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ON					

Development Program Report for the Bethel Island Area of Benefit

August, 2016

Prepared Pursuant to Section 913 of the County Ordinance Code

Prepared by and for:

Contra Costa County Public Works Department, Transportation Engineering Division and Department of Conservation and Development, Community Development Division



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Chapter

Introduction and Purpose

The Bethel Island Area of Benefit ("Bethel Island AOB") was created as a means to collect funds to maintain and improve the capacity and safety of the arterial road network in the north-east county area of Contra Costa County ("County") including Bethel Island, Jersey Island, Bradford Island, and King Edward Island. This Development Program Report ("DPR") contains information and data in support of a decrease in the fees imposed on development projects within the Bethel Island AOB to fund improvements to the County's roadway, transit, bicycle and pedestrian facilities needed to accommodate travel demand generated by new land development within the unincorporated portion of this AOB. The DPR is required by Chapter 913-6 of the County Ordinance Code and is required by the Board of Supervisors' Policy on Bridge Crossing and Major Thoroughfare Fees (adopted July 17, 1979), which implements Division 913 of the County Ordinance Code.

One of the objectives of the County General Plan is to connect new development directly to the provision of community facilities necessary to serve that development. In other words, development cannot be allowed to occur unless a mechanism is in place to provide the funding for the infrastructure necessary to serve that development. The Bethel Island AOB Fee is a means of raising revenue to construct road improvements to serve new developments. Requiring that all new development pay a road improvement fee will help ensure that they participate in the cost of improving the road system.

Each new development or expansion of an existing development will generate new additional traffic. Where the existing road system is inadequate to meet future needs based on new development, improvements are required to meet the new demand. The purpose of a development program is to determine improvements ultimately required by future development and to require developers to pay a fee to fund these improvements. Because the Bethel Island AOB Fee is based on the relative impact on the road system and the costs of the necessary improvements to mitigate this impact, the fee amount is roughly proportional to the development impact. This report discusses the basis of that fee amount. The update results in lower fee rates because the largest project on the former list, Bethel Island Bridge, was completed with a large cost savings due to grant funding. The projects on the current list are relatively low cost and thus require lower traffic impact fees.



Chapter

2

Background

On March 15, 1988, the Board of Supervisors ("Board") passed a resolution forming the Countywide Area of Benefit ("Countywide AOB") to improve the capacity and safety of the arterial road network in the County through the establishment of a traffic mitigation fee ordinance (Resolution 88/122 and Ordinance 88-27). This ordinance applied to unincorporated areas of the County and outlined boundaries of seven regional areas of benefit, including the Bethel Island AOB, within the original Countywide AOB. The Bethel Island AOB was last updated in 1993.

The Bethel Island Road Bridge over Dutch Slough (one of the key Area of Benefit improvement projects), has been replaced with a new, widened structure. However, other AOB improvements to Cypress Road and Bethel Island Road have not been implemented.

In recent years, the area within the Bethel Island AOB has experienced changes in the area's traffic circulation needs and development potential. In 2006, the City of Oakley annexed portions of the AOB south of Dutch Slough. In addition, the County's General Plan includes policies that significantly limit potential residential development on Bethel Island until financing for the island's perimeter levee system can be assured. These changes in AOB area and growth potential have prompted an update to the AOB program, resulting in an amended project list and fee schedule.



Chapter

3

Location and Boundary

The Bethel Island AOB boundary location is described in Exhibit A and generally shown in Exhibit B.

Chapter

4

General Plan Relationship

The Bethel Island AOB is consistent with the features of the County General Plan and its amendments, and subscribes to the policies of the General Plan elements. The General Plan policies include, but are not limited to, improving the County roadway network to meet existing and future traffic demands. The Bethel Island AOB Fee will assist in funding the necessary roadway improvements required for future growth as shown in the General Plan.

The General Plan and its various elements are available for review at the Department of Conservation and Development, Community Development Division, 30 Muir Road, Martinez, during office hours.



Chapter

5

Project List

The project List for the Bethel Island AOB is set forth in Exhibit C. This list contains five projects, all related to arterial roadway improvements through roadway widening. The improvements are not related to Level of Service (LOS) problems, as the Bethel Island roads are LOS A exceeding County standards. Instead, the improvements will address safety concerns on narrow roadways. The addition of shoulders will increase safety even as the amount of traffic increases. Shoulders will also provide a bike lane/walkway.

The improvements proposed on the Bethel Island AOB project list were identified in a cooperative effort by the Public Works Department and the Department of Conservation and Development, utilizing the combined knowledge of both agencies. These improvements have been identified through previous planning and traffic studies and environmental impact analyses conducted in the area.

The proposed improvements will be reviewed periodically to assess the impacts of changing travel patterns, the rate of development, and the accuracy of the estimated project costs. The periodic review of the program will also allow staff to evaluate project priority and the need to increase fees should project costs increase or exceed the rate of inflation.

Chapter

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Development Potential

The "Nexus Study: Bethel Island Area of Benefit" ("Nexus Study"), dated August, 2016, was prepared by DKS in association with Urban Economics for the Public Works Department and is attached as Exhibit D and incorporated herein by reference. The Nexus Study provides the technical basis for establishing the required nexus between the anticipated future development in Bethel Island AOB and the need for certain regional facilities.

The projected growth in households, employment, and vehicle-miles traveled within the Bethel Island AOB is discussed and shown in the Nexus Study.

A summary of the potential new residential dwelling units, office, industrial, and commercial/ retail developments (net growth from 2010 to 2040) for the unincorporated portion of AOB is shown in Table 1.

Table 1. Development Potential Summary

Land Use Category	Units		
Cinala Family Desidential	010 devalling units		
Single-Family Residential	819 dwelling units		
Multi-Family Residential	70 dwelling units		
Office	107,300 sq ft		
Industrial	31,800 sq ft		
Commercial/Retail	96,700 sq ft		



Chapter

7

Estimated Cost of Road Improvements

The estimated costs of the road improvements planned for the Bethel Island AOB and the corresponding recommended Bethel Island AOB Fee contributions are shown in Exhibit C. The Bethel Island AOB will only finance the proportional share of the improvements necessitated by the impact on the road system from new development.

Detailed cost estimates for the projects included in the road improvement plan are provided in Appendix A of the Nexus Study.

The County will assess an administrative fee equal to 2% of the applicable fee. This additional fee will be used to cover staff time for fee collection, accounting, and technical support to the community groups and traffic advisory committees.

for the Bethel Island Area of Benefit

Chapter

8

Method of Fee Apportionment

The total estimated cost of the projects included in the Bethel Island AOB project list is \$6,928,000. Of this, approximately \$2,339,000 is attributable to growth within the Bethel Island AOB. There is an existing account balance of \$477,000.

An adjusted project cost to be covered by the Bethel Island AOB fees was determined by subtracting the existing fund balance from the attributable project cost.

$$$2,339,000 - $477,000 = $1,862,000$$

(Attributable Project Cost) (Balance) (Adjusted Project Cost)

This adjusted project cost represents the amount of revenue needed from the Bethel Island AOB Fee to fund the construction of the projects shown in Exhibit C.

The expected growth in the Bethel Island AOB to the year 2040 is 889 dwelling units and 235,800 square feet of retail, office, and industrial space. To determine a fee rate per unit, first each development type is assigned a dwelling unit equivalent or "DUE" rate. DUEs compare the trip making characteristics of a land use in relation to a typical single-family residential unit, which is assigned a DUE of 1. Land uses with lower overall traffic impacts than a single family home are assigned values less than 1, and vice versa. The following Table shows the DUE rates for the various land use categories.

Table 2

Dwelling Unit Equivalent (DUE) Rates							
Land Use Category	PM Peak Hour Trip Rate per	Unit	Trip Length (miles) ²	Percent New trips ²	VMT per Unit	DUE per Unit	
Singe Family	1.01	Dwelling	5.0	100	5.050	1.00	
Multi-Family	0.62	Unit	5.0	100	3.100	0.61	
Retail	4.10	C	2.3	76	7.167	0.00142	
Office	1.40	Square Feet	4.5	92	5.796	0.00115	
Industrial	0.98	1 661	5.1	92	4.598	0.00091	

¹ ITE Trip Generation 7th Edition

² ITE Journal, May 1992

Source: DKS Associates, 2013

Next, the total growth in DUEs in the AOB by 2040 is found by multiplying the land use growth by the DUE per Unit factors found above. The growth in DUEs for each land use and the total growth in DUEs is shown below.

Table 3

Growth in DUEs						
Land Use Category	Unit	Growth in Units ¹	DUE per Unit	Growth in DUEs		
Singe Family	Dwelling	819	1.00	819.0		
Multi-Family	Unit	70	0.61	42.7		
Retail		96,700	0.00142	137.3		
Office	Square Feet	107,300	0.00115	123.4		
Industrial		31,800	0.00091	28.9		
Total 1,151.3						
¹ See Table 2: "Summary of Estimated Development 2010 to 2040 Growth"						
Source: DKS Associates, 2013						

Finally, the Cost per DUE is found by dividing the total Cost of Improvements Allocated to AOB Growth by the total Growth in Dwelling Unit Equivalents (DUE's):

$$\frac{\$1,862,000}{1.151.3} = \$1,617 \ per \ DUE$$

Because the DUE rates are based on estimates of the average vehicle-miles of travel generated during the PM peak hours for each general land use type, the developments are charged fees in proportion to the amount of traffic impact they are projected to generate. In this way, the fees attributed to each new parcel will be proportional to the estimated benefits they receive through use of the new improvements.

Chapter

9

Fee Rates

Calculation of Fees

The fee calculation is set forth in detail in the Nexus Study (Exhibit D).

To determine a maximum fee rate for the various land use categories, the Cost per DUE is multiplied by the DUE per unit, which were both found in Chapter 8. In the residential categories, this results in a fee per dwelling unit. In the non-residential categories, the fee is charged per square foot. These calculations are summarized in the following Table.

Table 4. Fee Calculations

Nexus-Based Fee Rates for Bethel Island AOB					
Cost of I	cated to AOB	\$1,862,000			
Grow	th in Dwelling Un	t Equivalents	1,151.3		
	Cost per DUE	\$1,617			
Land Use	Units	DUE per Unit	Maximum Fee per Unit ¹		
Single Family	Dwelling Unit	1.00	\$1,617		
Multi-Family	Dwelling Unit	0.61	\$986		
Retail	Square Foot	0.00142	\$2.30		
Office	Square Foot	0.00115	\$1.86		
Industrial	Square Foot	0.00091	\$1.47		
Other	Dwelling Unit	1.00	\$1,617		
¹ Maximum Fee per Unit = (Cost per DUE) x (DUE per Unit)					
Source: DKS Associates, 2014					

The "Other" Land Use category is for unique land uses, which are most commonly recreational or institutional. To determine the DUE for a development considered "Other," the vehicle miles traveled (VMT) are first estimated using a combination of trip generation data, the default rate for trip length, and percent new trips. A conversion factor is then applied to find the DUE.



Recommended Fees

The potential maximum fee rates calculated in the Nexus Study and presented in Table 4 above are the recommended fee rates for the Bethel Island AOB. These represent a 20% to 70% decrease from the current fee schedule, depending on the land use. The current fee rates are higher because the project list included the high-cost Bethel Island Bridge replacement project. Federal funding, which was not initially anticipated in the Bethel Island Area of Benefit program budget, was secured and used to complete the bridge replacement project. The updated Nexus Study indicates that a decrease in financial obligation is justified for the developers' fair share contribution to the updated project list. Lowering the rates will encourage new development and will have a significant positive impact on the Bethel Island area.



Chapter

10

Program Finance Considerations

Other Funding Sources

The improvements planned for the Bethel Island AOB will be only partially funded by Bethel Island AOB fee revenues. Other sources of funding, such as State or Federal aid, or local sources such as sales tax, gas tax, etc., will be pursued.

These other funding sources include, but are not limited to, Regional Measure J Funds, State Transportation Improvement Program (STIP) Funds, and Federal Program Funds.

The rate at which revenue is generated by the Bethel Island AOB Fee depends on the rate of new development. This rate of revenue generation affects the timing of construction of the improvement projects because it is dependent upon the total amount of fees collected, less expenditures. Alternate sources of funding would permit construction of AOB projects sooner.

Review of Fees

Project cost estimates will be reviewed periodically while the Bethel Island AOB is in effect. On January 1 of each year thereafter, the amount of the fees will be increased or decreased based on the percentage change in the Engineering News Record Construction Cost Index for the San Francisco Bay Area for the 12-month period ending with the October index of the previous calendar year, without further action of the Board of Supervisors.

Collection of Fees

Fees will be collected when a building permit is issued, in accordance with Section 913-4.204 of Title 9 (Subdivisions) of the Contra Costa County Ordinance Code. Fees collected will be deposited into an interest bearing trust fund established pursuant to Section 913-8.002 of the Contra Costa County Ordinance Code.



Interest on Fees

The interest accrued on the fees collected shall continue to accumulate in the trust account and shall be expended for construction of the improvements, or to reimburse the County for the cost of constructing the improvements, pursuant to Section 913-8.006 of the County Ordinance Code.

Dedication in Lieu of Fee

A development may be required to construct, or dedicate right-of-way for a portion of the improvements as a condition of approval. In such an event, the developer may be eligible to receive credit for the fee or reimbursement. The eligible credit and/or reimbursement shall be determined in accordance with the County's "Traffic Fee Credit and Reimbursement Policy."



Exhibit

A

Area of Benefit Boundary Legal Description

Boundary Description Bethel Island Area of Benefit

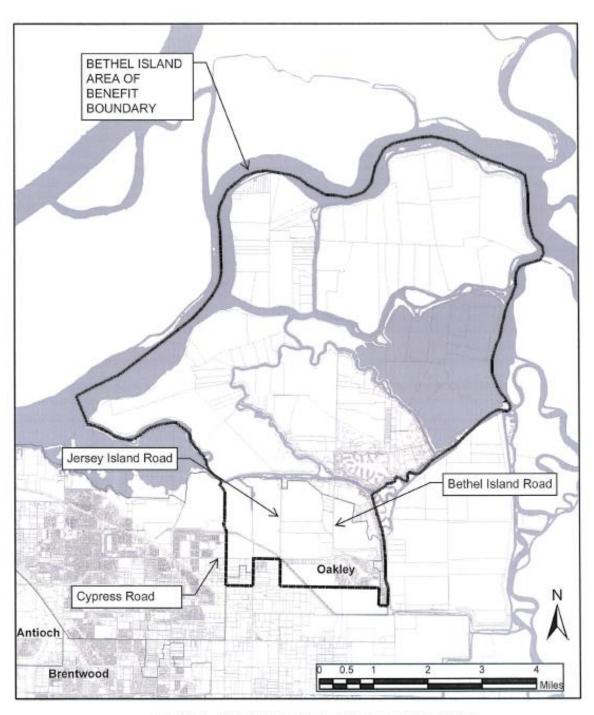
A portion of northeastern Contra Costa County, State of California, bounded on the north by Sacramento County, on the East by San Joaquin County and described as follows:

Beginning at a point in the San Joaquin River at the northwestern prolongation of Dutch Slough, on the boundary common to Contra Costa and Sacramento Counties; thence northeasterly along said County boundary 65,000 feet more or less to the intersection with San Joaquin County at the confluence of the San Joaquin River and Mokelumne River; thence leaving Sacramento County southerly along the boundary common to Contra Costa and San Joaquin Counties 26,000 feet more or less to the confluence of Old River and Sandmound Slough; thence leaving said County boundary, southwesterly up Sandmound Slough 17,600 feet more or less to the confluence of Sandmound Slough and Dutch Slough; thence southerly continuing up Sandmound Slough 1,200 feet more or less to the southeast corner of Subdivision 6610 filed June 9, 1999 in Book 411 of Maps at page 14; thence leaving Sandmound Slough westerly along the southerly line of Subdivision 6610. North 88°18'38" West 900.00 feet to the southwest corner of said Subdivision: thence along said Subdivision, North 1°41'22" East 1706.00 feet to the northwest corner of said Subdivision being a point on the south line of Section 27, Township 2 North, Range 3 East, Mount Diablo Meridian; thence along said Section line, North 89°02'36" West 4379.93 feet to the corner common to Sections 27, 28, 33, 34, (T2N, R3E, MDM); thence along the south line of said Section 28, North 89°43' West 5289.8 feet to the corner common to Sections 28, 29, 32, 33 (T2N, R3E, MDM); thence along the east line of said Section 29, North 0°59'30" East 2657.40 feet to the northeast corner of the southeast quarter of said Section 29 in Cypress Road; thence North 89°16'12" West 2636.86 feet to the northwest corner of said southeast quarter; thence leaving Cypress Road and along the west line of said southeast quarter, South 0°35' West 2649.92 feet to the quarter corner common to Sections 29 and 32; thence along the south line of said Section 29, North 89°51'45" West, 2643.76 feet to the corner common to Sections 29, 30, 31, 32, (T2N, R3E, MDM); thence along the west line of said Section 29. North 0°44'15" East 2649.03 feet to the quarter corner common to Sections 29 and 30; thence continuing along said west line of Section 29, North 1°02'17" East 2638.77 feet to the corner common to Sections 19, 20, 29, 30, (T2N, R3E, MDM) being a point on the westerly boundary of Subdivision MS 28-85 filed December 12, 1985 in Book 120 of Parcel Maps at Page 16; thence along said westerly boundary the following courses: North 89°37'20" West 65.00 feet; thence North 15°41'47" West 736.17 feet; thence North 20°20'00" East 321.92 feet; thence North 14°12'47" West 77.60 feet; thence North 0°43'13" East 2725.00 feet; thence North 36°30'47" West 785.00 feet; thence North 27°17'13" East 223.60 feet; thence North 0°43'13" East 149.80 feet; thence North 28°58'47" West 201.50 feet to the northwest corner of said Subdivision MS 28-85, being in the center of Dutch Slough; thence northwesterly down Dutch Slough 17,500 feet to the point of beginning.

Exhibit

B

Area of Benefit Boundary Plat Map



BETHEL ISLAND AREA OF BENEFIT MAP

Exhibit

Road Improvement Plan – Project List

Allocation of Project Costs to Bethel Island AOB Program					
Roadway	Location	Recommended Project	Estimated Total Cost	Percent Allocated to AOB	Cost Allocated to AOB
Bethel Island Rd	Taylor Rd to Sandmound Blvd	Add bicycle and pedestrian improvements	\$544,000	57.3	\$311,712
Sandmound	Oakley City Limits to Mariner Rd	Add bicycle and pedestrian improvements	\$772,000	43.6	\$336,592
Blvd	Mariner Rd to Cypress Rd	Add bicycle and pedestrian improvements	\$2,629,000	43.2	\$1,135,728
Gateway Rd	Bethel Island Rd to Piper Rd	Add bicycle and pedestrian improvements	\$1,690,000	12.1	\$204,490
Piper Rd	Gateway Rd to Willow Rd	Add bicycle and pedestrian improvements	\$1,293,000	27.1	\$350,403
		Total	\$6,928,000	33.8%	\$2,338,925



Exhibit D

Nexus Study Bethel Island Area of Benefit

Exhibit D Attached as separate document