

Project Title: Port Chicago Highway and Willow Pass Road Bike and Pedestrian Project
Project Summary for Air Quality Conformity Task Force Meeting: August 2014

Description

- The purpose of the project is to improve bicycle and pedestrian safety at the Willow Pass Road/ Port Chicago Highway intersection.
- Project will construct sidewalk and bike lane improvements along portions of Willow Pass Road and Port Chicago Highway.
- The intersection of Willow Pass Road and Port Chicago Highway (Bay Point) will be reconfigured to a T-intersection
- The westbound free right-turn from Willow Pass Road onto Port Chicago Highway will be removed.
- A dedicated right-turn lane will be added to the intersection as a replacement to the free right turn.
- Widening of the roadway will also occur on Port Chicago Highway to improve circulation at the intersection and provide Class II bike lanes.

Background

- NEPA process is almost complete
- Seeking air quality conformity determination ASAP

Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?

- Not a new or expanded highway project
- No change in traffic volume or truck percentages on either roadway

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?

- Intersection currently operates at LOS B.
- Heavy vehicles were analyzed at 3% of the intersection traffic volume.
- 2040 estimates the intersection would operate at LOS D for both with and without project.

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?

- It is unlikely that this is a site of violation since this project is constructing roadway and sidewalk improvements.

RTIP ID# (required) 240367

TIP ID# (required) CC-130027

Air Quality Conformity Task Force Consideration Date: August 28, 2014

Project Description (clearly describe project)

- This project is at the intersection of Port Chicago Highway and Willow Pass Road and is in proximity of two elementary schools, one middle school, and EBRPD's Delta De Anza trail. The main purpose of the project is to construct 1400 LF of sidewalk and bike lane improvements in order to close the gap between existing concrete sidewalk and bike lane segments.
- In addition to the sidewalk improvements, the roadway pavement on Port Chicago Highway will reconstruct approximately 21 feet x 360 feet area to complete the second northbound lane and stripe a Class II bike lane.
- The last major item of work is the removal of the free right turn for motorists traveling west bound on Willow Pass Road to north bound Port Chicago Highway and modifies the intersection to a more traditional T-intersection configuration in order to improve pedestrian and bicycle safety. A dedicated right turn pocket will be added to the intersection in lieu of the free right turn.

Type of Project:

Safety

County Narrative Location/Route & Postmiles

Contra Costa Local Road
Caltrans Projects – EA#: N/A

Lead Agency: Contra Costa County Public Works Department

<i>Contact Person</i> Angela Villar	<i>Phone#</i> 925-313-2016	<i>Fax#</i> 925-313-2333	<i>Email</i> avill@pw.cccounty.us
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Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

XX	Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	XX	PS&E or Construction	<i>Other</i>
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Scheduled Date of Federal Action: NEPA Approval expected 10/2014

NEPA Delegation – Project Type (check appropriate box)

<i>Exempt</i>	XX Section 6004 – Categorical Exemption	Section 6005 – Non-Categorical Exemption
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Current Programming Dates (as appropriate)

	PE/Environmental	ENG	ROW	CON
Start	12/2013	4/2014	N/A	4/2016
End	3/2015	3/2015	N/A	9/2016

Project Purpose and Need (Summary): (please be brief)

This project will construct pedestrian and bicycle improvements to close a sidewalk and bike lane gap and improve accessibility to the nearby elementary school, middle school, the Delta De Anza Regional Trail, public transit and BART. There is a need to 1) provide an ADA compliant path within the sidewalk, 2) improve pedestrian and bicycle safety (new Class II bike lanes) and 3) improve vehicle and pedestrian movements at the intersection.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

The surrounding area is mostly existing residential land use. There is some commercial use along Port Chicago Highway. There is area zoned heavy industrial that is not built out per the General Plan.

Brief summary of assumptions and methodology used for conducting analysis

HCM 2010 methods were used to analyze the intersection. Traffic counts were conducted in March 2013. RTP horizon design year is 2040. Peak AM/PM hours were analyzed using CCTA Travel Demand model for existing and 2040 Conditions.

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

ADT, east leg of intersection: ~19000 (CCTA 2010)
ADT, west leg of intersection: ~23700 (CCTA 2010)
ADT, Port Chicago Highway: ~14000 (CCTA 2010)
Widening will improve street segment LOS on Port Chicago Highway; remaining improvements are geared to bike and pedestrian movements.

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

ADT, east leg of intersection: ~34000 (CCTA 2040)
ADT, west leg of intersection: ~39000 (CCTA 2040)
ADT, Port Chicago Highway: ~15900 (CCTA 2040)

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Existing intersection configuration is at LOS B with 3% heavy vehicle for pre- and post-project conditions.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

RTP design project is 2040 with an intersection LOS D with 3% heavy vehicle for pre- and post- project conditions.

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

Port Chicago Highway will be restriped between Willow Pass Rd and Lynbrook to allow for a total of two northbound lanes and to include Class II bike lanes; this will allow for better traffic movement and improve vehicle safety along this segment.

Intersection improvements will improve pedestrian and bike safety by eliminating the large radius, yield-controlled right turn.

Comments/Explanation/Details (please be brief)

Existing Intersection Levels of Service Port Chicago Highway and Willow Pass Road Intersection					
Scenario	Movement	AM Peak Hour		PM Peak Hour	
		Delay (sec/vehicle)	LOS	Delay (sec/vehicle)	LOS
With free westbound right-turn lane (current conditions)	All (Intersection)	15.4	B	12.4	B
	Westbound right-turn lane	0.0	A	0.0	A
Separate westbound right-turn lane (in lieu of free right)	All (Intersection)	15.9	B	13.2	B
	Westbound right-turn lane	9.2	A	12.7	B
Source: DKS Associates (see attached LOS calculation summaries)					

Table 1: Existing Condition Intersection LOS for Port Chicago Highway and Willow Pass Road with build and no build scenario

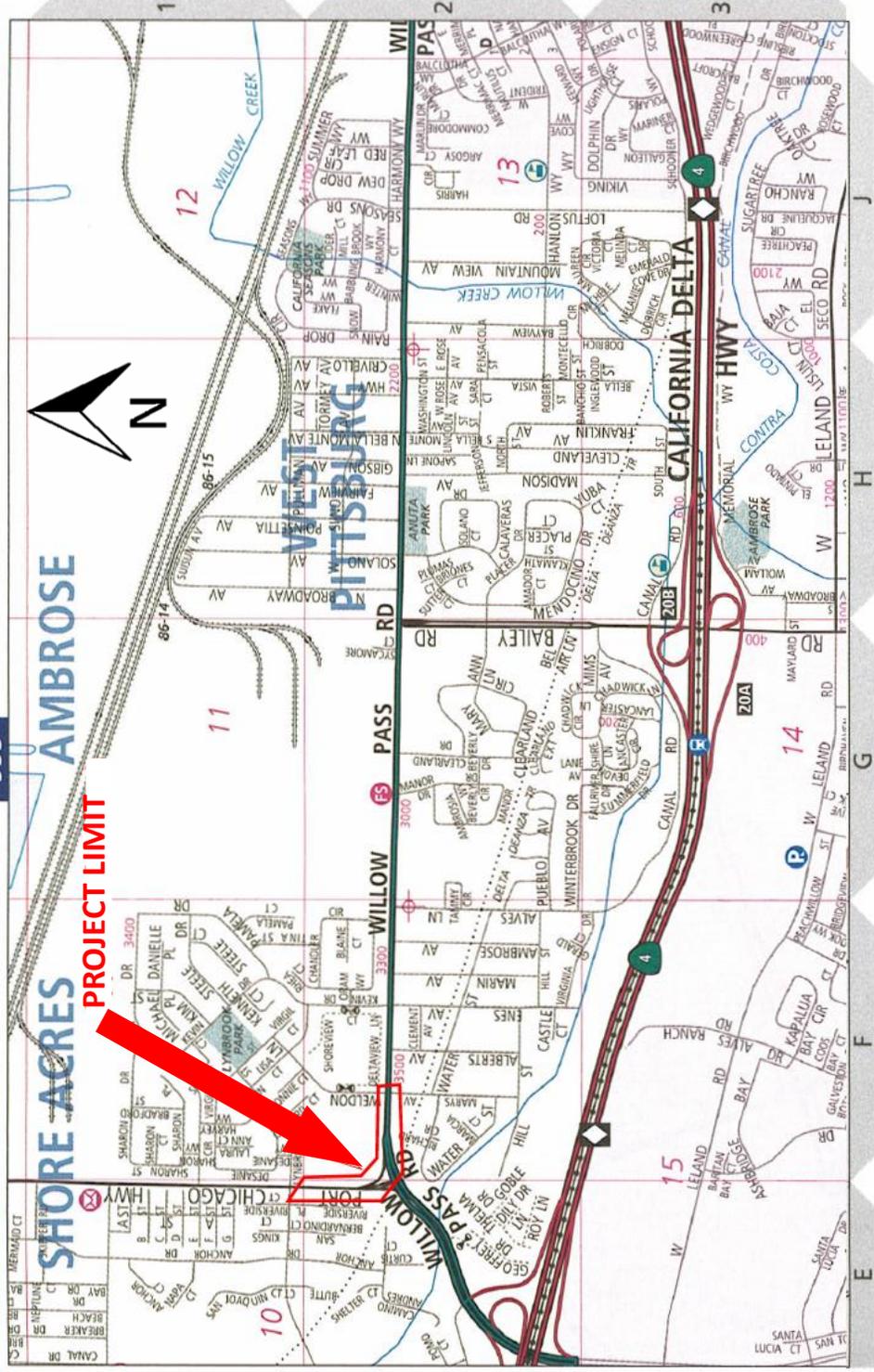
2040 Intersection Levels of Service Port Chicago Highway and Willow Pass Road Intersection					
Scenario	Movement	AM Peak Hour		PM Peak Hour	
		Delay (sec/vehicle)	LOS	Delay (sec/vehicle)	LOS
With free westbound right-turn lane (current conditions)	All (Intersection)	50.3	D	10.4	B
	Westbound right-turn lane	0.0	A	0.0	A
Separate westbound right-turn lane (in lieu of free right)	All (Intersection)	49.5	D	10.5	B
	Westbound right-turn lane	7.8	A	11.0	B
Source: DKS Associates (see attached LOS calculation summaries)					

Table 2: 2040 Intersection LOS for Port Chicago Highway and Willow Pass Road with build and no build scenario

MAP 573

SEE MAP 553

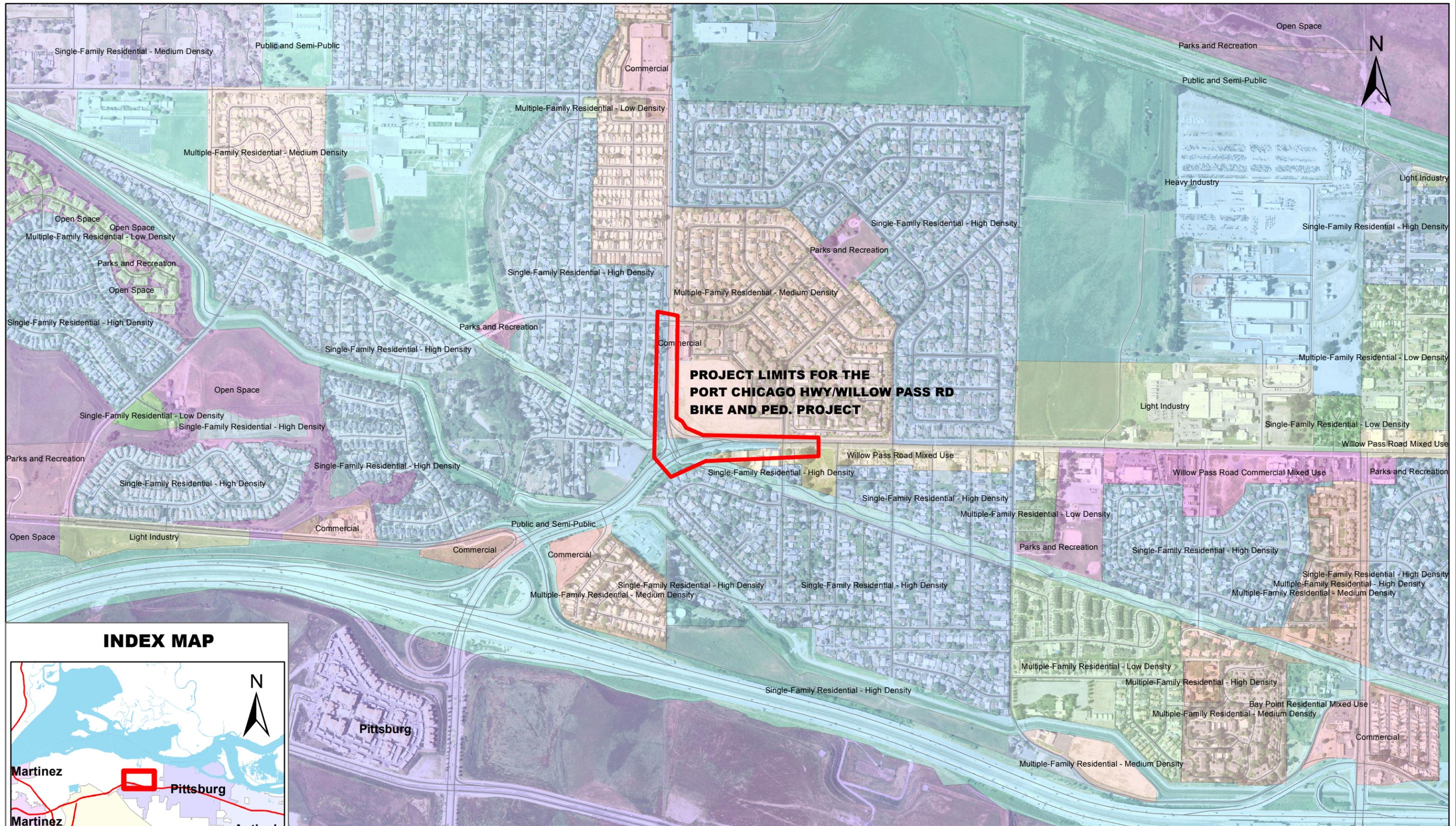
1:22,800
0.5 miles 1 in. = 1900 ft.



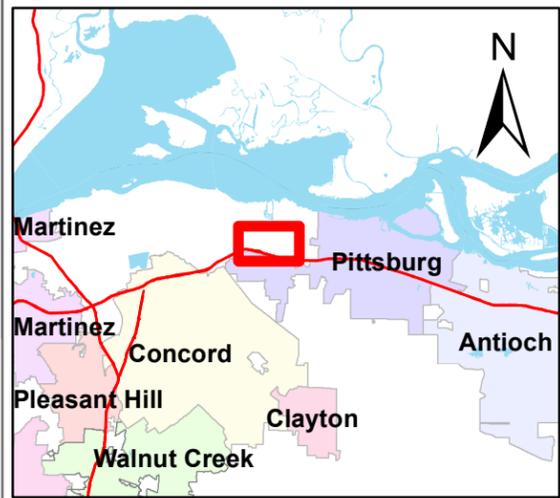
Contra Costa County
Public Works
Department

VICINITY MAP

Port Chicago Hwy/Willow Pass Rd Bike
and Ped. Project



INDEX MAP



Scale: 1 in = 700 ft



255 GLACIER DRIVE MARTINEZ, CALIFORNIA 94553 PH: (925) 313-2000 FAX: (925) 313-2333

Land Use Designations

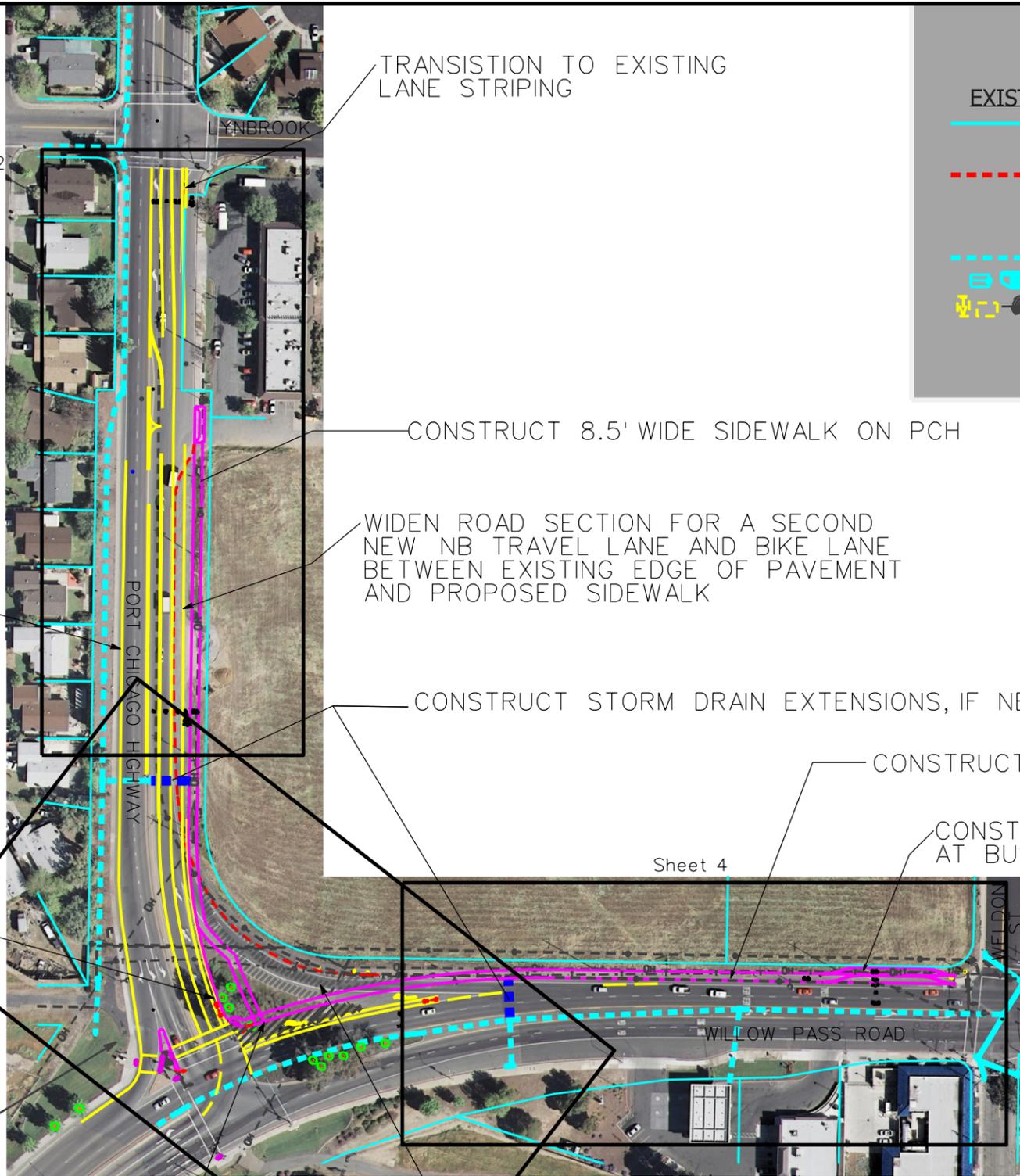
Port Chicago Hwy/Willow Pass Rd Project

FEDERAL ID NO:

DB: LL CB:

DATE: FEB 2014

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LEGEND

EXISTING	DESCRIPTION	PROPOSED
	Right of Way	
	Pavement Markings	
	Edge of Pavement	
	Sidewalk	
	Curb Ramp	
	Storm Drain Line	
	Storm Drain Features	
	Utilities	

ADD BIKE LANE PAVEMENT STRIPING

TRANSITION TO EXISTING LANE STRIPING

CONSTRUCT 8.5' WIDE SIDEWALK ON PCH

WIDEN ROAD SECTION FOR A SECOND NEW NB TRAVEL LANE AND BIKE LANE BETWEEN EXISTING EDGE OF PAVEMENT AND PROPOSED SIDEWALK

CONSTRUCT STORM DRAIN EXTENSIONS, IF NECESSARY

CONSTRUCT 8.5' WIDE SIDEWALK ON WPR

CONSTRUCT 8.5' WIDE SIDEWALK AT BUS STOP (TURN OUT OPTIONAL)

MODIFY ISLAND FOR BIKE LANE

SEE E3481C-93 DRAWINGS FOR AQUADUCT PIPES

CONSTRUCT SIDEWALK AND MODIFY SIGNAL FOR DEDICATED RIGHT TURN LANE

REMOVE EXISTING SWEEPING/FREE RIGHT TURN MOVEMENT

SCALE:
1" = 100' FOR 24x36
1" = 225' FOR 11x17



Contra Costa County
Public Works
Department

PROJECT LAYOUT - ULTIMATE

PORT CHICAGO HIGHWAY AND WILLOW PASS ROAD
SIDEWALK PROJECT - BAY POINT