East Contra Costa BART Extension (eBART) Project Final EIR

Addendum 2

April 18, 2012

Prepared by:

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East Contra Costa BART Extension (eBART) Project Final EIR Addendum 2

1.0 Summary

Background

The San Francisco Bay Area Rapid Transit District (BART) is proposing to extend transit services into east Contra Costa County from its existing Pittsburg/Bay Point BART Station in the unincorporated community of Bay Point near the City of Pittsburg. The project is generally known as "eBART" in reference to the extension of service to the "East" portion of Contra Costa County. The Project consists of an approximately 10-mile extension of transit service in the median of State Route 4 (SR 4) from the current BART terminus in Contra Costa County at the Pittsburg/Bay Point BART Station to a point just east of Hillcrest Avenue in the City of Antioch.

The potential environmental effects of the eBART Project were presented in a Final Environmental Impact Report (FEIR) for the purposes of evaluating environmental impacts under the California Environmental Quality Act (Public Resources Code Section 21000, et seq., CEQA). On April 23, 2009, the FEIR for the project was certified by the BART Board of Directors, a Mitigation Monitoring and Reporting Plan (MMRP)[1] was adopted, and the eBART Project (Project) was adopted.

Modifications to the Project were evaluated as part of an Addendum to the Final EIR (2011 Addendum), which was considered by the BART Board on April 28, 2011, and the modifications to the project were adopted.

Purpose of Addendum

Section 15164 of the CEQA Guidelines allows a Lead Agency to prepare an Addendum to a previously certified EIR if some changes or additions are necessary, as long as none of the conditions described in Section 15162 requiring the preparation of a subsequent EIR have occurred. In brief, Section 15162 states that when an EIR has been certified, no subsequent EIR needs to be prepared for the project unless the Lead Agency determines, on the basis of substantial evidence in the light of the whole record, that there are substantial changes proposed in the project which require major revisions of the previous EIR, substantial changes occur with respect to the circumstances under which the project is undertaken, or there is new information of substantial importance regarding new significant effects, more severe effects, or the feasibility or effectiveness of mitigation measures.

[1] Mitigation Monitoring and Reporting Plan adopted April 23, 2009 and revised April 28, 2011.

Revisions to the Project

The eBART terminus in Antioch will be constructed along SR 4, east of Hillcrest Avenue. The project components at this location include the station platform in the median of SR 4 and the station entry house, station parking lot, access road, and maintenance facility adjacent to SR 4 on the north. Exhibit 1 illustrates the overall site plan for the eBART Station area at Hillcrest, which covers 40.13 acres.

A small knoll lies along the east side of the eBART project site adjacent to SR 4 and rises approximately 90 feet above the surrounding terrain. Construction of the parking lot and the maintenance facility will include excavation of the north side of the knoll to create a level grade for the maintenance buildings, yard, and tailtracks and to provide fill for the elevated parking lot and the future Slatten Ranch Road. The slope will be excavated to the top of the knoll, resulting in the removal of 200,000 cubic yards of soil.

An additional 53,000 cubic yards of soil is required to provide fill for the parking lot and access road. In order to reduce overall environmental effects, such as truck traffic, the eBART project intends to balance cut and fill on-site to the extent feasible. The 2011 Addendum evaluated the potential impacts of excavating this additional fill from the upper portion of the knoll for the purpose of the parking lot grading. Based on further refinement of the project design, 53,000 cubic yards (an additional 2.56 acres) would be excavated from the top and the south-facing slope of the knoll adjacent to State Route 4 (SR 4). This change is being evaluated as an option which may or may not be executed, depending on the circumstances as construction proceeds.

Determination

This Addendum to the eBART Project Final EIR revisits the analysis conducted in the Final EIR and 2011 Addendum and evaluates the potential effects of the additional grading at the Hillcrest Avenue Station. The additional grading was evaluated for all categories of impact analyzed in the Final EIR (transportation, land use, visual quality, etc.).

The analysis did not identify any substantial changes to the affected environment and did not identify any new or substantially more severe impacts not already identified in the Final EIR. All mitigation measures included in the Final EIR and MMRP would also apply to the Revised Project. Based on the evaluation presented in this Addendum, there is no substantial evidence in the light of the whole record that the conditions outlined in Section 15162 of the CEQA Guidelines requiring a subsequent EIR are met. Therefore, an EIR Addendum is appropriate.

2.0 Revisions to the Project

Background

The San Francisco Bay Area Rapid Transit District (BART) is proposing to extend transit services into east Contra Costa County from its existing Pittsburg/Bay Point BART Station in the unincorporated community of Bay Point near the City of Pittsburg. The project is generally known as "eBART" in reference to the extension of service to the "East" portion of Contra Costa County. The Project consists of an approximately 10-mile extension of transit service in the median of State Route 4 (SR 4) from the current BART terminus in Contra Costa County at the Pittsburg/Bay Point BART Station to a point just east of Hillcrest Avenue in the City of Antioch.

The eBART terminus in Antioch will be constructed along SR 4 east of Hillcrest Avenue. The project components at this location include the station platform in the median of SR 4 and the station entry house, parking lot, access road, and maintenance facility adjacent to SR 4 on the north. Exhibit 1 illustrates the overall site plan for the eBART Station area at Hillcrest, which covers 40.13 acres. The existing environment around the site has not changed substantially since the Final EIR was certified in 2009 and the 2011 Addendum was considered.

Proposed Additional Grading

A small knoll lies along the east side of the eBART project site adjacent to SR 4 and rises approximately 90 feet above the surrounding terrain. The location of the additional excavation is indicated at the easternmost (right side) of Exhibit 1. Construction of the parking lot and the maintenance facility will include excavation of the north side of the knoll to create a level grade for the maintenance buildings, yard, and tailtracks and to provide fill for the elevated parking lot and the future Slatten Ranch Road. The slope will be excavated to the top of the knoll, resulting in the removal of 200,000 cubic yards of soil. The excavation will leave a stable, finished face that will not exceed a 3:1 slope (horizontal:vertical) on the north side of the knoll.

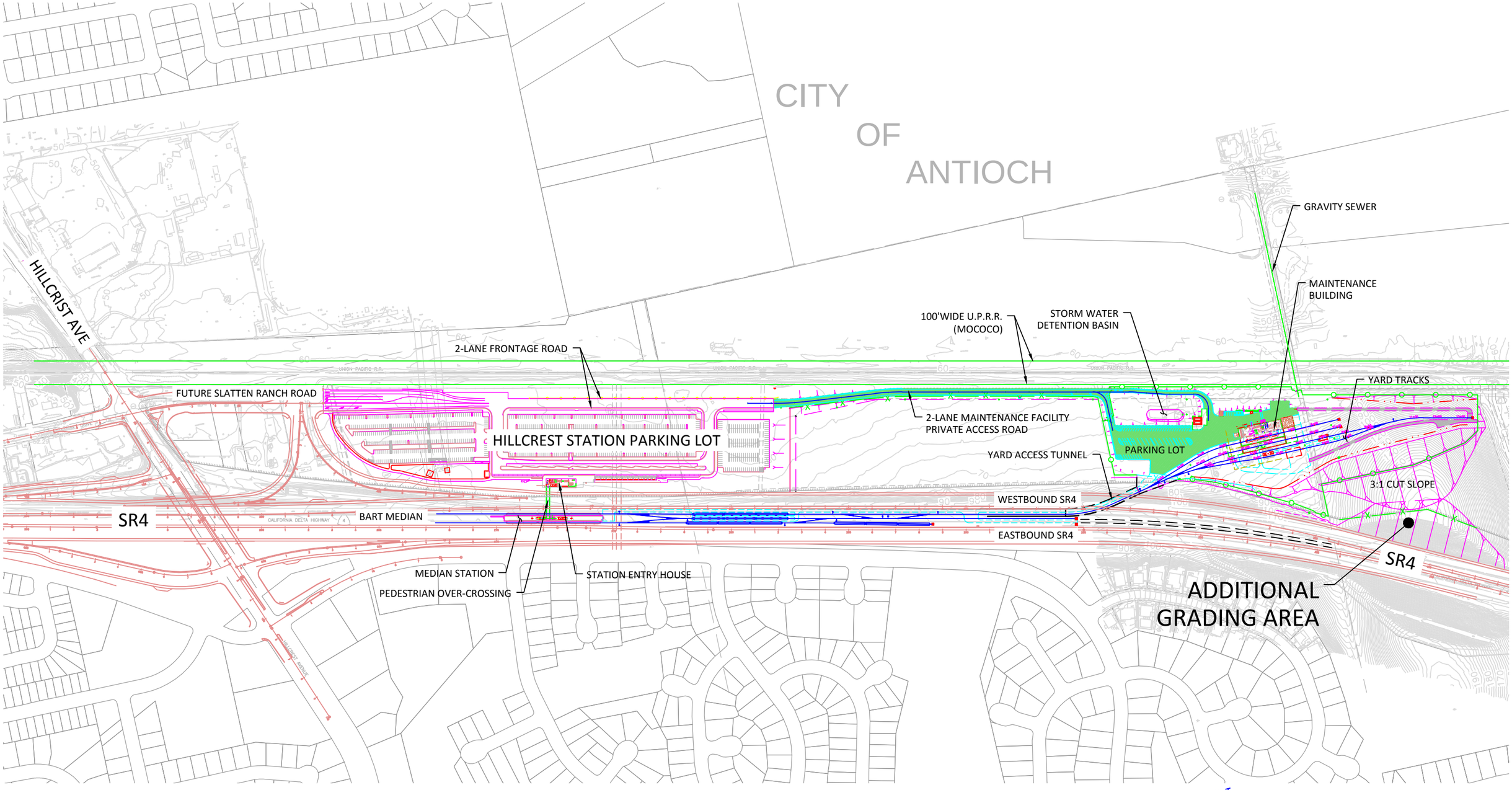
An additional 53,000 cubic yards of soil is required to provide fill for the parking lot and access road. In order to reduce overall environmental effects, such as truck traffic, the eBART project intends to balance cut and fill on-site to the extent feasible. The 2011 Addendum evaluated the potential impacts of excavating approximately 60,000 cubic yards of additional fill from the upper portion of the knoll for the purpose of the parking lot grading. Based on further refinement of the project design, 53,000 cubic yards (an additional 2.56 acres) would be excavated from the top and the south-facing slope of the knoll adjacent to SR 4. The excavated material would be transported from the knoll across the eBART site to the parking lot, where it would be placed for fill. The finished slope of the additional graded area would be a constant 4:1 from the shoulder of the expanded westbound lane of SR 4 to the top of the knoll. Exhibit 2 illustrates the plan view of the proposed excavation, and Exhibit 3 illustrates the cross sections. Photos of the site are presented in Exhibit 4. The proposed grading site lies adjacent to SR 4 and straddles two properties: the FKP property north of the SR 4 right-of way and a portion of the Caltrans

SR 4 right-of-way. Implementation of the grading program requires an encroachment permit from Caltrans.

The Project Description in the 2011 Addendum discusses the excavation of the knoll and states that "an additional 60,000 cubic yards [of fill] would be excavated from the upper portion of the knoll for the purpose of parking lot grading."[2] At that time, the location of the additional excavation was still in question. The proposed grading addressed in this second Addendum is outside the grading footprint of the Project as evaluated in the Final EIR and 2011 Addendum, and represents use and disruption of additional acreage not identified in those documents. This second Addendum evaluates the grading of the additional 2.56 acres.

This change is being evaluated as an option which may or may not be executed, depending on the circumstances as construction proceeds. BART retains the flexibility to construct the project as originally described in the Final EIR or to incorporate some or all the revised project elements described in the 2011 Addendum and in this second Addendum.

[2] East Contra Costa BART Extension (eBART) Project Final EIR – Addendum, April 2011, page 13.



N

SCALE:NTS

**TENTATIVE & PRELIMINARY
FOR DISCUSSION PURPOSES ONLY**

04.05.12
HILLCREST TERMINAL CONSERVATION EXHIBIT 2A R1

Hillcrest Parking Lot and Maintenance Facility Complex

OVERALL SITE PLAN

SAN FRANCISCO BAY AREA
RAPID TRANSIT DISTRICT

PGH WONG ENGINEERING, INC.
CONSULTING ENGINEERS

EAST CONTRA COSTA BART EXTENSION

EXHIBIT 1

NOTES:

1. UPON COMPLETION OF ALL GRADING OPERATIONS WITHIN STATE R/W, CONTRACTOR SHALL HYDROSEED ALL DISTURBED AREAS.
2. CONTRACTOR SHALL INSTALL COIR EROSION CONTROL MATS, WHEN NEEDED TO ESTABLISH VEGETATION ON SLOPE.

3:1 CUT SLOPE

3:1 CUT SLOPE

LIMITS OF PROPOSED BART CONTRACT GRADING FOR MAINTENANCE FACILITY

LIMITS OF PROPOSED BART CONTRACT GRADING WITHIN STATE R/W

4:1 CUT SLOPE

STATE R/W

PHOTO 1

℄ ECL

PHOTO 3

WESTBOUND SR4

℄ ECR

EASTBOUND SR4

PHOTO 4

EX 18"SD

SR4 P.M. 29.9

PHOTO 2

EX INLET

EX 54"SD

EX 18"SD

EX 18"SD

CALIFORNIA DELTA HIGHWAY

40' 0' 40' 80'

GRAPHIC SCALE

Site Plan

04.10.12

PROPOSED-EARTHWORK-EXHIBIT_r5.dwg

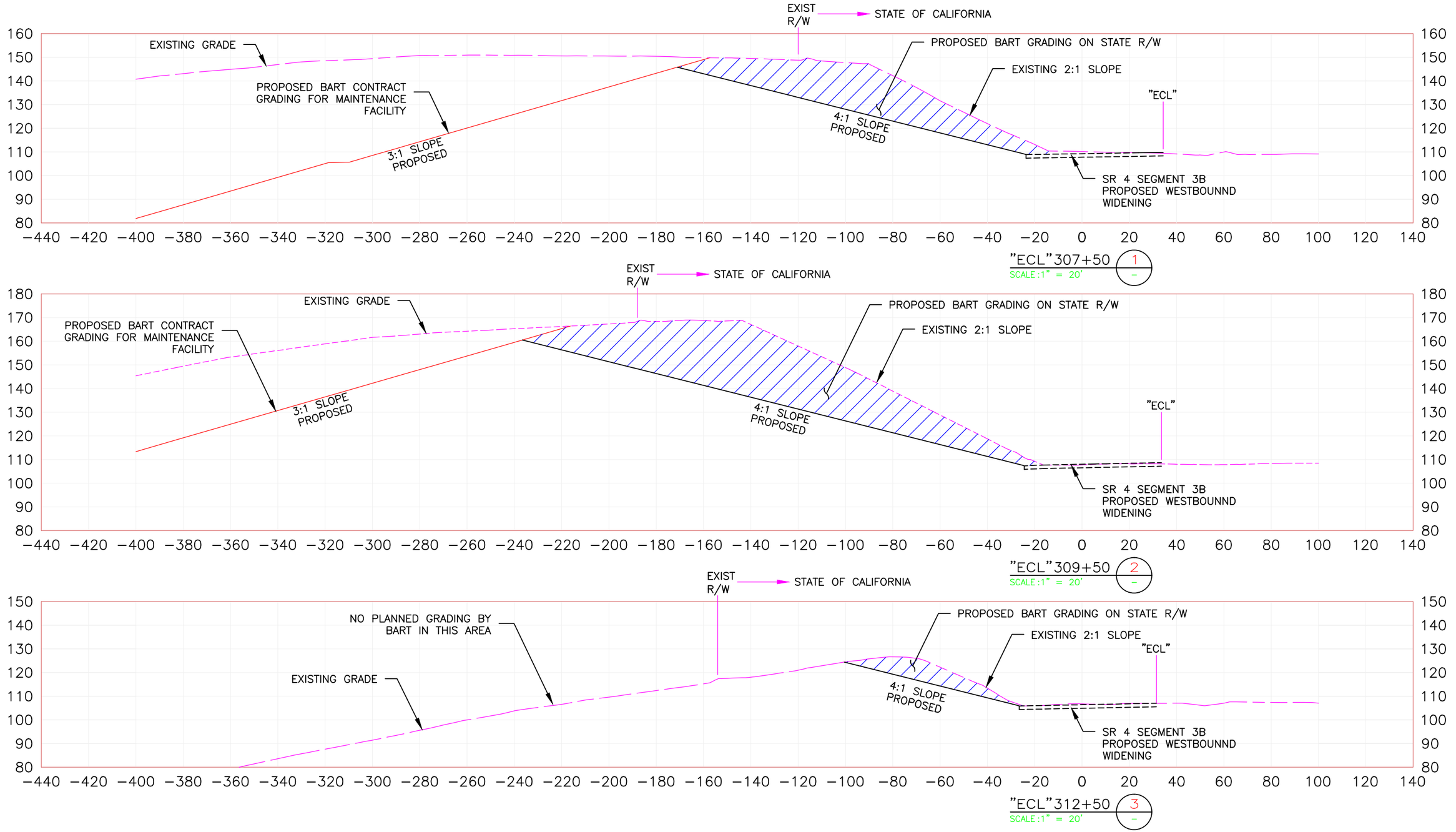
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

PGH WONG ENGINEERING, INC. CONSULTING ENGINEERS

STATE ROUTE 4 - Westbound Grading

East Contra Costa BART Extension

EXHIBIT 2



04.10.12
PROPOSED-EARTHWORK-EXHBIT_r5.dwg

Cross Section

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

PGH WONG ENGINEERING, INC. CONSULTING ENGINEERS

STATE ROUTE 4 - Westbound Grading

East Contra Costa BART Extension

EXHIBIT 3

Photo 1: View of Knoll looking east from shoulder of SR 4

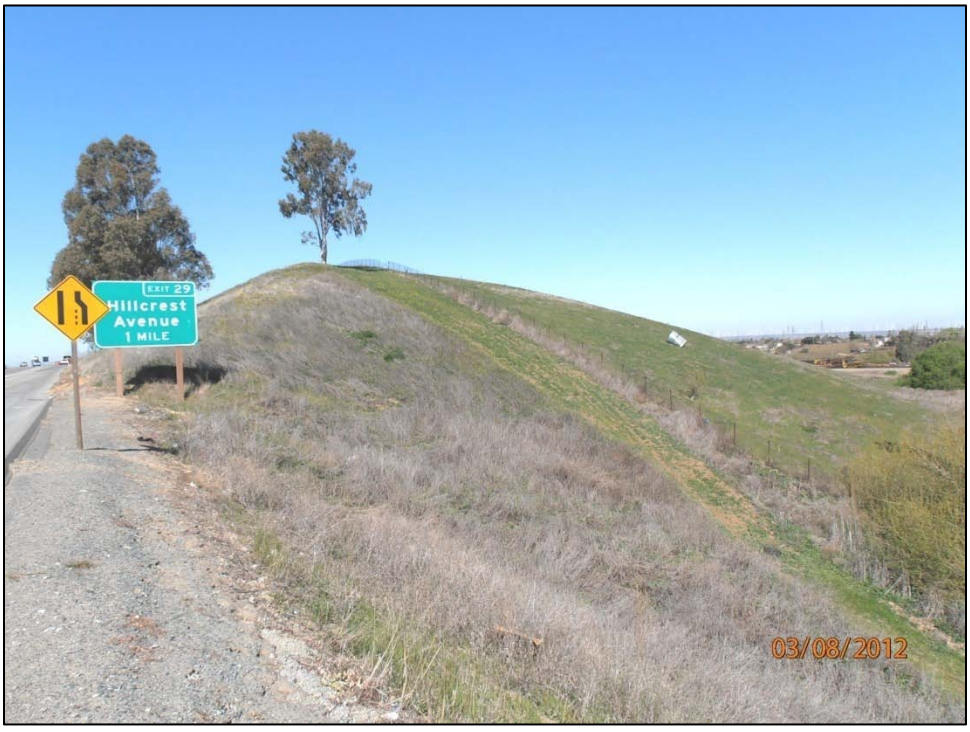


Photo 2: View of knoll looking west from shoulder of SR 4.

EXHIBIT 4

Photo 3: View of knoll from eastbound lane of SR 4.

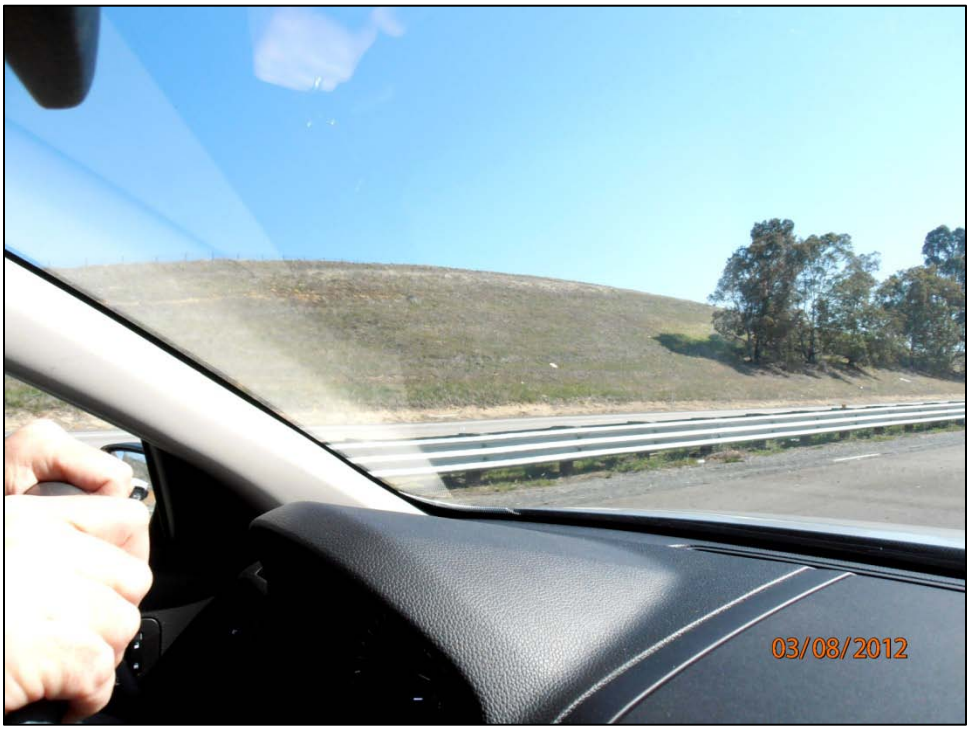


Photo 4: View of knoll from eastbound lane of SR 4.

EXHIBIT 4

3.0 Environmental Analysis

Transportation

The transportation analysis in the Addendum evaluated potential Project ridership and Project impacts to SR 4, local streets, intersections, local transit operations, parking availability, pedestrian and bicycle circulation, and construction impacts. Transportation impacts related to the additional grading would be limited to the additional truck trips to move the excavated material from the knoll to the parking lot and access road, where the fill would be placed. The analysis in the 2011 Addendum included a discussion of the total number of truck trips required to move the 260,000 cubic yards of estimated fill material, which would include the additional 53,000 cubic yards proposed to be excavated from the south side of the knoll. As noted on page 50 of the 2011 Addendum, during construction, approximately 14,950 truckloads would be required to transfer material excavated from the knoll to the parking lot area. Trucks carrying spoils from the knoll would travel west along the north side of SR 4 and into the center of the eBART project area to reach the parking lot area where the material would be dropped, a distance of approximately 3,500 feet. These truck trips would be on-site trips; trucks carrying excavated fill would not travel on public streets. Therefore, construction truck trips related to the excavation of the knoll would not affect traffic circulation near this station. Excavation of the knoll would not result in any additional transportation-related impacts not already discussed in the EIR and 2011 Addendum.

Land Use

The Final EIR evaluated the Project's consistency with plans, policies, and programs, and the eBART Project's compatibility with existing uses. The proposed grading is located on two parcels: one is an undeveloped privately-owned parcel adjacent to SR 4 (APN# 052-052-018) and the other is a portion of the state-owned SR 4 right-of-way. BART will acquire a portion of the privately-owned parcel and obtain a slope easement over a portion of the remainder for the eBART maintenance facility. An encroachment permit is required for the grading on the SR 4 right-of-way, but the state will retain ownership of the parcel. The subject parcels are bordered by the Union Pacific Railroad Mococo line to the north, SR 4 to the south, an unused industrial site to the east, and an abandoned residence to the west. The nearest residential uses are located across SR 4, approximately 400 feet to the south. The nearest residences to the north are approximately 1,500 feet away. There are also some commercial uses, such as a construction equipment storage yard and vehicle salvage and towing yard, along the north side of the Union Pacific Railroad tracks, approximately 650 feet to the north of the knoll. With no residential, commercial, or industrial uses close to the site, the proposed grading would not interfere with plans policies or programs, or be incompatible with surrounding land uses.

Population and Housing

The Population and Housing evaluation in the Final EIR provided an overview of the population, housing, and economic characteristics of the communities in the project corridor. The grading would take place on an undeveloped parcel and a portion of the SR 4 right-of-way. No residences or businesses would be

affected. Parcel APN# 052-052-018 was identified as a land acquisition in the eBART EIR, Table 3.4-5 (p. 3.4-12). Mitigation Measure PH-2.1 in the MMRP, which will mitigate displacement impacts, will apply to this parcel.

Visual Quality

The Visual Quality section of the EIR evaluated the effects of the Project related to its visual compatibility with the surrounding environment, the effect on significant views, and the potential for disruptive light and glare. The visual environment surrounding the Hillcrest Avenue Station has remained largely consistent with the description in the Final EIR. The grading on the knoll would not generate any light and glare and the knoll is not in a scenic corridor. Therefore, any potential visual effect the grading would be related to its visual compatibility on the surrounding environment.

The proposed grading would take place on an existing knoll that rises approximately 90 feet above the surrounding terrain and has an existing 2:1 (horizontal to vertical) cut slope along its entire length adjacent to SR 4. (See photos in Exhibit 4.) The additional grading would excavate 53,000 cubic yards from the top and the south-facing slope of the knoll adjacent to SR 4. The finished grade would have a constant 4:1 slope from the shoulder of the widened westbound lanes of SR 4. The grading would remove the top of the knoll and reduce its height by a maximum of approximately 8 feet. In essence, the existing face of the cut slope along SR 4 would be pushed further back from the roadway, removing the uppermost portion of the knoll in the process. The rounded form of the knoll would remain. (See plan and cross sections in Exhibits 2 and 3.)

The closest visual receptors would be auto drivers and passengers along SR 4. As noted above, the existing cut slope of the knoll would remain but would be altered from the existing 2:1 slope to a 4:1 slope, and the top of the knoll would be lowered. Given that auto speeds along SR 4 are frequently 65 miles per hour or higher and the limited visual exposure at those speeds, the auto drivers and passengers would not perceive the re-graded knoll as a substantial change to the viewshed. The closest residents are located across SR 4, approximately 400 feet to the south. These residences face the street frontage along Bluebell Circle, with the backyards aligned along SR 4. In most cases, these residences have backyard fences that would block most views toward SR 4 and the knoll. For views from those backyards, the visual change of the graded slope would be reduced due to the visual foreshortening on views from the south, as the slope would be moved further from the viewer, but not removed. There are also residences to the north, but these residences are more than 1,500 feet distant, and with the exception of the top of the knoll, the grading would be on the side opposite the viewer, reducing any visual impact. For the reasons stated above, the additional grading would not create any significant visual impacts.

Cultural Resources

The EIR evaluated the operational and construction effects of the Project on archaeological and historic resources in the project corridor and determined that construction activities have the potential to damage previously unknown cultural deposits or human remains during ground disturbance. However, there is no indication that the knoll has a greater archaeological sensitivity than other areas of the eBART site, and it is clear that the south-facing slope on the Caltrans property was formed by major cuts

undertaken when SR 4 was constructed that would have destroyed any subsurface archaeological deposits that could have been present. Mitigation measures in the MMRP to establish procedures to protect subsurface resources will be applicable to the additional graded area, as well as to the overall project. This will ensure that the grading will have a less-than-significant impact on archaeological resources.

Geology, soils and Seismicity

The Final EIR assessed the geologic, soil, and seismic hazards along the project corridor. There are no known faults, landslides, unstable soils, or other geologic issues on the site. BART has conducted soils tests on site, and the soils are considered suitable for fill material. Following excavation, the final finished grade facing SR 4 would be 4:1 (horizontal to vertical) and would be stable without any retaining walls or other structures.

Hydrology and Water Quality

The Final EIR described the existing hydrology and water quality conditions along the project corridor, and examined the Project with respect to potential impacts on surface water quality, groundwater, flooding, hydrology, and stormwater runoff. In addition, the 2011 Addendum considered hydrologic effects of excavation on the knoll. Since these analyses were conducted for the Final EIR and 2011 Addendum, there have not been any substantial hydrologic changes in the project area. The additional grading would reshape the slope adjacent to SR 4, but would not result in the construction of any permanent structures or impervious surface. Following excavation, the slope would be graded to 4:1 replacing the existing 2:1 slope and reseeded, so that the future slope would be similar to the existing slope.

Currently, runoff on the south-facing cut slope flows down to a drainage way along the shoulder of SR 4. The western half of the slope drains to an inlet near the center of the slope's drainageway that eventually drains to an outlet west of the knoll. The eastern half of the slope drains to an inlet at the eastern edge of the drainageway that eventually drains to a small wetland east of the knoll. Because the orientation of the slope will remain the same is it is today, the proportion of water draining in each direction would remain the same. In addition, the wetland east of the knoll receives water from an area larger than the adjacent knolls. It also receives water from an approximately 20-acre drainage area south of the SR 4 via a pipe under the roadway. Therefore, the local drainage pattern north of the freeway would be only a small portion of the wetland's overall water supply, and any changes to that supply would not be large enough to affect the overall hydrology of the wetland.

Biological Resources

The EIR evaluated the biological resources along the project corridor and the potential for the Project to disturb sensitive biological species and habitats. The project site is undeveloped pasture land and consists primarily of disturbed non-native annual grassland and ruderal vegetation. (See the site photos in Exhibit 4.) The south-facing slope of the site is a steep hillside cut face adjacent to SR 4 that has likely received erosion control treatments during the construction of SR 4. There are six trees at the bottom

of the cut slope adjacent to SR 4 and one additional tree partially up the slope. All seven trees would be removed as part of the excavation.

Surveys for biological resources were conducted as part of the eBART EIR evaluation, and a series of mitigation measures were adopted in the MMRP to mitigate for eBART project impacts and habitat loss. These surveys have been updated as part of BART's ongoing on-site monitoring. Additional biological surveys of the additional area to be graded were conducted in March, 2012.[3] This survey reported no indication of sensitive species, rare plants, or nesting birds on the site. (The biological assessment is attached as Appendix A.)

Mitigation for habitat loss due to the eBART project was implemented through the East Contra Costa County Conservancy Habitat Conservation Plan and Natural Community Conservation Plan (Conservancy), which issued a Certificate of Inclusion for the Hillcrest parking lot and maintenance facility on January 26, 2012. This mitigation measure applies to the additional grading. BART will amend its agreement with the Conservancy to provide for mitigation of the additional 2.56 acres of proposed grading.

Noise and Vibration

The FEIR and 2011 Addendum evaluated the noise and vibration associated with eBART's proposed Diesel Multiple Unit transit vehicles, increased traffic noise, and the Project's construction. The evaluation determined that although construction impacts would be temporary, construction activities (both project specific and cumulative) could have potentially significant impacts on sensitive receptors along the project corridor. Mitigation measures adopted for the overall project would apply to the additional grading. However, construction noise and vibration impacts could be significant and unavoidable, even with mitigation measures in place. These conclusions also would apply to the additional grading.

Trucks, excavators, and other heavy equipment would be used to excavate and move the soil from the knoll to the parking lot area where it would be used as fill. Construction methods and equipment would be similar to those assumed for the construction of other elements of the eBART project. Elements of the eBART Project north of SR 4, such as the parking lot and station entry house, will lie approximately 335 feet from the nearest residential properties, which are south of the freeway. The station platform itself will be in the median of SR 4, within approximately 175 feet of residential properties to the south. The closest residents to the additional grading on the knoll are located across SR 4, approximately 400 feet to the south. There are also residences to the north, but those residences are more than 1,500 feet distant, and the bulk of the knoll would serve to shield those residences from most of the noise. Therefore, the grading on the knoll would be no closer to sensitive receptors than other elements of the eBART construction, and construction impacts would be no greater than those analyzed in the FEIR and 2011 Addendum.

[3] Cardno-Entrix, General Habitat Assessment, Rare Plant, and Nesting Bird Survey for Bay Area Rapid Transit's eBART Phase 2 Hillcrest Station Parking lot and Maintenance Facility Project Expansion Area, March 30, 2012.

Air Quality

The eBART EIR and Addendum conducted a full analysis of air quality impacts related to the eBART project, including regional greenhouse gas, ozone precursors, construction exhaust pollutants, fugitive dust, and diesel particulate matter. Where potentially significant impacts were identified, mitigation measures were required. The proposed additional grading would excavate 53,000 cubic yards of fill and transport it to the eBART station parking lot. The project description of the 2011 Addendum (page 13) described that 60,000 cubic yards of grading would be excavated from the upper portion of the knoll. The additional 53,000 cubic yards of excavation is well within the 60,000 cubic feet of additional grading identified and analyzed in the earlier air quality analysis of the project. All relevant air quality mitigation measures would be implemented for the additional grading as they will be for the overall eBART project.

Public Health and Safety

The eBART EIR and Addendum identified hazards that may exist along the project corridor. Potential hazards include hazardous materials sites, hazardous materials used in project construction and operation, and overall system safety. Consistent with the mitigation measures in the MMRP, Phase I and Phase II hazardous material reports have been produced for properties to be acquired by BART, including the privately-owned property where a portion of the grading will take place (APN# 052-052-018). No hazardous materials were identified on that property.

A portion of the grading also will take place on the state owned-property within the SR 4 right-of-way, and the state will retain ownership of the parcel after the excavation takes place. BART has not conducted any hazardous materials investigations of the Caltrans parcel, but it is likely that aerially deposited lead or other materials could be present in the site soils and could be released during ground disturbance. The MMRP contains mitigation measures HS-8.1 and HS-8.2 that require BART to conduct additional file review and a Phase I ESA prior to project construction and additional investigation, including field sampling and laboratory analysis, if warranted, of areas where construction could take place. These measures will be implemented and require additional study of the Caltrans parcel, as they have for other properties to be acquired by BART.

Community Services

The EIR and Addendum described community services, such as police, fire, and emergency medical services along the eBART corridor. The additional grading would not create any new structures, roadways, or other infrastructure, and would have no effect on the need for, or provision of, community services. Truck traffic and other grading equipment would remain onsite and not travel on public roadways, which would reduce the potential to create traffic disruptions and road detours that could impede emergency response times by police and fire departments. Therefore, the additional grading would not affect community services.

Utilities

The Final EIR and Addendum described the location of existing utility lines and evaluated how construction and operation of the Project could interrupt or damage the proper functioning of these

lines. In addition, the Final EIR considered whether the existing water and wastewater treatment systems serving the project corridor could accommodate the increased load created by the Project. BART has identified the location of the utility lines crossing the project site, and there are none in the vicinity of the additional grading. Excavation of the soil and its transport to the eBART station parking lot would not affect the water and wastewater needs of the project.

Energy

The EIR considered the energy required for both the construction and operation of the Project, as well as the energy savings associated with the Project's reduction in vehicle miles traveled. The energy used by the equipment to excavate and move the additional 53,000 cubic yards of material was included in the analysis of the overall eBART project in the 2008 FEIR. The MMRP provides mitigation measures to develop and implement a construction energy conservation plan that would reduce impacts to a less than significant level.

APPENDIX A

General Habitat Assessment , Rare Plant , and Nesting Bird Survey for Bay Area Rapid Transit's eBART Phase 2 Hillcrest Station Parking Lot and Maintenance Facility Project Expansion Area
Cardno-ENTRIX

March 30, 2012

Memorandum

Cardno ENTRIX

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Date: March 30, 2012

To: Don Dean
Wayne Lind
BART
San Francisco Bay Area Rapid Transit
300 Lakeside Drive
Oakland, CA 94612

From: Sam Bacchini

RE: **General Habitat Assessment, Rare Plant, and Nesting Bird Survey for Bay Area Rapid Transit's eBART Phase 2 Hillcrest Station Parking Lot and Maintenance Facility Project Expansion Area**

Introduction

This memorandum report describes the survey methodology and results of a General Habitat Assessment, Rare Plant, and Nesting Bird Survey for the expansion area for the Hillcrest Avenue Station parking facility and maintenance yard project (Project Area) which is a part of Bay Area Rapid Transit's (BART) eBART Phase 2 project. The expansion area consists of the hill top and southern face of the hill at the eastern end of the Project Area. The expansion area footprint is detailed in the attached figure. The purpose of this report is to document what biological resources are present in the expansion area to support the HCP permit amendment for the expanded project area.

Methods

A general habitat assessment, rare plant survey, and nesting bird survey was conducted by Cardno ENTRIX biologists Sam Bacchini, and Carlos Alvarado on March 28, 2012. Surveys consisted of walking transects to cover the entire expansion area, and identify all habitat types occurring within the project boundaries. Trees on the site were closely examined for evidence of nesting raptors or other migratory birds. Plant species observed were identified to a level that allowed a determination that they were not one of the special-status plant species targeted during the survey.

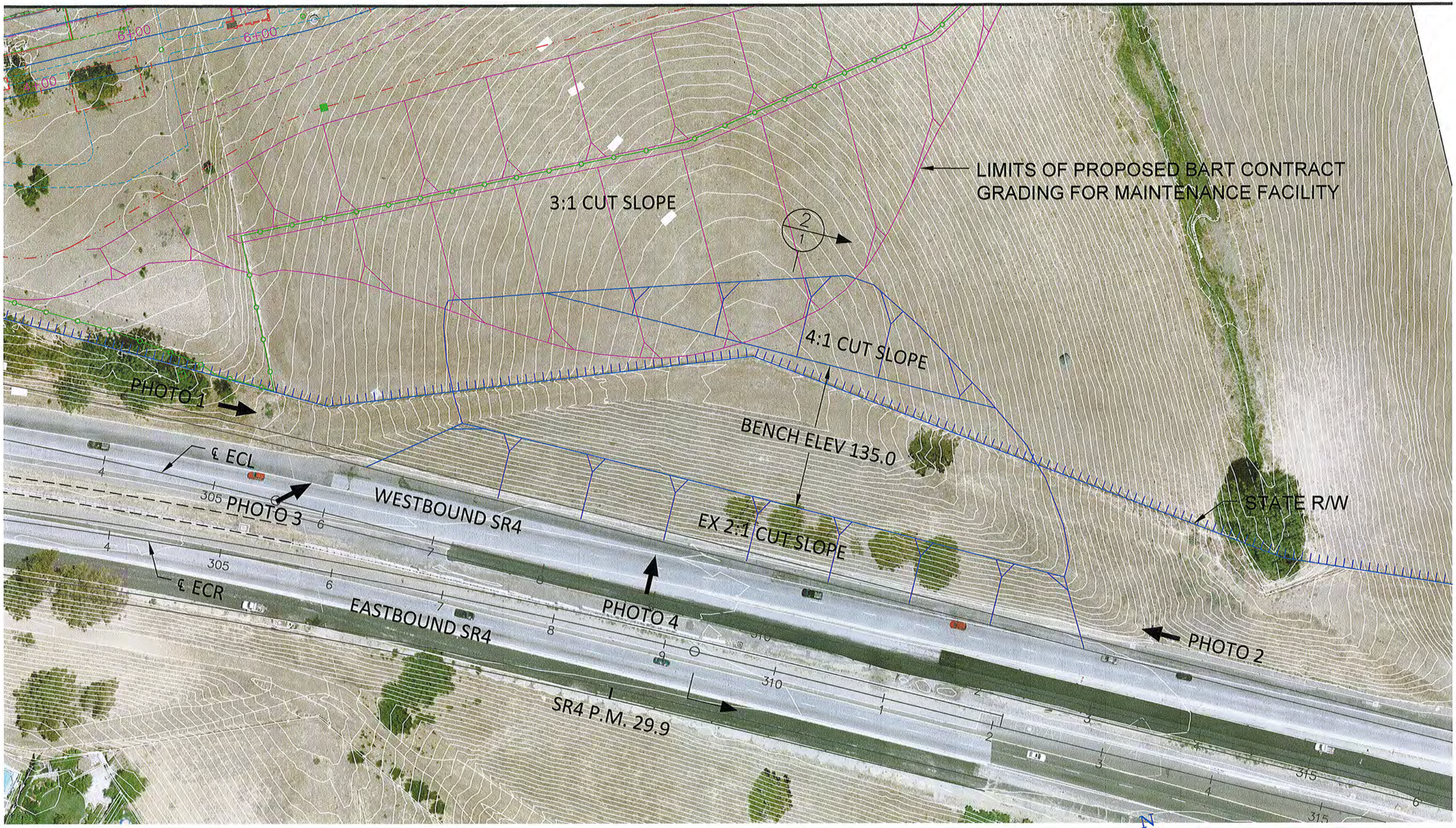
The list of special-status plant species targeted during the survey was derived from *Table 3A Species-Specific Planning Survey Requirements Triggered by Land Cover Types and Habitat Elements on the project site* in the eBART Phase II Extension Project Planning Survey Report, and included the following.

- Alkali milkvetch (*Astragalus tener* ssp. *tener*)
- Big tarplant (*Blepharizonia plumosa*)
- Brewer's dwarf flax (*Hesperolinon breweri*)
- Contra Costa goldfields (*Lasthenia conjugens*)
- Diamond-petaled poppy (*Eschscholzia rhombipetala*)
- Large-flowered fiddleneck (*Amsinckia grandiflora*)
- Mount Diablo buckwheat (*Eriogonum truncatum*)
- Mount Diablo fairy-lantern (*Calochortus pulchellus*)
- Round-leaved filaree (*California macrophylla*)[1]
- Showy madia (*Madia radiata*)

Results

The vegetation community in the expansion area consists primarily of disturbed non-native annual grassland and ruderal vegetation. The portion along the Caltrans ROW perimeter fence has been disked for a firebreak, and most of the southern portion of the expansion area consists of a steep hillside cut face adjacent to/facing Hwy 4 that likely received erosion control treatments during the construction of Hwy 4. Plant species observed during the survey include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Lolium multiflorum*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), wild mustard (*Brassica* sp.), clover (*Trifolium* sp.), prickly ox-tongue (*Picris echioides*), lupine (*Lupinus bicolor*), California manroot (*Marah fabacea*), red stemmed filaree (*Erodium cicutarium*), wild radish (*Raphanus sativa*), common fiddleneck (*Amsinckia menziesii*), yellow star thistle (*Centaurea solstitialis*), milk thistle (*Silybum marianum*), curly dock (*Rumex crispus*), and red maids (*Calandrinia ciliata*). Tree cover is very sparse, consisting only of a few young blue gum (*Eucalyptus globulus*). Wildlife species observed during the survey included red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), California ground squirrel (*Spermophilus beecheyi*), and black-tailed hare (*Lepus californicus*).

The expansion area overall is highly disturbed, and appears to be subject to regular maintenance activities by Caltrans. No nests were observed in any of the trees in the expansion area, therefore no nesting birds are present there. No ground squirrel burrows were observed in the expansion area, so the expansion area is not occupied by burrowing owl. No special-status plant species were observed during the survey. As stated in the methodology section above, all plants observed were identified to a level that allowed them to be eliminated as a possible special-status species. All species were found to be non-native annual grasses or forbs, or were common and widespread native species. Based on the lack of special-status species or nesting bird observations, the inclusion of the expansion area into the Hillcrest Station Parking Facility and Maintenance Yard project area will not result in the loss of any special-status species or nesting birds.



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Slope Grading Option B

Site Plan

BART
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

PGH WONG ENGINEERING, INC.
CONSULTING ENGINEERS

STATE ROUTE 4 - Westbound Grading

East Contra Costa BART Extension

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