EBMUD WEST OF HILLS NORTHERN PIPELINES PROJECT

Response to Comments Document

Prepared for

East Bay Municipal Utility District

October 2013

ESA

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Prepared for **October 2013**

East Bay Municipal Utility District

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CHAPTER 1
Introduction

1.1 Purpose of the Final Environmental Impact Report

This report has been prepared to accompany the Draft Environmental Impact Report (Draft EIR or DEIR) for East Bay Municipal Utility District's (EBMUD's) West of Hills Northern Pipelines Project. The Draft EIR assessed the potential impacts of the West of Hills Northern Pipelines Project and recommended mitigation measures to reduce significant and potentially significant impacts. This document responds to the comments on the Draft EIR and makes revisions to the Draft EIR, as necessary, in response to the comments. Together with the Draft EIR, this document constitutes the Final EIR for the project.

1.2 Environmental Review Process

On May 15, 2013, the EBMUD (the lead agency) published the Draft EIR for the West of Hills Northern Pipelines Project for public review and comment. The public review and comment period on the document extended from May 15, 2013 through July 2, 2013. Public hearings were held on the following dates and at the following locations:

- City of Berkeley (First Presbyterian Church, 2407 Dana Street) – June 12, 2103
- City of San Pablo (San Pablo City Hall, 13831 San Pablo Avenue) – June 19, 2013
- City of El Cerrito (El Cerrito High School, 540 Asbury Avenue) – June 26, 2013

This Response to Comments document has been prepared based on comments submitted as a result of the public review period. A total of 16 individual comment letters were received, as listed in **Table 1-1**. The EBMUD Board of Directors anticipates certifying that the Final EIR complies with the requirements of California Environmental Quality Act (CEQA) at a regularly scheduled Board meeting in December 2013. As part of project approval, the Board of Directors will adopt findings for each significant environmental impact that are supported by substantial evidence in the record and shall adopt the Mitigation and Monitoring and Reporting Program (MMRP).

1.3 Report Organization

Chapter 2 of this document contains copies of comments received during the comment period and responses to those comments. The comment letters are coded with the initials of the commenter or agency/organization name or acronym. The responses to all of the comments in a particular letter follow that letter. Each comment is numbered in the margin of the comment letter, so that

each comment is referenced by both a comment code and number. For example, the first comment in the letter from Barbara Redding is BR-1.

The following is a list of all persons and organizations that submitted comments on the DEIR during the comment period:

TABLE 1-1
PUBLIC AGENCIES AND INDIVIDUALS – DRAFT EIR COMMENTS

Comment Form	Comment Letter Code	Name, Title, and Affiliation	Date
Individuals			
Email	BR	Barbara Redding	July 2, 2013
Email	CE	Carl Edwardson	July 2, 2013
Email	CL	Catherine Lazio	July 2, 2013
Email	EL	Ealen Liu	June 26, 2013
Email	GD1	Gregory Davis	June 17, 2013
Email	GD2	Gregory Davis	June 19, 2013
Email	GD3	Gregory Davis	July 1, 2013
Email	JD	John DeSerio	July 1, 2013
Email	LH	Lucy Harter	July 2, 2013
Email	MA	Mandar Ambre	May 29, 2013
Email	MC	Mark and John Chekal-Bain	June 12, 2013
Email	RR	Rosemary Richie	July 1, 2013
Regional and Local Agencies			
Email	BERK	City of Berkeley, Department of Public Works	July 1, 2013
Letter	CCCFC	Maria Consolacion, Senior Engineering Technician, Contra Costa County Flood Control and Water Conservation District	June 24, 2013
Letter	ELCERR	Yvetteh Ortiz, Interim Public Works Director/City Engineer, City of El Cerrito, Public Works Department	July 2, 2013
State Agencies			
Letter	OPR	Scott Morgan, Director, State Clearinghouse and Planning Unit, Governor's Office of Planning and Research	July 1, 2013

Section 3, Text Revisions, contains changes to the Draft EIR that were initiated by staff subsequent to publication of the Draft EIR to clarify content, add additional information received after the release of the Draft EIR for clarification, or to correct the content in the Draft EIR, including revised figures and tables. Revisions to the Draft EIR text are shown as indented text. New or revised text is <u>underlined</u>; deleted material is shown in ~~strike-out~~.

CHAPTER 2
Comments and Responses

From: mary mary [mailto:copperore@hotmail.com]
Sent: Tuesday, July 02, 2013 4:24 PM
To: Blackwell, Michelle
Subject: pipeline on Benvenue Ave, Berkeley

Hi,

I'm concerned about the trees on this block. What is going to happen to the trees once you cut the roots back to the sidewalk which seems to be the plan if there is already a pipe in the center of the street and you have to leave clearance for the new 6 foot pipe. BR-1

Please reconsider the location for this pipe. There are many other blocks parallel to Benvenue with alot fewer trees. BR-2

Your truly,

Barbara Redding

2.1 Barbara Redding

BR-1 The commenter expresses concern regarding the trees on Benvenue Avenue, in particular with regard to the potential effect of cutting tree roots for pipeline trenching.

Detailed engineering design for the pipeline alignments will identify the location of existing underground utilities within the public right of way, consider the avoidance of below-ground obstructions and determine the specific location of the proposed pipeline alignments within each roadway. As discussed in the Project Description, Section 2.7.3, impacts on adjacent trees would be avoided to the extent practical. Potential impacts on the roots of street trees would depend upon two factors: the proximity of the pipeline trench to the tree; and the type and health of individual trees.

Trench excavation would not cut tree roots back to the sidewalk, as the commenter suggests. The construction zone would be limited to the street pavement and would extend no further than the curb, which is typically separated from the sidewalk by several feet comprising the "green strip." Many tree roots typically develop in the green strip, which would be avoided. Construction vehicles would be limited to the construction zone and would not drive on or park in the green strip. Pipeline construction would be performed in accordance with EBMUD's Master Construction Specifications (Section 01 35 46, Environmental Mitigation.[1]) These specifications require that EBMUD perform a tree survey in advance of construction and retain a Certified Arborist to direct all tree protection, trimming and pruning operations. Pruning shall adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. Tree roots exposed during trench excavation shall be pruned cleanly at the edge of the excavation and treated to the satisfaction of the Certified Arborist; any tree injured during construction shall be evaluated as soon as possible.

Utilities are routinely installed in roadways, yet tree mortality is not a common result of trenching in roadways for subsurface utility installation. Most healthy trees can tolerate one-sided root cutting and recover from the loss with long term after care.[2] In general, a healthy tree can recover from the loss of up to 25 percent of its tree root system. Further, the root system of a street tree located beneath the road pavement contributes less to its water and nutrient absorption than uncovered portions of the root system. The maturity of trees on Benvenue Avenue and that of street trees throughout Berkeley is evidence of their adaptability to these types of common, temporary construction disturbances.

1 EBMUD, 2008. *Standard Construction Specifications Section 01 35 46, Environmental Mitigation,* September 18, 2008.

2 Johnson, 2013. *Protecting Trees from Construction Damage: A Homeowner's Guide*. University of Minnesota Extension, Johnson, 2013. Protecting Trees from Construction Damage: A Homeowner's Guide). Website information http://www.extension.umn.edu/distribution/housingandclothing/dk6135.html#street, July 24, 2013.

Although the potential for significant tree damage or loss from trimming of tree roots or canopy is considered low, to address these concerns, the following text is added or revised under Impact 3.2-3, DEIR pages 3.2-11 to 14.

On page 3.2-11:

Impact 3.2-3: Tree removal or loss may affect visual character (applies to all pipelines).~~Wildcat Pipeline [Berkeley], Central Pressure Zone Pipelines [Richmond/San Pablo]).~~

On page 3.2-12, following the last paragraph:

All Pipelines

Pipeline construction may require the cutting of tree roots during pipeline trench excavation or the trimming of overhanging tree branches that interfere with construction equipment. EBMUD's Master Construction Specifications (EBMUD, 2008) require that EBMUD perform a tree survey in advance of construction to evaluate the potential for tree damage and retain a Certified Arborist to direct all tree protection, trimming and pruning operations. In accordance with these specifications, all tree pruning would adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. Tree roots exposed during trench excavation would be pruned cleanly at the edge of the excavation and treated to the satisfaction of the Certified Arborist; any tree injured during construction would be evaluated as soon as possible. Potential impacts to trees would depend upon the proximity of the pipeline trench to the tree, as well as the type and health of the individual tree. The potential for substantial tree damage or loss from trimming of tree roots or canopy is considered low and it is anticipated that any potential tree loss associated with the proposed pipeline construction would be a minor change that would not substantially alter the area's general appearance. With implementation of Mitigation Measure AES-2, which requires, one year following pipeline construction, an arborist evaluation of trees damaged during its construction and treatment or removal and replacement of injured trees, this impact would be *less than significant.*

Mitigation Measure AES-2: Tree Replacement and Landscaping Restoration.

This measure would apply to all pipelines except the Central Pressure Zone Pipeline (Richmond/San Pablo) at the San Pablo Creek crossing, which is addressed by Mitigation Measure BIO-1d.

If construction ~~of the Wildcat Pipeline (Berkeley)~~ requires the removal of trees or landscaping within a public right-of-way, EBMUD will replant trees and restore landscaping consistent with the following guidelines:

- If any mature native tree (i.e., trees that are 6 inches in diameter at breast height [dbh] or ten inches aggregate dbh for multi-trunk trees) or other tree protected by local ordinance is removed, replanting will be with the

same species at 1:1 ratio. To allow for access to the pipeline, replanted trees will not be located within 20 feet of the pipeline.

- All non-native protected trees which are removed will be replaced at a 1:1 ratio with a non-invasive or native tree species, or species from an approved list where applicable (i.e. Berkeley).
- ~~All~~ Any disturbed plant, bush, and ground cover landscaping will be restored to pre-project conditions, using similar plants and materials.
- Any tree that is injured during construction shall be evaluated by the District's Consulting Arborist one year following the completion of construction in the vicinity of the injured tree. The Arborist shall make recommendations for treatment or removal and replacement with an appropriate species in accordance with these tree replacement guidelines.

On page 3.2-14, References:

EBMUD, 2008. *Master Construction Specifications Section 01 35 46, Environmental Mitigation*, September 18, 2008

BR-2 The commenter requests reconsideration of the Benvenue Avenue alignment because other parallel blocks appear to have fewer trees. The DEIR Chapter 4, Project Alternatives, describes three alternative alignments of the proposed Wildcat Pipeline (Berkeley), the criteria for alternative screening, and the results of the alternatives analysis. Based upon this comment which suggests that fewer trees would be affected by project construction on Hillegass Avenue relative to Benvenue Avenue, additional evaluation of street trees for these two alignments was performed. The results of the survey indicate that the Hillegass Avenue alignment has more street trees, with a total of 139 trees on Hillegass Avenue as compared to 99 trees on Benvenue Avenue. In addition, a large coast live oak, which is protected by Berkeley's Coast Live Oak tree ordinance, is present on Hillegass Avenue near Russell Street. On Benvenue Avenue, however, approximately two thirds of the trees consist of mature trees (defined as 10-inches or greater, diameter at breast height) as compared to one third of the trees on Hillegass Avenue, which contribute to the dense canopy on several blocks of Benvenue Avenue and the perception that there are more trees or a mature closed canopy. Given a worst case scenario of pipeline trenching near the curb on either alignment, pipeline trenching would affect the same percentage of an individual tree's roots, regardless of the tree size, therefore, there would be a greater impact on trees with the Hillegass Avenue alignment because there are more trees. With respect to trimming of branches, mature trees with a high canopy would be less likely to interfere with construction equipment that would require tree trimming.

As noted in Response BR-1, EBMUD will consider all factors, including potential impacts on existing utilities and street trees, in determining the final location of the pipeline alignment within Benvenue Avenue.

From: mary mary [mailto:lakeedison@hotmail.com]
Sent: Tuesday, July 02, 2013 4:32 PM
To: Blackwell, Michelle
Subject: Wildcat Pipeline On Benvenue In Berkeley

To Whom It May Concern:

I'm against the installation of a pipeline on Benvenue for the following reasons:

it will damage the trees to have their roots cut back enough for a 6' pipe to be installed next to the existing CE-1

traffic will be impacted on College, College at Webster and in particular Webster and Benvenue which is already an odd configuration CE-2

children will be in danger walking to the library and to the shops on College CE-3

are you aware of the statistics for hit and run accidents for walkers in Berkeley? check it out CE-4

Best Regards,
Carl Edwardson

2.2 Carl Edwardson

CE-1 The commenter is opposed to pipeline installation on Benvenue Avenue due to concern regarding potential damage to trees if roots need to be cut. Refer to Response BR-1.

CE-2 The commenter states that the Benvenue Avenue alignment would affect traffic on College Avenue, the College Avenue/Webster Street intersection, and the Benvenue Avenue/Webster Street intersection. The DEIR Section 3.13, Traffic and Transportation, describes the effects of project construction on traffic in the vicinity of proposed pipelines, including College Avenue and Benvenue Avenue. The project includes conceptual traffic control schemes to reduce potential traffic disruptions; final traffic control plans would be developed closer to construction in consultation with the local jurisdictions (DEIR Section 2, Project Description). However, traffic disruptions for the proposed Wildcat Pipeline (Berkeley) would be fewer with the Benvenue Avenue option than the Hillegass Avenue alignment, as Benvenue Avenue carries approximately 690 fewer vehicles per day than Hillegass Avenue (DEIR, Section 4.5.2, Project Alternatives).

CE-3 The commenter states that the Benvenue Avenue alignment would present a danger to children walking to the library and shops on College Avenue. The DEIR Section 2, Project Description, describes the traffic control schemes that would be implemented during project construction. As described in Table 2-8, the sidewalk would remain open on one side of Benvenue Avenue (or Hillegass Avenue) during construction of the Wildcat Pipeline (Berkeley). The DEIR Section 3.13, Transportation and Traffic, addresses pedestrian access during construction under Impact 3.13-5. The discussion states that pedestrian access would be minimally affected under either the Benvenue Avenue or Hillegass Avenue alignment options because at least one sidewalk would be accessible for pedestrian traffic during construction, and pedestrians would be able to walk past the pipeline construction area to cross the roadway at locations where there are no construction activities.

Pedestrians would not have to walk more than one or two blocks to get around the construction zone. It is possible that both sidewalks would remain open, depending upon the location of the pipeline alignment within the street and its distance from the curb. If closure of one sidewalk is needed, pedestrian access from residences adjacent to the closed sidewalk to the open sidewalk across the street would be provided by a footbridge with handrails across the construction trench and a brief cessation of construction equipment use near the crossing. The footbridge would be provided upon a resident's request, either scheduled in advance or following notification to the EBMUD liaison or construction personnel. Pre-construction notification to residents would contain contact information for an EBMUD liaison.

CE-4 The commenter suggests reviewing the hit-and-run accident statistics for pedestrians in Berkeley. As discussed above in Response CE-3, sidewalks would be accessible for pedestrian traffic throughout construction. Also, the project includes other traffic control measures such as advance notice of construction, designated detour routes, removal of road blocks and covering trenches at the end of the work day, which would lessen traffic safety hazards.

Comment Letter CL

From: Catherine Lazio [mailto:catherinelazio@yahoo.com]
Sent: Tuesday, July 02, 2013 4:08 PM
To: WOHNP
Subject:

I am writing to express my concern about a few local issues that your draft EIR brought to mind.

The first is timing of the project. I did see mentioned the Alternative 4 Wildcat (4') Pipeline would follow Stuart street directly in front the entrance to Willard Middle School With 600 students, that work must be conducted during the summer when school is out (mid June). I can't imagine the major disruption at Willard School if it wasn't. And a heads up for those unfamiliar with Berkeley, many of the 38,000 UC Berkeley college students and 20,000 staff LEAVE the city between graduation in mid-may and fall semester in late August. We feel it keenly on our block when the apartment building on the corner empties out and parking eases. This project would certainly have a lessoned impact on all Berkeley residents of it were conducted during the summer months. CL-1

I noticed that your criteria for route selection during your 11/09/2011 public meeting included "avoiding schools ", other than Willard, your draft EIR does not note Benvenue House preschool as well as a daycare facility on the Benvenue block between Webster and Woolsey. These both operate year-round, and would be impacted by a complete closure or even limited access of the street for 2-4 weeks. CL-2

I couldn't find discussion or mitigation of the impact a 6 foot wide and 8 foot deep trench will have on the street trees on our block. We have a mature

grove of 30' sweetgums, uniformly planted on both sides of the street, with large canopies. I understand trenching can destroy root systems and bark and limb damage can result from all the heavy equipment. This particular species is moderately resistant to construction damage, and we are wondering if you have any root protection or watering mitigations planned, particularly if this wide trench is installed on one side rather than the center of the street. Also wondering the height of the equipment planned, as we have a substantial (and lovely) tree canopy. CL-3

Lastly, the differences between the Benvenue and Hillegass alternatives, as outlined in your draft EIR come down to traffic volume and traffic calming barriers. The difference in car volume per your report is 690 vehicles more per day on Hillegass. (are these summer figures?) Northbound Hillegass traffic could easily be rerouted onto Benvenue during construction, picking up half of those vehicles and southbound could easily be directed to College Ave. Hillegass functions as a short-cut anyway for those wanting to skirt the major arterials for College and Ashby. People turn off Ashby and find their way back to College and visa versa. Lastly, residents of Benvenue will be subjected to the same traffic calming constraints as Hillegass- we cannot enter our street from the Webster to the north nor cannot head west on Webster or even one block further on Ashby (right turn only from Benvenue) without first heading up to College and turning from there. Sounds like our southbound access on Woolsey will be restricted as well. CL-4

The differences used to determine Hillegass as the "environmentally superior" alignment are pretty negligible and given the impact on the schools on this block and the more mature CL-5

grove of street trees which could be irreparably damaged, I respectfully submit that Hillegass be reconsidered as a preferred route. CL-5 cont.

Thank you for your time,

Catherine Lazio
3014 Benvenue Ave
Berkeley, CA

2.3 Catherine Lazio

CL-1 The commenter expresses concern regarding the timing of project construction, suggesting that construction of the Wildcat Pipeline (Berkeley) in front of Willard Millard School be completed during the summer. Further, the commenter believes that construction impacts would be lessened throughout the City of Berkeley as many UC Berkeley students and staff leave during the summer.

The DEIR Project Description, Section 2.7.1, on pages 2-19 and 20 describes the proposed project construction schedule, and indicates that construction of pipelines directly in front of schools (e.g., the Willard Middle School) would be completed during traditional school breaks (summer break or winter holiday break). Table 2-2 provides the Wildcat Pipeline (Berkeley) construction details. The exact timing of project construction has not yet been determined, but based on an estimated production rate of 80 to 200 feet per day the total construction duration for the Wildcat Pipeline (Berkeley) is estimated to be between 20 to 32 weeks, so cost-efficient construction cannot be completed during a summer.

CL-2 The commenter states that avoidance of schools was part of the criteria for route selection EBMUD presented at the 2011 public meeting and that the Benvenue House pre-school and a daycare facility, both located on Benvenue Avenue between Webster and Woolsey, are not discussed in the DEIR. Because these facilities operate year-round, the commenter questions how pipeline construction in front of these facilities would be avoided.

Daycare facilities are often numerous and difficult to identify. Therefore, the presence of daycare facilities and preschools was not a consideration for alignment selection. With respect to street closure and access considerations during pipeline construction, refer to Responses CE-3 and RR-2.

CL-3 The commenter questions the potential impact of pipeline construction on street trees, due to trench excavation, bark and limb damage from construction equipment, and potential trimming of the tree canopy. Refer to Response BR-1.

CL-4 The commenter states that the differences between the Benvenue and Hillegass Avenue alternatives come down to traffic volume and traffic calming barriers, and points out that Hillegass traffic could also be detoured. Although detours could be provided on either street, the Benvenue Avenue alignment is considered to be the environmentally superior option, because – all other environmental impacts being roughly equal - it would result in less traffic disruption, as 690 fewer vehicles per day travel on Benvenue Avenue than on Hillegass Avenue based upon traffic counts performed in April 2012. In addition, traffic calming measures on Benvenue Avenue and in the vicinity would make access to homes more difficult if Hillegass Avenue were closed for construction. Whereas if Benvenue Avenue were closed, then

construction traffic could be readily detoured onto either Hillegass Avenue or College Avenue. While conceptual traffic control schemes have been prepared, the final traffic control plans would be prepared prior to construction in consultation with the City of Berkeley

CL-5 The commenter believes the differences used to determine the environmentally superior alignment are small and requests that Hillegass Avenue be reconsidered as a preferred pipeline route due to the presence of the two pre-school and daycare facilities and mature street trees on Benvenue Avenue. Refer to Responses CL-2 and BR-2.

From: Ealen [mailto:ealen@moustachetrade.com]
Sent: Tuesday, June 25, 2013 5:38 AM
To: WOHNP
Subject: Manufacturer partner from China

Hi,

Good day!

My name is Ealen Liu, the marketing manager of Mousta Inc.

I have noticed your great project on the Kickstarter website. Your product idea concept is really brilliant!

We are an integrate manufacturer in Mainland China. We can manufacture many kind of products. We also provide professional services, design and manufacturing advice and efficient top-quality production. We can help you to realize your innovative design. You can visit our website (www.MoustaC2B.com) to know more about us. And you are welcome to contact me at any time. ealen@moustachetrade.com :)

EL-1

Best wishes,
Ealen

2.4 Ealen Liu

EL-1 This comment, from the marketing manager of a Chinese manufacturer, does not pertain to the DEIR. No response is required.

Comment Letter GD1

From: gdavis@sonic.net [mailto:gdavis@sonic.net]
Sent: Monday, June 17, 2013 10:32 PM
To: Blackwell, Michelle
Subject: my concerns on the proposed West of Hills Northern Pipelines Project

Dear Ms. Blackwell:
Thank you for your helpful comments and information about the proposed project. I am a resident of Berkeley, living at 3043 Benvenue Ave., so I am concerned about the impact and implications of the project. As I indicated during our phone conversation, I would be interested in attending a briefing or brief discussion for Benvenue homeowners and residents with the project engineer or others able to answer questions.
Specifically, these are my concerns:

1) Because Benvenue runs parallel to College Ave., the two-block long Elmwood commercial strip of shops, cafes, and restaurants, roughly included in the area bordered by Russell on the north and Webster on the south could be financially impacted by the project. This is because many shoppers' and customers' cars currently park on the adjacent three block area of Benvenue, from Oregon to Woolsey. GD1-1

2)For the same reason as cited above, parking and access could be more congested and chaotic on Benvenue due to trenching, pipeline laying, and paving. For this reason as well as 1) cited above, I urge that any work on this 3-block segment bordered by Oregon (north) and Woolsey (south) be conducted on an deliberately expedited schedule. GD1-2

3)I also urge you to reconsider the Hillegass route, which has less parking infiltration by shoppers and customers of the Elmwood commercial strip on College. GD1-3

4)There are underground streams which cross Benvenue, originating from higher areas east of the street and running east to west. There is one under my house which can cause water accumulation in my cellar during storms. To avoid flooding, I have a sump and pump in my basement. I know that my underground stream also goes under some houses in its path on Hillegass to the West. My concern is that if the pipeline is laid in the rainy season, there could be some flow inhibition and backing up of underground water, perhaps causing flooding. GD1-4

5)I have allergies and breathing problems at various times, which could be aggravated by dust and grit from extended street construction. GD1-5

6) Noise pollution is a concern and I hope no work will be done until at least 8 a.m. in the morning. GD1-6

7) Paving, which I understand will involve a preliminary and a permanent application, also involves unpleasant chemical odors, which could cause headaches or nausea. I hope there is a way to avoid or ease such problems. GD1-7

8)Large waterpipes were recently laid east of College Ave. on Woolsey.
There are many cracks in the new pavement, which does not have an even appearance or surface.Will paving on Benvenue be of better quality? GD1-8

9)Will there be any new or aggravated risks to houses and residents of Hillegass because of the new pipeline if an earthquake should occur? GD1-9

10)Because this project affects an attractive and relatively quiet residential street, I urge that it be planned and executed to minimize delays and inconveniences. What is the anticipated date and duration of pipeline laying on my block of Benvenue, from Webster to Woolsey? GD1-10

Sincerely, Gregory H. Davis (510-649-0390); gdavis@sonic.net

Comment Letter GD2

From: gdavis@sonic.net [mailto:gdavis@sonic.net]
Sent: Wednesday, June 19, 2013 5:17 PM
To: Blackwell, Michelle
Subject: a correction on boundary of Benvenue parking impacted by the Project

Dear Ms. Blackwell:
On the email I sent you recently, I erroneously listed the northern boundary of the area on Benvenue adjacent to the Elmwood commercial strip on College as Oregon. The correct limits of that parking area which will be impacted by the pipeline work and undoubtedly financially impact merchants, restaurants, and cafes on College are STUART(north) and Woolsey (south). I would appreciate it greatly if you would apply this correction to points 1) and 2)on my list of concerns.
Thank you, Gregory Davis

GD2-1

Comment Letter GD3

From: gdavis@sonic.net [mailto:gdavis@sonic.net]
Sent: Monday, July 01, 2013 9:35 PM
To: Blackwell, Michelle
Subject: after the meeting

Dear Michelle,
please add these comments and forward them in the EIR report:

1) Apparently the Benvenue path rather than the Hillegass route, although the former is more likely to cause problems because of its proximity to the Elmwood commercial strip on College, has been selected for the wildcat pipeline route. When I asked the engineer, Mr. McGowan, what the basis of the decision was, he provided no information. In other words, he provided no transparency. GD3-1

2)The first EBMUD mailed notice of public meetings announced three meetings in June without any specifics on proposed Berkeley routes. The second notice said Hillegass and Benvenue were being considered. And the third said Benvenue would be the route. None of these meetings, unfortunately, were attended by Benvenue residents. The vagueness of the pipeline location in the earlier notices very likely caused residents to essentially ignore the reality of the pipeline project for them. If your cards announcing the meetings had included a photo of a big pipe on a flatbed truck and one of the big, ditch-digging machine, no doubt they would have been better attended. In any case, you did eventually arrange a last-minute meeting with myself and another Benvenue resident, Catherine, at the Café Roma with yourself and Mr. McGowan. This will undoubtedly go down in your EIR as a public meeting with Benvenue residents-attended by a total of two, however, and essentially a session where Mr. McGowan did more talking at us than explaining how our concerns might be addressed. GD3-2

Now I have the information packet and will show it to some neighbors, but unfortunately it will be too late for them to ask any questions or include any comments. The best we can hope for now is that the project will be expeditiously implemented when it reaches Benvenue to reduce the magnitude of some of the problems it may cause to residents, College Ave. merchants, restauranteers and café owners. Availability of a responsible contact person at EBMUD with whom we can communicate when there are problems, requests, or concerns would be extremely helpful. GD3-3

Gregory H. Davis, 3043 Benvenue, Berkeley (resident)

2.5 Gregory Davis

GD1-1 The comment speculates that commercial businesses on College Avenue could be financially impacted due to lack of available parking on Benvenue Avenue during construction. The DEIR evaluates access limitations to adjacent land uses under Impact 3.13-4 in Section 3.13, Transportation and Traffic. As discussed, all roadways would be closed for construction on a block-by-block basis as construction progresses, limiting the duration of parking restrictions on each block (refer to Table 2-2, Wildcat Pipeline (Berkeley) Construction Details and Figure 2-12, Typical Progression of Open Trench Construction, in Section 2, Project Description). Mitigation Measures TRA-2a through 2d would reduce the potential effects of parking restrictions by providing advance notice of construction to residents and business owners within 300 feet of construction activities, removing road blocks at the end of the work day, ensuring sidewalk access, and providing alternate parking solutions for residents.

The California Environmental Quality Act (CEQA) requires consideration of the *environmental* effects of proposed projects; in accordance with CEQA Guidelines Section 15131, economic impacts are not treated as significant effects on the environment unless it would result in a physical change in the environment, and thus, are not included in the DEIR analysis.

GD1-2 The commenter requests that work on Benvenue Avenue between Oregon and Woolsey Streets, be expedited for the reasons described in Comment GD1-1. Refer to the project schedule in Section 2.7, Project Description, and Response GD1-1. As discussed, roadways would be closed on a block-by-block basis so as to expedite the project to the extent practical.

GD1-3 Commenter suggests that there would be fewer economic and parking-related effects from commercial visitors to the Elmwood commercial strip on College Avenue with the Hillegass Avenue alternative. The number of parking spaces that are temporarily closed would be similar for both Hillegass Avenue and Benvenue Avenue. Since the streets are only a block apart, the potential impact on the business district would be about the same. Refer to Responses CL-4, JD-1 and GD1-1.

GD1-4 The commenter states that there are underground streams that cross Benvenue Avenue, and one causes flooding in his cellar during storms. He is concerned that if construction occurs during the rainy season, the flow of the creeks could be impeded and the backed up water could cause flooding.

As discussed in the DEIR Project Description (pages 2-33 and 2-34), any groundwater or stormwater that accumulates in the pipeline trenches during construction would be pumped and disposed to maintain a dry working environment. As discussed in DEIR Section 3.10, Hydrology and Water Quality, Impact 3.10-2 (pages 3.10-24 to 26), the water would be discharged to the storm or sanitary sewer in accordance with a

Discharge Plan prepared by the construction contractor as required by Section 01 35 44 of the EBMUD Master Specifications. The Discharge Plan would specify discharges in accordance with the requirements of the local jurisdiction. Rather than exacerbate flooding issues during construction, trench dewatering could alleviate flooding in the vicinity during construction by removing groundwater and other water that accumulates in the trench.

GD1-5 The commenter states that his occasional allergies and breathing problems could be aggravated by construction dust. DEIR Section 3.3, Air Quality, Impact 3.3-1 addresses short-term increases in criteria pollutant emissions, including suspended and inhalable particulate matter (i.e., dust) and equipment exhaust emissions. The project includes Mitigation Measure AIR-1a, Construction Mitigation Measures, to limit the project's construction-related dust and criteria pollutant emissions. This measure requires watering exposed surface two times per day. Additional dust control measures that will be required include covering haul trucks, and using wet power vacuum street sweepers to remove all visible mud or dirt track-out onto adjacent roads.

GD1-6 The commenter hopes that no construction work will be done until at least 8 a.m. in the morning. As stated in the DEIR Project Description, Work Hours, page 2-19, typical construction hours would be from 8 a.m. to 7 p.m.

GD1-7 This comment expresses concern that paving would involve odors that could cause headaches or nausea. DEIR Section 3.3, Air Quality, Impact 3.3-3 addresses construction-related odors. Hydrocarbon odors resulting from asphalting would be similar in nature to nuisance diesel odors associated with operation of construction equipment and readily dissipated. As discussed, this effect would be localized, primarily affecting the closest residences, and would be temporary.

GD1-8 The comment questions the quality of new pavement following construction. The DEIR Project Description, Table 2-6, Pipeline Construction Characteristics (page 2-27), describes the pavement restoration. As discussed on page 2-27, the pavement restoration structural section would match the existing structural section and would extend 12 inches beyond the edge of the trench, or to the curb line if the edge of the trench is within 2 feet of the curb. Further, in accordance with Utility Master Permit Conditions, pavement material would conform to the Caltrans Standard Specifications (Section 39). These standards were jointly developed by the Contra Costa County City-County Engineering Advisory Committee and the members of the Utility Coalition and are commonly-accepted paving practices for paving following utility installation.

GD1-9 The commenter asks if there will be new or aggravated flooding risks to homes on Hillegass Avenue in the event of an earthquake.

As discussed in DEIR Section 3.7, Geology and Soils (page 3.7-17), the underground pipelines would be imbedded in structural fill and would be constructed in

accordance with seismic design standards such as the American Water Works Association's standards for design and installation of steel pipe, standards of the American Society of Mechanical Engineers, standards of the American Welding Society for structural welding and EBMUD Engineering Standard Practice 550.1 which would reduce the potential for damage in the event of an earthquake or other natural disaster. In addition, the pipelines would be designed with isolation valves that can be closed to interrupt the flow of water to a ruptured pipeline as discussed in DEIR Section 3.10, Hydrology and Water Quality, Impact 3.10-4 (page 3.10-27) and in the Project Description (page 2-18). Therefore, the project would not result in substantial flooding risks to homes in the event of an earthquake. Refer also to Response BERK-19 for information regarding EBMUD's Leak Response Program.

GD1-10 The commenter requests construction planning and execution to minimize delays and inconveniences. The DEIR Project Description, Section 2, Table 2-2, Wildcat Pipeline (Berkeley) Construction Details and Figure 2-12, Typical Progression of Open Trench Construction, describe the schedule for construction activities. EBMUD shares the commenter's concern and seeks to plan and execute the project to minimize construction delays and inconveniences.

GD2-1 The comment revises the northern boundary of the Elmwood commercial district referred to in Comments GD1-1 and GD1-2. Refer to Responses GD1-1 and GD1-2.

GD3-1 The comment questions the basis for selection of Benvenue Avenue as the preferred alignment of the Wildcat Pipeline (Berkeley). Refer to DEIR page 4-17 and Response CL-4.

GD3-2 The comment asserts that the EBMUD notice of public meetings was vague on the proposed Berkeley pipeline routes and meetings. EBMUD mailed the same initial notice of public meetings to residents and businesses in the vicinity of each of the proposed pipelines. The title of the notice was "Large Water Pipeline Construction In or Near Your Street" and the other side had a map of the alignment showing both Benvenue Avenue and Hillegass Avenue as proposed route options. The notices provided a link to the EBMUD website, http://www.ebmud.com/about-ebmud/news/project-updates/west-hills-northern-pipelines-project, which contains detailed maps of the pipeline routes and the DEIR.

GD3-3 The comment states that it would be helpful to have a responsible contact person at EBMUD to contact if there are problems or concerns regarding project construction. Mitigation Measure NOI-1, described in Section 3.11, Noise, requires that an EBMUD contact person be designated to respond to construction-related issues, including noise. The phone number and email address of the liaison would be posted at construction areas, on all advanced notifications, and on the EBMUD project website. This person would take action to address all questions and complaints.

Comment Letter JD

From: John DeSerio [mailto:deserio4@gmail.com]
Sent: Monday, July 01, 2013 10:46 PM
To: WOHNP
Subject: Wildcat Pipeline: Benvenue Ave Resident Comment

Dear East Bay MUD,

I live on Benvenue Ave and was saddened to hear that there is a proposed pipeline plan construction project aimed for our street. I am written to share my concern over Benvenue being used versus Hillegass Ave. I believe that Hillegass is both a wider street (better for construction) and has more driveways to accommodate the decrease in street parking. Benvenue has fewer driveways as well as serves as a main street for College Ave business and consumer parking. Having Benvenue closed for 6 weeks would cause a huge inconvenience not only for its residents but for the customers of restaurants and shops on College Ave. JD-1

Sincerely,

John DeSerio

3027 Benvenue Ave, Berkeley, CA 94705

510-593-9671

2.6 John DeSerio

JD-1 The comment suggests that Hillegass Avenue alternative may be preferable to Benvenue Avenue because it is wider and has more driveways to accommodate the lack of street parking, and further, closure of Benvenue Avenue would inconvenience residents on Benvenue and customers of the nearby commercial area on College Avenue. As shown on Table 2-8, Hillegass Avenue and Benvenue Avenue are both 36 feet wide. Hillegass Avenue has a Class III bicycle route and greater vehicle traffic per day. While parking restrictions during construction would be an inconvenience for residents on either street, parking facilities are available for the commercial area and EBMUD would seek to find alternate parking solutions for residents (Mitigation Measure TRA-2d in DEIR Section 3.13, Transportation and Traffic, page 3.13-34.) Refer also to Responses CE-2 and GD1-1.

From: mary mary [mailto:monocreek@hotmail.com]
Sent: Tuesday, July 02, 2013 4:18 PM
To: Blackwell, Michelle
Subject: Wildcat Pipeline

Dear EBMUD:

Benevenue Ave isn't a good place to put a new pipeline because it is a major route to the library and the shops on College. Drivers already panic when they see that Benvenue and Webster are closed and start doing strange things - back up into Webster, head straight into Benvenue, make a U turn at the intersection or before, etc.

It's already an extremely dangereous intersection for children and adults walking to the library or to College Ave.

What will the drivers do if you close off Benevenue????????

Please put the pipeline on another block.

LH-1

Thanks,

Lucy Harter

2.7 Lucy Harter

LH-1 The comment expresses concern regarding traffic and pedestrian impacts if Benvenue Avenue is closed, and requests an alternative pipeline alignment. Refer to Responses CE-2, CE-3, and CL-4.

From: Mandar Ambre [mailto:mandar.ambre@topworthgroup.com]
Sent: Wednesday, May 29, 2013 2:47 AM
To: WOHNP
Subject: Expression of Interest for Hills Pipeline Project and Introduction to Topworth Pipes and Tubes Pvt Ltd.

To,
Associate Civil Engineer,
M/S #701, 375 11th St.,
Oakland, CA 94607-4240

Kind Attention:Mr.Timothy McGowan,

Dear Sir,

Greetings!!

Hope my email finds you in best of health and spirits.

We have received information from internet that Hills Pipeline project will be moving forward. We are indeed very happy to note and very keen to participate in this project. I would take an opportunity to introduce our company. My name is Mandar Ambre earlier i was in Man Industries India Ltd. Now i am working as DGM Marketing in Topworth Pipes and Tubes Pvt Ltd. We have one of best State to art HSAW pipe mill based in India having a annul manufacturing capacity of 300,000MT per annum HSAW pipes along with coating facilities. We are executing one of the prestigious order for Larsen and Tubro Ltd for GIDC Project of approx 95,000MT.

I am enclosing herewith following documents for your kind reference.

1. Introduction letter of Topworth Pipes and Tubes Pvt Ltd.
2. Product Mix.
3. Company Brochure.
4. Presentation of Topworth Pipes.
5. Track Record of Supplies made.

I would request you to please advice who is contact person for this project.We look forward to receive your valuable enquiry for Hills Pipeline project.

Thanking you and assuring our best services.

MA-1

regards
--

MANDAR AMBRE | Dy. General Manager (MARKETING) | Topworth Pipes & Tubes Pvt. Ltd. |
The Landmark, 701-703, Plot No. 26 A, Sector – 7, Kharghar, Navi Mumbai – 410 210, India |
Tel: +91 22 27746017 / 18 | Fax: +91 22 27746015 | **Mobile:+91 9029006149**
Email: mandar.ambre@topworthgroup.com | www.topworthgroup.com |

2.8 Mandar Ambre

MA-1 This comment, from a pipe manufacturer in India, does not pertain to the DEIR; therefore, no response is necessary.

From: Mark Chekal-Bain [mailto:mjchekal@cal.berkeley.edu]
Sent: Wednesday, June 12, 2013 3:48 PM
To: Blackwell, Michelle
Cc: Kriss Worthington; Gordon Wozniak; cfong@ci.berkeley.ca.us; Farid Javandel; Andy Katz; lucysmallsreed@comcast.net
Subject: Final EIR comments, Proposed West of Hills project

Ms. Blackwell:

Thank you for the incredible outreach that EBMUD has done on the "West of Hills" project. You and EBMUD provide a great example of how to do community relations!

We love our water and strongly support your efforts to make sure our water system is safe and healthy for the next century and beyond. That said, we are writing during the scoping period of this project to request consideration of some concerns.

We live on Hillegass Avenue between Webster and Woolsey in Berkeley and have for 17 years. We are not writing in opposition or support of this project; however, we would like EBMUD to specifically address or adopt the following when preparing the final EIR for this project.

1. Please adopt the Benvenue option for the following reasons:

A. Benvenue is a straight street. Hillegass has a curve/bend between Webster and Ashby. Hillegass will be more expensive and take longer.

B. Hillegass Avenue has a roundabout. There is no roundabout on Benvenue meaning EBMUD does not have to deal with restoring that and destroying the vegetation that has taken years to grow... speeding up the process and lowering costs.

C. Benvenue already has a barricade.. meaning traffic only enters at Benvenue and Woolsey.. not at Webster. Closing Benvenue temporarily will cause less traffic and air quality impacts than Hillegass.

D. Hillegass is the city bike route from Woolsey to Dwight. Benvenue is not. Closing Hillegass may cause significant impacts to bike travel during the project period.

E. The Malcolm X School Bus drives down Hillegass 3 times a day (twice a day on Wednesdays) during the BUSD academic year. It does not go down Benvenue so a closure of Benvenue would not impact the route. Furthermore, there is at least one child who receives special education services on this block who uses the special education bus.

F. Willard Park serves as the location for a BUSD academic school year after-school program as well as a summer camp. For this reason, many buses travel Hillegass year-round.

MC-1

G. There is at least one permanently disabled person on the block who requires van access to the house for transportation reasons.

H. Hillegass is a through street that many use to bypass College. Benvenue is not because of the barricade and the right turn only (both sides) at Benvenue and Ashby. MC-1 cont.

2. During closure of streets for permit Area A, we request that you contract with the owner of the parking structure at Regent and Webster to allow permit Area A residents to park for free between 5pm and 9am on construction days (not just consider it or reach out about it). Due to dead end streets and the proximity of Oakland, it will be VERY difficult for Area A residents to park during construction. Furthermore, it is unreasonable to expect people to leave their houses with cars before construction starts every morning... particularly people with children. What does one do with his/her child before school/camp starts at 8 or 9am? Stating that EBMUD will work with the city is not sufficient. MC-2

3. Please explicitly describe what occurs with a water line break and effect on flooding of downhill homes both during construction as well as post construction. Please also describe what will be done to prevent such a break during and post construction as well as during and after seismic events. MC-3

4. The water table is extremely high on and around Hillegass Avenue... there is a daylighted creek just a few blocks towards the hills so presumably this is the cause of the high water table. Please address how construction will take this high water table into account as well as study the soil/water table BEFORE construction begins to minimize other impacts or a longer construction period. MC-4

5. Water pressure for homes on this block is already extremely high resulting in homes needing water pressure regulators. Please specifically address potential impacts during and post construction and what will be done to make sure water pressure regulators will be repaired, adjusted or installed at no cost to residents. MC-5

6. Please specifically address how traffic and air quality impacts will be mitigated during the length of the project. Stating that EBMUD will work with the city is not sufficient. MC-6

7. Please specifically commit to mitigate noise impacts and comply with Berkeley and Oakland noise ordinances including the specific times set-out in the municipal code for both cities for construction. MC-7

8. We ask that the EBMUD Board not approve the Final EIR until all these items have been resolved and finalized with the city of Berkeley. MC-8

Thank you again for the opportunity to comment. Feel free to contact us via email for clarification or questions.

Jon Chekal-Bain and Mark Chekal-Bain

2.9 Mark and John Chekal-Bain

MC-1 The commenter requests adoption of the Benvenue Avenue option, and describes a number of traffic and transportation reasons. The commenter's preference for the Benvenue Avenue option is acknowledged. As stated in the DEIR on pages S-3, 2-12 and 4-17, Benvenue Avenue is the preferred alignment.

MC-2 The commenter requests EBMUD make a firm commitment to the alternate parking solutions for residents described in Mitigation Measure TRA-2d, not just "work with" the City of Berkeley and owners of nearby parking facilities. EBMUD will make a reasonable effort to find parking for Berkeley residents affected by street closures during construction. However, EBMUD cannot require the City of Berkeley or parking facility owners to comply with its requests.

MC-3 The commenter requests EBMUD to explicitly describe what occurs when a water line breaks and the effect of flooding on downhill homes during construction as well as post-construction. He requests that EBMUD also describe what will be done to prevent such a break during and post construction as well as during and after a seismic event.

During construction, the proposed pipeline would be empty and therefore a pipeline break during construction would not result in flooding or associated impacts. Refer to Responses GD1-9 regarding pipeline design criteria and BERK-19 for discussion of EBMUD's leak response measures that would reduce the potential for pipeline rupture and associated flood damage related to a seismic event.

MC-4 The comment expresses concern regarding the high water table around Hillegass Avenue. Refer to Response GD1-4.

MC-5 The comment states that water pressures in homes on the block of Hillegass Avenue are extremely high, and requests the DEIR address potential impacts related to high water pressure, including on residents' water pressure regulators. The DEIR Project Description, Section 2.2.2, provides an overview of existing water system operations. Figure 2-4 presents a pressure zone diagram. The residents on Hillegass Avenue are in the Berryman Pressure Zone and would not be connected in any way to the proposed pipeline. The proposed project would have no effect on the Berryman Pressure Zone or on homeowners' water pressure regulators on Hillegass Avenue.

MC-6 The comment questions how traffic and air impacts will be mitigated during the project. The commenter is referred to DEIR Section 3.13, Transportation and Traffic, for a discussion of potential traffic impacts and mitigation measures and to DEIR Section 3.3, Air Quality, for a discussion of potential air quality impacts and mitigation measures.

MC-7 The comment requests that EBMUD specifically commit to mitigating noise impacts and compliance with Berkeley and Oakland noise ordinances. As discussed in DEIR Section 3.11, Noise, even with implementation of mitigation measures NOI-1 and NOI-2b, daytime construction noise from certain construction equipment would exceed the City of Berkeley ordinance noise limits at the nearest residences, and is identified as a significant and unavoidable project impact. Proposed work hours along the Wildcat Pipeline (Berkeley) are generally consistent with the City of Berkeley's construction time limits; however, there are some instances in which construction could extend into the evening and nighttime hours. As described on page 3.11-22, extended work hours may be required for one evening and nighttime at each of two tie-in locations. Further, it is possible that the City of Berkeley could require nighttime construction through its encroachment permit conditions at some street intersections to avoid traffic impacts.

MC-8 The commenter requests that EBMUD not approve the Final EIR until these items have been resolved with the City of Berkeley. EBMUD will continue to work with the local jurisdictions, including the City of Berkeley, during the encroachment permit acquisition process to develop final traffic control plans and address parking concerns, as discussed in the DEIR on pages 2-35 and 3.13-34.

From: Rosemary Richie [mailto:rosemaryrichie@gmail.com]
Sent: Monday, July 01, 2013 6:55 PM
To: WOHNP
Subject: Berkeley Wildcat pipeline

Good Morning!

I live in one of several residences on Benvenue Avenue that has no driveway. This proposed pipeline location presents a difficult parking problem on a street that ALREADY has a parking shortage. As you know there are many popular eateries and a movie theater around the corner from my house at 3027 Benvenue. Often, even now I need to park a block or two away from my house. If this proposed construction proceeds it will severely impact this street, whereas Hillegass residents rarely have restaurant, theater and library patrons park on their block. RR-1

Also, there are two Family Day Care childcare homes located on this block. Both Joyce Newton and I have operated small facilities for over 20 years at these locations. Joyce has arranged with the city to have a 5 minute parking area in front of her home for convenient, safe drop off and pick up of the toddlers under her care. My small daycare serves children 2 years 9 months to 5 years of age. Although many of the children are neighbors who walk their children to school, the majority (including my own grandchildren who live in South Berkeley) drive to Benvenue. This proposed construction will be a big problem for all the parents at both of our little programs. RR-2

Please reconsider your original plan to construct the pipeline on Hillegass.
Thank you for giving us the chance to comment on this matter.

Rosemary Richie owner, Benvenue Children's House
and 30 year resident of Benvenue Avenue between Woolsey and Webster
510-333-3198

--
Rosemary Richie
Please note - I have changed my email to **rosemaryrichie@gmail.com**.

2.10 Rosemary Richie

RR-1 The comment expresses concern regarding parking availability during construction and suggests that parking impacts would be less on Hillegass Avenue because it is further from commercial areas than Benvenue Avenue. Refer to Responses JD-1, GD1-1 and CL-4.

RR-2 The comment indicates that proposed construction will affect the safe drop off and pickup from two daycare facilities on Benvenue Avenue, one of which has a 5-minute parking zone in front of her home. As discussed in Response GD1-1, the roadway would be closed during the daytime construction hours for about two weeks per block and the 5-minute drop-off area would not be accessible. The daycare facilities could arrange with the City of Berkeley to have an alternate temporary drop-off zone one to two blocks away during the construction, as EBMUD would notify all residents and business owners in advance of road closures and the estimated schedule and duration of construction activity. This would be a short-term inconvenience. Refer to Response CE-3 regarding pedestrian access to residences (or the daycare/preschool facility) during construction.

East Bay Municipal Utility District West of Hills Northern Pipelines Project, Draft EIR
Review by City of Berkeley, Public Works - 7/01/13

Page S-18. Impact 3.10-2. The table lists the Mitigation Measures for Impact 3.10-2 are "None Required". This contradicts other portions of the EIR that recognize disinfection water (super-chlorinated) will need to be disposed. The table needs to identify the mitigation measures for groundwater dewatering, treated water, and for non-stormwater discharges. BERK-1

Page 2-21 Two Hot Tap Connections. The hot tap methodology requires a 24-hour construction period (see description Page 3.11-14). This is a unique construction procedure with a definite noise impact that needs to be stated in this table.

Page 2-22 Two Hot Tap Connections. The hot tap methodology requires a 24-hour construction period (see description Page 3.11-14). This is a unique construction procedure with a definite noise impact that needs to be stated in this table. BERK-2

Page 2-27 Pavement Restoration:
" In accordance with the Utility Master Permit Conditions, the structural section would match the existing structural section and would extend 12 inches beyond each edge of trench or to curb line if the edge of trench is within 2 feet of the curb."

The Draft EIR also says:

Minimum Construction Easement Width	25 feet for 36-inch diameter pipe 30 feet for 48-inch diameter pipe
Minimum Trench Width	56 inches for 36-inch diameter pipe 68 inches for 48-inch diameter pipe

"A minimum construction corridor width of 25 to 30 feet (depending on pipe diameter) would be needed to accommodate pipe storage and to allow trucks and equipment access along the trench. In some areas where the pipeline would need to be installed at greater depth to avoid other utilities, a wider trench and construction easement of up to 40 feet would be required. Other construction activities, such as the installation of pipeline connections, could also require larger excavations."

Given that Berkeley's streets are on average 36 feet wide and likely the entire road will be closed down by EBMUD's work as noted above, EBMUD should repave the entire road width. BERK-3

Page 2-32 Hot Tap Connections. This is a unique construction procedure that requires a 24-hour operation period (see description Page 3.11-14). This procedure needs further description on Page 2-32. BERK-4

Pages 2-33 and 2-34 Dewatering. Construction dewatering plans must be submitted to the City of Berkeley's Department of Public Works, and Toxics Management Division in addition to the other named regulatory agencies. BERK-5

Page 2-34 Tree Removal. All tree removal within the City of Berkeley must be reviewed by Berkeley's Arborist. When roots are encountered, no roots larger than 2-inch in diameter can be cut without review by the City's arborist, roots cannot be pulled. BERK-6

Page 2-47 Berkeley Permit/Approval. This table indicates a permit is required for sending water from dewatering operations to the storm drain. This very narrowly defines the permits needed from the City. Any non-stormwater discharge to the storm drains must be permitted with the City. BERK-7

Chapter 3. Include figure(s) showing storm drain and sanitary sewer conduits 15-inch and larger, to enable all interested parties to identify crossings and potential interferences. BERK-8

Page 3.4-9 Fishery Resources. The Uplands section of the proposed project will cross Temescal Creek. This section needs discussion on the fishery resources of Temescal Creek. BERK-9

Pages 3.7-14 and 3.7-15 EBMUD Standard Construction Specifications. EBMUD must provide proof to the City that the Notice of Intent for coverage under the Statewide Construction Permit has been filed with the State. BERK-10

Page 3.8-4 Local Policies (Greenhouse Gas Emissions). The City has a Greenhouse Gas Policy document that needs to be considered in the EIR for this project. BERK-11

Page 3.9-23 Mitigation Measure HAZ-2: Asbestos Dust Mitigation Plan. Wetting to control asbestos dust must not generate runoff from site. BERK-12

Chapter 3.10. In a number of cases, past work by EBMUD in the region has caused problems with existing underground pipelines. A recent example is the Southern Loop work that was done within the boundaries of the Castro Valley Sanitary District (CVSD). EBMUD's contractor damaged and improperly repaired sanitary sewer infrastructure without notifying CVSD thus depriving the local agency of the opportunity to inspect repairs. The City does not have staff available to dedicate an inspector to EBMUD's project. The EIR needs to address how EBMUD will mitigate the problem of protecting major existing pipelines owned by the City. BERK-13

Page 3.10-14 Alameda Countywide Clean Water Program. The Alameda Countywide Clean Water Program (ACCWP) is not the entity responsible for implementing compliance with the Municipal Regional Permit (MRP). Within the City of Berkeley, the City is responsible for implementing the MRP. BERK-14

Page 3.10.15 Berkeley, Chapter 17.20. This EIR section on local policies needs to include BMC Chapter 17.08 commonly referred to as the Creek Protection Ordinance. BERK-15

The means and methods for the work in the vicinity of creeks are not certain at the EIR level of analysis. The actual proposed work must be checked for compliance with BMC 17.08. BERK-15 cont.

Page 3.10.17 Potable Water Discharges. Non-stormwater discharges within the City are subject to the City's review. BERK-16

Page 3.10-24 Mitigation Measure HYD-1. Provide the City with the Contractor's plans for conducting the work at all creeks. The plan needs to include but not be limited to schedule, techniques, materials, location relative to the creek, and condition of creek. BERK-17

Page 3.10-25 Discharge Requirements. Any non-stormwater discharge requires City review for compliance with City Municipal Code and the MRP. BERK-18

Page 3.10-27 Impact 3.10-4: Flooding resulting from a pipeline rupture (applies to all pipelines). The text includes "The inspector would be fully equipped and authorized to implement leak control BMPs immediately upon arrival..." What are these BMPs? BERK-19

Page 3.11-20 City of Berkeley. Many of the storm drains and the creek culverts in the project area are very old (approaching 90 to 100 years in age). Materials include brick and mortar, and unreinforced concrete. What vibration analysis has been performed to check on the construction impact due to the heavy equipment and proximity of the work to the aging infrastructure? What vibration analysis has been done for aging EBMUD water pipelines along the proposed pipeline's alignment? BERK-20

Chapter 5 Cumulative Impacts. Provide discussion of cumulative impact of post-construction water leaks on aging EBMUD pipelines. BERK-21

<u>Review by City of Berkeley, Public Works Transportation Division - 7/01/13</u>

Increased vehicle trips on local roadways for assessment of potential traffic impacts were calculated based on construction truck trips and construction employee vehicle trips, but did not include detoured traffic from full or partial roadway closures. This likely causes an underestimation of potential level of service impacts on roadways and intersections. BERK-22

Mitigation Measure TRAF-2 (T-2) requires preparation and implementation of a Traffic Management Plan. Any aspect of the Traffic Management Plan on or impacting Berkeley roadways hall be subject to review and approval by the City of Berkeley Traffic Engineer. Unless approved by the City of Berkeley Traffic Engineer, there shall be no lane closures on arterial roadways in Berkeley from 7am to 9am or 4pm to 6pm. City of Berkeley Emergency Services staff shall be notified daily of full roadway closures and detours planned for that day. BERK-23

2.11 City of Berkeley

BERK-01 The commenter notes that DEIR page S-18, Table S-1, Summary of Impacts and Mitigation Measures, does not indicate that mitigation is necessary for discharges of super-chlorinated disinfection water. This contradicts other sections that state that this water needs to be disposed.

Discharge of super-chlorinated disinfection water is addressed in two sections of the DEIR: Chapter 2, Project Description, and Section 3.10, Hydrology and Water Quality. As summarized in Section 3.10, Impact 3.10.2 (DEIR pages 3.10-25 and 26), the water would be managed in accordance with EBMUD's Environmental Compliance Manual. Because EBMUD has well-established standard BMPs for discharge of super-chlorinated water, and the water would be dechlorinated as necessary and discharged in accordance with a permit from the appropriate governmental jurisdiction, no mitigation is required.

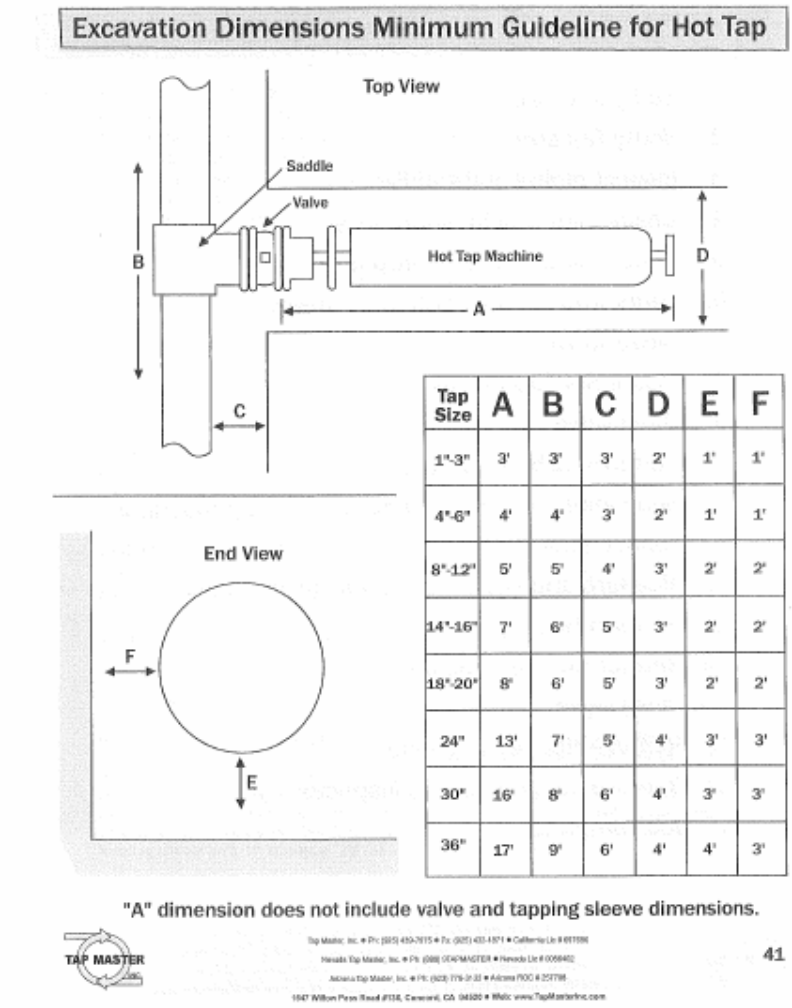
BERK-02 The comment states that the noise impacts of hot tap connections should be included in Table 2-2, on DEIR pages 2-21 and 2-22. Section 2, Project Description, provides a description of the WOHNP project design, construction and operation, it does not discuss impacts. Table 2-2, Wildcat Pipeline (Berkeley) Construction Details, presents the construction activities by pipeline segment, the proposed road closures, construction method, and approximate duration of construction for the Wildcat Pipeline (Berkeley). Environmental impacts of the proposed project are discussed in Section 3. In particular, the noise impacts of tie-in construction in Berkeley are discussed in Section 3.11, Noise, under Impact 3.11-1. As noted on DEIR page 3.11-22, it is possible that construction at each of the two Berkeley tie-in locations could extend into the night time hours on one night, and noise levels would exceed the City's noise limit. Therefore, this is considered a significant and unavoidable impact.

BERK-03 The comment indicates that, because entire roads in Berkeley would be closed for construction, EBMUD should repave the entire road width (typically 36 feet wide). Although the roads along the Wildcat Pipeline (Berkeley) may be closed to traffic to provide safe construction work areas due to the narrow width of roadways in Berkeley, the pavement disturbance from trenching would be substantially smaller, generally less than 8 feet and would not necessitate paving the entire roadway. As stated, the pavement restoration would extend 12 inches beyond the edge of the trench, or to the curb if the trench edge is within 2 feet of the curb. These pavement restoration procedures are consistent with the uniform approach to utility trench work in the public right-of-way outlined in the Utility Trench Master Permit Conditions (dated April 14, 2006). These standards were jointly developed by the Contra Costa County City-County Engineering Advisory Committee and the members of the Utility Coalition.

BERK-04 This comment requests additional description of the hot tap connections described on DEIR page 2-32. To supplement the written description of the hot tap connection procedure, the following photographs and figure are provided:

SOURCE: EBMUD

Source: EBMUD, 2013



Tap Size	A	B	C	D	E	F
1"-3"	3'	3'	3'	2'	1'	1'
4"-6"	4'	4'	3'	2'	1'	1'
8"-12"	5'	5'	4'	3'	2'	2'
14"-16"	7'	6'	5'	3'	2'	2'
18"-20"	8'	6'	5'	3'	2'	2'
24"	13'	7'	5'	4'	3'	3'
30"	16'	8'	6'	4'	3'	3'
36"	17'	9'	6'	4'	4'	3'

BERK-05 The comment states that construction dewatering plans must be submitted to the City of Berkeley's Department of Public Works and Toxics Management Division, in addition to the other regulatory agencies listed on page 2-34 of the Project Description. EBMUD agrees.

BERK-06 The comment states that all tree removal within the City of Berkeley must be reviewed by the City's arborist, and that no roots large than 2-inch in diameter can be cut without the arborist's review. Pursuant to California Government Code Section 53091, EBMUD, as a local agency and utility district serving a broad regional area is not subject to building and land use zoning ordinances (such as noise ordinances) for projects involving facilities that would produce, generate, store, or transmit water. However, it is the practice of EBMUD to work with local jurisdictions and neighboring communities during project planning, and to conform to local environmental protection policies to the extent feasible. Refer to Response BR-1.

BERK-07 This comment states that Table 2-12, Required Permits, only indicates that a permit is needed for dewatering operations to the storm drain, but should include any non-stormwater discharge to the storm drains. In response to this comment, the DEIR text of Table 2-12 on page 2-47 is revised as follows:

TABLE 2-12
REQUIRED PERMITS[1]

Agency	Permit/Approval	Pipeline Segment
City of Berkeley	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Wildcat Pipeline (Berkeley)
City of El Cerrito	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Wildcat Pipeline (El Cerrito) Central Pressure Zone Pipeline (El Cerrito/Richmond)
City of Richmond	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Central Pressure Zone Pipeline (El Cerrito/Richmond) Central Pressure Zone Pipeline (Richmond/San Pablo)
City of San Pablo	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Central Pressure Zone Pipeline (Richmond/San Pablo)
Stege Sanitary District	Approval for use of sewer line for ~~dewatering activities~~ water discharges.	Wildcat Pipeline (El Cerrito) Central Pressure Zone Pipeline (El Cerrito/Richmond)
California Department of Transportation	Encroachment Permit	Wildcat Pipeline (Berkeley) Central Pressure Zone Pipeline (El Cerrito/Richmond).
California Department of Transportation	Transportation Permit	All pipelines
California Department of Fish and Wildlife	Streambed Alteration Agreement	Central Pressure Zone Pipeline (Richmond/San Pablo)
California Regional Water Quality Control Board	National Pollution Discharge Elimination System Construction General Permit	All pipelines
California Regional Water Quality Control Board	Waste Discharge Requirements for dewatering and work within the bed and banks of waters of the State	Central Pressure Zone Pipeline (Richmond/San Pablo)

NOTES:

[1] Because the pipe bridge (including footings) proposed under the Central Pressure Zone Pipeline (Richmond/San Pablo) will be above the ordinary high water mark of San Pablo Creek, Clean Water Act Section 404 and 401 permits are not expected to be necessary.

BERK-08 The comment requests that Chapter 3 include figure(s) showing storm drain and sanitary sewer conduits 15-inch and larger, to enable all interested parties to identify crossings and potential interferences. The level of detail requested by this comment is beyond that needed in the DEIR to identify potential environmental impacts. All entities responsible for operating sewer and storm drains along the proposed

alignments were notified and able to review the DEIR. The potential for the project to result in adverse effects related to the rupture of subsurface utilities is discussed under DEIR Impact 3.9-3 in Section 3.9, Hazards and Hazardous Materials (p. 3.9-21 to 22). The final design drawings, to be produced prior to construction, will show all known utilities in order to allow EBMUD's contractor to coordinate and deal with potential interferences.

Refer also to Response BERK-20, below.

BERK-09 The comment indicates that the discussion of fishery resources on page 3.4-9 in DEIR Section 3.4, Biological Resources, should address fishery resources of Temescal Creek. The proposed project would cross a culverted section of Harwood Creek (a tributary of Temescal Creek). The project proposes to excavate under the culvert and would not impact the creek or its aquatic resources.

In response to this comment, the following text is added to DEIR page 3.4-9:

> Harwood Creek (a tributary of Temescal Creek) does not contain habitat for rainbow trout in its largely culverted and heavily urbanized areas (Leidy et al., 2005).

The following text is inserted following the seventh reference on page 3.4-32:

> Leidy, R.A., G.S. Becker, B.N. Harvey. 2005. *Historical distribution and current status of steelhead/rainbow trout (Oncorhynchus mykiss) in streams of the San Francisco Estuary, California*. Center for Ecosystem Management and Restoration, Oakland, CA.

BERK-10 The commenter states that in addition to the requirements of EBMUD Master Construction Specifications discussed in Section 3.7, Geology and Soils (DEIR pages 3.7-14 and 15), EBMUD must provide proof to the City of Berkeley that the Notice of Intent (NOI) required by the Stormwater General Construction Permit has been filed with the State.

The text referred to by the commenter is discussing specific provisions of Section 01 35 44 of EBMUD's Master Specifications, Environmental Requirements. Because providing proof of submittal of the NOI to the City of Berkeley is not a part of the EBMUD Master Specifications, it would not be appropriate to add this information to the text noted. However, in accordance with Chapter 17.20 of the Berkeley Municipal Code, EBMUD agrees that it would be required to submit documentation of submitting the NOI to the City of Berkeley.

Section 3.10, Hydrology and Water Quality, discusses stormwater regulations. The first paragraph on DEIR page 3.10-15 has been revised as follows to include this requirement:

Berkeley. Chapter 17.20 of the Berkeley Municipal Code, Discharge of Non-Stormwater into the City's Storm Drain System – Reduction of Stormwater Pollution, requires implementation of all practicable measures to reduce or prevent the contamination of stormwater by pollutants. For construction projects, these measures include, but are not limited to, prohibition of littering; providing filter materials at catch basins to retain any debris, dirt, or other pollutants generated at the construction site; and implementing appropriate BMPs for construction activity. Water produced from flushing of water line or other discharges of potable water are exempted from this section of the Berkeley Municipal Code. Uncontaminated pumped groundwater is also exempted when measures are taken to minimize the amount of groundwater discharged. This section of the Berkeley Municipal Code also requires that applicants submit documentation to the City of Berkeley that they have submitted an NOI to the SWRCB in compliance with the Stormwater General Construction Permit.

BERK-11 This comment states that the City of Berkeley Greenhouse Gas Policy should be considered in the EIR. In response to this comment, the following text is added to DEIR Section 3.8, Greenhouse Gas Emissions, on page 3.8-5:

City of Berkeley Climate Action Plan. In 2009, the City of Berkeley adopted a Climate Action Plan (CAP) focusing on measures to reduce the city's GHG emissions by 80% by 2050. Since the project involves construction of new facilities and the operational component only involves maintenance activities, the only relevant measures in the CAP relate to diversion of construction and demolition waste (Berkeley Municipal Code 19.24). Chapter 19.24 requires that construction or demolition projects divert 100% of asphalt and concrete, 100% of excavated soil and land clearing debris on undeveloped lots, and at least 50% of the remaining construction and demolition debris generated. This waste shall be diverted from landfill disposal by recycling, reuse, compost, or other approved method. Pursuant to California Government Code Section 53091, EBMUD, as a local agency and utility district serving a broad regional area is not subject to building and land use zoning ordinances (such as noise ordinances) for projects involving facilities that would produce, generate, store, or transmit water. However, it is the practice of EBMUD to work with local jurisdictions and neighboring communities during project planning, and to conform to local environmental protection policies to the extent feasible. EBMUD's Master Specification 01 74 19 requires the contractor to develop a Waste Management Plan to indicate how waste will be diverted from landfills and sets a goal of 50% diversion for construction and demolition debris.

BERK-12 The comment on Mitigation Measure HAZ-2, Asbestos Dust Mitigation Plan, states that wetting to control asbestos dust must not generate runoff from the site. Excessive wetting that generates runoff would be avoided and controlled under the measures

outlined in the Stormwater Pollution Prevention Plan required under the Construction General Permit.

BERK-13 The comment states that the DEIR should address protection of existing underground pipelines and coordination of repair to damaged infrastructure. Refer to Response BERK-08 and BERK-20.

BERK-14 The commenter notes that Alameda Countywide Clean Water Program is not the entity responsible for implementing the Municipal Regional Stormwater NPDES Permit in the City of Berkeley. The City of Berkeley has this responsibility within the City limits.

The second to the last paragraph on DEIR Section 3.10, Hydrology and Water Quality, page 3.10-14 is revised as follows to reflect this:

> **Alameda Countywide Clean Water Program**
>
> The Alameda Countywide Clean Water Program is the local entity within Alameda County responsible for implementing compliance with the Municipal Regional Stormwater NPDES permit. It comprises Alameda County, 13 incorporated cities ~~(including Berkeley)~~, the Alameda County Flood Control and Water Conservation District, and the Zone 7 Water Agency.

BERK-15 The commenter notes that the text on DEIR page 3.10-15 should reference Berkeley Municipal Code Chapter 17.08, commonly referred to as the Creek Protection Ordinance and the proposed work must be checked for compliance with this code.

Note that the referenced text on DEIR Section 3.10, Hydrology and Water Quality, page 3.10-15 describes local stormwater management ordinances, and the correct reference to the Berkeley Municipal Code is Chapter 17.20, as included in the DEIR text. Chapter 17.08 of the Berkeley Municipal Code is listed as an applicable code section in Table 3.10-2 (DEIR page 3.10-17) and the requirements of this chapter are discussed in the first bullet on DEIR page 3.10-16, which addresses local ordinances that apply to water course protection and work within flood zones. The Creek Protection Ordinance requires administrative review of construction projects within 25 feet of the centerline of a culverted creek to ensure the structural integrity of the culvert during construction.

Pursuant to California Government Code Section 53091, EBMUD, as a local agency and utility district serving a broad regional area is not subject to building and land use zoning ordinances for projects involving facilities that would produce, generate, store, or transmit water. EBMUD also has a statutory right to construct its works across any stream or watercourse pursuant to California Public Utilities Code Section 12808. However, it is the practice of EBMUD to work with local jurisdictions and neighboring communities during project planning, and to conform to local environmental protection policies to the extent feasible. As such, EBMUD

would provide its creek crossing plans to the City for its review and comment. As discussed in Response BERK-08, should damage of the creek culvert occur during construction, EBMUD would notify the City to coordinate repair of the damaged culvert.

BERK-16 The commenter notes that the potable water discharges discussed on DEIR page 3.10-17 would be subject to the City's review.

Impacts related to discharges of potable water are addressed in Impact 3.10-2 (DEIR pages 3.10-24 to 26). As described on DEIR pages 3.10-24 and 25, EBMUD's Master Specifications would require the construction contractor to prepare a Discharge Plan for any potable water discharges. The City of Berkeley would have the opportunity to review the Discharge Plan for any discharges within its jurisdiction.

BERK-17 The commenter states that Mitigation Measure HYD-1 should include a requirement to provide the City of Berkeley with the contractor's plans for conducting work at all creeks. The plan needs to include, but not be limited to, schedule, techniques, materials, location relative to the creek, and condition of the creek.

Mitigation Measure HYD-1 identifies measures to reduce water quality impacts to less than significant, beyond those required for compliance with existing state regulations. As discussed in Response BERK-15, EBMUD is exempt from compliance with local zoning ordinances and has a statutory right to cross any stream or watercourse, but would provide its creek crossing plans to the City upon request.

BERK-18 The commenter states that non-storm water discharges discussed on DEIR page 3.10-25 that occur in the City of Berkeley require review for compliance with the Berkeley Municipal Code and the Municipal Regional Stormwater NPDES Permit.

As described in DEIR Section 3.10, Hydrology and Water Quality, page 3.10-26, and in Response BERK-16, EBMUD's Master Specifications would require the construction contractor to prepare a Discharge Plan for any potable water discharges. The City of Berkeley would have the opportunity to review the Discharge Plan for any discharges within its jurisdiction, and EBMUD would obtain all required approvals prior to discharge.

BERK-19 Regarding EBMUD response to a pipeline rupture that is discussed on DEIR page 3.10-27, the commenter asks what leak control BMPs an EBMUD inspector would implement when responding to a ruptured pipeline.

The types of leak control BMPs that could be implemented include, but are not limited to, the following: removing debris from the discharge flow path; placing pea gravel bags or fiber rolls in the flow path to remove sediments; installing a

dechlorination mat or strip across the flow path downstream of sediment control devices; monitoring chlorine residual and adjusting the dechlorination setup as necessary; isolating the ruptured portion of the pipeline, if possible, prior to excavating; and cleaning up the site once the repair is completed to remove sediment and debris[3].

The text of Impact 3.10-4 on EIR page 3.10-27 is revised as follows to address this information:

> **Impact 3.10-4: Flooding resulting from a pipeline rupture (applies to all pipelines).**
>
> In the event that one of the new pipelines constructed under the West of Hills Northern Pipelines Project ruptured, adjacent and downhill residences and structures could be flooded, resulting in water damage. However, as described in the Project Description, the pipelines would be designed with isolation valves that can be closed to interrupt the flow of water to a ruptured pipe. Further, as discussed in the Setting above, an EBMUD inspector would respond on-site within one hour in accordance with EBMUD's Leak Response Program. The inspector would be fully equipped and authorized to implement leak control BMPs immediately upon arrival, if safe to do so. Potential BMPs include, but are not limited to, the following: removing debris from the discharge flow path; placing pea gravel bags or fiber rolls in the flow path to remove sediments; placing a dechlorination mat or strip across the flow path downstream of sediment control devices; monitoring chlorine residual and adjusting the dechlorination setup as necessary; isolating the ruptured portion of the pipeline, if possible, prior to excavating; and cleaning up the site once the repair is completed to remove sediment and debris (EBMUD, 2010).
>
> Once immediate BMPs are implemented, the inspector would assign a leak repair priority based on factors such as safety, customer impacts, environmental impacts, property damage, discharge rate, and traffic impacts. With proper design of the pipelines, and implementation of EBMUD's Leak Response Program (EBMUD, 2010), the potential for pipeline rupture and associated flood damage is low. Therefore, this impact would be *less than significant*.

BERK-20 The comment states that many storm drains and creek culverts in the City of Berkeley are very old, constructed of brick and mortar or unreinforced concrete, and questions whether vibration analysis has been performed to evaluate the potential impact of heavy construction equipment on aging infrastructure in proximity to proposed construction. Further, the comment questions what vibration analysis has been done for EBMUD's aging pipelines near the proposed alignments.

[3] EBMUD Environmental Compliance Manual, 2010.

While the City of Berkeley may have many very old storm drains constructed of brick and mortar or unreinforced concrete, review of the City of Berkeley's Department of Public Works storm drain and sewer system GIS mapping[4] indicates that the only unreinforced storm drain in the vicinity of the project is the Harwood Creek culvert, located near Parkside Drive. Other storm drains within the City of Berkeley in the project vicinity are described as reinforced concrete pipe.

EBMUD considered the presence of underground utilities during the planning studies for the proposed project. The *West of Hills Northern Pipelines Alignment Study* (EBMUD, 2012) discussed in DEIR Section 4, Project Alternatives, describes the process used to develop potentially feasible alternatives and the general evaluation criteria, which included construction obstacles such as existing utility crossings. The proposed alignment was selected, in part, to accommodate a request from the City of Berkeley to avoid Derby Street in order to protect unreinforced storm drains.

The American Association of State Highway and Transportation Officials (AASHTO) guidelines[5] include a discussion of vibration recommendations for underground structures. As discussed, threshold cracking recommendations developed for residential and commercial structures (refer to DEIR Section 3.11, Noise, Table 3.11-4, Vibration Thresholds) are not applicable to underground structures, such as foundation walls, buried pipelines and other underground structures because aboveground structures have freedom to respond to ground motion whereas buried structures are restrained in their response. In addition, vibration amplitude at ground level is much greater than that actually measured on a buried pipeline. While AASHTO has not developed specific criteria for buried structures, the AASHTO discussion indicates that at least one major utility has established a threshold of 4.0 inch/second (in./sec) peak particle velocity (ppv) for their buried pipelines; other studies indicate a restrained concrete block can experience 10.0 in./sec before cracking[6]. As an indicator of impact on underground structures, a vibratory compactor operating within approximately 4 feet of an underground facility could generate vibration levels that exceed the 4.0 in./sec guidance, although very old unreinforced concrete or brick and mortar facilities could be more sensitive to vibration and thus require a lower threshold.

The EBMUD water distribution network contains approximately 4,150 miles of distribution pipelines, some of which date back well over 100 years. However, EBMUD has not identified a need to perform a vibration analysis on its aging pipelines. EBMUD would seek to avoid damage to the aging storm drain during construction, and may utilize smaller vibratory compactors and/or modified construction techniques in the vicinity of sensitive subsurface utilities. As discussed in DEIR Section 3.9, Hazards and Hazardous Materials, implementation of

4 City of Berkeley, 2013. Online GIS system mapping of storm drain features (20070904) and sewers (01Jun2009).

5 AASHTO Standard R 8-96, 2004.

6 Ibid.

Mitigation Measures HAZ-1a through HAZ-1c requires the identification of buried utilities in accordance with EBMUD Engineering Standard Practice 514, Identifying Buried Conflicts (EBMUD, 2008), subsurface utility protection, and notification of utility damage. These measures require the identification of existing utilities prior to construction by requesting as-built drawings and maps from all utilities in the project area, including city and county utility owners, and use of subsurface geophysical methods, potholing, or other excavation methods. During excavation, existing utilities will be protected, supported, or removed and replaced as necessary. Utility owners will be notified of any damage that occurs and EBMUD will coordinate repair with approval of the owner.

BERK-21 The commenter states that the cumulative discussion provided in Chapter 5 should provide a discussion of the cumulative impacts of post-construction water leaks on aging EBMUD pipelines.

Regarding cumulative impacts, CEQA Guidelines Section 15130(a)(1) states that "An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR." As described in the Project Description on DEIR page 2-9, the purpose of the West of Hills Northern Pipelines Project includes correcting existing deficiencies in water transmission and storage operations, improving system reliability and water quality maintenance challenges, and facilitating repair and replacement of aging infrastructure. Further, as discussed in Section 3.7, Geology and Soils (DEIR page 3.7-17) the underground pipelines would be imbedded in structural fill and would be constructed in accordance with seismic design standards such as the AWWA's standards for design and installation of steel pipe, standards of the American Society of Mechanical Engineers, standards of the American Welding Society for structural welding and EBMUD Engineering Standard Practice 550.1 which would reduce the potential for damage in the event of an earthquake or other natural disaster.

Because the pipelines constructed under the proposed project would be constructed to more current and robust engineering standards than the older pipelines, they would be less likely to rupture or leak. Therefore, the proposed project would not contribute to cumulative impacts related to water leaks from the older EBMUD pipelines. Instead, construction of the pipelines would result in a beneficial impact related to the potential for leaks from the EBMUD water distribution system in that they provide for easier isolation of certain older pipes.

BERK-22 This comment, that the increased vehicle trips on local roadways used for DEIR analysis of traffic impacts did not include detoured traffic from roadway closures, is incorrect. The DEIR traffic impact analysis considers the future traffic volume (based on existing traffic counts conducted in April 2012 and projected to 2016 volume), the construction truck trips and employee vehicle trips, and the detoured traffic from roadway closures.

BERK-23 The comment states that the Traffic Management Plan will be subject to review and approval by the City of Berkeley Traffic Engineer. Further, there shall be no lane closures on arterial roadways in Berkeley from 7 a.m. to 9 a.m. or 4 p.m. to 6 p.m. without approval. As discussed in the DEIR Section 2, Project Description, final traffic control plans will be developed in consultation with the appropriate jurisdictions and in accordance with the requirements for an encroachment permit. Thus, the traffic control plan, including proposed construction hours, will be subject to review and approval by the City traffic engineer. It should be noted that longer construction hours shorten the overall construction duration, increase efficiency, and minimize the overall disruption to the community.

Contra Costa County
Flood Control
& Water Conservation District

Julia R. Bueren,
ex officio Chief Engineer

June 24, 2013

Timothy McGowan
Project Manager
East Bay Municipal Utility District
375 Eleventh Street, MS #701
Oakland, CA 94607

RE: Draft EIR, West of Hills Northern Pipelines Project
Our Files: 3073-00 & 97-73

Dear Mr. McGowan:

We have reviewed the Project Description and the Hydrology and Water Quality sections of the Draft Environmental Impact Report (Draft EIR) for the West of Hills Northern Pipelines Project and submit the following comments:

1. Pages 3.10-15 and 3-10-16, the paragraphs for "Contra Costa County Flood Control Ordinance":

    a. We recommend changing the title "Contra Costa County Flood Control Ordinance" on page 3.10-15 to "Contra Costa County Public Works and Flood Control Ordinance."

    b. Please replace the word "Chapter" with the word "Division" in the first sentence in the first paragraph on page 3.10-15.

    c. Please replace the term "Flood Control Encroachment Permit" in the second sentence of the first paragraph on page 3.10-15 with "County Drainage Permit."

    d. Please replace "Contra Costa County Flood Control and Water Conservation District" in the last sentence of the first paragraph on page 3.10-16 with "Contra Costa County Public Works Department."

CCCFC-1

2. Pages 3.10-15 and 3.10-16, the section for "Contra Costa County Flood Control Ordinance."

    a. The narrative in this section indicated that the creek crossings at San Pablo Creek and at Wildcat Creek for the Central Pressure Zone

CCCFC-2

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Pipeline (Richmond/San Pablo) would be subject to the Contra Costa County drainage permit requirements under Division 1010 of the Title 10 Ordinance. The County drainage permit is required for activities on drainage facilities and watercourses located in the unincorporated areas. This permit is not issued to projects within the cities.

b. Contra Costa County cannot require drainage permits for the proposed pipe bridge at San Pablo Creek and for the pipeline crossing at Wildcat Creek, since the sites for these creek crossings are located in the City of San Pablo and should comply with the regulations and permitting requirements of the City of San Pablo.

c. Similarly, Contra Costa County cannot require drainage permits for the other construction activities of the West of Hills Northern Pipelines Project that impact drainage facilities within the cities of Richmond and El Cerrito.

CCCFC-2 cont.

3. Page 3.10-16, last paragraph under the heading "Contra Costa County Flood Control Ordinance":

   a. The statements made in this paragraph that the Central Pressure Zone Pipeline (Richmond/San Pablo) is located in Flood Control Zone 6 and Drainage Area 73 and that the Wildcat Creek crossing is located in Flood Control Zone 7 are accurate.

   b. The Contra Costa County Flood Control and Water Conservation District (FC District) established the boundaries for Flood Control Zones 6 and 7 to delineate the watershed areas for Wildcat Creek and for San Pablo Creek.

   c. The proposed work sites for the Central Pressure Zone Pipeline (Richmond/San Pablo) do not involve facilities and properties owned by the FC District. A flood control encroachment permit from the FC District is not required for the Central Pressure Zone Pipeline (Richmond/San Pablo).

CCCFC-3

4. We reviewed the pipeline alignments for the Wildcat Pipeline (El Cerrito) and for the Central Pressure Zone Pipeline (El Cerrito/Richmond). These projects do not involve facilities and properties maintained or owned by the FC District. A flood control encroachment permit is not required for these projects.

CCCFC-4

5. Page 3.10-4, Flooding Hazards:

   Please include a creek cross-section drawing in the Draft EIR that shows the elevations and minimum vertical clearance between the flowline of Wildcat Creek and the top of the 36-inch water pipe at the jack-and-bore location in the vicinity of Brookside Drive. This creek crossing is part of the Central Pressure Zone Pipeline (Richmond/San Pablo). CCCFC-5

   If the City of San Pablo has not specified a minimum vertical clearance for the waterline crossing of Wildcat Creek, we recommend that the vertical clearance from the creek flowline be at least 5 feet.

6. Page 3.10-4, Flooding Hazards:

   Please include cross-section drawings in the Draft EIR that show the elevations for the pipe bridge for both crossing options at San Pablo Creek, which are the EBMUD utility corridor option and the San Pablo Avenue option. The drawings should also show the 100-year stormwater surface elevation to allow reviewers to see the proposed freeboard for each option. CCCFC-6

   We recommend that the vertical clearance between the bottom of the 36-inch waterline on the pipe bridge and the 100-year stormwater surface elevation include adequate freeboard that takes into account floating debris in the creek flows.

We appreciate the opportunity to provide comments on the Draft EIR involving drainage matters and welcome continued coordination. If you have any questions, please contact me at (925) 313-2283 or at mcons@pw.cccounty.us.

Sincerely,

Mario Consolacion
Senior Engineering Technician
Contra Costa County Flood Control
& Water Conservation District

MC:cw
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c: Tim Jensen, Flood Control
Teri Rie, Flood Control

2.12 Contra Costa County Flood Control and Water Conservation District

CCCFC-1 The commenter requests several text changes regarding the Contra Costa County Flood Control Ordinance described on DEIR pages 3.10-15 and 16. The following text changes are made to the last paragraph on DEIR page 3.10 -15 and the first paragraph on DEIR page 3.10-16 in response to this request:

Contra Costa County Public Works and Flood Control Ordinance

Contra Costa County requirements for work within a watercourse or drainage facility are specified in Title 10, Division ~~Chapter~~ 1010 of the Contra Costa County Code. This chapter was adopted to provide for implementation of drainage, recreation, and riparian vegetation requirements of the Contra Costa County General Plan. The code provides protection for watercourse riparian vegetation, requires a County Drainage Permit ~~Flood Control Encroachment Permits~~ for projects that may change the hydraulic characteristics of watercourses and drainage facilities, controls erosion and sedimentation, prevents the placement or discharge of polluting matter into watercourses, and requires adequate watercourse drainage facilities. This Contra Costa County code requires a permit for any work that could impair, impede, or obstruct the natural flow of stormwater or other water running in a defined channel; deposit any material in a defined channel; excavate, grade, or otherwise alter the surface of land so as to reduce the capacity of a defined channel; destroy or significantly alter riparian or bank-stabilizing vegetation; plant any shrub, vine, or tree within a riparian corridor; construct, alter, or repair any stormwater drainage structure, facility, or channel; commit to an act that would impair the use of an easement; or construct new non-drainage structures, or improvements to structures, within watercourses.

The permit requires submittal of engineered plans and specifications showing the work to be done and necessary engineering information, such as soil investigations and materials tests. Hydrology and hydraulic calculations must be provided for projects that may affect the capacity of a drainage system. All trenches must be backfilled with suitable materials and compacted to a relative compaction of 90 percent, and applicants proposing alterations to, or bank repairs in, a watercourse must show that the changes will not adversely affect the hydraulic capacity of the watercourse. The Contra Costa County Public Works Department ~~Flood Control and Water Conservation District~~ inspects all permitted work at completion to ensure compliance with the provisions of Chapter 1010 of the Contra Costa County Code and specific permit conditions.

CCCFC-2 The commenter notes that the EIR states on pages 3.10-15 and 16 that the Contra Costa County Flood Control Ordinance would apply to the creek crossings at San Pablo Creek and Wildcat Creek. However, the ordinance only applies to unincorporated areas of Contra Costa County and Contra Costa County cannot require drainage permits for the pipeline crossings at San Pablo Creek and Wildcat Creek because they are in the City of San Pablo.

The EIR text has been revised to address this comment as indicated below.

The following text is from the first two full paragraphs on DEIR page 3.10-16:

> ~~The permit requires submittal of engineered plans and specifications showing the work to be done and necessary engineering information, such as soil investigations and materials tests. Hydrology and hydraulic calculations must be provided for projects that may affect the capacity of a drainage system. All trenches must be backfilled with suitable materials and compacted to a relative compaction of 90 percent, and applicants proposing alterations to, or bank repairs in, a watercourse must show that the changes will not adversely affect the hydraulic capacity of the watercourse. The Contra Costa County Flood Control and Water Conservation District inspects all permitted work at completion to ensure compliance with the provisions of Chapter 1010 of the Contra Costa County Code and specific permit conditions.~~
>
> The Central Pressure Zone Pipeline (Richmond/San Pablo) crossing of San Pablo Creek is located in Flood Control Zone 6, Drainage Area 73, of the Contra Costa County Flood Control and Water Conservation District; and the Wildcat Creek crossing is located within Flood Control Zone 7, outside of a Contra Costa County Formed Drainage Area.[4] <u>However, these crossings are located within the City of San Pablo, and</u>~~Therefore,~~ construction at these creek crossings would <u>not</u> be subject to the requirements of Chapter 1010 of the Contra Costa County <u>Flood Control Ordinance</u>.

The following text is from the first full paragraphs on DEIR page 3.10-23:

> Further, any construction under or across creek channels ~~in Contra Costa County would occur within the right-of-way of the Contra Costa County Flood Control and Water Conservation District and would require a Flood Control Encroachment Permit. This permit would require proof of correspondence with CDFW and USACE to assure that construction activities are in compliance with applicable regulations of those agencies with jurisdiction over wetlands or stream beds.~~ <u>would comply with</u> ~~T~~<u>t</u>he drainage and water course protection ordinances for each city ~~would be accommodated~~ to the maximum extent practical. Compliance with these requirements would ensure that impacts related to degradation of water quality as a result of erosion and sedimentation or a hazardous materials release during construction would be *less than*

significant for the Wildcat Pipeline (El Cerrito), Central Pressure Zone Pipeline (El Cerrito/Richmond), northern portion of the Wildcat Pipeline (Berkeley), and southern portion of the Central Pressure Zone Pipeline (Richmond/San Pablo).

The following text is from the first full paragraph on DEIR page 3.10-24:

Compliance with EBMUD's Master Specifications, including compliance with the Construction General Stormwater Permit, ~~as well as Contra Costa County Flood Control and Water Conservation District requirements for construction near Wildcat Creek and San Pablo Creek,~~ would reduce the potential for adverse water quality impacts related to construction near these creeks and Harwood Creek. However, because of the sensitivity of these water bodies and the proximity of construction to the creeks, impacts related to degradation of water quality as a result of erosion and sedimentation or a hazardous materials release during construction would be potentially significant at these creek crossings. Implementation of Mitigation Measure HYD-1**,** Schedule Construction Activities at Harwood Creek, Wildcat Creek, and San Pablo Creek During the Dry Season, requiring contractors to schedule construction activities in the 100-year flood zones of these creeks during the dry season (i.e., between June 1 and October 15) would reduce this impact to *less than significant* by ensuring that construction debris and equipment are not subjected to flooding and heavy winter

CCCFC-3 The commenter notes that the text on DEIR page 3.10-16 correctly notes that the Central Pressure Zone Pipeline (Richmond/San Pablo) is located in Flood Control Zone 6 and Drainage Area 73, and the Wildcat Creek Crossing is located in Flood Control Zone 7. However, the proposed work at these crossings does not involve facilities or properties owned by the Flood Control District, therefore a flood control encroachment permit is not required for these crossings.

Comment noted, see text changes made in response to comment CCCFC-2.

CCCFC-4 The commenter notes that the pipeline alignments for the Wildcat Pipeline (El Cerrito) and Central Zone Pipeline (El Cerrito/Richmond) do not involve facilities or properties maintained or owned by the Flood Control District and therefore a flood control encroachment permit is not required for these pipelines.

Comment noted. The DEIR did not conclude that these pipelines would be subject to a flood control encroachment permit from the Contra Costa County Flood Control District (see DEIR page 3.10-16).

CCCFC-5 The commenter states that a cross section should be provided, showing the elevations and minimum vertical clearance between the flow line of Wildcat Creek and the top of the 36-inch pipeline at the jack-and-bore crossing near Brookside Drive. In

addition, the minimum distance between the top of the pipeline and the waterline crossing of Wildcat Creek should be five feet, unless the City of San Pablo has specified a different minimum distance.

The preliminary engineering plans for this crossing indicate that the top of the pipeline will be 5 feet below the bottom of the creek bed in Wildcat Creek. This distance would be subject to review by the City of San Pablo under Chapter 13.04 of the San Pablo Municipal Code.

CCCFC-6 The commenter requests cross sections which show the 100-year stormwater elevation and the elevation of the pipe bridge for both crossing options at San Pablo Creek to illustrate the amount of freeboard under each option. Also, the freeboard between the bottom of the pipeline and the 100-year storm surface elevation at the San Pablo Creek crossing should allow for floating debris.

The DEIR page 2-31 describes the proposed pipe bridge alternatives relative to the base flood elevation of San Pablo Creek. EBMUD would design the bridge in accordance with the requirements of Section 15.28 of the San Pablo Municipal Code referenced on DEIR pages 3.10-16 and 17, which require new structures be elevated to or above base flood elevation or be capable of resisting flood loads. EBMUD will work with the City of San Pablo to ensure that there is sufficient freeboard that takes into account floating debris.

PUBLIC WORKS DEPARTMENT
(510) 215-4382

July 2, 2013

Timothy McGowan
Associate Civil Engineer
375 Eleventh Street, M/S #701
Oakland, California 94607-4240,

EMAIL DELIVERY to WOHNP@ebmud.com

Dear Mr. McGowan:

The City of El Cerrito appreciates the opportunity to review and comment on the West of Hills Northern Pipelines Project Draft Environmental Impact Report (EIR). We support the East Bay Municipal Utility District's (EBMUD's) efforts to correct existing deficiencies in water transmission and storage operations, meet future water demands, improve system reliability and water quality challenges, and facilitate repair and replacement of other aging infrastructure. El Cerrito City staff has reviewed the EIR and has noted that the EIR identifies various impacts within the City including several that are considered significant and unavoidable. Our comments on the EIR are provided below.

Section 2.8 Traffic Control Plan

Comments on Tables 2.9 and 2.10 are as follows:

- Some of the street widths indicated are inconsistent with City records and should be verified. These include sections along Hill Street, Richmond Street, Norvell Street, C Street, Ashbury Avenue and Lynn Avenue.
- City counts from 2010 on Lynn Avenue indicate an existing ADT of approximately 2,000 vpd, which is twice that indicated in the EIR. The traffic analysis should reflect the higher number of vehicles would be detoured to Fairmount Avenue.
- Given the roadway and land use characteristics of Pomona Avenue and San Carlos Avenue, they should not be used as detour routes for Lynn Avenue and Ashbury Avenues. Colusa Avenue is a minor arterial and therefore more appropriate than San Carlos or Pomona Avenues.
- Given the roadway characteristics of Lincoln Avenue, it should not be used as a detour route for Fairmount Avenue. Central Avenue has a parking prohibition on the north side of the street and therefore more appropriate than Lincoln Avenue.
- Clarify whether or not detours are proposed for any closures of Hill Street and Lynn Avenue. Other sections of the EIR indicate that a detour is not required for Hill Street, but that one is required for Lynn Avenue. Provide traffic volume information and analysis as appropriate.
- Given the roadway and land use characteristics of Lexington and Lincoln Avenues, they are not the most appropriate roadways to be used as detours for Central Avenue and San Pablo Avenue. Traffic calming or other similar measure may be required.

ELCERR-1

Section 2.11 Permits and Approvals

Comments on Table 2-12 are as follows:

- A City Encroachment Permit and/or City SWPPP Permit will be required for use of City storm drains for dewatering activities. ELCERR-2
- A City Grading and Transportation Permit is also required for the transportation of rock/soil materials exceeding 50 cubic yards. The City's Master Fee Schedule also indicates that a haul route impact fee may apply to address pavement damage caused by the hauling activities related to the project. ELCERR-3

Section 3.10 Hydrology and Water Quality

Creek areas exist along San Pablo Avenue and Richmond Street in the City of El Cerrito. Mitigations required for creek areas in the other affected cities should also be required for creek areas in El Cerrito. ELCERR-4

Regarding the Municipal Regional Stormwater NPDES Permit, it should be clarified that construction operations including potential dewatering and potable water discharge are "conditionally" exempted and will need to comply with Section C.6 and C.15 requirements. ELCERR-5

Section 3.11 Noise

Page 3.11-1: How were the characterization of these streets created? Traffic volume and land use characteristics suggest that Norvell Street, Lincoln Avenue, C Street, and Lynn Avenue in El Cerrito have similar characteristics as Woolsey Street , Hillegass Avenue and Dana Avenue in Berkeley. These El Cerrito streets are all relatively low-volume, residential streets. ELCERR-6

Page 3.11-4: The map incorrectly shows Casa Cerrito Preschool as a "Recreation Center." This school is located on a property much smaller than what is identified. The El Cerrito Community Center and Swim Center are located across Portola Drive and are not shown on the map. St. John the Baptist School should be shown on the map since it is identified as a sensitive receptor. ELCERR-7

Page 3.11-23&23: The document should clearly state that Mitigation NOI-1 is required in El Cerrito as well as the other affected cities. ELCERR-8

In addition to the sensitive receptors identified, Pride and Joy Preschool is located at 1226 Liberty Street and the City has records of the following large family daycare homes near the project: 7031 Fairmount Ave, 1328 Elm Street, 1809 Key Blvd, 1301 Everett St. These facilities should also be subject to Mitigation Measure NOI-2. ELCERR-9

Section 3.12 Recreation

The Wildcat Pipeline (El Cerrito) alignment is along C Street, a narrow street, which is the only access point to Harding Park and Clubhouse. Vehicular access must be maintained to these facilities at all times including summer when summer camp is in session. Because summer camps are provided by the City of El Cerrito at this facility, impacts and mitigation measures should be considered. ELCERR-10

Section 3.13 Transportation and Traffic

Comments on Table 3.13-1 (also Tables 2-9 & 2-10) are as follows:

- Some of the street widths indicated are inconsistent with City records and should be verified. These include sections along Hill Street, Richmond Street, Norvell Street, C Street, Ashbury Avenue and Lynn Avenue.
- On Ashbury Avenue between Fairmount Avenue and south City limits, bike lanes are currently being installed as part of the Moeser and Ashbury Pedestrian/Bicycle Corridor Improvements Project. These will be completed by the end of this summer.
- The City of El Cerrito also has Residential Permit Parking (RPP) in areas up to a ½-mile radius of the El Cerrito Del Norte and Plaza BART Stations. Generally, the parking is restricted on one side of the block, and not the other. Refer to City's CommunityView/GIS webpage at http://www.el-cerrito.org/index.aspx?nid=154 for location information.
- Traffic count data should be included in the appendices.

ELCERR-11

Page 3.13-7: In El Cerrito, there are proposed bikeways on Lincoln Avenue, Fairmount Avenue and Behrens Street.

ELCERR-12

Impact 3.13-1: Given the significant and unavoidable impacts identified for both the Wildcat and Central Pressure Zone Pipelines in El Cerrito, the EIR should identify and analyze various detour alternatives and all transportation alternatives for all modes of travel. Consider the following possible measure to minimize impacts:

- Identify and analyze transportation demand management measures
- Identify and analyze alternative detour routes for bicycles
- Identify and analyze separate detour routes for northbound and southbound traffic to minimize impacts along a single detour route
- Consider installation of traffic calming measures along non-detour routes that may be used by diverted traffic
- Conduct additional analysis and coordinate with Caltrans and the City to identify interim traffic signal control and signal timing schemes.

ELCERR-13

The lane configuration at San Pablo/Cutting has recently changed from two to only one westbound left-turn lane on Cutting Boulevard. This was done to accommodate a new eastbound bus lane directly serving the Del Norte BART Station from San Pablo Avenue.

The lane configuration and signal phasing at San Pablo/Fairmount has recently changed to protected left-turn phasing on Fairmount Avenue and to one left-turn lane and one shared through-right turn lane on westbound Fairmount Avenue.

ELCERR-14

The Richmond/Fairmount intersection also include the Ohlone Greenway. Pedestrian and bicycle operations along the Ohlone Greenway must also be specifically evaluated at this intersection.

ELCERR-15

Table 3.13-4: Clarify whether or not a detour is proposed for any closures of Hill Street and Lynn Avenue. Other sections of the EIR indicate that a detour is not required for Hill Street, but that one is required for Lynn Avenue. Provide traffic volume information and analysis as appropriate.

ELCERR-16

Impact 3.13-: The City of El Cerrito also has Residential Permit Parking (RPP) in areas up to a ½-mile radius of the El Cerrito Del Norte and Plaza BART Stations. Evaluate impacts for RPP areas in El Cerrito. ELCERR-17

Impact 3.13-5: The EIR should address the importance of the El Cerrito Del Norte BART Station as a regional transportation hub. Traffic conditions on San Pablo, Hill, Key, Elm, Cutting, and Knott in this area will affect regional transportation including several bus transit providers. The El Cerrito Plaza BART Station is also a transportation hub serving Richmond, El Cerrito, Albany and Berkeley. Traffic conditions on Fairmount, Richmond, and Central in this area will also affect transit users. Given the proposed detour routes and the importance of the two El Cerrito BART Stations, impacts to the following intersections should also be evaluated: San Pablo/Knott (signalized), Key/Knott (four-way stop), Key/Cutting (four-way stop) – all intersection along a route used by AC Transit and BART commuters to access Del Norte. ELCERR-18

Given that various segments of the Wildcat and Central Pressure Zone Pipeline alignment in El Cerrito are along bikeways, identify and analyze alternative detour routes for bicycles that are separate from the vehicle detour routes. ELCERR-19

Again, we support EBMUD's efforts to correct existing deficiencies in water transmission and storage operations, meet future water demands, improve system reliability and water quality challenges, and facilitate repair and replacement of other aging infrastructure. Although we had a number of comments on the EIR, we believe it has made a good attempt to address a complex project. Please contact me at (510) 215-4382 or yortiz@ci.el-cerrito.ca.us should you have any questions concerning the comments contained in this letter.

Sincerely,

Yvetteh Ortiz
Interim Public Works Director/City Engineer

cc: Margaret Kavanaugh-Lynch, Development Services Manager
Sean Moss, Senior Planner

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2.13 City of El Cerrito

ELCERR-01 The comment addresses details included on Table 2.9, Traffic Control Schemes for the Wildcat Pipeline (El Cerrito) and Table 2.10 (Traffic Control Schemes for the Central Pressure Zone Pipeline (El Cerrito/Richmond).

Regarding the comment on street widths, street widths were obtained by measuring roadway widths on Google aerial for the purpose of the DEIR. Based on additional review of street widths, a modification to the width of Hill Street is proposed (see revised text below). The City may provide its records of street widths for review during preparation of the final traffic control plans; however, a small modification of the street widths stated in the DEIR would not affect the traffic handling details described in Table 2-9. Block-long closures are anticipated for all of the streets mentioned in the first bullet of the comment except Ashbury Avenue and Hill Street.

Regarding the comment on existing average daily traffic (ADT) on Lynn Avenue, the traffic counts presented in the DEIR were obtained by Wiltec, a contractor to EBMUD. The ADT volumes were not directly used for the level of service (LOS) analysis to assess the project impacts. The turning movement counts were used for the peak hour LOS analysis and the ADT counts were used to determine periods that would be suitable for lane closures. Therefore, the difference in ADT counts collected and historic counts on file for Lynn Avenue does not change the conclusions of the DEIR traffic impact analysis.

Regarding the comments on detour routing, the detour routes analyzed in the DEIR were selected with input by the City of El Cerrito staff. Note that Pomona Avenue is not proposed as a detour route (see Figure TC-5 in Appendix D and revised text below); Colusa and Fairmount Avenues could be used as a detour route for Lynn Avenue in place of San Carlos Avenue; Central Avenue (via Richmond Street or Ashbury Avenue) could be used as a detour route for closure of the block of Fairmount between Norvell and Behrens Streets in lieu of Lincoln Avenue; and detours are identified for Lynn Avenue (see Table 2-9 and Figure TC-5,) although EBMUD proposes to keep one lane of Hill Street open during construction hours (DEIR page 3.13-20). Conceptual traffic control figure TC-5 has been revised to correct an error (see revised figure on page 3-36 of this document). As indicated in the legend on Figure TC-8, the intended detour routes along Lexington Avenue and Lincoln Avenue were intended to serve only the eastbound left-turn Central Avenue automobile traffic at the San Pablo Avenue/Central Avenue intersection during the pipeline tie-in at the intersection. Due to City staff concerns about routing traffic through the residential neighborhood, Carlson Boulevard could be considered for use as an alternate route for all the eastbound left-turn traffic including automobiles, buses and trucks. Carlson Boulevard has adequate roadway

capacity to accommodate traffic detours and the conceptual traffic control figure TC-8 has been revised to reflect this request (see revised figure on page 3-37).

As discussed in the Project Description Section 2.8, conceptual traffic control plans were prepared to outline the intended approach to minimize traffic disruption during the construction. The conceptual traffic control plans presented in the DEIR, which were developed with input from City of El Cerrito staff, would be further detailed following engineering design and prior to project implementation. Final traffic control plans would be developed in consultation with the appropriate jurisdictions. As pipeline construction for the Wildcat Pipeline and Central Pressure Zone Pipelines is estimated to occur between mid-2015 to 2017 and 2021 to 2022, respectively, traffic and roadway conditions may alter prior to development of the final traffic control plans. EBMUD and its consultants will consult again with the City of El Cerrito staff to confirm appropriate detour routes and traffic measures to be implemented during project construction.

To reflect these comments, the DEIR Table 2-9, on pages 2-40 and 2-41, is revised as follows:

TABLE 2-9
TRAFFIC CONTROL SCHEMES FOR THE WILDCAT PIPELINE (EL CERRITO)

Segment Limits or Intersection	**Segment or Intersection Characteristics**	**Traffic Control Plan** Figure or CA-MUTCD Typical Application (TA)[a] (see Appendices D and E)	**Traffic Handling Detail**	**Possible Detour Routes** (see Figure TC-5)
Tie-in @ Hill St./Liberty St.	• 2-way stop	Figure TC-6	• Partial or full intersection closure	Elm St., Key Blvd., Cutting Blvd. (EB), Knott Ave. (WB), San Pablo Ave.
Hill St. (Liberty St. to Elm St.)	• 2-lane EB residential • ~~36~~40 feet wide • Parking both sides • Class III shared bicycle route • 2,050 VPD	TA-20	• Block-long ~~closure of traffic and parking lanes~~ parking restriction	~~Elm St., Key Blvd., Cutting Blvd. (EB), Knott Ave. (WB), San Pablo Ave.~~
Ashbury Ave. (C St. to Lynn Ave.)	• 2-lane arterial • 78 feet wide • Parking both sides • 4,070 VPD	TA-20 for the SB approach	• For preliminary planning purposes, pipeline construction assumed to occur in SB lanes (may occur in NB lanes) • SB: Closure of travel lanes • NB: No closure, NB travel only	SB: Fairmount Ave., San Carlos Ave., Lynn Ave., ~~Pomona Ave.~~

In addition, Table 3.13-1 on page 3.13-3 is revised as follows:

TABLE 3.13-1
CHARACTERISTICS OF ROADWAYS IN THE PROJECT AREA

Roadway / Segment	No. of Lanes / Road Width[a]	Traffic Volumes[b]	Bike Lanes?	On-Street Parking Permitted?[c]	Public Transit Lines?
Wildcat Pipeline (El Cerrito)					
Hill Street: ▪ Liberty Street to Elm Street	Two lanes (~~36~~40 feet)	2,050 vpd	Yes, Class III both sides	Yes, both sides	No

The second paragraph of DEIR page 3.13-20 is revised as follows:

> The Wildcat Pipeline (El Cerrito) alignment requires 25-30 feet for the pipeline work zone along Hill Street, Elm Street, ~~and~~ Richmond Street, Lincoln Avenue, Norvell Street, Fairmount Avenue, Behrens Street, C Street, Ashbury Avenue, and Lynn Avenue. ~~Affected segments of Elm Street and Richmond Street~~ Except for Hill Street, all the affected roadway segments would need to be closed for construction because they have widths less than 40 feet, which will provide inadequate room to allow traffic to proceed safely through the work zone. The affected segment of Hill Street has a width of approximately 40 feet. Because Hill Street is a one-way eastbound roadway and carries relatively low traffic during the peak periods (i.e., less than 181 vehicles per hour), it is proposed to keep one lane open during construction.

Figure TC-5, Proposed Detour Routes, Wildcat Pipeline (El Cerrito) and Figure TC-8, Proposed Detour Routes Central Pressure Zone Pipeline (El Cerrito/Richmond) in Appendix D are revised as shown on pages 3-36 and 37.

ELCERR-02 The comment confirms the information presented in Table 2-12, Required Permits, that an encroachment permit for work within streets and/or SWPPP permit for discharges to storm drains will be required in the City of El Cerrito.

ELCERR-03 The comment states that a Grading and Transportation permit is required for the transportation of rock/soil materials exceeding 50 cubic yards and that a haul route impact fee may also apply to address pavement damage caused by hauling. This comment, regarding local zoning requirements, does not address the adequacy of the DEIR analysis. Pursuant to California Government Code Section 53091, EBMUD, as a local agency and utility district serving a broad regional area is not subject to building and zoning ordinances for projects involving facilities that produce, generate, store, treat or transmit water. However, it is the practice of EBMUD to work with local jurisdictions and neighboring communities during project planning, and to conform to local environmental protection policies to the

extent feasible. The El Cerrito Municipal Code Section 13.24 makes no mention of a haul route impact fee. Pursuant to Government Code 6100 et seq. the city cannot impose fees for the mere issuance of a permit nor can it charge EBMUD a fee for using a public road for its intended purpose. Pursuant to California Public Utility Code Section 12808, EBMUD has the right to construct its work in city streets. While a city has the right to require EBMUD to obtain an encroachment permit, the city cannot impose requirements under the permit that would interfere with EBMUD's statutory right to construct its work in the city streets. EBMUD would restore any street or highway to its former state as near as may be in accordance with Public Utility Code Section 12808.

ELCERR-04 The commenter states that creek areas exist along San Pablo Avenue and Richmond Street in the City of El Cerrito, and the mitigation required for creek areas in other affected cities should be required in El Cerrito.

All of the creeks crossed by the proposed pipelines in El Cerrito are culverted and they are not considered sediment-sensitive water bodies. As discussed in Section 3.10, Hydrology and Water Quality, Impact 3.10-1 (DEIR page 3.10-22), these crossings would not involve direct disruption of the creek bed or surface waters. Further, as discussed on DEIR page 3.10-23, all creek crossings would comply with the drainage and water course protection ordinances of the city in which they are located to the extent practical, and construction activities would be subject to the SWRCB Construction General Stormwater Permit. 100-year flood zones along the pipeline alignments are shown on Figure 3.10-2 (DEIR page 3.10-6), and none of the creek crossings in El Cerrito would occur within a 100-year flood zone.

Mitigation Measure HYD-1 only applies to the creek crossings at Harwood Creek, San Pablo Creek, and Wildcat Creek, which are either in their natural banks at the crossing, or construction activities would occur within the 100-year flood zone of the creek. Because none of the creeks in El Cerrito are within their natural banks at the crossing, and construction would not occur within the flood zones of these creeks, compliance with the Construction General Stormwater Permit would ensure that impacts related to degradation of water quality as a result of erosion and sedimentation or a hazardous materials release during construction would be less than significant for each creek crossing in El Cerrito, as concluded on DEIR page 3.10-23.

In addition, if any culverts were damaged during construction, they would be repaired in coordination with the City of El Cerrito, subject to approval by the City, in accordance with Mitigation Measure HAZ-1c, Notification of Utility Damage (DEIR Section 3.9, Hazards and Hazardous Materials, page 3.9-22).

ELCERR-05 The commenter states that the description of the Municipal Regional Stormwater Permit should be clarified to state that construction operations, including potential dewatering and potable water discharges, are conditionally exempted and will need to comply with Section C.6 and C.15 requirements.

The requirements of Section C.6 of the Municipal Regional Stormwater NPDES permit are described on DEIR page 3.10-13. The following text is added to the top of DEIR page 3.10-14 to describe Section C.15.b.iii of the permit:

> The regional permit prohibits non-stormwater discharges to the storm sewer system, planned, unplanned, and emergency discharges of potable water from potable water systems are conditionally exempt under Section C.15.b.iii of the permit, provided that certain BMPs are implemented. For planned discharges, BMPs for dechlorination and erosion and sediment control must be provided, and the permittees must notify the RWQCB in advance of certain planned discharges. The discharges must also meet discharge limitations for residual chlorine, pH, and turbidity.
>
> For unplanned discharges, BMPs for dechlorination and erosion and sediment control must also be provided. Administrative BMPs such as source control measures, managerial practices, operations and maintenance procedures may also be necessary to prevent a discharge. Permittees must notify the Office of Emergency Services within 2 hours of any discharge that could threaten aquatic life or endanger public health and safety. The RWQCB must be notified within 24 hours when the total chlorine residual is greater than 0.05 mg/L and the total volume is approximately 50,000 gallons or more. If the pH, residual chlorine, or turbidity related to the discharges exceeds the specified limits, then the BMPs for the unplanned discharges would need to be reviewed for improvement.
>
> For emergency discharges that could result from natural or other disasters (e.g., earthquakes, floods, wildfires, accidents, or terrorist actions), the appropriate BMPs include actions such as plugging the storm drain system for storage and proper disposal of the water according to jurisdictional requirements.

ELCERR-06 The comment questions the characterization of streets with respect to noise, and suggests that the traffic volume and land use characteristics indicate that Norvell Street, Lincoln Avenue, C Street and Lynn Avenue in El Cerrito are all relatively low-volume, residential streets.

The referenced text characterizes the general range of noise environments over a large area, involving many streets. These characterizations were based on field observations during the daytime (non-peak) on a weekday. Daily volumes may vary from what was observed; however, such variations do not affect the DEIR findings because these characterizations were not used as a basis for determining impact significance. As indicated in DEIR Tables 3.11-5 and 3.11-6, impact significance in El Cerrito was based on speech interference and sleep disturbance thresholds, not ambient noise levels on specific streets.

ELCERR-07 The comment points out facilities not identified, or incorrectly identified, on Figure 3.11-2 (DEIR page 3.11-4). Preschools and community centers are not identified on Figures 3.11-1 through 3.11-3, only parks and schools.

In response, DEIR Figure 3.11-2 has been revised to delete the Casa Cerrito Recreation Center and add St. John the Baptist School (see page 3-34).

ELCERR-08 The comment indicates that the DEIR (pages 3.11-22 and 3.11-23) should clearly state that Mitigation Measure NOI-1 is required in El Cerrito, as well as the other affected cities. Impact 3.11-1 discusses potential noise impacts related to project construction activities that fall outside of ordinance time limits or noise levels.

The proposed work hours would not conflict with the time restrictions in the City of El Cerrito's standard encroachment permit conditions and there are no construction noise limits specified; therefore, there would be no impact in the City of El Cerrito under Impact 3.11-1. However, Mitigation Measures NOI-1 and NOI-2 are required in the City of El Cerrito to mitigate Impact 3.11-2, which addresses the potential for temporary noise increases to interfere with nearby noise-sensitive land uses (DEIR pages 3.11-28 and 3.11-29). Refer to Table S-1, Summary of Impacts and Mitigation Measures.

ELCERR-09 The comment indicates that several preschool and family daycare homes should be identified as sensitive receptors and subject to Mitigation Measure NOI-2. As noted in Footnote #1 on DEIR page 3.11-27, daycare facilities (which include preschools) are considered to be noise sensitive, similar to residential uses. Therefore, significance thresholds and mitigation measures that were applied to residential uses would also apply to daycare and preschool facilities.

ELCERR-10 The comment states that the Wildcat Pipeline alignment is along C Street, the only access point to Harding Park and Clubhouse, which operates year-round, and provides summer camps; therefore, impacts and mitigation measures should be considered.

The DEIR Section 3.12, Recreation (page 3.12-4) considers the impact on Harding Park, and notes that the duration of construction would last approximately one to two weeks, during which time access to Harding Park would remain open, although recreational activities could be affected by construction-related noise and dust. While it may not be possible to relocate summer camp activities to Memorial Park as suggested under Impact 3.12-1, the impact would be less than significant due to the short-term nature of the disruption. Mitigation Measures NOI-1 and AIR-1 would reduce construction-related noise and air emissions. Vehicular access on C Street would be restricted during construction; however, an alternative drop-off location for campers/recreational users could be identified within one block of the main clubhouse entrance (possibly the driveway on Ashbury Avenue to the south of Harding Elementary School), with City input, during preparation of the final traffic control plan.

ELCERR-11 The comment addresses several details in Table 3.13-1, Table 2-9 and Table 2-10. Regarding the comment on street widths, refer to Response ELCERR-01.

The comment states that bicycle lanes are currently being installed on Ashbury Avenue between Fairmount Avenue and south City limits and that the City of El Cerrito has residential permit parking (RPP) in areas up to ½- mile from the BART stations, generally restricted on one side of the block and not the other.

In response, DEIR Table 3.13-1 (pages 3.13-3 and 3.13-4) is revised as follows:

TABLE 3.13-1
CHARACTERISTICS OF ROADWAYS IN THE PROJECT AREA

Roadway / Segment	No. of Lanes / Road Width[a]	Traffic Volumes[b]	Bike Lanes?	On-Street Parking Permitted?[c]	Public Transit Lines?
Wildcat Pipeline (El Cerrito)					
Hill Street: ▪ Liberty Street to Elm Street	Two lanes (36 feet)	2,050 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	No
Elm Street: ▪ Hill Street to Richmond Street	Two lanes (40 feet)	6,750 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	No
Richmond Street: ▪ Elm Street to Lincoln Avenue	Two lanes (30 to 40 feet)	6,250 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	Yes, AC Transit Bus (G)
Lincoln Avenue: ▪ Richmond Street to Norvell Street	Two lanes (30 feet)	1,000 vpd	No	Yes, both sides (RPP required Richmond to Everett)	No
Norvell Street ▪ Lincoln Avenue to Fairmount Avenue	Two lanes (28 feet)	1,000 vpd	No	Yes, both sides (RPP required)	No
Fairmount Avenue ▪ Norvell Street to Behrens Street	Two lanes (40 feet)	8,720 vpd	No	Yes, both sides (RPP required)	Yes, AC Transit Bus (G, 25)
Behrens Street ▪ Fairmount Avenue to C Street	Two lanes (30 feet)	1,000 vpd	No	Yes, both sides	No
C Street ▪ Behrens Street to Ashbury Avenue	Two lanes (26 feet)	1,000 vpd	No	Yes, both sides	No
Ashbury Avenue: ▪ C Street to Lynn Avenue	Two lanes (78 feet)	4,070 vpd	~~No~~Yes	Yes, both sides	No
Lynn Avenue: ▪ Ashbury Avenue to San Carlos Avenue	Two lanes (36 feet)	1,000 vpd	No	Yes, both sides	No

NOTES:

[a] Roadway widths (curb-to-curb) are presented in approximate feet.
[b] Existing traffic volume represents average daily traffic (ADT); vpd = vehicles per day
[c] RPP = residential parking permit (~~City of Berkeley only~~). Unrestricted = no residential parking permit required. (City of Berkeley RPP restricts all parking to zone permit holders only; City of El Cerrito RPP restricts parking on one side of the street to permit holders).
* San Pablo Avenue (SR 123) includes four general purpose lanes (two in both directions); however, roadway includes multiple left-turn pocket lanes at the majority of intersections.
** NB = northbound

SOURCES: ESA, 2012; AC Transit, 2012; Wiltec (traffic counting firm), 2012; *23rd Street Road Diet Traffic Study,* Dowling Associates, Inc., May 2012.

It should be noted that RPP restrictions in El Cerrito, which allow non-residents to park on one side of the street, are different than those in Berkeley which restrict parking solely to residents of that parking zone. Therefore, as discussed in Impact 3.13-4, parking prohibitions would not significantly affect residents during construction as they could park in nearby areas.

The comment also states that traffic count data should be included in the appendices. The traffic count data is summarized in the traffic impact analysis. In response to this request, EBMUD will provide the detailed traffic count data directly to the City of El Cerrito.

ELCERR-12 The comment states that there are proposed bikeways on Lincoln Avenue, Fairmount Avenue and Behrens Street. Consistent with CEQA, the DEIR determines impacts based on a comparison between existing conditions and future with-project conditions. As indicated in Response ELCERR-01, it is likely that traffic and roadway conditions may alter prior to development of final traffic control plans. EBMUD will consult with the City during preparation of the final traffic control plans to confirm appropriate detour routes and traffic measures to be implemented during construction.

ELCERR-13 The comment states that the DEIR should identify and analyze various detour alternatives and all transportation alternatives for all modes of travel.

The detour routes analyzed in the DEIR were selected by the EIR traffic planners and engineers based on professional judgment and with input by the City of El Cerrito staff. The EIR team met with Jerry Bradshaw, Public Works Director and Yvetteh Ortiz, Engineering Manager on February 7, 2012. Possible detour routes for the pipeline construction in the City of El Cerrito were identified and discussed at the meeting. The considered detour routes were based on roadway widths, type of traffic control along the routes, and adjacent land use characteristics.

The detour routes found to best accommodate rerouted traffic based on currently available information were identified. During the course of the investigation, no alternative detour routes were identified that could avoid deterioration of levels of service of intersection operations; consequently, inclusion of the suggested additional analysis in the EIR would not be expected to change its conclusions with respect to impact significance. Note that CEQA does not require a lead agency to consider alternatives to every component of a multi-component project, such as the West of Hills Northern Pipeline Project. Under the “rule of reason,” the lead agency may choose to consider alternatives that reduce or modify some but not all of the project’s individual components (California Oak Foundation vs. Regents of University of California (2010)). Suggested traffic calming measures are typically associated with long-term impacts, and would not be necessary for the short-term construction impacts associated with the project. As stated in the DEIR, the final traffic control plan will be developed in coordination with Caltrans and the City,

and may consider changes in detour routing, traffic signal controls and signal timing schemes, as applicable. Refer to Response ELCERR-01.

ELCERR-14 The comment states that lane configuration and/or signal phasing has been recently changed at San Pablo/Cutting and San Pablo/Fairmont. As discussed in ELCERR-01, traffic and roadway conditions will likely continue to change up until the date of project construction. Modification of the DEIR to reflect the recent lane configuration changes would not alter the significance conclusions presented in the DEIR. Final traffic control plans, based on up-to-date traffic and roadway conditions would be prepared in consultation with local jurisdictions prior to construction.

ELCERR-15 The comment states that pedestrian and bicycle operations along the Ohlone Greenway at the Richmond/Fairmount intersection should be specifically evaluated.

The Richmond Street/Fairmount Avenue intersection is currently an all-way stop intersection. As noted in the DEIR (see Table 3.13-6), under project conditions, it is proposed to install temporary traffic signals to improve traffic operations at the intersection. Pedestrian traffic signals will be included as part of the traffic signal system to allow patrons of the Ohlone Greenway Trail to safely cross the intersection during traffic detours for the pipeline construction. In lieu of the pedestrian signals, flaggers can be deployed to facilitate safe pedestrian and bicycle crossing.

ELCERR-16 The comment requests clarification of whether any detours are proposed for closures of Hill Street and Lynn Avenue. No detour is proposed for Hill Street because EBMUD would be able to keep one travel lane open, but vehicles may detour onto the streets identified in Table 2-9. Because Lynn Avenue is less than 40 feet wide it would require closure between Ashbury Avenue and San Carlos Avenue. Refer to Response ELCERR-01.

ELCERR-17 The comment states the City of El Cerrito has RPP in areas up to ½-mile from BART stations and the DEIR should evaluate impacts for RPP areas in El Cerrito. Refer to Response ELCERR-11.

ELCERR-18 The comment states the DEIR should address the importance of the BART stations in El Cerrito as regional transportation hubs and indicates that impacts at additional key intersections used by AC transit and BART commuters should be evaluated.

While it is impractical to analyze all intersections in the project area, only critical intersections within the project area that are likely to be impacted by the project were selected for the DEIR impact analysis. Traffic to BART stations was considered in the selection of intersections for analysis, which was discussed with City staff at the February 7, 2012 meeting. Some intersections were added and

others were dropped for the study based on discussions with the City at the meeting. Refer to Response ELCERR-13.

ELCERR-19 The comment states that the DEIR should identify and analyze alternative detour routes for bicycles that are separate from the vehicle detour routes because various segments of the Wildcat and Central Pressure Zone Pipeline alignments are along bikeways.

Due to the grid layout of the streets in the project area, there are numerous opportunities for cyclists to bypass road closures. Cyclists will be directed to use adjacent streets to bypass road closures. As discussed under Impact 3.13-5, Mitigation Measure TRA-3e: Bicycle Traffic Management (see DEIR page 3.13-37), temporary 'share the road' signs will be mounted within the construction zone along San Pablo Avenue, or temporary permit will obtained to allow cyclists to use the sidewalk to bypass the construction area.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

July 1, 2013

RECEIVED
JUL 03 2013
WATER SERVICE PLANNING

Timothy McGowan
East Bay Municipal Utility District
375 Eleventh Street
Oakland, CA 94623-1055

Subject: West of Hills Northern Pipelines Project
SCH#: 2012022068

Dear Timothy McGowan:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on June 28, 2013, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

OPR-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	2012022068
Project Title	West of Hills Northern Pipelines Project
Lead Agency	East Bay Municipal Utility District

Type	**EIR** Draft EIR
Description	The project involves the construction and operation of four transmission pipeline segments in western Alameda and Contra Costa Counties - a proposed 1.5 mile long, 48-inch diameter pipeline in the City of Berkeley; a proposed 36-inch diameter, 2.5 mile long pipeline in the City of El Cerrito; a proposed 36-inch diameter, 2.5 mile long pipeline in the Cities of El Cerrito and Richmond; and a proposed 36-diameter, 1.9 mile long pipeline in the Cities of Richmond and San Pablo. The proposed pipeline routes are located within existing city streets and on non-street properties owned by EBMUD ans City of San Pablo.

Lead Agency Contact

Name	Timothy McGowan		
Agency	East Bay Municipal Utility District		
Phone	510 287-1981	*Fax*	
email			
Address	375 Eleventh Street		
City	Oakland	*State* CA	*Zip* 94623-1055

Project Location

County	Alpine, Contra Costa			
City	Brentwood, Richmond, San Pablo, El Cerrito			
Region				
Lat / Long				
Cross Streets				
Parcel No.				
Township		*Range*	*Section*	*Base*

Proximity to:

Highways	123
Airports	
Railways	BART, SP
Waterways	San Francisco Bay
Schools	
Land Use	Primarily developed within existing streets; also Open Space/Parks/Recreation, and Multi-Family Res/Med. Density Residential.

Project Issues	Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Solid Waste; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Landuse; Growth Inducing; Wetland/Riparian
Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 3; Office of Historic Preservation; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; California Highway Patrol; Caltrans, District 4; CA Department of Public Health; State Water Resources Control Board, Divison of Financial Assistance; Regional Water Quality Control Board, Region 2; Native American Heritage Commission; Public Utilities Commission

Date Received 05/15/2013 *Start of Review* 05/15/2013 *End of Review* 06/28/2013

2.14 California State Clearinghouse

This letter states that no state agencies submitted comments to the State Clearinghouse during the Draft EIR public review period and acknowledges compliance with the State Clearinghouse requirements for draft environmental documents pursuant to the California Environmental Quality Act.

CHAPTER 3
Text Revisions

3.1 Introduction

The following revisions have been made to the Draft EIR (EIR) text. These revisions include: minor corrections made by the EIR authors to improve writing clarity, grammar, and consistency; corrections, additions, or clarifications requested by a specific comment; or staff-initiated text changes to update information presented in the Draft EIR. The text revisions are organized by the chapter and page number that appear in the Draft EIR. ~~Strikethrough~~ text presented in this section indicates text that has been deleted from the Draft EIR. Text that has been added to the Draft EIR is presented as <u>underlined</u>.

3.2 Text Revisions

Summary Chapter

S.4 Summary of Impacts

DEIR Table S-1, on pages S-4 through S-27, is revised as follows:

TABLE S-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
AESTHETICS						
Impact 3.2-1: Short-term visual effects experienced from nearby areas during project construction**.**	None Required.					
Impact 3.2-2: Short-term visual effects experienced from nearby areas due to nighttime construction lighting.	**Mitigation Measure AES-1: Reduce Nighttime Lighting.** To the extent practical, ensure that stationary lighting used during nighttime construction (if required) is of limited duration, shielded and directed downward or oriented such that the light source is not directed toward residential areas.	X	X	X	X	Less than Significant.
Impact 3.2-3: Tree removal or loss may affect visual character.	**Mitigation Measure AES-2: Tree Replacement and Landscaping Restoration.** This measure would apply to all pipelines except the Central Pressure Zone Pipeline (Richmond/San Pablo) at the San Pablo Creek crossing, which is addressed by Mitigation Measure BIO-1d. If construction ~~of the Wildcat Pipeline (Berkeley)~~ requires the removal of trees or landscaping within a public right-of-way, EBMUD will replant trees and restore landscaping consistent with the following guidelines: • If any mature native tree (i.e., trees that are 6 inches in diameter at breast height [dbh] or ten inches aggregate dbh for multi-trunk trees) or other tree protected by local ordinance is removed, replanting will be with the same species at a 1:1 ratio. To allow for access to the pipeline, replanted trees will not be located within 20 feet of the pipeline. • All non-native protected trees which are removed will be replaced at a 1:1 ratio with a non-invasive or native tree species, or species from an approved list where applicable (i.e. Berkeley). • Any ~~All~~ disturbed plant, bush, and groundcover landscaping will be restored to pre-project conditions, using similar plants and materials. • Any tree that is injured during construction shall be evaluated by the District's Consulting Arborist one year following the completion of construction in the vicinity of the injured tree. The Arborist shall make recommendations for treatment or removal and replacement with an appropriate species in accordance with these tree replacement guidelines. Mitigation Measure BIO-1d.	X	X	X	X X	Less than Significant.
Impact 3.2-4: Construction of a pipe bridge may affect the visual character at San Pablo Creek.	None.					Significant and Unavoidable for Central Pressure Zone Pipeline (Richmond/San Pablo) San Pablo Avenue Option only. Less than Significant for other pipelines.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
AESTHETICS (cont.)						
Impact 3.2-5: Aboveground appurtenances may affect visual character along the pipeline routes.	None Required.					
AIR QUALITY						
Impact 3.3-1: Activities associated with proposed construction would generate significant, short-term increases in criteria pollutant emissions, including suspended and inhalable particulate matter and equipment exhaust emissions.	**Mitigation Measure AIR-1a: Construction Mitigation Measures.** To limit the Project's construction-related dust and criteria pollutant emissions, the following BAAQMD-recommended *Basic Construction Mitigation Measures* will be included in the contractor specifications for the proposed Project: • When moisture content is low enough to create dust, all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day or as needed to control dust. Areas may be rocked to minimize dust and water, covered, or sprayed with soil binder. • All haul trucks transporting soil, sand, or other loose material off-site will be covered. • All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads will be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. • Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points. • All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to using the equipment at the construction site. • A publicly visible sign with the telephone number and email address to contact EBMUD regarding dust complaints will be posted at the site. If dust exceeds specified limits, EBMUD would respond and take corrective action within 48 hours.	X	X	X	X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
AIR QUALITY (cont.)						
Impact 3.3-1 (cont.)	**Mitigation Measure AIR-1b: NO_x Control** To reduce the Project's construction-related NO_X emissions, if construction of the Wildcat (Berkeley) and Wildcat (El Cerrito) pipelines occurs at the same time, or if two pipeline construction headings are undertaken on either the Wildcat (Berkeley) or Wildcat (El Cerrito) pipelines, the Project's on-road haul truck fleet will be, on average, model year of 2010 or newer.	X	X			
Impact 3.3-2: Project construction could expose sensitive receptors to substantial pollutant concentrations.	None Required.					
Impact 3.3-3: Project construction activities would not create objectionable odors affecting a substantial number of people.	None Required.					
Impact 3.3-4: Project operations would not violate air quality standards or contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors.	None Required.					
BIOLOGICAL RESOURCES						
Impact 3.4-1: The proposed Project could have a substantial adverse effect on special-status species during open-trench construction in Urban habitat.	None Required.					
Impact 3.4-2: The proposed Project could have a substantial adverse effect on special-status species in Riparian habitats during construction at creek crossings using jack and bore and pipe bridge methods.	**Mitigation Measure BIO-1a: General Protection Measures.** EBMUD will ensure that the following general measures are implemented by the contractor(s) during construction to minimize or avoid impacts on biological resources: • Removal of native and ornamental trees and shrubs will be minimized by locating staging areas away from vegetated areas and restricting construction areas in vegetated areas to the extent practical. No trees will be removed from private property. • At the San Pablo Creek crossing, temporary fencing will be installed at the perimeter of the pipe bridge work area to protect trees on private property (see				X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-2 (cont.)	also description of exclusion fence, in Measure BIO-1b). The contractor will maintain the temporary fencing until all construction activities are completed. No construction activities, parking, or staging will occur beyond the fenced areas. • The contractor will provide closed garbage containers for the disposal of all food-related trash items (e.g., wrappers, cans, bottles, food scraps). All garbage will be collected daily from the project site and placed in a closed container, from which garbage will be removed weekly. • Construction personnel will not feed or otherwise attract fish or wildlife in the project area. • If vehicle or equipment fueling or maintenance is necessary, it will be performed in the designated staging areas located at least 50 feet from the top of bank of watercourses. **Mitigation Measure BIO-1b: Riparian Protection Measures.** • Prior to the start of pipe bridge construction at San Pablo Creek, silt fencing or other appropriate erosion control measures will be installed at the limit of the construction areas near the top of bank and extending to the limit of EBMUD property at Brookside Drive and private property on the north side of San Pablo Creek and along the limits of construction facing Wildcat Creek. Silt fencing will be at least three feet high, and with a bottom edge buried at least three inches, to contain sediment and potential spills within the work area. • Construction contractor(s) will minimize the extent of the construction disturbance as much as feasible, especially within the drip lines of riparian trees and the bed and bank of San Pablo Creek by locating staging areas outside of riparian areas and restricting construction areas in riparian areas to the extent practical. • A construction employee education program will be conducted prior to the initiation of ground disturbing activities at the San Pablo Creek pipe bridge construction area. The program will consist of a brief presentation by persons knowledgeable about California red legged frog, steelhead, western pond turtle, raptor and nesting bird biology and legislative protection to explain endangered species concerns to contractors and their employees. The program will include a description of the measures being taken to reduce impacts to these species during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and other Project-related personnel entering the San Pablo Creek riparian corridor. At a minimum, the program would include: - Description and natural history of the species; - Representative photographs;					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-2 (cont.)	- Species' legal status; - Measures to prevent the spread of invasive, non-native species; - Terms and conditions of any biological permits; and - Penalties for not complying with terms and conditions. **Mitigation Measure BIO-1c: Implement preconstruction surveys near Riparian habitat.** During the breeding bird season (February 1 through August 31) and not more than two weeks before onset of construction (including equipment mobilization) of the tunnel beneath Wildcat Creek and the pipe bridge over San Pablo Creek a qualified biologist will conduct preconstruction surveys for nesting raptors and songbirds within 500 feet of the construction area. • Surveys will include all potential habitats within 500 feet (for raptors) of activities and all on-site vegetation including bare ground within 250 feet of activities (for all other species). • If construction activities occur only during the non-breeding season, between September 1 and January 31, no surveys will be required. • Results of the surveys will be forwarded to CDFW (if results are positive for nesting birds) and avoidance procedures will be adopted, if necessary, on a case-by-case basis. These may include construction buffer areas or seasonal avoidance. Typical buffer distances are 250 feet for non-raptor species, and 500 feet for raptors but these may be adjusted through consultation with CDFW on a case by case basis. Prior to removal of mature trees at San Pablo Creek, a pre-construction survey will be carried out by a qualified wildlife biologist using an acoustic detector. If signs of bat activity are detected, the biologist will make recommendations about how to minimize adverse effects to the bats, such as adjusting timing of tree removal, or the creation of a "no disturbance" buffer, if feasible. **Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration Plan and Compensatory Mitigation for Riparian Habitats.** This measure would apply only to San Pablo Creek crossing, which is the only location where natural habitat would be directly impacted. At least one month prior to construction and during the plant growing season (March-July), a qualified botanist performs preconstruction surveys of the construction area to collect vegetation composition data, vegetation structure (tree diameter size, etc.), and percent cover of plant species. Photo documentation will be used to show pre-project conditions.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-2 (cont.)	Prepare and implement a vegetation restoration plan with detailed specifications for minimizing the introduction of invasive weeds and restoring all temporarily disturbed areas. For the purpose of existing pipeline maintenance as well as proposed pipe bridge construction, trees removed at the alternative San Pablo Creek crossing on EBMUD land would not be replaced on-site. Shrubs and other plants will be re-planted on EBMUD land within the pipeline alignment. Replacement tree planting could occur on-site if the selected San Pablo Creek crossing is the eastern alternative adjacent to 23rd Street and Kennedy Plaza. However, to allow for access to the pipeline, replanted trees will not be located within 20 feet of the pipeline. Tree replacement will adhere to the following guidelines: • If any mature native tree (i.e., trees that are 6 inches in diameter at breast height [dbh] or ten inches aggregate dbh for multi-trunk trees) is removed, replanting will be with the same species at a 1:1 ratio. • All non-native protected trees which are removed will be replaced at a 1:1 ratio with a non-invasive tree species. Non-native trees removed from a natural environment will be replaced with a native species that occurs in the area. • Efforts will be made to plant replacement trees within the San Pablo Creek watershed. However if no ecologically appropriate sites are available within the watershed, EBMUD will work with local organizations to plant trees in adjacent watersheds on public lands. • In lieu of tree replacement (if the western alternative crossing of San Pablo Creek is selected), EBMUD will fund riparian or upland restoration work by a local creek group (such as San Pablo Watershed Neighbors Education and Restoration Society (SPAWNERS) or Friends of Five Creeks) for the purposes of compensating for tree loss associated with the Project. In-lieu restoration work would be appropriate where restoration activities would provide greater benefit to protected trees than tree replacement. Examples of appropriate restoration work include invasive plant removal or actions to reduce exposure or risk of sudden oak death. The funded restoration work must provide habitat benefits commensurate with that lost through the removal of trees. • Implementation of in-lieu restoration, especially tree planting, is recommended well in advance of construction of the Central Pressure Zone Pipeline (Richmond/San Pablo) because it would ensure that replacement trees are established and beginning to provide habitat values for wildlife by the time project construction is expected to commence. Planting would be carried out at streambank restoration sites elsewhere within the watershed.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-2 (cont.)	If required, EBMUD will provide the vegetation restoration and replacement plan to the Corps, CDFW, RWQCB, and USFWS during the permitting process, as any vegetation to be removed may provide habitat for special-status species and may also be within areas under the jurisdiction of the Corps and RWQCB. The determination of mitigation requirement (i.e., extent of habitat loss) and accumulated habitat values for advance in-lieu restoration would be determined during the permitting process. The minimum avoidance, minimization, and restoration measures as well as success criteria to be included in the vegetation restoration plan are described below. *Invasive Weed Control Measures* Invasive weeds such as Canary ivy, Himalayan blackberry, and Cape ivy readily colonize riparian soils that have been disturbed by grading or other mechanical disturbance. Although the project area has an extensive weed infestation and relatively few native species, EBMUD will incorporate the following measures into the construction plans and specifications for construction within riparian zones of San Pablo Creek and Wildcat Creek to permit restored riparian vegetation to become established and to prevent the spread of additional invasive species: • Construction equipment will arrive at the project area washed and free of soil, seed, and plant parts to reduce the likelihood of introducing new weed species. • Any imported fill material, soil amendments, gravel etc., required for construction and/or restoration activities that would be placed within the upper 12 inches of the ground surface will be free of vegetation and plant material. • California Department of Food and Agriculture certified, weed-free, imported erosion-control materials (or rice straw in upland areas) will be used exclusively, as applicable (this measure concerns biological material and does not preclude the use of silt fences, etc.). • The environmental awareness training program for construction personnel will include an orientation regarding the importance of preventing the spread of invasive weeds. • The restoration plan will specify measures to remove and/or control weeds in the project area. • No invasive species will be used in any restoration plantings. *Minimum Restoration Measures* Restoration areas are riparian areas within the project area that would be disturbed during Project-related construction activities but would subsequently be restored to their preconstruction conditions as defined by the success criteria described below. In order to restore these areas, EBMUD will ensure the following:					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-2 (cont.)	*Minimum Success Criteria* Unless otherwise determined by the applicable resource agencies, the success criteria for restoring temporarily disturbed areas will be as follows: • Tree replacement and re-vegetation will occur within the first year after the completion of construction. • A qualified arborist or biologist will monitor newly planted trees at least twice a year for 5 years. • Any trees planted as remediation for failed plantings will be planted as stipulated here for original plantings, and will be monitored for a period of 5 years following installation, or as otherwise determined by the applicable resource agencies. • Where native vegetation is present and/or for erosion control purposes, all temporarily disturbed areas will be restored to approximate their baseline condition. Pre-construction baseline monitoring will be conducted to determine vegetative cover at the site. Revegetation success criteria will be based on the baseline monitoring and will stipulate that site cover of target weed species is equal to or less than the baseline condition. • At the end of the 5 year monitoring period, vegetation within restoration areas will be functional, fully established, and self-sustaining as evidenced by healthy vegetative growth; observed increase in vegetative cover, canopy cover, and/or plant height; successful flowering, seed set, and/or vegetative reproduction over the 5-year monitoring period. • Revegetation work will start within one year of construction completion. • Restoration areas will be monitored for target invasive plants during the 5-year monitoring period, and they will be removed as necessary to support meeting the cover and vegetation composition success criteria. • Monitoring and maintenance will continue until the minimum success criteria are met, or as otherwise determined by the applicable resource agencies.					
Impact 3.4-3: The proposed Project could have a substantial adverse effect on jurisdictional waters during construction.	Mitigation Measures BIO-1b, BIO-1d and HYD-1.	X			X	Less than Significant.
Impact 3.4-4: The proposed Project could have a substantial adverse effect on resident trout and other native fishes during construction, either by impeding movement or adversely affecting aquatic habitat.	Mitigation Measure HYD-1.				X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
BIOLOGICAL RESOURCES (cont.)						
Impact 3.4-5: The proposed Project could have a substantial adverse effect on wildlife corridors or wildlife nursery sites during construction.	None Required.					
Impact 3.4-6: Construction activities associated with the proposed Project could conflict with local policies or ordinances protecting biological resources.	Mitigation Measure AES-2, BIO-1a.	X			X	Less than Significant.
Impact 3.4-7: The proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	None Required.					
CULTURAL RESOURCES						
Impact 3.5-1: Construction of the proposed Project could cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines, Section 15064.5.	Mitigation Measure NOI-4.	X	X	X	X	Less than Significant.
Impact 3.5-2: Construction of the proposed Project could cause a substantial adverse change in the significance of an archaeological resource, including those determined to be a historical resource defined in Section 15064.5 or a unique archaeological resource defined in PRC 21083.2.	**Mitigation Measure CUL-1a: Retain a Qualified Archaeologist.** A qualified archaeologist meeting the Secretary of the Interior's Qualification Standard will be retained by EBMUD prior to approximately 50% design phase (when the specific location of the alignments within the roadways have been established) to carry out the cultural resources mitigation measures contained herein. **Mitigation Measure CUL-1b: Develop an Archaeological Research Design and Treatment Plan.** A qualified archaeologist will prepare an Archaeological Research Design and Treatment Plan (ARDTP) that addresses, at a minimum, the following: the establishment of Environmentally Sensitive Areas; treatment and recovery of important scientific data contained within the portions of the historical resources located within the project Area of	X	X	X	X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
CULTURAL RESOURCES (cont.)						
Impact 3.5-2 (cont.)	Potential Effects (APE); construction worker cultural resources sensitivity training; archaeological and Native American monitoring; inadvertent discovery protocols; and provisions for curation of recovered materials. The ARDTP will address the methods for subsurface investigation at each of the four historical resources (CA-CCO-432; CA-CCO-758; WOH-01; WOH-02) to determine whether the portions of the sites located within the project APE contribute to each of the sites' overall eligibility. The subsurface investigation will seek to identify whether the portions of the sites within the APE contain important scientific data (Criterion D/4) or other archaeological materials of traditional/cultural value to Native American tribes (Criteria A/1, B/2, and C/3). The ARDTP will include the specific methods that will be employed at each site location (i.e. the length and depth of excavation, the type of equipment utilized, the percent of area investigated at each site location). The investigation may include trenching in the APE adjacent to the visible site components and may be coordinated with potholing to confirm the location of existing utilities. The ARDTP will identify how the proposed program would preserve any significant historical information obtained and will identify the scientific/historic research questions applicable to the resources, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The results of the investigation will be documented in a technical report that provides a full artifact catalog, analysis of items collected, results of any special studies conducted, and interpretations of the resource within a regional and local context. All technical documents are to be placed on file at the Northwest Information Center of the California Historical Resources Information System. The results report will also provide recommendations for archaeological and Native American monitoring in Environmentally Sensitive Areas of the proposed Project to the extent deemed appropriate by the qualified archaeologist who carried out the work described here. **Mitigation Measure CUL-1c: Inadvertent Discovery of Cultural Resources.** Following implementation of CUL-1b, if prehistoric or historic-period cultural materials that were not identified and studied in the ARDTP are unearthed during ground-disturbing activities, all work will halt within 100 feet of the find until a qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the lead agency and appropriate Native American representative, will implement actions outlined in the ARDTP.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
CULTURAL RESOURCES (cont.)						
Impact 3.5-3: Construction of the proposed Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure CUL-2a: Paleontological Resources Mitigation Program.** Prior to ground disturbance, EBMUD will retain a qualified paleontologist or a California Registered Professional Geologist (California RPG) with appropriate paleontological expertise to carry out all mitigation measures related to paleontological resources. The qualified paleontologist or geologist will be available "on-call" to EBMUD throughout the duration of ground-disturbing activities. **Mitigation Measure CUL-2b: Paleontological resources training.** All construction forepersons and field supervisors conducting or overseeing subsurface excavations will be trained in the recognition of potential fossil materials prior to ground disturbing activities. A one hour pre-construction training on paleontological resources will also be provided to all other construction workers, but may include videotape of the initial training and/or the use of written materials rather than in person training by the qualified paleontologist. In addition to fossil recognition, the training will convey procedures to follow in the event of a potential fossil discovery. **Mitigation Measure CUL-2c: Assessment and salvage of potential fossil finds.** If potential fossils are discovered during construction, all earthwork or other types of ground disturbance in the immediate vicinity of the find will stop until the qualified paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If treatment and salvage is required, recommendations will be consistent with current professional standards. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection. **Mitigation Measure CUL-2d: Monitoring by a qualified Paleontologist during ground disturbing activities.** If found to be warranted based on experience during construction, a qualified paleontologist, or paleontological monitor working under the supervision of a qualified paleontologist, will monitor ground-disturbing activities. This monitoring would consist of periodically inspecting disturbed, graded, and excavated surfaces, as well as soil stockpiles and disposal sites. The frequency of monitoring would be determined by the qualified paleontologist. If the monitor encounters a paleontological resource, he or she will assess the fossil, and record or salvage it as described in CUL-2c.	X	X	X	X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
CULTURAL RESOURCES (cont.)						
Impact 3.5-4: Construction of the proposed Project could disturb any human remains, including those interred outside of formal cemeteries.	**Mitigation Measure CUL-3: Inadvertent Discovery of Human Remains.** If potential human remains are encountered, all work will halt within 100 feet of the find and EBMUD will be contacted. EBMUD will contact the county coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the NAHC. As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.	X	X	X	X	Less than Significant.
ENERGY CONSERVATION						
Impact 3.6-1: Construction and operation of the proposed Project would result in less-than-significant consumption of energy.	None Required.					
Impact 3.6-2: The proposed Project would not result in a significant impact on local and regional energy supplies or on requirements for additional capacity.	None Required.					
Impact 3.6-3: The proposed Project would not result in a significant impact on peak and base period demands for electricity and other forms of energy.	None Required.					
Impact 3.6-4: Construction and operation of the proposed Project would not conflict with existing energy standards.	None Required.					
Impact 3.6-5: The proposed Project would not result in a significant impact related to transportation energy use or use of efficient transportation alternatives.	None Required.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
GEOLOGY AND SOILS						
Impact 3.7-1: Surface Fault Rupture	None Required.					
Impact 3.7-2: Seismic-related ground failure including liquefaction.	**Mitigation Measure GEO-1: Site-Specific Geotechnical Investigation.** For the Central Pressure Zone Pipeline (Richmond/San Pablo), EBMUD will conduct a site-specific geotechnical investigation at the Wildcat and San Pablo Creek crossings under the direction of a geotechnical engineer before final design of the proposed pipelines. The investigation will evaluate subsurface conditions related to the potential for geological and seismic hazards, including ground shaking as well as liquefaction and related phenomena such as lateral spreading and settlement. The geotechnical report will include recommendations regarding the seismic design of the pipeline at the Wildcat Creek crossing and the pipe bridge at San Pablo Creek to comply with current seismic standards and to withstand geologic and seismic hazards. These recommendations will be included in the project design and incorporated into project construction specifications, for implementation.				X	Less than Significant.
Impact 3.7-3: Seismic ground shaking.	Mitigation Measure GEO-1.				X	Less than Significant.
Impact 3.7-4: Seismically induced landslides.	None Required.					
Impact 3.7-5: Erosion and loss of topsoil.	Mitigation Measure HYD-1~~None Required.~~				X	Less than Significant.
Impact 3.7-6: Unstable geologic unit.	Mitigation Measure NOI-4.				X	Less than Significant.
Impact 3.7-7: Expansive soil.	Mitigation Measure GEO-1.				X	Less than Significant.
GREENHOUSE GAS EMISSIONS						
Impact 3.8-1: Project construction-related GHG emissions would not result in a significant impact on climate change or conflict with applicable greenhouse gas reduction plans, policies, or regulations.	None Required.					
Impact 3.8-2: Project operational GHG emissions would not result in a significant impact on climate change or conflict with applicable greenhouse gas reduction plans, policies, or regulations.	None Required.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
HAZARDS AND HAZARDOUS MATERIALS						
Impact 3.9-1: The Project would not result in significant hazards from the release of hazardous materials present in soil or groundwater.	None Required.					
Impact 3.9-2: The Project would not result in significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.	None Required.					
Impact 3.9-3: The proposed Project could result in potential adverse effects related to the rupture of subsurface utilities.	**Mitigation Measure HAZ-1a: Identifying Buried Utilities.** EBMUD and/or its construction contractor(s) will adhere to EBMUD Engineering Standard Practice 514, Identifying Buried Conflicts (EBMUD, 2008) which sets forth the requirements and guidelines for planning, design and construction to identify existing buried utilities/conflicts. **Mitigation Measure HAZ-1b: Subsurface Utility Protection.** While any excavation is open, EBMUD or its contractors will protect, support, or remove underground utilities as necessary to safeguard employees. **Mitigation Measure HAZ-1c: Notification of Utility Damage.** EBMUD or its contractors will notify local fire departments whenever damage to a gas utility results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety. EBMUD or its contractors will also contact utility owners if any damage occurs as a result of the Project and coordinate repair with approval of the owner.	X	X	X	X	Less than Significant.
Impact 3.9-4: The Project could expose construction workers and the public to naturally occurring asbestos.	**Mitigation Measure HAZ-2: Asbestos Dust Mitigation Plan.** For the Wildcat Pipeline (Berkeley) and Central Pressure Zone Pipeline (El Cerrito/ Richmond), EBMUD or its contractor will conduct soil testing within areas of the pipeline alignments that are located within 100 feet of mapped ultramafic rock. This may be completed in conjunction with potholing conducted during the design phase. If ultramafic rock is found within the pipeline alignment, EBMUD or its contractor will submit notification of proposed construction activities to the BAAQMD and prepare an Asbestos Dust Mitigation Plan to be implemented in areas containing ultramafic rock. Additional measures, including air quality monitoring for fugitive asbestos dust, may be required by the BAAQMD. The contractor will implement all specified dust control measures and keep records of daily inspections and activities that document implementation of the plan. The plan will comply with BAAQMD criteria and address the following as applicable:	X		X		Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
HAZARDS AND HAZARDOUS MATERIALS (cont.)						
Impact 3.9-4 (cont.)	• Prevent and control visible track-out from the project site. • Ensure adequate wetting or covering of active storage piles and disturbed surface areas. • Control earthmoving activities by pre-wetting ground or suspending activities during windy periods. • Ensuring that trucks hauling excavated materials are adequately wet and covered. • Stabilize disturbed areas following construction by paving or establishing vegetative cover.					
Impact 3.9-5: The Project would use of hazardous materials within ¼ mile of a school.	None Required.					
Impact 3.9-6: Exposure of people or structures to a significant risk of property loss, injury, or death involving wildfires.	None Required.					
HYDROLOGY AND WATER QUALITY						
Impact 3.10-1: Degradation of water quality as a result of erosion and sedimentation or a hazardous materials release during construction.	**Mitigation Measure HYD-1: Schedule Construction Activities at Harwood Creek, Wildcat Creek, and San Pablo Creek During the Dry Season.** The SWPPP, to be submitted in accordance with the Construction General Stormwater Permit, will include a schedule for construction activities that specifies a timeline for earthmoving activities, hydroseeding, and stabilization of soils and slopes. Incorporate into contract specifications that, in addition to the requirements of the Construction General Stormwater Permit, the contractor will limit construction activities within the 100-year flood zones of Harwood Creek, Wildcat Creek, and San Pablo Creek to the dry season. The schedule will indicate that all earthmoving activities at these creeks will occur during the dry season (i.e., between June 1 and October 15), unless otherwise negotiated with the appropriate regulatory agencies. The construction schedule will also specify that all materials for soil stabilization be on-site by September 15 and that site stabilization be completed by October 15.	X			X	Less than Significant.
Impact 3.10-2: Degradation of water quality resulting from discharges during dewatering of trenches and discharges of treated water.	None Required.					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
HYDROLOGY AND WATER QUALITY (cont.)						
Impact 3.10-3: Alteration of drainage patterns and impedance or redirection of flood flows.	Mitigation Measure HYD-1~~None Required.~~				X	Less than Significant.
Impact 3.10-4: Flooding resulting from a pipeline rupture.	None Required.					
NOISE						
Impact 3.11-1: Construction activities could expose people to noise during time periods that fall outside of ordinance time limits or to noise levels that exceed ordinance limits.	**Mitigation Measure NOI-1: Time Limits, Administrative Controls, and Source Controls.** a. An acoustical consultant qualified in construction noise control analysis and design will prepare a Noise Control Plan for each pipeline. This plan will include noise controls for all construction activities to reduce the noise to the 75-dBA (Leq) ordinance daytime noise limit and 54-dBA (Leq) ordinance nighttime noise limit to the extent feasible. These limits may be increased if ambient noise levels are higher, consistent with applicable ordinances. Measures to reduce noise levels and disturbance from construction noise to be incorporated into the Noise Control Plan will include, but are not be limited to, the following: ***Time Limits*** b. All construction activities, including truck operations (e.g., haul trucks and concrete delivery trucks), will be limited to the daytime weekday hours (8:00 a.m. to 7:00 p.m.) to the extent feasible. ***Noise Level Reduction Measures*** c. Best available noise-control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) will be used for all equipment and trucks, as necessary. d. Stationary noise sources (e.g., pumps, compressors) will be located as far from sensitive receptors as possible and practicable and within the specified construction time limits. If they must be located near receptors, adequate muffling (with enclosures) will be used. Enclosure openings or venting will face away from sensitive receptors. A registered engineer qualified in noise control analysis and design will design the enclosures. If impact equipment (e.g., jackhammers) is used during demolition or construction activities, the construction contractor(s) will use hydraulically or electrically powered equipment wherever practical to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust will be used (a muffler can lower noise levels from the exhaust by up to about 10 dB). External jackets on the tools themselves will be used,	X	X	X	X	Significant and Unavoidable (Berkeley and Richmond) No Impact (El Cerrito and San Pablo)

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
NOISE (cont.)						
Impact 3.11-1 (cont.)	where feasible, which could achieve a reduction of 5 dB. Quieter procedures, such as drilling rather than impact equipment, will be used whenever practical. e. An EBMUD contact person will be designated to respond to construction-related issues, including noise. The phone number and e-mail address of the liaison will be conspicuously posted at construction areas, on all advanced notifications, and on the EBMUD project website. This person will take steps to resolve complaints, including coordinating periodic noise monitoring, if necessary. f. Residents located within 300 feet of project construction will be notified at least seven (7) days in advance of extreme noise-generating activities about the estimated duration of the activity. EBMUD will also send emails to individuals on the Project's mailing list to update them prior to noisy phases. g. At pipeline tie-ins, in an effort to minimize the potential of the work extending beyond the above daytime time limits (8 a.m. and 7 p.m.), the contractor will be required to begin pipe-cutting operations for the hot-tapping connection prior to 9 a.m. or wait until the following morning in order to minimize the potential for pipe-cutting equipment to operate during the evening and nighttime hours. If pipe-cutting equipment must be operated during the nighttime hours at pipeline tie-ins, temporary noise barriers or noise enclosures will be used to minimize disturbance when construction occurs adjacent to residential uses. In addition, operation of trucks and noisier types of heavy equipment will be minimized to the extent feasible.					
Impact 3.11-2: Construction activities could result in substantial temporary noise increases that could interfere with activities at nearby noise-sensitive land uses.	**Mitigation Measure NOI-2: Additional Noise Attenuation Measures.** The Noise Control Plan required by Mitigation Measure NOI-1 will also contain measures to reduce potential noise impacts on schools as well as reduce construction noise levels at the jack and bore pipeline crossing. These measures will include but not be limited to the following: ***Schools*** a. Coordinate with schools located within 250 feet of Project pipeline alignments to schedule construction activities in a manner that minimizes noise impacts on school activities to the extent feasible. The following list of schools within 250 feet of the Project will be confirmed during preparation of the Noise Control Plan. • Willard Middle School (2425 Stuart Street, Berkeley) • Windrush Elementary School (1800 Elm Street, El Cerrito) • Keystone Montessori School (6639 Blake Street, El Cerrito) • Harding School (7115 C Street, El Cerrito) • St. John the Baptist School (11156 San Pablo Avenue, El Cerrito) • Richmond High School (1250 23rd Street, Richmond)	X	X	X	X	Significant and Unavoidable.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
NOISE (cont.)						
Impact 3.11-2 (cont.)	***Jack and Bore Pipeline Crossing*** b. Noise barriers or enclosures will be used as necessary to ensure that noise from the boring jack power unit/generator does not exceed 70dBA (Leq) speech interference threshold for more than 10 consecutive work days at the closest noise-sensitive receptors. **Mitigation Measure NOI-3: Nighttime Construction Measures.** The Noise Control Plan required by Mitigation Measure NOI-1 will include a provision to provide alternative lodging for residents, if requested, that are adversely affected by nighttime pipeline tie-in construction or by nighttime construction at intersections when required by encroachment permit conditions; this measure would only be used if nighttime construction occurs. EBMUD will make a concerted attempt to notify residents located within 400 feet of potential nighttime project construction at least ten (10) days in advance. Notified residents may request alternative lodging for the night(s) of the potential nighttime construction from EBMUD; alternative lodging will consist of a standard room at a hotel located within 6 miles of the affected residence or as close as feasible. Alternative lodging will be provided and approved by EBMUD the day before the known nighttime construction would occur, or sooner, based upon the types of construction activities that may occur during the nighttime hours (10:00 p.m. to 7:00 a.m.).					
Impact 3.11-3: Construction activities could result in excessive groundborne vibration.	**Mitigation Measure NOI-4: Vibration Limits** Construction practices will be utilized that do not generate vibration levels at the closest structures above the following thresholds:	X	X	X	X	Less than Significant.

Category	Maximum Amplitude
Cosmetic Damage – Residential and Commercial Buildings	
Transient or Intermittent Sources	0.5 in/sec PPV
Continuous Vibratory Sources	0.4 in/sec PPV
All Vibratory Sources Located in Areas of Very High Liquefaction Susceptibility, as Depicted in Figure 3.7-4	0.1 g (peak acceleration), or 0.2 in/sec PPV at 30 Hz

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
NOISE (cont.)						
Impact 3.11-3 (cont.)	The following measures, at a minimum, will be employed to ensure these thresholds are met: ***Pipeline, Tie-in, and Creek Crossing Construction*** a. Vibration monitoring will be conducted for the first 500 feet of pipeline construction for each segment to confirm vibration levels do not exceed the above vibration thresholds. If vibration levels exceed the limits of this mitigation measure, then construction practices will be modified (i.e. use smaller types of construction equipment, operate the equipment in a manner to reduce vibration, or use alternate construction methods), and monitoring will continue for an additional 200 feet or until construction practices meet the required vibration levels. The monitoring in this mitigation measure will be repeated if the construction methods change in a manner that would increase vibration levels, or when structures are closer to the limits of construction than previous vibration monitoring have confirmed is below the vibration thresholds. b. Smaller vibratory compactors and/or non-compacting materials (i.e., some types of gravel) will be used to minimize vibration levels during repaving activities where needed to meet vibration limits. c. Sheet piles will be installed with vibratory drivers instead of impact drivers where feasible. Impact sheet pile installation will be prohibited within 55 feet of the closest structures. Vibration monitoring will be conducted within 100 feet of any buildings where impact sheet pile installation occurs, and within 60 feet of any building where vibratory sheet pile installation occurs to ensure that the above applicable performance standard is not exceeded. If vibration levels exceed the applicable threshold, the contractor will use alternative construction methods. d. For the pipe bridge supports, pile holes will be pre-drilled to minimize or avoid the use of impact pile drivers. ***Areas Susceptible to High/Very High Liquefaction Hazards*** e. Soil settlement and vibration monitoring will be conducted at the closest structures when vibratory equipment is operated in areas with High to Very High liquefaction susceptibility to ensure that the above performance standard is not exceeded. ***Preconstruction Surveys and Monitoring*** f. With permission and at the request of homeowners, EBMUD will conduct a preconstruction survey of homes, other sensitive structures, hardscaping, hillsides, and slide areas adjacent to the pipeline alignments, for potential effects due to vibration-generating activities. EBMUD will respond to any claims by inspecting the affected property promptly. Any new cracks or other changes in structures will be compared to preconstruction conditions and a determination made as to whether					

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
NOISE (cont.)						
Impact 3.11-3 (cont.)	the proposed Project could have caused such damage. In the event that the Project is demonstrated to have caused the damage, EBMUD will coordinate with the owner to have the damage repaired to the pre-existing condition.					
Impact 3.11-4: Project operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity or significant impacts related to the exposure of people to noise levels in excess of local noise ordinance limits.	None Required.					
RECREATION						
Impact 3.12-1: Construction of the Project may disrupt access to parks and other recreational facilities.	None Required.					
Impact 3.12-2: Construction of the Project may result in the removal of trees and other park facilities.	**Mitigation Measure REC-1**: **Restoration of 23rd Street Pocket Park.** If the jack and bore pit required for the Central Pressure Zone Pipeline (Richmond/San Pablo) crossing of Wildcat Creek is located in the City of San Pablo's park adjacent to 23rd Street, the pit and construction activities will be located to avoid trees to the extent feasible. After completion of construction activities, the park will be restored to pre-project conditions. Restoration will include replanting any trees or other vegetation and replacing any other park amenities (park benches, sidewalks, signage etc) that were removed during construction. To allow for access to the pipeline, replanted trees will not be located within 20 feet of the pipeline.				X	Less than Significant.
TRANSPORTATION AND TRAFFIC						
Impact 3.13-1: Closure of travel lanes during project construction would temporarily reduce roadway capacity and increase traffic delays on area roadways, causing temporary and intermittent conflicts with all modes of travel, but the effects would be of short duration and limited in magnitude.	**Mitigation Measure TRA-1:** a. ***Intersection Traffic Control.*** A flagger will be deployed at the Claremont Avenue/ Hillcrest Boulevard/Brookside Drive intersection to control westbound traffic during the p.m. peak period. This would minimize the impact of the pipeline installation project.	X				Significant and Unavoidable for Wildcat Pipeline (El Cerrito) and Central Pressure Zone Pipeline (El Cerrito/ Richmond). Less than Significant for other pipelines.
	b. ***Intersection Traffic Control.*** *Flaggers will be deployed at the Richmond Street/Central Avenue and Richmond Street/Fairmount Avenue intersections to control traffic during peak periods.*		X			

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
TRANSPORTATION AND TRAFFIC (cont.)						
Impact 3.13-1 (cont.)	c. ***Intersection Traffic Control.*** Prohibit left-turns from San Pablo Avenue to 23rd Street or Road 20 during the p.m. peak period when construction activities require lane closures. This can be accomplished using cones and changeable message signs. d. ***Intersection Traffic Control.*** *Prohibit left-turns from 23rd Street to Rheem Avenue during the p.m. peak period when construction activities require lane closures. This can be accomplished using cones and changeable message signs.*				X	
Impact 3.13-2: Project construction would potentially have a significant impact on access, including access for emergency vehicles.	None Required.					
Impact 3.13-3: The proposed Project would not substantially increase hazards due to a design feature or incompatible uses.	None Required.					
Impact 3.13-4: Project construction would not substantially limit access to adjacent roadways and land uses due to construction within roadways.	**Mitigation Measure TRA-2:** a. ***Advance Notification of Construction.*** Residents and business owners located within 300 feet of project construction will be notified in advance of activities requiring road closures about the estimated schedule and duration of the activity. EBMUD will also send emails to individuals on the Project's mailing list to update them prior road closures. b. ***Road Blocks and Trenches.*** Road blocks will be removed and open trenches covered at the end of the work day on a daily basis to provide access to residents. However, a portion of the parking zones will be retained for the storage of construction equipment on a daily basis. c. ***Sidewalk Access.*** Sidewalk access will be maintained on one side of the street during construction.	X	X	X	X	Significant and Unavoidable for Central Pressure Zone Pipeline (El Cerrito/ Richmond) Less than Significant for other pipelines.
	d. **Alternate Parking Solutions for Residents.** In the City of Berkeley where their Residential Preferential Parking Program restricts street parking, EBMUD will request the City of Berkeley to provide temporary parking permits for residents to park in other nearby parking permit zones during construction, and EBMUD will, where feasible, work with the owners of parking facilities near the pipeline alignments to provide parking for residents affected by construction.	X				

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
TRANSPORTATION AND TRAFFIC (cont.)						
Impact 3.13-5: Project construction would not substantially impair access to alternative transportation facilities (public transit, bicycle, or pedestrian facilities), although it would temporarily decrease the performance of such facilities.	**Mitigation Measure TRA-3:** a. ***Notification of Transit Changes*.** EBMUD will coordinate with AC Transit to provide the notification to transit patrons. EBMUD will provide AC Transit with 14 days notice of bus stop closures. AC Transit will communicate alternate bus stop locations to their customers.	X	X	X	X	Significant and Unavoidable for Central Pressure Zone Pipeline (El Cerrito/Richmond) Less than Significant for other pipelines.
	b. ***AC Transit Coordination*.** EBMUD will coordinate with AC Transit to relocate bus stops and/or reroute affected transit services via parallel streets during construction. This would minimize the distance that bus patrons would need to walk to access the buses due to bus stops on affected streets being temporarily closed.		X			
	c. ***AC Transit Coordination*.** EBMUD will coordinate with AC Transit to relocate bus stops and/or reroute affected transit services via parallel streets during construction along San Pablo Avenue. This would minimize the distance that bus patrons would need to walk to access the buses due to bus stops on San Pablo Avenue being temporarily closed. d. ***Crosswalks*.** Where possible, the contractor will implement staged construction across the intersections along San Pablo Avenue to make either the north or south crosswalk available at any one time during construction. This would minimize the need for pedestrians to walk an entire block to use the adjacent crosswalk to cross San Pablo Avenue.			X		
	e. ***Bicycle Traffic Management*.** The contractors will mount temporary "share the road" signs within the construction zone along San Pablo Avenue, or will apply for a temporary permit to allow cyclists to use the sidewalk to bypass the construction area where allowed by the local jurisdiction.			X		
	f. ***Road Closure Notification*.** During Garvin Avenue and Hellings Avenue closures, notification will be provided through signing that pedestrians need to use alternative locations to cross 23rd Street. *g.* ***Sidewalk Closure*.** Contractors will minimize or avoid closing multiple crosswalks at closely-spaced intersections at Dover Avenue, between Visalia Avenue and Lincoln Avenue, and between Grant Avenue and Clinton Avenue.				X	

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
CUMULATIVE IMPACTS						
Impact C-1: Cumulative impacts to scenic vistas and visual character.	Mitigation Measures AES-1 and BIO-1d.	X	X	X	X	Significant and Unavoidable <u>for Central Pressure Zone Pipeline (Richmond/San Pablo) San Pablo Avenue Option only</u>. <u>Less than Significant for other pipelines.</u>
Impact C-2: Cumulative air quality impacts.	Mitigation Measure AIR-1b.	X	X	X	X	Less than Significant.
Impact C-3: Cumulative impacts on biological resources.	Mitigation Measures HYD-1, BIO-1a, BIO-1b, BIO-1c, BIO-1d	X			X	Less than Significant.
Impact C-4: Cumulative impacts on historical, archaeological, and paleontological resources.	Mitigation Measures CUL-1, CUL-2 and CUL-3.	X	X	X	X	Less than Significant.
Impact C-5: Cumulative impacts related to energy consumption and conservation.	None Required.					
Impact C-6: Cumulative impacts related to seismic hazards, soil erosion and topsoil, unstable geologic units, and expansive soils, and changes to topography.	Mitigation Measures ~~GEO-2~~ <u>HYD-1</u> and NOI-4.				X	Less than Significant.
Impact C-7: Cumulative impacts related to GHG emissions.	Mitigation Measure AIR-1	X	X	X	X	Less than Significant.
Impact C-8: Cumulative impacts related to hazards and hazardous materials.	Mitigation Measures HAZ-1a-c and HAZ-2.	X	X	X	X	Less than Significant.
Impact C-9: Cumulative impacts on hydrology and water quality.	Mitigation Measure HYD-1	X			X	Less than Significant.

TABLE S-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MITIGATION MEASURES APPLICABLE[a]				SIGNIFICANCE AFTER MITIGATION
		W.B	W.E	C.E/R	C.R/S	
CUMULATIVE IMPACTS (cont.)						
Impact C-10: Cumulative increases in construction noise and vibration in the vicinity of proposed pipelines.	Mitigation Measures NOI-1, NOI-2, NOI-3, and NOI-4. **Mitigation Measure C-1: Coordinated Noise Control Plan During Construction** EBMUD will prepare a coordinated Noise and Vibration Control Plan that outlines noise and vibration controls to ensure that where feasible the 70-dBA speech interference threshold is not exceeded during the daytime hours (7 a.m. to 10 p.m.) for more than two consecutive weeks at one location without at least a one week break between projects and vibration thresholds listed in Mitigation Measure NOI-4 (Vibration Limits) are not exceeded when combined noise and vibration effects from cumulative projects are considered. At locations like the tie-in locations where the Project activities will extended beyond two weeks, EBMUD will attempt to coordinate with the cumulative projects to provide a week long gap between the construction activities.	X	X	X	X	Significant and Unavoidable. ~~Less than Significant.~~
Impact C-11: Cumulative impacts to parks or other recreational facilities.	Mitigation Measure REC-1.				X	Less than Significant.
Impact C-12: Cumulative impacts related to increases in traffic and traffic hazards, access, and parking.	Mitigation Measures TRA-1a through 1d, 2a through 2d and 3a through 3g. **Mitigation Measure C-2: Coordinated Traffic Control Plan During Construction** Prior to construction, EBMUD will develop a Coordinated Transportation Management Plan in coordination with the appropriate local government departments in Berkeley, El Cerrito, Richmond, and San Pablo to address the transportation impact of the overlapping construction projects within the vicinity of the West of Hills Project. The coordinated transportation management plan will include, but not be limited to, the following requirements: • Coordination of individual traffic control plans for the project and nearby projects. • Coordination between the contractor and EBMUD in developing circulation and detour plans that include safety features (e.g., signage and flaggers). • Protocols for updating the transportation management plan to account for delays or changes in the schedules of individual projects.	X	X	X	X	Significant and Unavoidable (Central Pressure Zone Pipeline [Richmond/ San Pablo] and Wildcat Pipeline [El Cerrito). Less than Significant for other pipelines.

Chapter 2. Project Description

2.8.1 Traffic Control Schemes

DEIR Table 2-9, on pages 2-40 and 2-41, is revised as follows:

TABLE 2-9
TRAFFIC CONTROL SCHEMES FOR THE WILDCAT PIPELINE (EL CERRITO)

Segment Limits or Intersection	**Segment or Intersection Characteristics**	**Traffic Control Plan** Figure or CA-MUTCD Typical Application (TA)[a] (see Appendices D and E)	**Traffic Handling Detail**	**Possible Detour Routes** (see Figure TC-5)
Tie-in @ Hill St./Liberty St.	• 2-way stop	Figure TC-6	• Partial or full intersection closure	Elm St., Key Blvd., Cutting Blvd. (EB), Knott Ave. (WB), San Pablo Ave.
Hill St. (Liberty St. to Elm St.)	• 2-lane EB residential • ~~36~~40 feet wide • Parking both sides • Class III shared bicycle route • 2,050 VPD	TA-20	• Block-long ~~closure of traffic and parking lanes~~ parking restriction	~~Elm St., Key Blvd., Cutting Blvd. (EB), Knott Ave. (WB), San Pablo Ave.~~
Ashbury Ave. (C St. to Lynn Ave.)	• 2-lane arterial • 78 feet wide • Parking both sides • 4,070 VPD	TA-20 for the SB approach	• For preliminary planning purposes, pipeline construction assumed to occur in SB lanes (may occur in NB lanes) • SB: Closure of travel lanes • NB: No closure, NB travel only	SB: Fairmount Ave., San Carlos Ave., Lynn Ave., ~~Pomona Ave.~~

2.11 Permits and Approvals

Table 2-12 on page 2-47 is revised as follows:

TABLE 2-12
REQUIRED PERMITS[1]

Agency	**Permit/Approval**	**Pipeline Segment**
City of Berkeley	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Wildcat Pipeline (Berkeley)
City of El Cerrito	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Wildcat Pipeline (El Cerrito) Central Pressure Zone Pipeline (El Cerrito/Richmond)
City of Richmond	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Central Pressure Zone Pipeline (El Cerrito/Richmond) Central Pressure Zone Pipeline (Richmond/San Pablo)

Agency	Permit/Approval	Pipeline Segment
City of San Pablo	Encroachment Permit for work within City streets Approval for ~~use of~~ non-stormwater discharges to the City sewer line or storm drains ~~for dewatering activities~~	Central Pressure Zone Pipeline (Richmond/San Pablo)
Stege Sanitary District	Approval for use of sewer line for ~~dewatering activities~~ water discharges.	Wildcat Pipeline (El Cerrito) Central Pressure Zone Pipeline (El Cerrito/Richmond)
California Department of Transportation	Encroachment Permit	Wildcat Pipeline (Berkeley) Central Pressure Zone Pipeline (El Cerrito/Richmond).
California Department of Transportation	Transportation Permit	All pipelines
California Department of Fish and Wildlife	Streambed Alteration Agreement	Central Pressure Zone Pipeline (Richmond/San Pablo)
California Regional Water Quality Control Board	National Pollution Discharge Elimination System Construction General Permit	All pipelines
California Regional Water Quality Control Board	Waste Discharge Requirements for dewatering and work within the bed and banks of waters of the State	Central Pressure Zone Pipeline (Richmond/San Pablo)

NOTES:

[1] Because the pipe bridge (including footings) proposed under the Central Pressure Zone Pipeline (Richmond/San Pablo) will be above the ordinary high water mark of San Pablo Creek, Clean Water Act Section 404 and 401 permits are not expected to be necessary.

Chapter 3. Environmental Setting, Impacts, and Mitigation Measures

3.2 Aesthetics

Impact statement 3.2-3 on page 3.2-11 is revised as follows:

Impact 3.2-3: Tree removal or loss may affect visual character (applies to all pipelines).~~Wildcat Pipeline [Berkeley], Central Pressure Zone Pipelines [Richmond/San Pablo]).~~

This paragraph is inserted following the last paragraph on page 3.2-12:

All Pipelines

Pipeline construction may require the cutting of tree roots during pipeline trench excavation or the trimming of overhanging tree branches that interfere with construction equipment. EBMUD's Master Construction Specifications (EBMUD, 2008) require that EBMUD perform a tree survey in advance of construction to evaluate the potential for tree damage and retain a Certified Arborist to direct all tree protection, trimming and pruning operations. In accordance with these specifications, all tree pruning would adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. Tree roots exposed during trench excavation would be pruned cleanly at the edge of the excavation and treated to the satisfaction of the Certified Arborist; any tree injured during construction would be evaluated as soon as possible. Potential impacts to trees would

depend upon the proximity of the pipeline trench to the tree, as well as the type and health of the individual tree. The potential for substantial tree damage or loss from trimming of tree roots or canopy is considered low and it is anticipated that any potential tree loss associated with the proposed pipeline construction would be a minor change that would not substantially alter the area's general appearance. With implementation of Mitigation Measure AES-2, which requires, one year following pipeline construction, an arborist evaluation of trees damaged during its construction and treatment or removal and replacement of injured trees, this impact would be *less than significant*.

Mitigation Measure AES-2 on page 3.2-13 is revised as follows:

Mitigation Measure AES-2: Tree Replacement and Landscaping Restoration.

This measure would apply to all pipelines except the Central Pressure Zone Pipeline (Richmond/San Pablo) at the San Pablo Creek crossing, which is addressed by Mitigation Measure BIO-1d.

If construction ~~of the Wildcat Pipeline (Berkeley)~~ requires the removal of trees or landscaping within a public right-of-way, EBMUD will replant trees and restore landscaping consistent with the following guidelines:

- If any mature native tree (i.e., trees that are 6 inches in diameter at breast height [dbh] or ten inches aggregate dbh for multi-trunk trees) or other tree protected by local ordinance is removed, replanting will be with the same species at 1:1 ratio. To allow for access to the pipeline, replanted trees will not be located within 20 feet of the pipeline.
- All non-native protected trees which are removed will be replaced at a 1:1 ratio with a non-invasive or native tree species, or species from an approved list where applicable (i.e. Berkeley).
- ~~All~~ Any disturbed plant, bush, and ground cover landscaping will be restored to pre-project conditions, using similar plants and materials.
- Any tree that is injured during construction shall be evaluated by the District's Consulting Arborist one year following the completion of construction in the vicinity of the injured tree. The Arborist shall make recommendations for treatment or removal and replacement with an appropriate species in accordance with these tree replacement guidelines.

The following text is inserted following the third reference on page 3.2-14:

EBMUD, 2008. *Master Construction Specifications Section 01 35 46, Environmental Mitigation*, September 18, 2008.

3.4 Biological Resources

The following text is inserted following the last paragraph on page 3.4-9:

Harwood Creek (a tributary of Temescal Creek) does not contain habitat for rainbow trout in its largely culverted and heavily urbanized areas (Leidy et al., 2005).

The following text is inserted following the seventh reference on page 3.4-32:

Leidy, R.A., G.S. Becker, B.N. Harvey. 2005. *Historical distribution and current status of steelhead/rainbow trout (Oncorhynchus mykiss) in streams of the San Francisco Estuary, California*. Center for Ecosystem Management and Restoration, Oakland, CA.

3.8 Greenhouse Gas Emissions

The following text is inserted following the first full paragraph on page 3.8-5:

City of Berkeley Climate Action Plan. In 2009, the City of Berkeley adopted a Climate Action Plan (CAP) focusing on measures to reduce the city's GHG emissions by 80% by 2050. Since the project involves construction of new facilities and the operational component only involves maintenance activities, the only relevant measures in the CAP relate to diversion of construction and demolition waste (Berkeley Municipal Code 19.24). Chapter 19.24 requires that construction or demolition projects divert 100% of asphalt and concrete, 100% of excavated soil and land clearing debris on undeveloped lots, and at least 50% of the remaining construction and demolition debris generated. This waste shall be diverted from landfill disposal by recycling, reuse, compost, or other approved method. Pursuant to California Government Code Section 53091, EBMUD, as a local agency and utility district serving a broad regional area is not subject to building and land use zoning ordinances (such as noise ordinances) for projects involving facilities that would produce, generate, store, or transmit water. However, it is the practice of EBMUD to work with local jurisdictions and neighboring communities during project planning, and to conform to local environmental protection policies to the extent feasible. EBMUD's Master Specification 01 74 19 requires the contractor to develop a Waste Management Plan to indicate how waste will be diverted from landfills and sets a goal of 50% diversion for construction and demolition debris.

3.10 Hydrology and Water Quality

The following text is inserted following the last paragraph on page 3.10-13:

Although the regional permit prohibits non-stormwater discharges to the storm sewer system, planned, unplanned, and emergency discharges of potable water from potable water systems are conditionally exempt under Section C.15.b.iii of the permit, provided that certain BMPs are implemented. For planned discharges, BMPs for dechlorination and erosion and sediment control must be provided, and the permittees must notify the RWQCB in advance of certain planned discharges. The discharges must also meet discharge limitations for residual chlorine, pH, and turbidity.

For unplanned discharges, BMPs for dechlorination and erosion and sediment control must also be provided. Administrative BMPs such as source control measures, managerial practices, operations and maintenance procedures may also be necessary to prevent a discharge. Permittees must notify the Office of Emergency Services within 2 hours of any

discharge that could threaten aquatic life or endanger public health and safety. The RWQCB must be notified within 24 hours when the total chlorine residual is greater than 0.05 mg/L and the total volume is approximately 50,000 gallons or more. If the pH, residual chlorine, or turbidity related to the discharges exceeds the specified limits, then the BMPs for the unplanned discharges would need to be reviewed for improvement.

For emergency discharges that could result from natural or other disasters (e.g. earthquakes, floods, wildfires, accidents, or terrorist actions), the appropriate BMPs include actions such as plugging the storm drain system for storage and proper disposal of the water according to jurisdictional requirements.

The first paragraph of page 3.10-14 is revised as follows:

Berkeley. Chapter 17.20 of the Berkeley Municipal Code, Discharge of Non-Stormwater into the City's Storm Drain System – Reduction of Stormwater Pollution, requires implementation of all practicable measures to reduce or prevent the contamination of stormwater by pollutants. For construction projects, these measures include, but are not limited to, prohibition of littering; providing filter materials at catch basins to retain any debris, dirt, or other pollutants generated at the construction site; and implementing appropriate BMPs for construction activity. Water produced from flushing of water line or other discharges of potable water are exempted from this section of the Berkeley Municipal Code. Uncontaminated pumped groundwater is also exempted when measures are taken to minimize the amount of groundwater discharged. This section of the Berkeley Municipal Code also requires that applicants to submit documentation to the City of Berkeley that they have submitted an NOI to the SWRCB in compliance with the Stormwater General Construction Permit.

The second to the last paragraph on page 3.10-14 is revised as follows:

Alameda Countywide Clean Water Program

The Alameda Countywide Clean Water Program is the local entity within Alameda County responsible for implementing compliance with the Municipal Regional Stormwater NPDES permit. It comprises Alameda County, 13 incorporated cities ~~(including Berkeley)~~, the Alameda County Flood Control and Water Conservation District, and the Zone 7 Water Agency.

The following text changes are made to the header and last paragraph on page 3.10 -15 and the first paragraph on DEIR page 3.10-16:

Contra Costa County Public Works and Flood Control Ordinance

Contra Costa County requirements for work within a watercourse or drainage facility are specified in Title 10, Division ~~Chapter~~ 1010 of the Contra Costa County Code. This chapter was adopted to provide for implementation of drainage, recreation, and riparian vegetation requirements of the Contra Costa County General Plan. The code provides protection for

watercourse riparian vegetation, requires a County Drainage Permit ~~Flood Control Encroachment Permits~~ for projects that may change the hydraulic characteristics of watercourses and drainage facilities, controls erosion and sedimentation, prevents the placement or discharge of polluting matter into watercourses, and requires adequate watercourse drainage facilities. This Contra Costa County code requires a permit for any work that could impair, impede, or obstruct the natural flow of stormwater or other water running in a defined channel; deposit any material in a defined channel; excavate, grade, or otherwise alter the surface of land so as to reduce the capacity of a defined channel; destroy or significantly alter riparian or bank-stabilizing vegetation; plant any shrub, vine, or tree within a riparian corridor; construct, alter, or repair any stormwater drainage structure, facility, or channel; commit to an act that would impair the use of an easement; or construct new non-drainage structures, or improvements to structures, within watercourses.

The permit requires submittal of engineered plans and specifications showing the work to be done and necessary engineering information, such as soil investigations and materials tests. Hydrology and hydraulic calculations must be provided for projects that may affect the capacity of a drainage system. All trenches must be backfilled with suitable materials and compacted to a relative compaction of 90 percent, and applicants proposing alterations to, or bank repairs in, a watercourse must show that the changes will not adversely affect the hydraulic capacity of the watercourse. The Contra Costa County Public Works Department ~~Flood Control and Water Conservation District~~ inspects all permitted work at completion to ensure compliance with the provisions of Chapter 1010 of the Contra Costa County Code and specific permit conditions.

The first two full paragraphs on DEIR page 3.10-16 are revised as follows:

~~The permit requires submittal of engineered plans and specifications showing the work to be done and necessary engineering information, such as soil investigations and materials tests. Hydrology and hydraulic calculations must be provided for projects that may affect the capacity of a drainage system. All trenches must be backfilled with suitable materials and compacted to a relative compaction of 90 percent, and applicants proposing alterations to, or bank repairs in, a watercourse must show that the changes will not adversely affect the hydraulic capacity of the watercourse. The Contra Costa County Flood Control and Water Conservation District inspects all permitted work at completion to ensure compliance with the provisions of Chapter 1010 of the Contra Costa County Code and specific permit conditions.~~

The Central Pressure Zone Pipeline (Richmond/San Pablo) crossing of San Pablo Creek is located in Flood Control Zone 6, Drainage Area 73, of the Contra Costa County Flood Control and Water Conservation District; and the Wildcat Creek crossing is located within Flood Control Zone 7, outside of a Contra Costa County Formed Drainage Area.[4] However, these crossings are located within the City of San Pablo, and ~~Therefore,~~ construction at these creek crossings would not be subject to the requirements of Chapter 1010 of the Contra Costa County Flood Control Ordinance.

The first full paragraph on DEIR page 3.10-23 is revised as follows:

> Further, any construction under or across creek channels ~~in Contra Costa County would occur within the right-of-way of the Contra Costa County Flood Control and Water Conservation District and would require a Flood Control Encroachment Permit. This permit would require proof of correspondence with CDFW and USACE to assure that construction activities are in compliance with applicable regulations of those agencies with jurisdiction over wetlands or stream beds.~~ would comply with ~~T~~the drainage and water course protection ordinances for each city ~~would be accommodated~~ to the maximum extent practical. Compliance with these requirements would ensure that impacts related to degradation of water quality as a result of erosion and sedimentation or a hazardous materials release during construction would be *less than significant* for the Wildcat Pipeline (El Cerrito), Central Pressure Zone Pipeline (El Cerrito/Richmond), northern portion of the Wildcat Pipeline (Berkeley), and southern portion of the Central Pressure Zone Pipeline (Richmond/San Pablo).

The first sentence of the first full paragraph on DEIR page 3.10-24 is revised as follows:

> Compliance with EBMUD's Master Specifications, including compliance with the Construction General Stormwater Permit, ~~as well as Contra Costa County Flood Control and Water Conservation District requirements for construction near Wildcat Creek and San Pablo Creek,~~ would reduce the potential for adverse water quality impacts related to construction near these creeks and Harwood Creek.

The last paragraph on page 3.10-27 is revised as follows:

> In the event that one of the new pipelines constructed under the West of Hills Northern Pipelines Project ruptured, adjacent and downhill residences and structures could be flooded, resulting in water damage. However, as described in the Project Description, the pipelines would be designed with isolation valves that can be closed to interrupt the flow of water to a ruptured pipe. Further, as discussed in the Setting above, an EBMUD inspector would respond on-site within one hour in accordance with EBMUD's Leak Response Program. The inspector would be fully equipped and authorized to implement leak control BMPs immediately upon arrival, if safe to do so. Potential BMPs include, but are not limited to, the following: removing debris from the discharge flow path; placing pea gravel bags or fiber rolls in the flow path to remove sediments; placing a dechlorination mat or strip across the flow path downstream of sediment control devices; monitoring chlorine residual and adjusting the dechlorination setup as necessary; isolating the ruptured portion of the pipeline, if possible, prior to excavating; and cleaning up the site once the repair is completed to remove sediment and debris (EBMUD, 2010).
>
> Once immediate BMPs are implemented, the inspector would assign a leak repair priority based on factors such as safety, customer impacts, environmental impacts, property damage, discharge rate, and traffic impacts. With proper design of the pipelines, and implementation of EBMUD's Leak Response Program (EBMUD, 2010), the potential for pipeline rupture and associated flood damage is low. Therefore, this impact would be *less than significant*.

3.11 Noise

Figure 3.11-2, Noise Measurement Locations for Wildcat Pipeline (El Cerrito) and Central Pressure Zone Pipeline (El Cerrito and Richmond) on page 3.11-4 is revised, as shown on the following page.

3.13. Transportation and Traffic

Table 3.13-1 on page 3.13-3 is revised as follows:

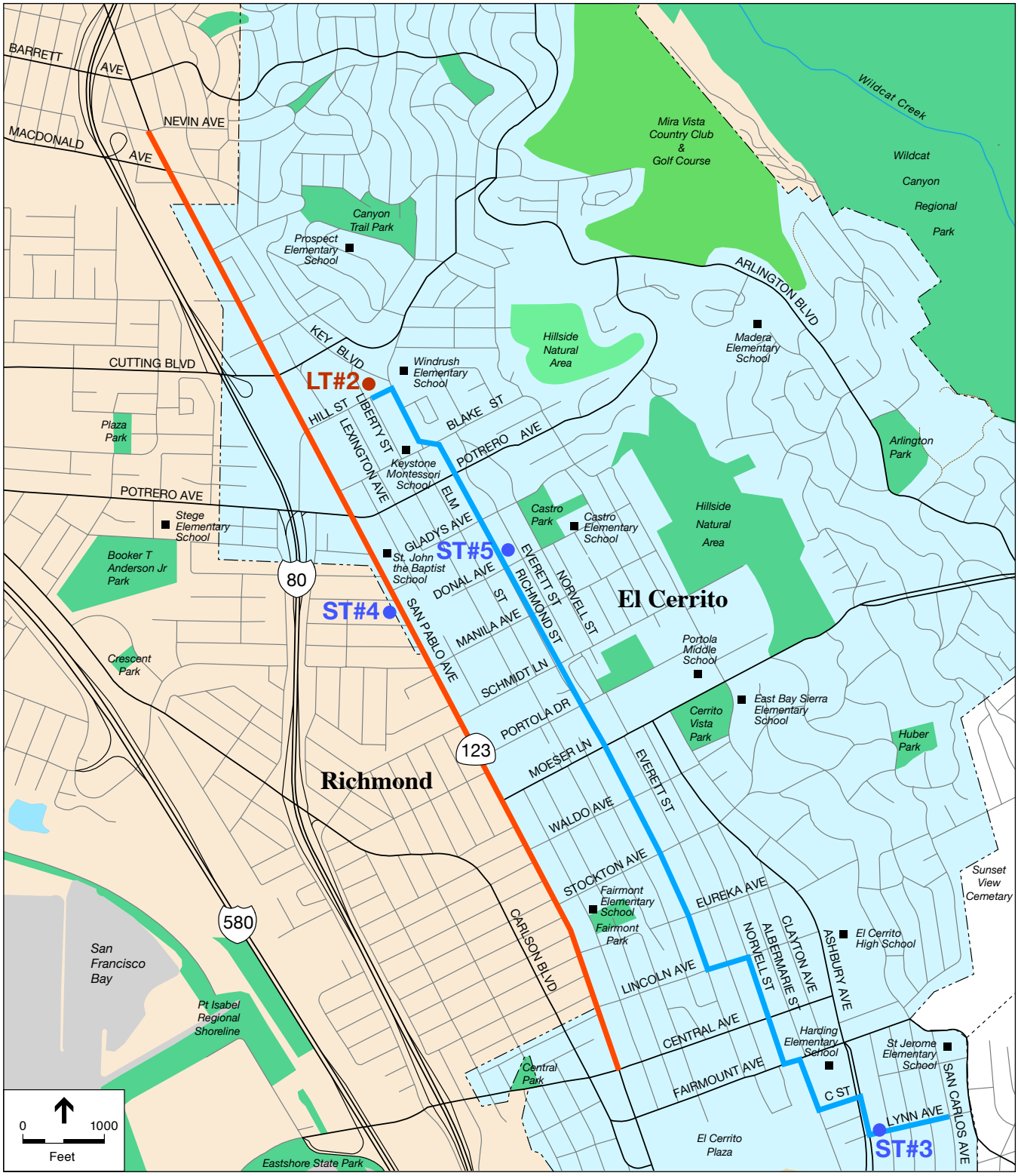
TABLE 3.13-1
CHARACTERISTICS OF ROADWAYS IN THE PROJECT AREA

Roadway / Segment	No. of Lanes / Road Width[a]	Traffic Volumes[b]	Bike Lanes?	On-Street Parking Permitted?[c]	Public Transit Lines?
Wildcat Pipeline (El Cerrito)					
Hill Street: ▪ Liberty Street to Elm Street	Two lanes (~~36~~40 feet)	2,050 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	No
Elm Street: ▪ Hill Street to Richmond Street	Two lanes (40 feet)	6,750 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	No
Richmond Street: ▪ Elm Street to Lincoln Avenue	Two lanes (30 to 40 feet)	6,250 vpd	Yes, Class III both sides	Yes, both sides (RPP required)	Yes, AC Transit Bus (G)
Lincoln Avenue: ▪ Richmond Street to Norvell Street	Two lanes (30 feet)	1,000 vpd	No	Yes, both sides (RPP required Richmond to Everett)	No
Norvell Street ▪ Lincoln Avenue to Fairmount Avenue	Two lanes (28 feet)	1,000 vpd	No	Yes, both sides (RPP required)	No
Fairmount Avenue ▪ Norvell Street to Behrens Street	Two lanes (40 feet)	8,720 vpd	No	Yes, both sides (RPP required)	Yes, AC Transit Bus (G, 25)
Behrens Street ▪ Fairmount Avenue to C Street	Two lanes (30 feet)	1,000 vpd	No	Yes, both sides	No
C Street ▪ Behrens Street to Ashbury Avenue	Two lanes (26 feet)	1,000 vpd	No	Yes, both sides	No
Ashbury Avenue: ▪ C Street to Lynn Avenue	Two lanes (78 feet)	4,070 vpd	~~No~~Yes	Yes, both sides	No
Lynn Avenue: ▪ Ashbury Avenue to San Carlos Avenue	Two lanes (36 feet)	1,000 vpd	No	Yes, both sides	No

NOTES:

[a] Roadway widths (curb-to-curb) are presented in approximate feet.
[b] Existing traffic volume represents average daily traffic (ADT); vpd = vehicles per day
[c] RPP = residential parking permit (~~City of Berkeley only~~). Unrestricted = no residential parking permit required. (City of Berkeley RPP restricts all parking to zone permit holders only; City of El Cerrito RPP restricts parking on one side of the street to permit holders).
* San Pablo Avenue (SR 123) includes four general purpose lanes (two in both directions); however, roadway includes multiple left-turn pocket lanes at the majority of intersections.
** NB = northbound

SOURCES: ESA, 2012; AC Transit, 2012; Wiltec (traffic counting firm), 2012; *23rd Street Road Diet Traffic Study,* Dowling Associates, Inc., May 2012.



SOURCE: ESA

EBMUD West of Hills Northern Pipelines . 211488

Figure 3.11-2

Noise Measurement Locations for Wildcat Pipeline (El Cerrito) and Central Pressure Zone Pipeline (El Cerrito and Richmond)

The second paragraph of DEIR page 3.13-20 is revised as follows:

> The Wildcat Pipeline (El Cerrito) alignment requires 25-30 feet for the pipeline work zone along Hill Street, Elm Street, ~~and~~ Richmond Street, Lincoln Avenue, Norvell Street, Fairmount Avenue, Behrens Street, C Street, Ashbury Avenue, and Lynn Avenue. ~~Affected segments of Elm Street and Richmond Street~~ Except for Hill Street, all the affected roadway segments would need to be closed for construction because they have widths less than 40 feet, which will provide inadequate room to allow traffic to proceed safely through the work zone. The affected segment of Hill Street has a width of approximately 40 feet. Because Hill Street is a one-way eastbound roadway and carries relatively low traffic during the peak periods (i.e., less than 181 vehicles per hour), it is proposed to keep one lane open during construction.

Chapter 5. Cumulative Impacts

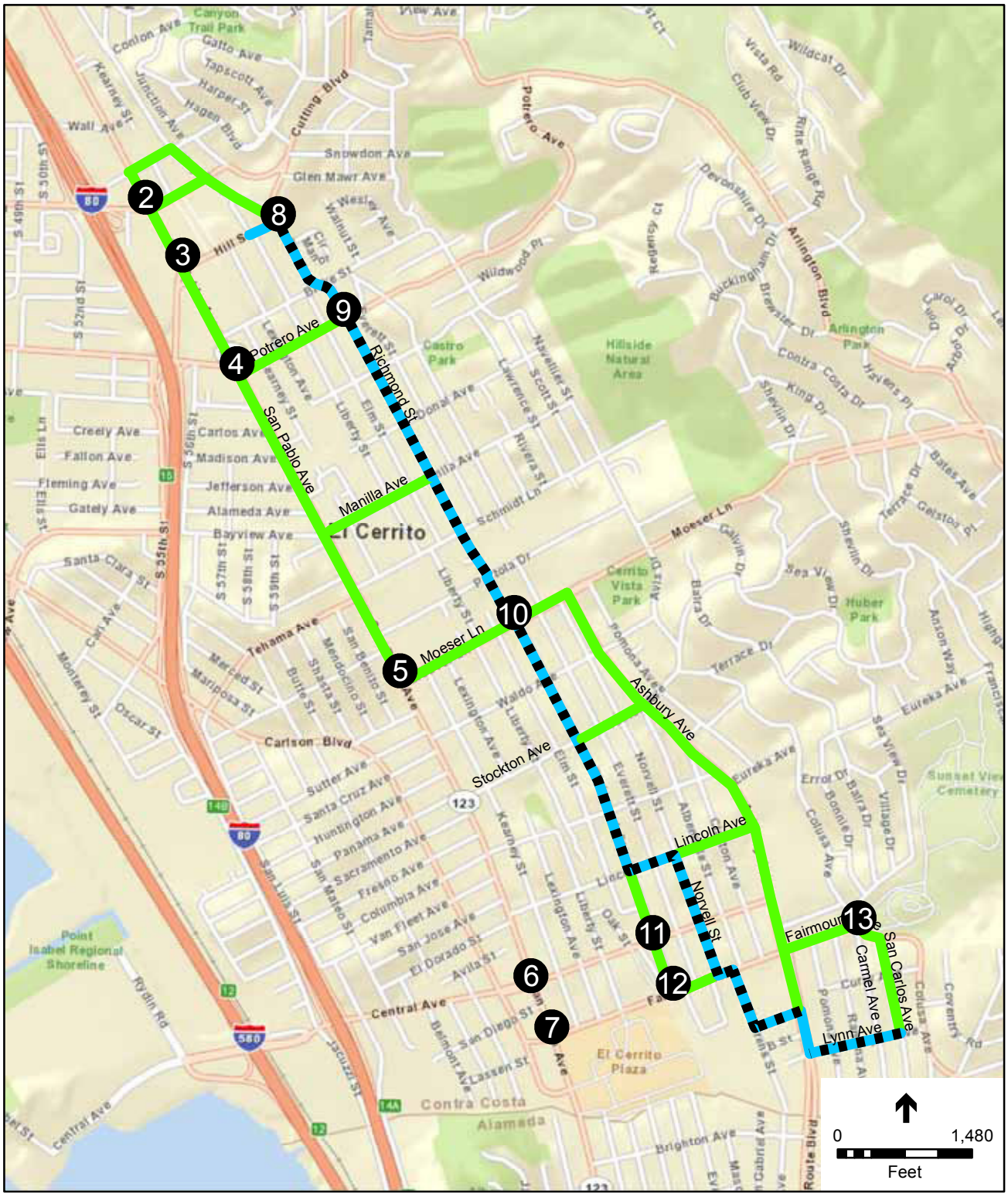
5.3.6 Geology and Soils

The fourth paragraph of DEIR page 5-27 is revised as follows:

> As discussed in Impact 3.7-5~~1~~, construction of the pipe bridge at the north end of the Central Pressure Zone Pipeline (Richmond/San Pablo) and the adjacent Kennedy Park could result in the loss of top soil. Many of the projects listed in Table 5-1 would also have the potential to result in a loss of topsoil, particularly those projects constructed adjacent to San Pablo or Wildcat Creek, including the Davis Street Master Plan (RSP-1), construction of the Wildcat Creek Trail (RSP-24 and RSP-25), and San Pablo Creek Daylighting (RSP-26), Rumrill Bridge Replacement (RSP-22), and Wildcat Creek Regional Trail: Construct Bridge over railroads (RSP-23). Therefore, cumulative impacts related to loss of topsoil are potentially significant and the project's contribution would be cumulatively considerable. However, as described in Section 3.7, Geology and Soils, EBMUD would implement Mitigation Measure HYD-1, which would require contractors to schedule construction activities at San Pablo Creek during the dry season~~GEO-2 (Replacement of Topsoil at San Pablo Creek Crossing) requiring the contractor to segregate top soil and replace the topsoil at the completion of construction~~. Implementation of this measure would ensure that the project's contribution to cumulative impacts related to loss of top soil would not be cumulatively considerable and would be *less than significant*.

Appendix D, Traffic Control Scheme Figures

Figure TC-5, Proposed Detour Routes, Wildcat Pipeline (El Cerrito) and Figure TC-8, Proposed Detour Routes Central Pressure Zone Pipeline (El Cerrito/Richmond) are revised, as shown on the following pages.



Proposed Road Closures
Wildcat Pipeline (El Cerrito)
Detour Routes
2 Study Intersections

EBMUD West of Hills Northern Piplines . 211488

Figure TC-5
Proposed Detour Routes
Wildcat Pipeline (El Cerrito)

EBMUD West of Hills Northern Pipelines . 211488

Figure TC-8
Proposed Detour Routes
Central Pressure Zone Pipeline (El Cerrito/Richmond)