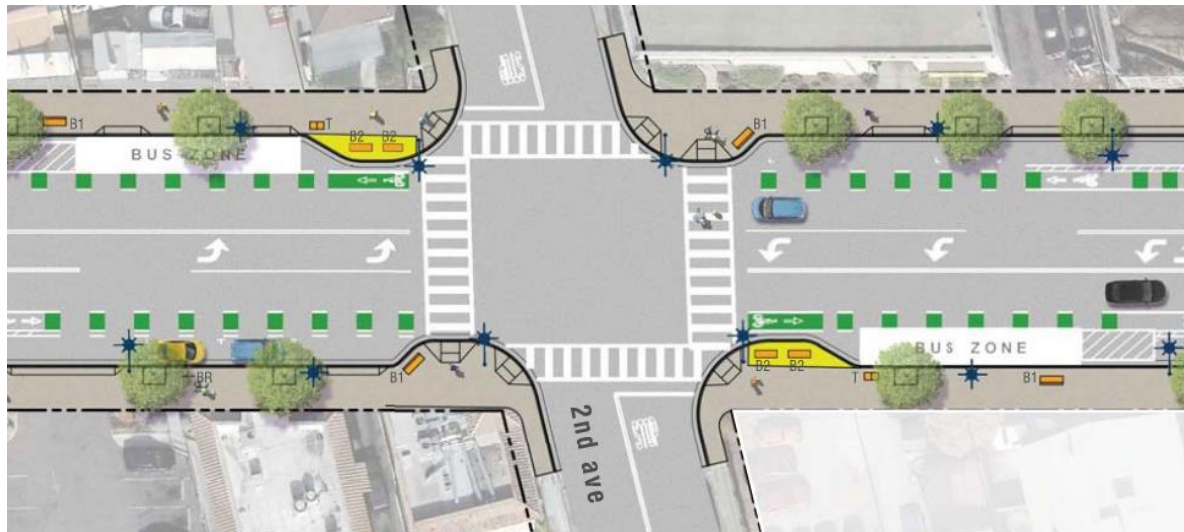


Pedestrian Focused Improvements

- **High Visibility Crosswalks**

All intersection and existing crossings will receive high visibility crosswalks

Recent studies have shown that high visibility crosswalks increase the likelihood of drivers yielding to pedestrians vs. lower visibility crosswalks



Pedestrian Focused Improvements

Street and Pedestrian Lights

Improve lighting for pedestrians walking
Better visibility of pedestrian from roadway at night



Pedestrian Focused Improvements

- **Rectangular Rapid Flash Beacon (RRFB)**

Installed at all unsignalized intersection that cross Middlefield Road included in this Project:

Dumbarton Avenue

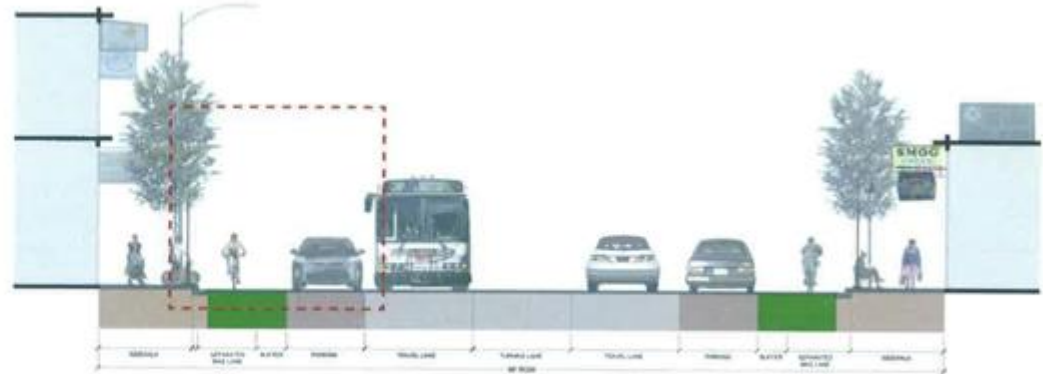
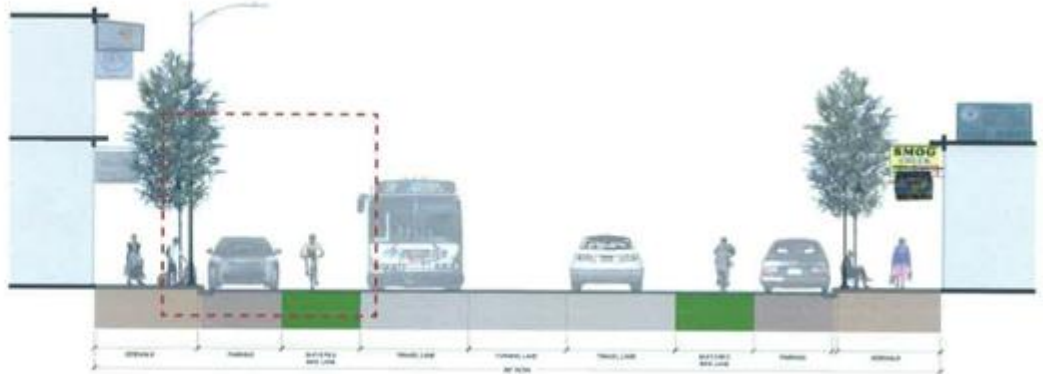
Second Avenue

Fourth Avenue



Bicycle Focused Improvements

- Buffered vs. Separated Bike Lanes
- Decision was to go with Buffered Bike Lanes



Bicycle Focused Improvements

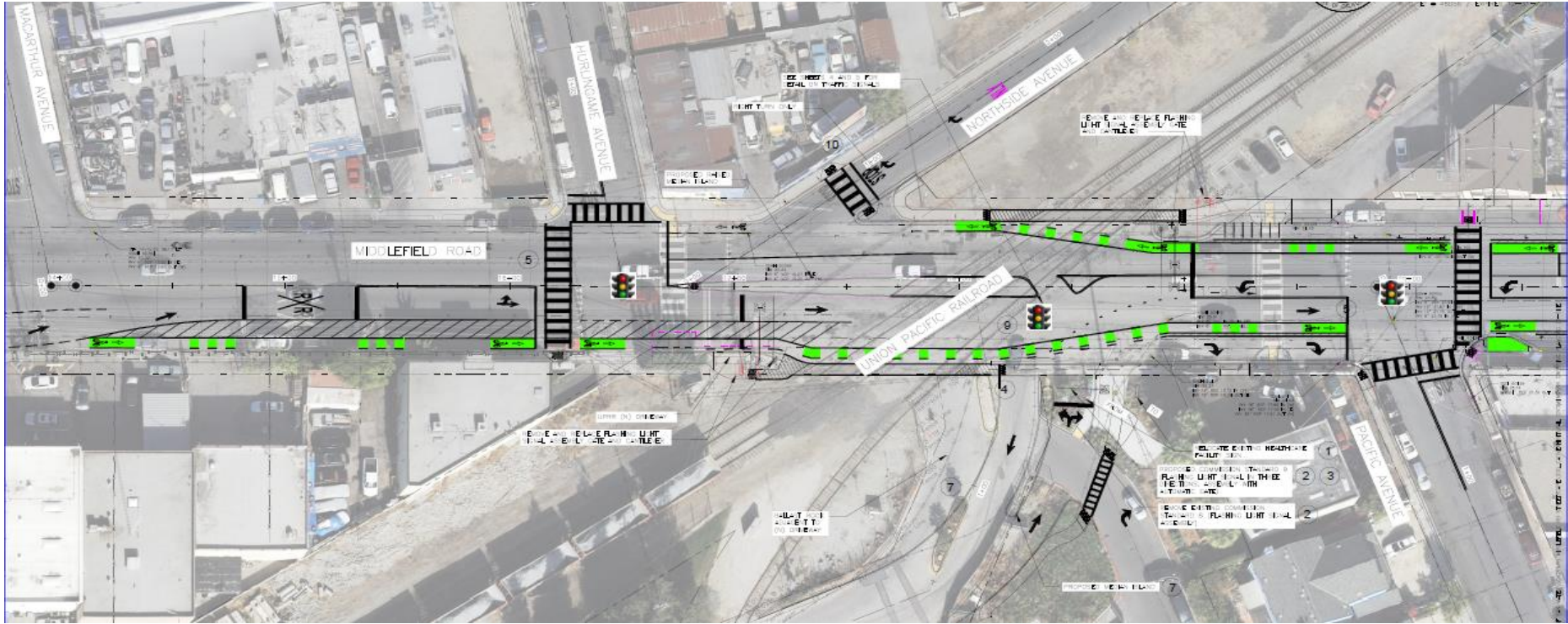
- **Buffered Bike Lanes**
- **Bike Racks**



Bike Rack



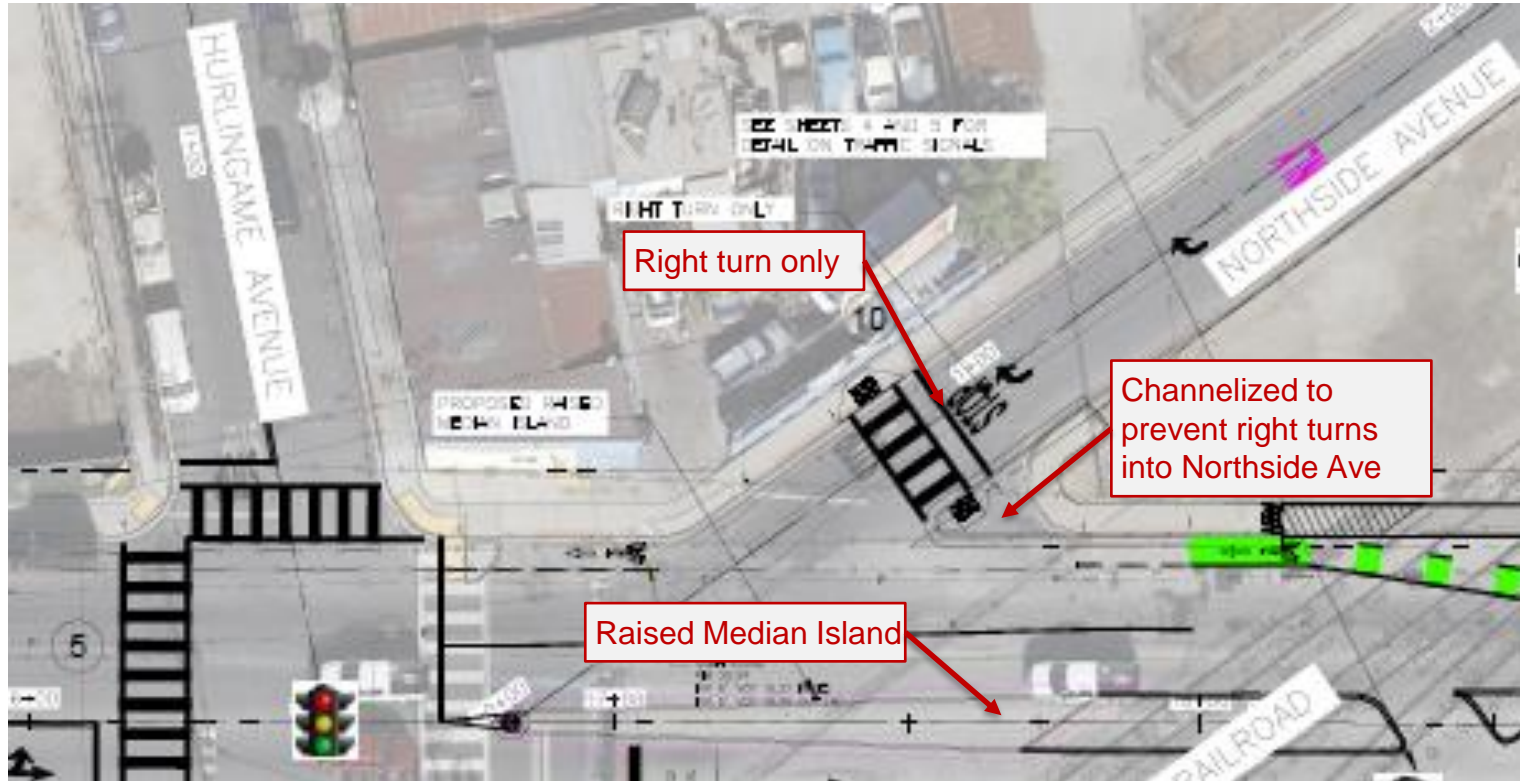
Traffic Signals and Clinic/Redwood Junction Driveway



- Three (3) new traffic signals - Hurlingame, Clinic/Redwood Junction driveway, and Pacific Ave.
- Signals will be interconnected to the railroad crossing equipment.
- New railroad crossing equipment at Clinic/Redwood Junction driveway.



Modifications near Railroad Crossing



- **Northside Avenue** - one way from Stanford Avenue to Middlefield Road and right turn exit only
- **Median** - on Middlefield Road to prevent left turns from Northside Avenue to Middlefield Road



Challenges

- **Community Outreach and consensus on preferred options from sidewalk width, bicycle lanes, streetlights, street trees, benches, public art and more**
- **Parking impacts on the community**
- **Approval from the North Fair Oaks Community Council and County of San Mateo Board of Supervisors**
- **Revisiting past decisions based on timeline of project design**
- **County constructed two (2) new parking lots to account for loss of on street parking**
- **Lengthy and extensive coordination between multiple utility agencies from permits to design related issues ie PG&E, Comcast, ATT, SFPUC, Calwater, Verizon**
- **Lengthy Railroad permit approval process by Union Pacific Railroad (UPRR) and Samtrans**
- **Coordination efforts to secure Rule 20A credits from PG&E and purchase additional Rule 20A credits from Stanislaus County in order to fund the undergrounding of overhead lines.**



Lessons Learned

- **Budget additional design time to gather appropriate permits from UPRR, Samtrans, and Utility Agencies**
- **Plethora of unforeseen underground utility conflicts with our sanitary sewer and joint trench conduits**
- **Existing utility facilities (PG&E/Cal Water) present clearance issues during construction, quick and agile communication during construction is critical**
- **Redesign of sanitary sewer and utility joint trench during construction to avoid unforeseen underground conflicts**
- **Pothole, pothole, pothole!! Do as much exploratory work prior to construction and then perform some more**
- **Public Outreach to provide notifications to all businesses and residences and keep communication lines open**



Project Timeline

| Action | Date |
|--|---------------|
| North Fair Oaks Community Plan Adopted by Board of Supervisors | November 2011 |
| Funding approved by for Middlefield Road Improvement Project | July 2013 |
| North Fair Oaks Community Council (NFOCC) provided, and the Board accepted recommendations for preliminary design and development of additional supporting reports | October 2014 |
| Board adopted four design element recommendations from NFOCC 1) buffered bike lanes, 2) 35 tree spacing, 3) bulb-out at intersections, 4) 12-foot sidewalks | April 2017 |
| Board adopted Initial Study/Mitigation Negative Declaration for Project – Environmental Clearance | February 2019 |
| Board adopted plans and specifications and authorized a call for bids | October 2020 |
| Board awarded project to Granite Rock Company for a low bid of \$21,044,550 | February 2021 |



Project Cost \$21,044,550

Bicycle and Pedestrian Improvements : \$3,000,000

Bicycle

- **Thermoplastic Pavement Markings**
- **Thermoplastic Striping – Green**
- **Bike Racks**

Pedestrian

- **Remove and replace concrete sidewalk**
- **Install Bus Pads**
- **New Sidewalk Access Ramps**
- **High Visibility Crosswalks**
- **Streetlights – Pedestrian**
- **Benches**
- **Bulb-out Seating**



Anticipated Construction Sequence

1. Underground work – Sanitary sewer pipe replacement and trenching for undergrounding of utilities
2. Sidewalk Construction
3. Road Work
4. Install streetlights, trees, and traffic signals
5. Railroad crossing equipment installed by UPRR
6. PG&E and other utilities to pull wires through the underground conduits
7. Energize underground system, remove overhead wires, and remove poles

Note: some of these items of work may be concurrent, but this provides a general sequence of work

Construction started: May 2021

Estimated Completion: December 2022



Street View



Questions?



COUNTY OF SAN MATEO
OFFICE OF COMMUNITY AFFAIRS

COUNTY OF SAN MATEO



Public Parking

Middlefield Road @ 2nd Avenue Lot (**43 Parking Spaces**)
Parking Restrictions: 2 Hour parking from 7:00 am - 10:00 pm.
No Parking from 10:00 pm - 7:00 am



Public Parking

Berkshire Road @ Huntington Ave Parking Lot
(16 parking spots for compact cars)

Parking Restrictions: 2 Hour parking from 7:00 am - 10:00 pm
No Parking from 10:00 pm - 7:00 am



Project Schedule Updates

- **Project Advertised for Bid**: October 23, 2020
- **Project Awarded to Contractor**: February 2, 2021
- **Construction Began**: May 17, 2021
- **Anticipated Completion**: Winter 2022 (1.5 years)



Access During Construction

- Work on one side of Middlefield Road in two blocks at a time
- Temporary pedestrian walkways to allow pedestrian access
- Access for delivery trucks and vehicle service to businesses will be maintained and may be controlled by flaggers at work zone entrances during construction hours
- Emergency vehicle access will be provided
- Ongoing coordination with SamTrans bus service during construction

