



# Department of Parks COUNTY OF SAN MATEO

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August 18, 2010

## LETTER OF DECISION

To Whom It May Concern:

Subject: Certification of Negative Declaration for Crystal Springs Trail South of Highway 92

Staff has completed its review of the Negative Declaration. The Parks Department opened a 30-day public review period from January 27 to February 27, 2010. The Negative Declaration was submitted to the State Clearinghouse which began January 26, 2010 and ended February 26, 2010. The project was advertised by legal ad in the San Mateo County Times January 30, 2010.

The San Mateo County Park and Recreation Commission held a public hearing on the Negative Declaration at its February 4, 2010 meeting. Public comments were received from Ernst Meissner, Walter Glockowski, and Fay Brophy. Mr. Meissner requested that graveled shoulders be at least 3 feet in width for equestrian use, and that equestrian hitching posts be included. Three foot shoulders were incorporated and hitching posts were added to the Draft 100% Design Plans (see attached). Mr. Glockowski requested earlier notice about the plans. It was explained that the Planning Commission public hearing was one opportunity to provide public input, but staff could review Design Plans and answer any additional questions, so that any additional comments could be received in writing within the 30-day public review period. Ms. Brophy requested that any cyclone fencing be located further away from the proposed trail to give equestrians more room to maneuver should something startle the rider. The proposed fencing has been relocated away from the trail as requested, but within the fifty foot wide easement as shown in the Draft 100% Design Plans (see attached). The Park and Recreation Commission directed staff upon the close of the public comment period on February 27, 2010 at 5:00 p.m. to prepare responses to comments to the Final Negative Declaration for the Crystal Springs Trail south of Highway 92.

One written comment was received from CalTrans as a result of the State Clearinghouse circulating the Negative Declaration. CalTrans staff requested installing 10 foot long sections of three beam guard rail interspersed with the K-rail barrier at 200 foot intervals throughout the 650 foot stretch of the trail to allow for wildlife movement. Having reviewed proposed alterations to the Design Plans to provide for wildlife movement CalTrans staff concurred the changes made that they had requested, and these changes will be reflected on the Final 100% Design Plans.

Attachment C is a set of Draft 100% Design Plans which address the comments received from Mr. Meissner and Ms. Brophy. Attachment E shows the proposed changes to allow for wildlife movement along Highway 92 requested by CalTrans. A Mitigation Monitoring and Reporting Plan has been prepared. As mitigated, any potential impacts shall be reduced to a level of insignificance as required by the California Environmental Quality Act (CEQA). The Negative Declaration is hereby approved subject to the following conditions of approval:

### **FINDINGS**

1. The Negative Declaration consists of the following documents:
  - a. The Initial Study and Negative Declaration (January 27, 2010)
  - b. The Mitigation Monitoring and Reporting Plan
2. The Negative Declaration is complete, correct, adequate and prepared in accordance with CEQA and applicable State and County Guidelines.
3. That on the basis of the Initial Study and comments received hereto; there is no substantial evidence that the project will have a significant effect on the environment if subject to the mitigations measures contained in the Negative Declaration.
4. That the Negative Declaration reflects the independent judgment of the Director of the San Mateo County Parks Department.
5. That the mitigation measures identified in the Negative Declaration, agreed to by the San Mateo County Parks Department, placed as conditions on the project, and identified as part of the public hearing, have been incorporated into the Mitigation Monitoring and Reporting Plan in conformance with California Public Resources Code Section 21081.6.

## CONDITIONS OF APPROVAL

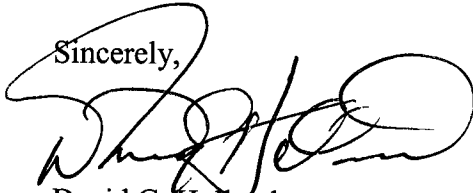
1. **BIO-1:** Prior to project construction in any areas that support serpentine grassland habitat, a rare plant survey shall be conducted to determine if they are present in the area to be affected by trail construction. Fences shall be erected around any rare plants found to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage, or if not practical, then the species shall be used in the revegetation of the unofficial trails.
2. **BIO-2:** The revegetation project shall include the use of top soil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.
3. **BIO-3:** The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.
4. **BIO-4:** Project construction shall be limited to the dry season (June 1-November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.
5. **BIO-5:** All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.
6. **BIO-6:** A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require monitoring.
7. **TRA-1:** The County of San Mateo shall consult with the County and Caltrans traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks; use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings. An

Encroachment Permit will be secured from CalTrans prior to any work being initiated in the Highway 92 Right of Way.

8. **TRA 2:** The County of San Mateo shall incorporate into its Final Design Plans that the k rail barrier along Highway 92 10 foot long sections of tri-beam guard rail (MBGR) at 200 foot intervals throughout the 650 foot stretch of the trail to allow for wildlife movement. The MBGR will still provide protection and separation of the trail from the travelled way while allowing gaps that would allow small wildlife to cross the roadway relatively unhindered.

This approval may be appealed by any aggrieved party on or before 5:00 p.m. August 31, 2010, the tenth working day following this action by the Parks Department Director. An appeal is made by completing and filing a Notice of Appeal including a statement on the ground of the appeal with the Parks Department and paying an Appeal Fee. In accordance with Section 15074 (c) of the Public Resources Code, the location and custodian of the documents or other material which constitute the record of proceedings under which the decision is based, can be reviewed by contacting Senior Planner Sam Herzberg at 650/363-1823 or [sherzberg@co.sanmateo.ca.us](mailto:sherzberg@co.sanmateo.ca.us).

Sincerely,



David G. Holland  
Director

C: Joe Naras, SFPUC  
Sandra Finegan, CalTrans  
Ernst Meissner, ETRACC  
Walter Glockowski  
Fay Brophy  
Gary Lockman, Superintendent  
Dave Moore, Superintendent  
Sam Herzberg, Senior Planner  
Cecily Harris, Financial Services Manager  
Matt Del Carlo, Ranger IV

**Attachments**

- A - Mitigated Negative Declaration
- B - Mitigation Monitoring and Reporting Plan
- C - Draft 100% Design Plans
- D - Letter received from State Clearinghouse and CalTrans
- E - CalTrans concurrence with Proposed Final Design Plan Changes

## SAN MATEO COUNTY PARKS AND RECREATION DIVISION

NOTICE OF INTENT TO ADOPT  
A NEGATIVE DECLARATIONPOSTAL  
ONLYJAN 27 2010  
COUNTY CLERK

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et seq.) that the following project: Crystal Springs Trail, South of Highway 92, when implemented will not have a significant impact on the environment.

FILE NO.: \_\_\_\_\_

OWNER: \_\_\_\_\_

APPLICANT: San Mateo County Parks DepartmentASSESSOR'S PARCEL NO.: 093-080-170 and 093-080-180PROJECT DESCRIPTION AND LOCATION

The project analyzed in this IS/MND consists of a 0.9-mile trail segment that begins on the southern side of the signalized intersection of Highway 92 and Highway 35 and follows alongside Highway 92 and Canada Road where it would connect to the Ralston Trail. This segment is the first section of the new Crystal Springs Trail North. Crystal Springs Trail North, when it is complete, would connect the Sawyer Camp Trail (at the northern end) to the Crystal Springs Trail South (at the southern end), leading to an uninterrupted, non-motorized, multi-use trail stretching from the City of San Bruno to the Town of Woodside. The trail will be used for walking, bicycling, roller-skating, and horseback riding.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

The Parks Department has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

1. The project will not adversely affect water or air quality or increase noise levels substantially;
2. The project will not have adverse impacts on the flora or fauna of the area;
3. The project will not degrade the aesthetic quality of the area;
4. The project will not have adverse impacts on traffic or land use;
5. In addition, the project will not:
  - a. Create impacts, which have the potential to degrade the quality of the environment.
  - b. Create impacts, which achieve short-term to the disadvantage of long-term environmental goals.
  - c. Create impacts for a project, which are individually limited, but cumulatively considerable;
  - d. Create environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

The County of San Mateo has, therefore, determined that the environmental impact of the project is insignificant.

MITIGATION MEASURES included in the project to avoid potentially significant effects:

**Mitigation Measure BIO-1:** Prior to project construction in any areas that support serpentine grassland habitat, a rare plant survey shall be conducted to determine if they are present in the area to be affected by trail construction. Fences shall be erected around any rare plants found to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage, or if not practical, then the species shall be used in the revegetation of the unofficial trails.



**Mitigation Measure BIO-2:** The revegetation project shall include the use of top soil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.

**Mitigation Measure BIO-3:** The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.

**Mitigation Measure BIO-4:** Project construction shall be limited to the dry season (June 1- November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.

**Mitigation Measure BIO-5:** All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.

**Mitigation Measure BIO-6:** A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require monitoring.

**Measure TRA-1:** The County of San Mateo shall consult with the County and Caltrans traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks; use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings.

#### RESPONSIBLE AGENCY CONSULTATION

The United States Fish and Wildlife Service (USFWS) has been contacted about this project, and has had an opportunity to respond early to the project. The IS addresses all listed species considered for their potential to occur on site, including the Bay Checkerspot butterfly, red legged frog and SF garter snake, and contains Mitigation Measures as listed above to reduce or avoid significant impacts to these species.

#### INITIAL STUDY

The San Mateo County Parks Department has reviewed the Environmental Evaluation of this project and has found that the probable environmental impacts are insignificant. A copy of the initial study is attached.

#### REVIEW PERIOD

All comments regarding the correctness, completeness, or adequacy of this Negative Declaration must be received by the County Parks Department, 455 County Center, Fourth Floor, Redwood City, no later than 5:00 p.m., February 27, 2010.

#### CONTACT PERSON

Sam Herzberg, Senior Planner 650/363-1823



**INITIAL STUDY**  
**ENVIRONMENTAL EVALUATION CHECKLIST**  
(To Be Completed By Parks Planning Section)

**1.0 BACKGROUND**

Project Title: Crystal Springs Trail, South of Highway 92

File No.:

Project Location: South of Highway 92 at Highway 280 and Canada Road, traveling south along Canada Road, and in between Canada Road to the east and Crystal Springs Reservoir to the west (see Figures 1 and 2).

Assessor's Parcel No.: 093-080-170 and 093-080-180

Applicant/Owner: San Mateo County Parks Department

Date Environmental Information Form Submitted:

**2.0. PROJECT DESCRIPTION**

**2.1 Overview**

In 1993 the San Mateo County Board of Supervisors (BOS) and the San Francisco Public Utilities Commission (SFPUC) entered into a Memorandum of Understanding (MOU) to develop the Crystal Springs Regional Trail (CSRT). The CSRT is a 12-mile trail that stretches from the City of San Bruno to the City of Woodside. The CSRT is a non-motorized, multi-use trail running along the east side of the Lower Crystal Springs

Reservoir. In October 1994 an IS/Mitigated Negative Declaration (MND) was adopted by the BOS for the trail concept, and in 1996 the SFPUC granted trail easements through San Francisco watershed lands. A Facility Plan was completed in 1998, and in 1996 three miles of the CSRT were completed between San Bruno Avenue and the northern terminus of the project segment.

The project analyzed in this IS/MND consists of a 0.9-mile trail segment that begins on the southern side of the signalized intersection of Highway 92 and Highway 35 and follows alongside Highway 92 and Canada Road where it would connect to the CSRT at the Ralston Trail (Figures 1 and 2). This proposed trail segment does not provide for pedestrian crossing at Highway 92 or Canada Road, therefore, the trail connection between the Ralston Trail and the Crystal Springs Trail North would remain incomplete. This segment is the first section of the new Crystal Springs Trail North. Crystal Springs Trail North, when it is complete, would connect the Sawyer Camp Trail (at the northern end) to the Crystal Springs Trail South (at the southern end), leading to an uninterrupted, non-motorized, multi-use trail stretching from the City of San Bruno to the Town of Woodside. The trail will be used for walking, bicycling, roller-skating, and horseback riding.

## 2.2 Environmental Setting

The proposed trail segment runs through an area of open space bounded by Lower Crystal Springs Reservoir (Reservoir) to the west, Highway 92 to the north and east, and Canada Road to the east. To the south is a continuation of open space between the Reservoir and Highway 280 (Figures 1 and 2). Habitat types include serpentine grassland, annual, non-native grassland, and oak and Monterey pine woodland interspersed with areas of coastal scrub. Dominant woody species include coast live oak (*Quercus agrifolia*), coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), Monterey pine (*Pinus radiata*), toyon (*Heteromeles arbutifolia*), coffeeberry (*Rhamnus californica*), California bay (*Umbellularia californica*), and oceanspray (*Holodiscus discolor*).

## 2.3 Project Details

The proposed trail segment is comprised of three distinct sections: 1) a 650-foot section adjacent to the paved shoulder along the west edge of Highway 92, from the signalized intersection of Highway 92/35 to the intersection with the existing paved trail on SFWD land; 2) a 4,950-foot section located within the existing footprint of an old SFWD service road; and 3) a 370-foot section of new trail at 8.33% (Americans with Disabilities Act (ADA) Accessible) through a grassland hillside that would connect the former SFWD trail to Canada Road. The existing paving from the SFWD trail to Canada Road will be removed as the new trail is being constructed. A 150 ft long section of the trail footprint will be moved up to 4' west of the existing paved surface with no increase or decrease in the amount of impervious surface, i.e., the trail will be moved outward from the existing road footprint, however the area to be paved on the downhill side will be replaced by the area of existing asphalt and v-ditch to be revegetated with native grasses and forbs. The width of the trail along Highway 92 is eight feet wide, with a three foot graveled shoulder, and the width of the trail within SFWD lands is 10 feet wide with a three foot graveled shoulder on the west side.

From the segment's start at Highway 92, the trail would be constructed alongside Highway 92 for 650 linear feet. This section of the trail is on the western shoulder of Highway 92 and is devoid of vegetation. The 620-foot portion of the trail that runs alongside Highway 92 will be built between the paved shoulder and the edge of the existing vegetation. It would be paved with new asphaltic concrete. K-railing would be installed along the new asphalt concrete section only. Five trees will be removed and four trees will be pruned. The trees to be removed include a 6" Monterey pine (*Pinus radiata*), 8" coast live oak (*Quercus agrifolia*), 5" Monterey pine, 16" coast live oak and 3" Monterey pine. The trees to be pruned include a 6" coast live oak, 10" coast live oak, 9" coast live oak, and a 36" multi-trunk coast live oak. All measurements are at Diameter at Breast Height

(DBH). In addition, branches that hang over the trail would be pruned on two coast live oaks, one on Highway 92 and one along the existing service road.

The crossing of Highway 92 is not the subject of this CEQA review, and will be the subject of further design and CEQA review in coordination with the California Department of Transportation (CalTrans).

The main portion of the proposed trail would begin where the SFWD service road leaves Highway 92 and bears west toward the Reservoir. This section of the trail would follow the existing SFWD maintenance road south, along the eastern shore of Lower Crystal Springs Reservoir, for approximately 0.8 miles. This portion of the proposed trail will be built entirely within the footprint of the SFWD service road. Trail construction will be of three types: (1) 2580 linear feet will consist of two inches of asphalt with a reinforcing membrane applied over the top of existing asphalt paving. (2) 3020 linear feet will be a new section of paving, consisting of 2 inches of asphalt over 6 inches of base rock. In these locations exiting asphalt paving will be removed and then the new pavement constructed in its place. (3) 370 linear feet will be a new section of paving laid on existing earthen grade, to consist of 2 inches of asphalt over 6 inches of base rock. The existing PG & E plates that are in the southern shoulder of Highway 92 where proposed trail will be constructed will remain in place and the trail will be graded to match.

The existing concrete and asphalt will be removed from the road, the base will be re-compacted, and new asphaltic concrete will be installed on the road bed. The existing concrete and asphalt will be removed using a backhoe and a 3 foot side strip of asphalt will be removed the entire length of the existing service road, and replaced with class 2 aggregate base rock for a running path. The cut material will be placed in a dump truck and hauled off-site. An asphalt roller will be used to resurface the road/trail. Construction equipment will access the site at the north end from Highway 92, and at the south end from Canada Road.

In areas where existing fencing is removed for construction or is absent, new, fencing will be put in its place. The main portion of the trail will include the insertion of three benches and four trash receptacles. The benches and trash receptacles will be pre-manufactured, similar to those found in most public parks. Two types of fencing will be used: six-foot chain link, topped with barbed wire, and 5 foot barbed wire. Both fencing types were chosen to match existing fences on the site.

After approximately 3,700 feet from the northernmost start, the service road turns east away from the Reservoir and traverses up a steep slope where it meets Canada Road. Since the grade of the service road up this slope is too steep to meet the ADA grade requirements, a new 520-foot trail section will be constructed to connect the service road to Canada Road. Construction of the new section of trail would require the placement of 3,700 square feet (0.085 acres) of asphaltic concrete. The new trail will be ADA compliant, with grades that will not exceed 8.3%. New fencing will be installed along the entire length of this trail section, and the fencing will be one of the two types as listed above.

Construction of the new trail section for ADA compliance will include the restoration of 8,600 square feet of unofficial trails (also referred to as "volunteer" or "wildcat" trails). The existing equestrian trail along Canada Road will remain. These existing, unofficial trails were created by park users alongside the San Mateo County barbed wire fence that runs parallel to Canada Road in the vicinity of the proposed new trail segment (Figure 3). The unofficial trails will be graded, refertilized, and then revegetated with native, local seed. The total area to be disturbed by the construction of this section and the restoration of unofficial trails will be 15,400 square feet (0.35 acres). Please refer to Figures 2 and 3 for project illustrations. The area will be hydroseeded with a native seed mix specifically chosen for this site.

An existing catchment basin located 550 feet south of Highway 92 will be replaced during trail installation. The basin will be a precast concrete structure exactly the same size as the existing basin. The old basin will be excavated using a backhoe, and the new basin will be installed in the same area. A short connecting pipe will be installed to meet the existing drainage pipe. All of this work will be contained within the existing roadway.

### **2.3.1 Site Preparation**

The project will involve cutting and removing 31 cubic yards of asphalt paving and base rock along the entire portion of the trail, and where removed, the existing asphalt and baserock is expected to be six inches thick. The project will also remove 65 cubic yards of subgrade soil prior to resurfacing and, for 150 lineal feet, widening the existing roadway that will be used for new trail construction. In addition, 200 cubic yards of soil will be removed during the installation of the ADA compliant trail section that connects the trail, through a grassland hillside, to Canada Road. The equipment used for demolition (backhoe, dumptruck, etc.) will be staged at Canada Road.

The intent of site preparation and grading is to minimize the work required to fit the trail within the existing road prism. The existing asphalt roadway would be treated in one of the following ways depending on the condition of the existing asphaltic concrete (AC).

- a. Apply 2-inch asphalt overlay on top of existing AC;
- b. Remove existing AC and base, re-grade for ADA compliance, and reconstruct new pavement; or
- c. Construct new pavement in an existing earthen area for the restroom area. Construct new pavement at the southern end to connect the trail with Canada Road.

The project is expected to take six months to complete. Work would take place on weekdays between 7 a.m. to 6 p.m. Deviations from this schedule must be approved by County Planning.

### **2.4 Permit Requirements**

Construction of the 0.9-mile trail segment would take place entirely within unincorporated San Mateo County. This project is being prepared to County Department of Public Works (DPW) design standards as a biddable project. No Building or Grading Permit will be secured. The County Watershed Protection Maintenance Standards will be met. The majority of the trail will take place on the existing SFWD road, and the only place that the project will disturb native soil is the new path leading from the SFWD road to Canada Road. In this area, a total of 15,400 square feet (0.35 acre) of native soil will be disturbed. Therefore, since the project will not disturb more than 1 acre, no construction permit will be required from the San Francisco Bay Regional Water Quality Control Board.

### **2.5 Mitigation Measures Incorporated into Project**

The following mitigation measures related to air quality control, water quality control, biological resources, and cultural resources will be incorporated into the project design and construction specifications. As a result, potentially significant impacts to these resources will be avoided

or reduced to less than significant levels. Additional mitigation measures have been recommended and are included in the impact analysis section below.

### **2.5.1 Construction-related Air Quality Control**

#### **Air Quality**

The Bay Area Air Quality Management District (BAAQMD) regulates short- and long-term air quality sources in the Bay Area. Construction of the proposed trail will only create short-term, construction-related emissions. The District sets forth thresholds of significance for construction-related activities in the form of Best Management Practices (BMPs) for Criteria Air Pollutants and Precursors and Greenhouse Gases (BAAQMD 2009). The project proponent, the County of San Mateo, will strictly apply the following BMPs during construction.

#### **Criteria Air Pollutants and Precursors BMPs**

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall 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 shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall 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 shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the BAAQMD shall also be visible to ensure compliance with applicable regulations.

#### **BMPs to Reduce or Avoid Greenhouse Gases**

The following BMPs will further reduce the effects of Greenhouse Gases (e.g., Carbon Monoxide, Nitrogen Oxides, and aerosols):

- Using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
- Using local building materials (within 100 miles) of at least 10 percent; and
- Recycling at least 50 percent of construction waste or demolition materials.

### **2.5.2 Construction-related Water Quality Control**

The County of San Mateo is a permittee of the San Mateo Countywide National Pollution Discharge Elimination System (NPDES) permit. This permit sets forth guidelines for adherence to State and Local laws as they pertain to the protection of storm water quality. The County will implement its Watershed Protection and Maintenance Standards that it uses for construction and maintenance of facilities to comply with NPDES requirements.

As stated above, since the project will not disturb more than 1 acre, no a construction permit will be required from the San Francisco Bay Regional Water Quality Control Board.

### **2.5.3 Pre-Construction Nesting Bird Survey**

The County will conduct a preconstruction survey for nesting birds between February 1 and August 31 of any year before any construction occurs. A qualified biologist shall survey the trail corridor not more than 72 hours before the start of construction to determine whether there are any active nests in any trees that would be removed as part of the trail refurbishment, or that are located in trees within 100 feet of the trail corridor. If active nests are found on or within 100 feet of the trail construction zone, the biologist shall consult with the California Department of Fish and Game (CDFG) to establish a buffer zone around the nest where construction activities cannot occur until nesting is complete. Construction activities may occur outside the buffer zone, if approved by the CDFG. The biologist shall prepare a monitoring report documenting the survey and consultation.

### **2.5.4 Cultural Resources Encountered During Construction**

Since most of the trail would be constructed along an existing roadway, the chance of encountering historical or archaeological resources during construction is remote. Furthermore, the project includes a provision that in the event cultural resources are encountered during construction, all activities within 50 feet must stop and the County shall be notified. An archaeologist would be called in to determine how to deal with the find. The following is standard language used to ensure that any cultural resources encountered during construction would not result in significant impacts:

If prehistoric or historic-period archaeological resources or any paleontological resources are encountered during construction, all activities within 50 feet will stop and the County shall be notified. Workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. This qualified archeologist shall inspect the findings within 24 hours of discovery. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars and pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

Any cultural resources found shall be recorded on California Department of Parks and Recreation (DPR) Form 523 (Historic Resource Recordation form). This form is available on the State of California Office of Historic Preservation's website ([http://ohp.parks.ca.gov/default.asp?page\\_id=1069](http://ohp.parks.ca.gov/default.asp?page_id=1069)). If it is determined that the proposed development could damage a unique archaeological or paleontological resource, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of

the CEQA Guidelines, with a preference for preservation in place. Additionally, in accordance with Public Resource Code Section 5097.993, the project sponsor shall inform project personnel that law prohibits the collection of any Native American artifact.

If human remains are discovered during construction, the measures specified in Section 15064.5(e)(1) of the CEQA Guidelines shall be followed. These measures are:

- A. In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:
  1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - a. The San Mateo County coroner is contacted to determine that no investigation of the death is required, and
    - b. If the coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission within 24 hours.
  2. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American;
  3. The most likely descendent may make recommendations to the County staff person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or where the following conditions occur, the County or their authorized representative shall rebury the Native American remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:
    - a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the Commission;
    - b. The descendent identified fails to make a recommendation; or
    - c. The County rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the County.

Figure 1. Project Location

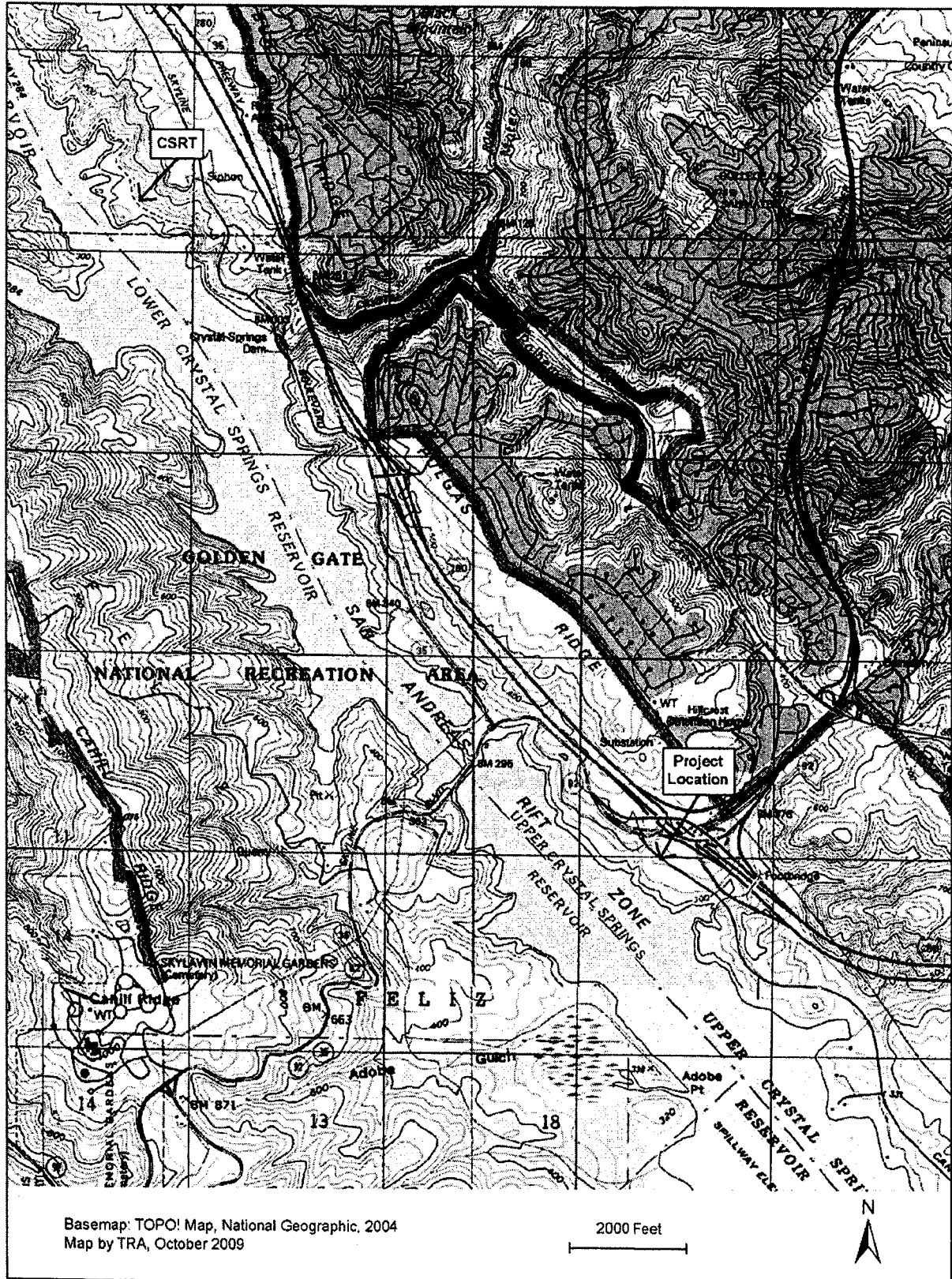
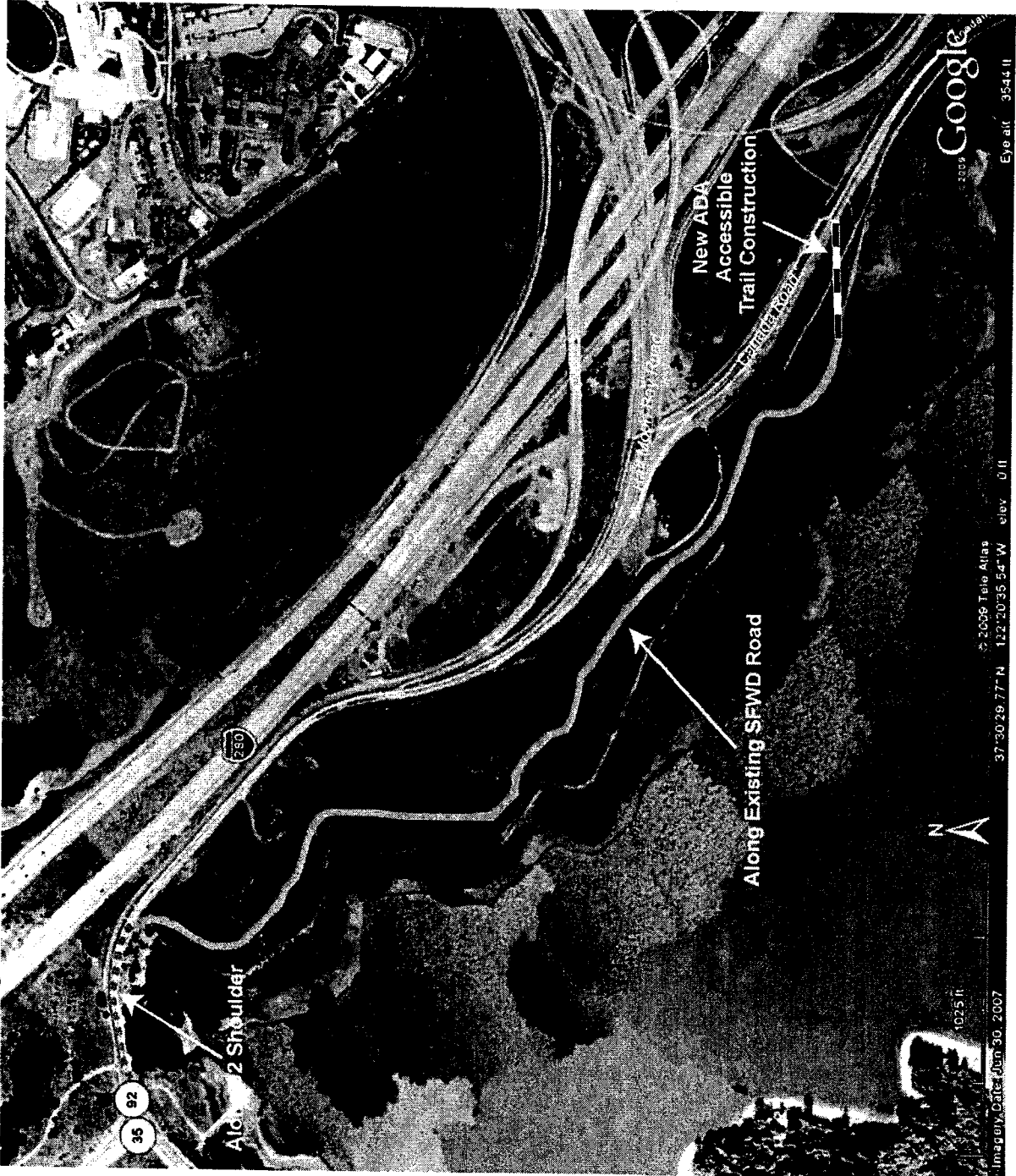


Figure 2. Trail Alignment



**Figure 3. Close Up of Trail Alignment**  
Note the red trails shown on this Figure will be closed and revegetated. The long trail shown that parallels the SFWD trail is for equestrians and will be retained.

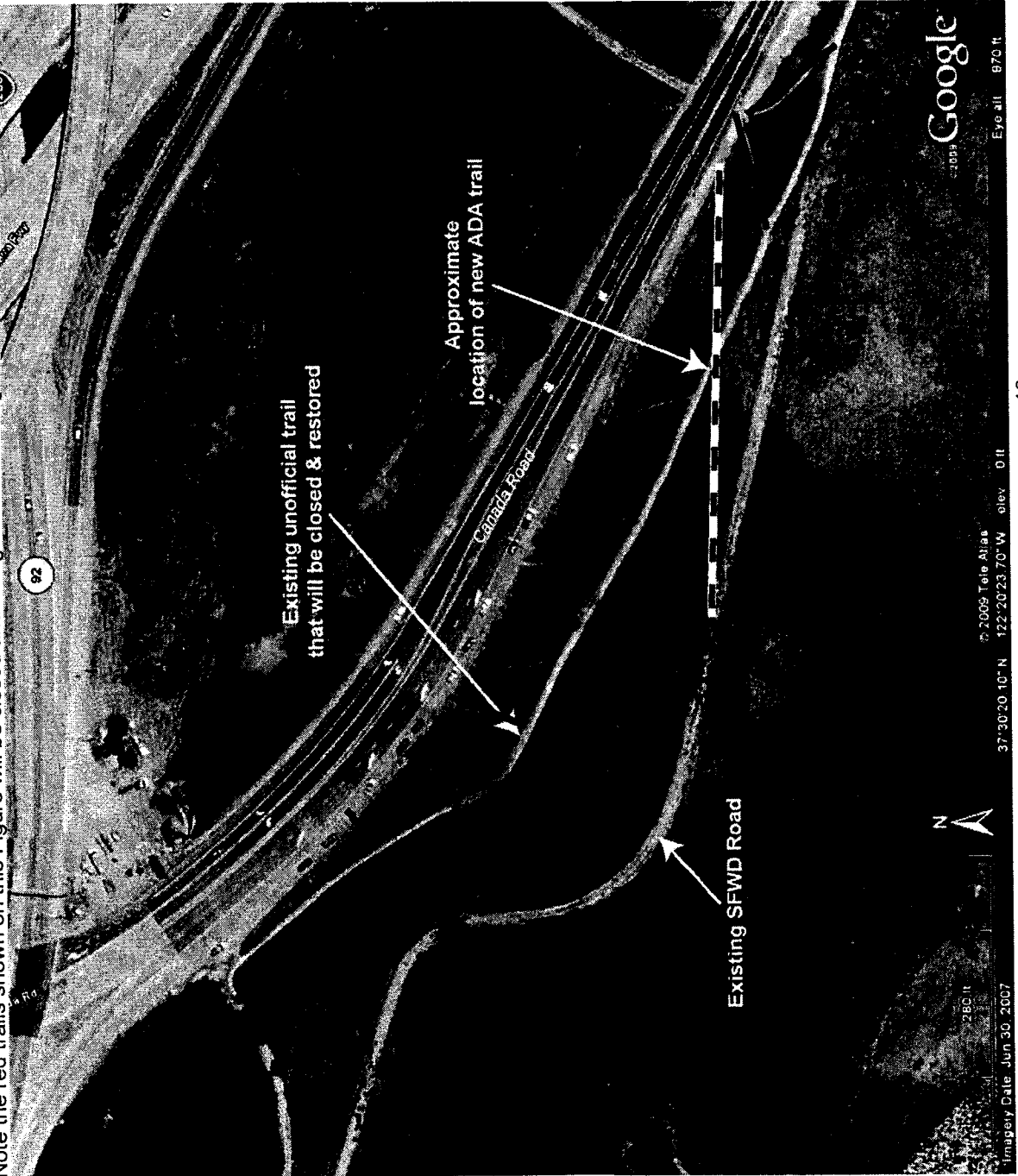
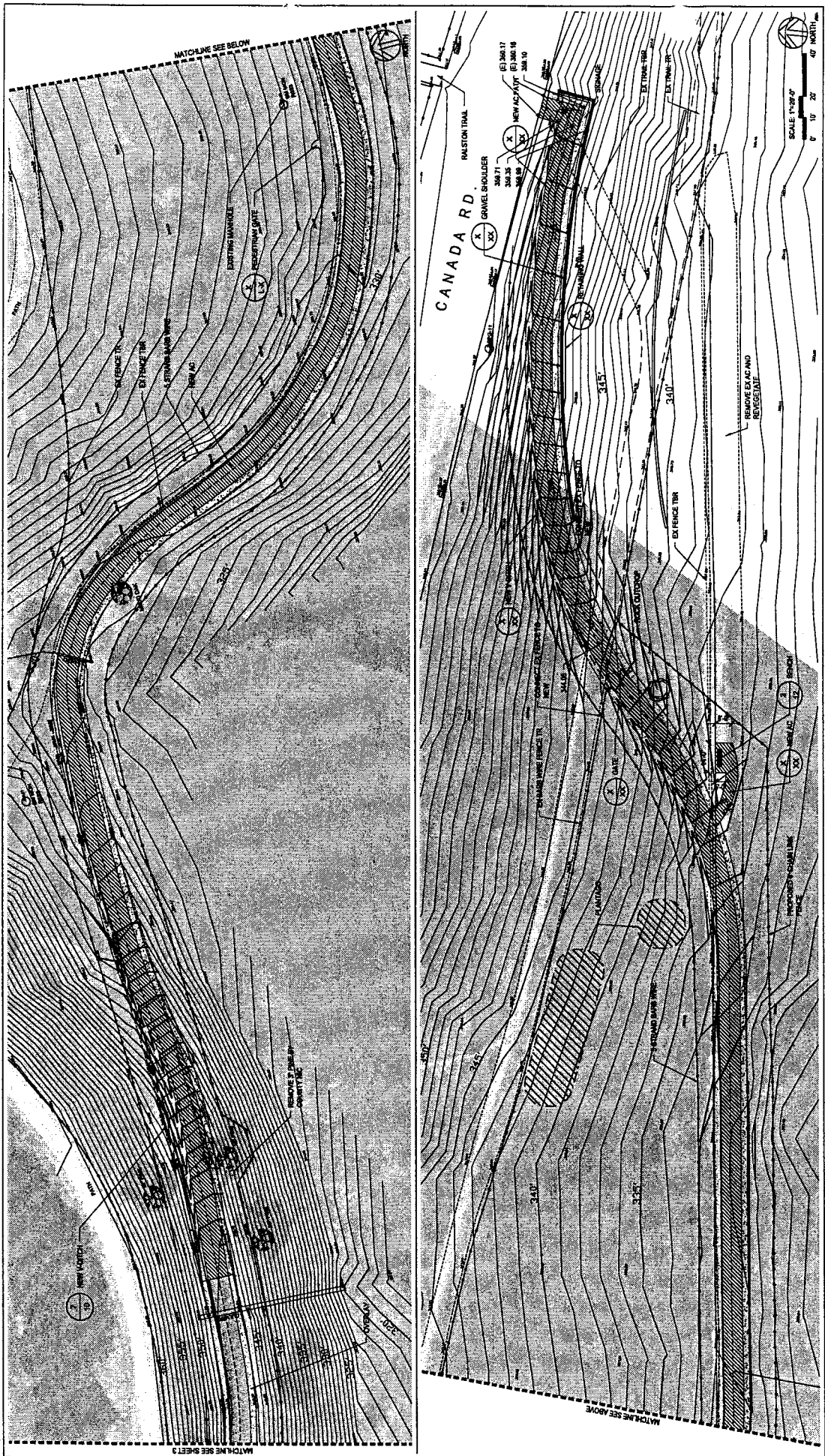








Figure 7. Sheet 5 of the Trail Construction Drawing Set



Design Title: **SITE CONSTRUCTION PLAN**

Date: **SEPTEMBER 25, 2009**

Scale: **1" = 20'-0"**

Project Number: **09.07**

Sheet Number: **5**

Total Number: **5 of 10**



Drawn by: **J.P./ms**  
 Checked by: **1Bn**

**HARRIS DESIGN**  
 3450 S. Bascom Avenue  
 Suite 100  
 San Jose, CA 95128  
 Tel: 408.950.8800

Rev	Date	By	For

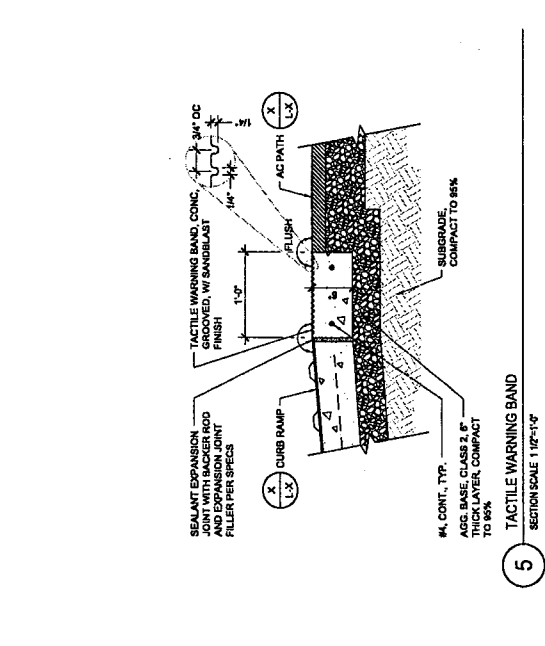
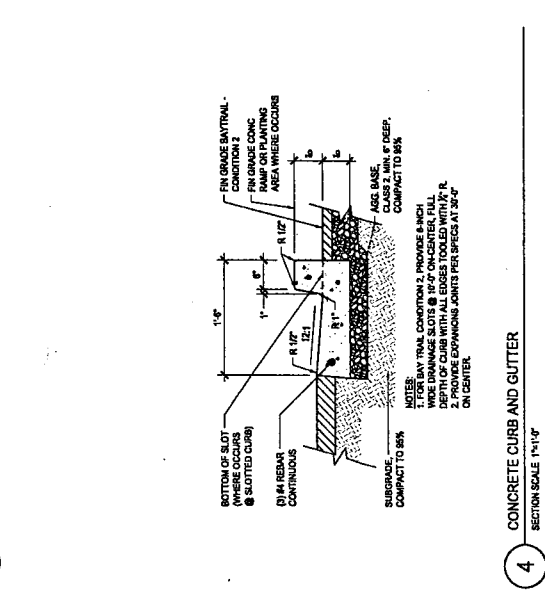
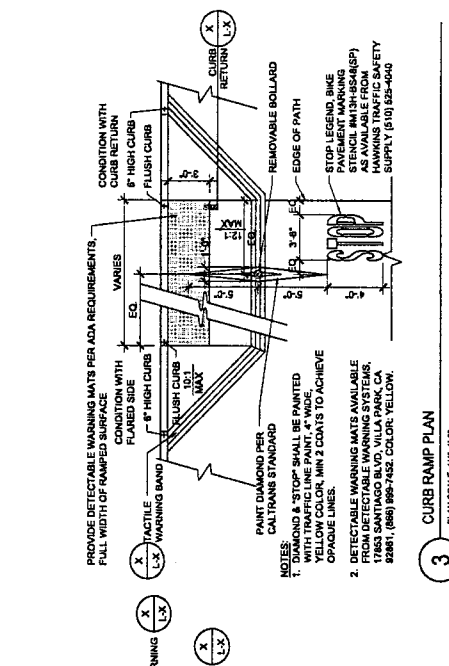
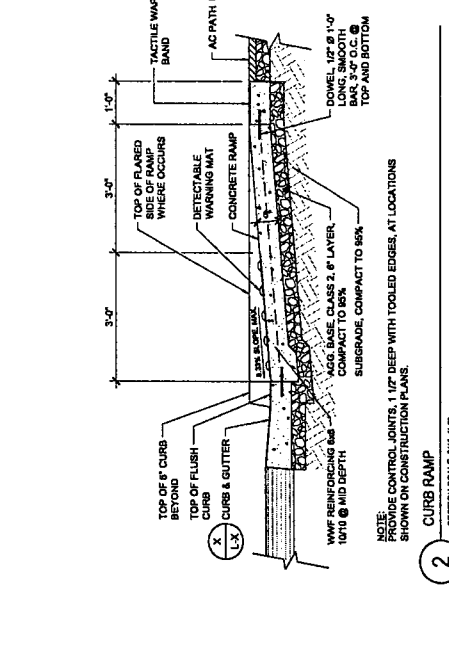
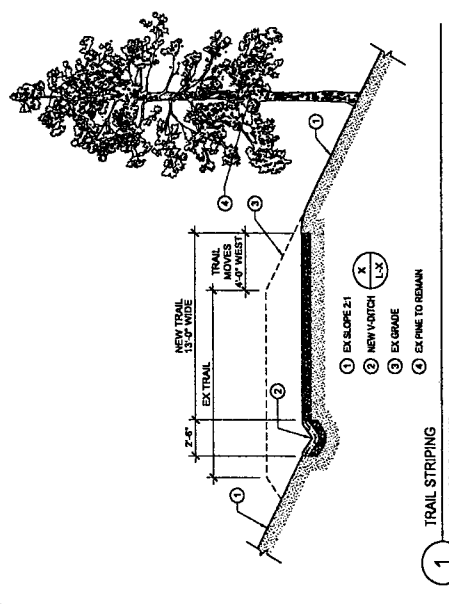
**Crystal Springs Trail Extension South of Highway 92**

County of San Mateo,  
 California  
 San Mateo County Parks Department

APPROVED DATE	
APPROVED DATE	
JAMES C. PORTER DIRECTOR OF PUBLIC WORKS P.C.E. NO. C 40858 / EXPIRES 12-31-2011	
DAVID HOLLAND DIRECTOR OF PARKS	



Figure 9. Sheet 7 of the Trail Construction Drawing Set



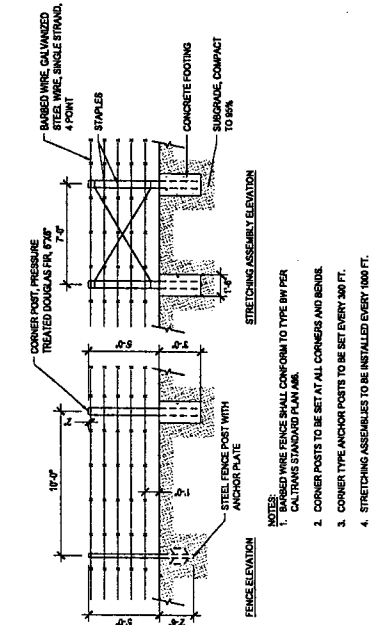
APPROVED DATE	
APPROVED DATE	JAMES C. PORTER
	DIRECTOR OF PUBLIC WORKS
	R.C.E. NO. C 46058 / EXPIRES 12-31-2011

NO. OF SHEETS	17
SHEET NO.	17
DATE	SEPTEMBER 25, 2009
PROJECT NO.	08-07
PROJECT NAME	Crystal Springs Trail Extension South of Highway 92
DRAWN BY	J. P. / S.M.
CHECKED BY	J. P. / S.M.

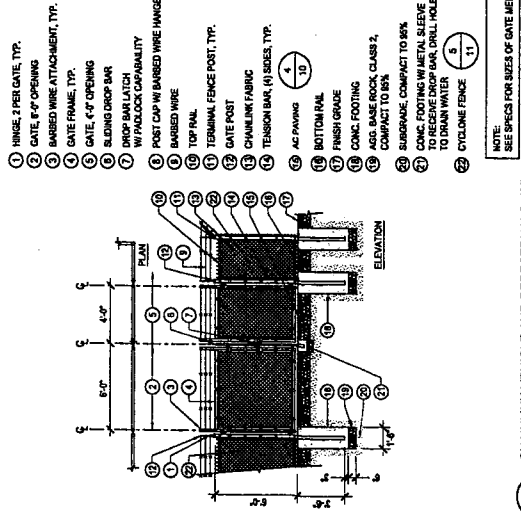
**HARRIS DESIGN**  
153 N. Main Street  
San Mateo, CA 94401  
Tel: (650) 593-2700  
Fax: (650) 593-2710

**CONSTRUCTION DETAILS**  
Date: SEPTEMBER 25, 2009  
AS NOTED  
Project Number: 08-07  
Sheet Number: 7 of 10

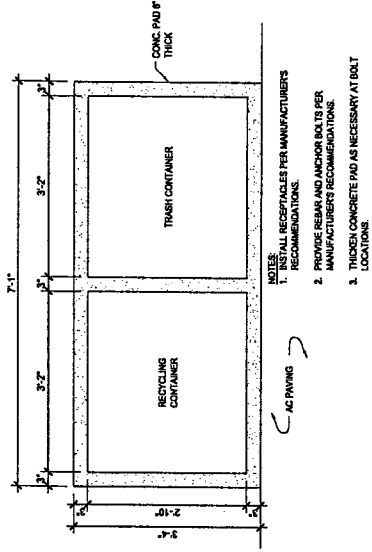
Figure 10. Sheet 8 of the Trail Construction Drawing Set



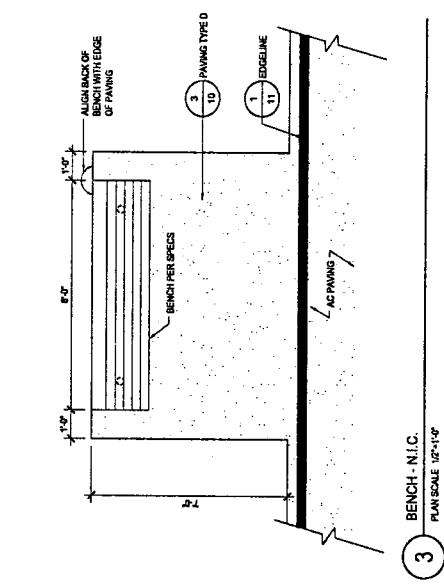
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SECTION SCALE 1/4"=1'-0"



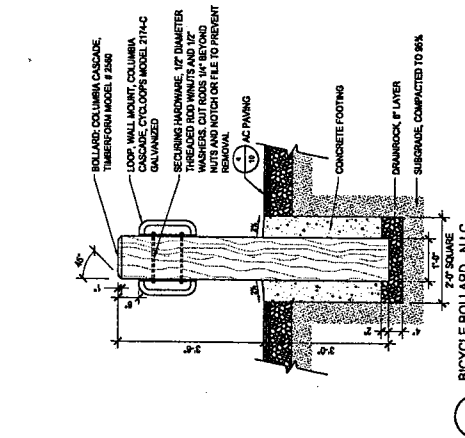
**4** CHAINLINK VEHICLE AND PEDESTRIAN GATE  
SCALE 1/4"=1'-0"



**2** TRASH AND RECYCLING RECEPTACLES - N.I.C.  
PLAN SCALE 1/4"=1'-0"



**3** BENCH - N.I.C.  
PLAN SCALE 1/2"=1'-0"



**5** BICYCLE BOLLARD - N.I.C.  
SECTION SCALE 3/4"=1'-0"

Approved Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

Checked for: \_\_\_\_\_

Drawn by: J. P. / as

Checked by: J. M.

Scale: 1"=10'

Project Number: 1

Sheet Number: 8

CONSTRUCTION DETAILS

SEPTEMBER 25, 2009

AS NOTED

08.07

09.07

8

18

Crystal Springs Trail Extension South of Highway 92

County of San Mateo, California

San Mateo County Parks Department

James C. Porter  
Director of Public Works  
R.C.E. No. C-48068 / Expires 12/31/2011

David Holland  
Director of Parks

Approved Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

Checked for: \_\_\_\_\_

Drawn by: J. P. / as

Checked by: J. M.

Scale: 1/4"=1'-0"

Project Number: 1

Sheet Number: 8

CONSTRUCTION DETAILS

SEPTEMBER 25, 2009

AS NOTED

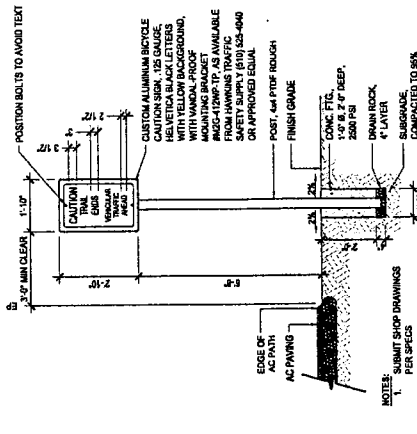
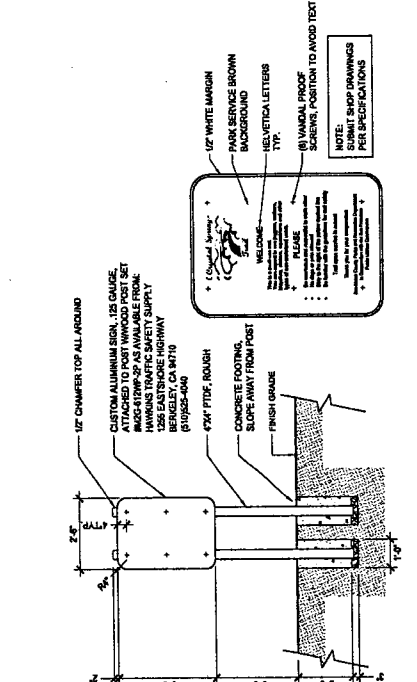
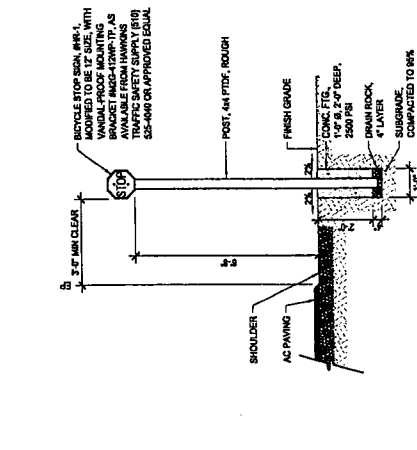
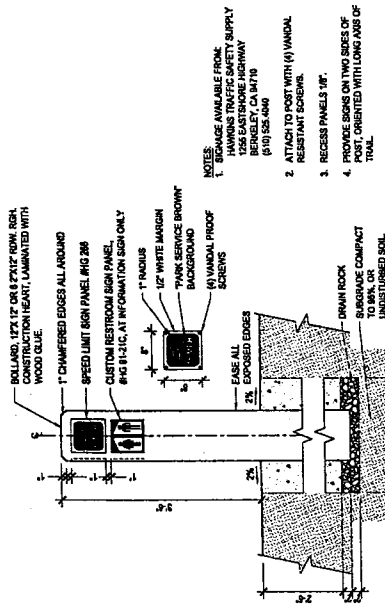
08.07

09.07

8

18

Figure 11. Sheet 9 of the Trail Construction Drawing Set



APPROVED DATE	
APPROVED DATE	
JAMES C. PORTER DIRECTOR OF PUBLIC WORKS P.C.E. NO. C-46568 / EXPIRES 12.31.2011	
DAVID HOLLAND DIRECTOR OF PARKS	

Crystal Springs Trail Extension South of Highway 92

County of San Mateo,  
California

San Mateo County Parks Department

Approved for  
SIX EXHIBITS

Per Date  
SIXES

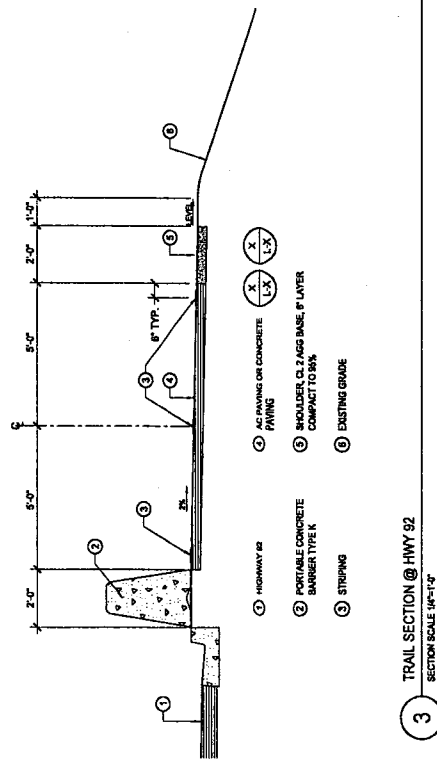
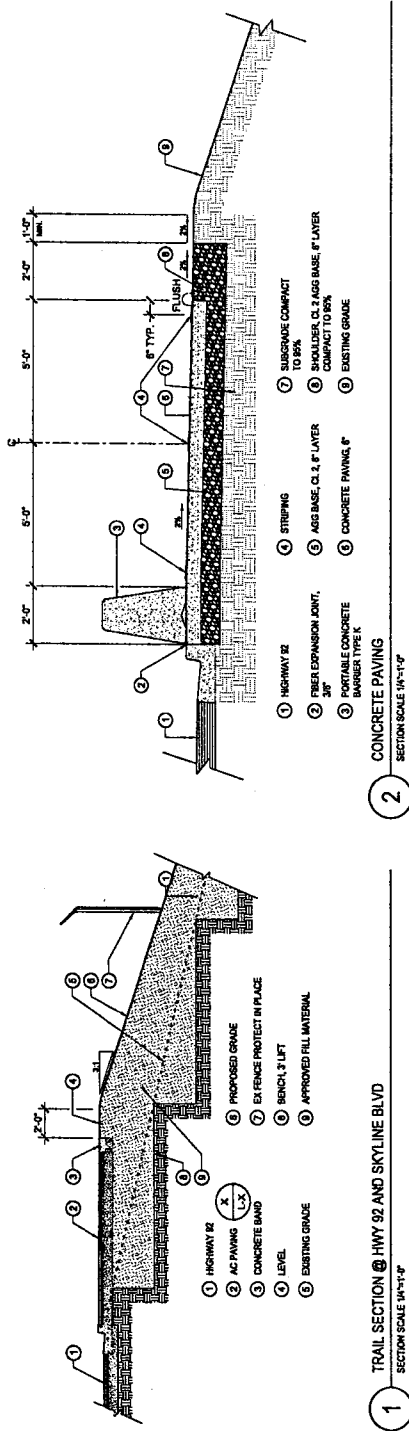
Sheet and Signature

CONSTRUCTION DETAILS  
SEPTEMBER 25, 2009  
AS NOTED  
Project Number: 04.07  
Sheet Number: 9 of 10

MARRIS DESIGN

355 Miller Avenue  
San Mateo, CA 94403  
Tel: (650) 339-3300  
Fax: (650) 339-3314

Figure 12. Sheet 10 of the Trail Construction Drawing Set



APPROVED DATE	APPROVED DATE
DAVID HOLLAND DIRECTOR OF PARKS	JAMES C. PORTER DIRECTOR OF PUBLIC WORKS R.C.E. NO. C 46008 / EXPIRES 12-31-2011

REVISIONS	DATE	BY

Crystal Springs Trail Extension South of Highway 92  
County of San Mateo,  
California  
San Mateo County Parks Department

CONSTRUCTION DETAILS  
SEPTEMBER 25, 2008  
AS NOTED  
DB 07  
10  
10

MARRIS DESIGN  
101 ALVARADO STREET  
SAN MATEO, CA 94402  
TEL: (650) 441-2200  
FAX: (650) 441-2202

Scale and Signature  
Drawn by: J. P. / J. P.  
Checked by: J. P.

**3.0 ENVIRONMENTAL ANALYSIS**

Any controversial answers or answers needing clarification are explained on an attached sheet. For source, refer to pages 11 and 12.

	IMPACT					SOURCE
	NO	YES			Cumulative	
		Not Significant	Significant Unless Mitigated	Significant		
<b>1. LAND SUITABILITY AND GEOLOGY</b>						
Will (or could) this project:						
a. Involve a unique landform or biological area, such as beaches, sand dunes, marshes, tidelands, or San Francisco Bay?			X			
b. Involve construction on slope of 15% or greater?		X				
c. Be located in an area of soil instability (subsidence, landslide or severe erosion)?		X				
d. Be located on, or adjacent to a known earthquake fault?		X				
e. Involve Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?	X					
f. Cause erosion or siltation?		X				
g. Result in damage to soil capability or loss of agricultural land?	X					
h. Be located within a flood hazard area?		X				
i. Be located in an area where a high water table may adversely affect land use?	X					

	IMPACT	YES				SOURCE	
		NO	Not Significant	Significant Unless Mitigated	Significant		Cumulative
j. Affect a natural drainage channel or streambed, or watercourse?	X						
<b>2. <u>VEGETATION AND WILDLIFE</u></b> Will (or could) this project:							
a. Affect federal or state listed rare or endangered species of plant life in the project area?			X				
b. Involve cutting of heritage or significant trees as defined in the County Heritage Tree and Significant Tree Ordinance?			X				
c. Be adjacent to or include a habitat food source, water source, nesting place or breeding place for a federal or state listed rare or endangered wildlife species?			X				
d. Significantly affect fish, wildlife, reptiles, or plant life?			X				
e. Be located inside or within 200 feet of a marine or wildlife reserve?		X					
f. Infringe on any sensitive habitats?			X				
g. Involve clearing land that is 5,000 sq. ft. or greater (1,000 sq. ft. within a County Scenic Corridor), that has slopes greater than 20% or that is in a sensitive habitat or buffer zone?			X				
<b>3. <u>PHYSICAL RESOURCES</u></b> Will (or could) this project:							

	IMPACT				SOURCE
	NO	YES			
		Not Significant	Significant Unless Mitigated	Significant	
a. Result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, oil, trees, minerals or topsoil)?	X				
b. Involve grading in excess of 150 cubic yards?		X			
c. Involve lands currently protected under the Williamson Act (agricultural preserve) or an Open Space Easement?	X				
d. Affect any existing or potential agricultural uses?	X				
<b>4. AIR QUALITY, WATER QUALITY, SONIC</b>					
Will (or could) this project:					
a. Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area?		X			
b. Involve the burning of any material, including brush, trees and construction materials?	X				
c. Be expected to result in the generation of noise levels in excess of those currently existing in the area, after construction?		X			
d. Involve the application, use or disposal of potentially hazardous materials, including pesticides, herbicides, other toxic substances, or radioactive material?	X				
e. Be subject to noise levels in excess of levels determined appropriate according to the County Noise Ordinance or other standard?	X				

	IMPACT					SOURCE
	NO	YES			Cumulative	
		Not Significant	Significant Unless Mitigated	Significant		
f. Generate noise levels in excess of levels determined appropriate according to the County Noise Ordinance standard?	X					
g. Generate polluted or increased surface water runoff or affect groundwater resources?		X				
h. Require installation of a septic tank/leachfield sewage disposal system or require hookup to an existing collection system which is at or over capacity?	X					
<b>5. <u>TRANSPORTATION</u></b>						
Will (or could) this project:						
a. Affect access to commercial establishments, schools, parks, etc.?	X					
b. Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?			X			
c. Result in noticeable changes in vehicular traffic patterns or volumes (including bicycles)?		X				
d. Involve the use of off-road vehicles of any kind (such as trail bikes)?	X					
e. Result in or increase traffic hazards?		X				
f. Provide for alternative transportation amenities such as bike racks?	X					

	IMPACT				SOURCE
	NO		YES		
	Not Significant	Significant Unless Mitigated	Significant	Cumulative	
g. Generate traffic which will adversely affect the traffic carrying capacity of any roadway?	X				
<b>6. LAND USE AND GENERAL PLANS</b>					
Will (or could) this project:					
a. Result in the congregating of more than 50 people on a regular basis?		X			
b. Result in the introduction of activities not currently found within the community?	X				
c. Employ equipment which could interfere with existing communication and/or defense systems?	X				
d. Result in any changes in land use, either on or off the project site?		X			
e. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?	X				
f. Adversely affect the capacity of any public facilities (streets, highways, freeways, public transit, schools, parks, police, fire, hospitals), public utilities (electrical, water and gas supply lines, sewage and storm drain discharge lines, sanitary landfills) or public works serving the site?	X				

	IMPACT					SOURCE
	NO	Not Significant	YES		Cumulative	
			Significant Unless Mitigated	Significant		
g. Generate any demands that will cause a public facility or utility to reach or exceed its capacity?	X					
h. Be adjacent to or within 500 feet of an existing or planned public facility?	X					
i. Create significant amounts of solid waste or litter?		X				
j. Substantially increase fossil fuel consumption (electricity, oil, natural gas, coal, etc.)?	X					
k. Require an amendment to or exception from adopted general plans, specific plans, or community policies or goals?	X					
l. Involve a change of zoning?	X					
m. Require the relocation of people or businesses?	X					
n. Reduce the supply of low-income housing?	X					
o. Result in possible interference with an emergency response plan or emergency evacuation plan?	X					
p. Result in creation of or exposure to a potential health hazard?	X					
<b>7. <u>AESTHETIC, CULTURAL AND HISTORIC</u></b> Will (or could) this project:						

	IMPACT				SOURCE
	NO	YES		Cumulative	
		Not Significant	Significant Unless Mitigated		
a. Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?		X			
b. Obstruct scenic views from existing residential areas, public lands, public water body, or roads?	X				
c. Involve the construction of buildings or structures in excess of three stories or 36 feet in height?	X				
d. Directly or indirectly affect historical or archaeological resources on or near the site?		X			
e. Visually intrude into an area having natural scenic qualities?		X			

**EXPLANATION OF ENVIRONMENTAL IMPACTS**

**1. Land Suitability and Geology**

*Will (or could) this project:*

- a. Involve a unique landform or biological area, such as beaches, sand dunes, marshes, tidelands, or San Francisco Bay?

**Significant Unless Mitigated.** Serpentine grasslands are found throughout the project site along the proposed trail corridor. This is a unique soil type and plant association as few non-native plant species can tolerate the low-nutrient, toxic character of serpentine soils. As such, native plant communities typically dominate serpentine areas and serpentine grasslands often serve as a refuge for special status plant species that have been unable to compete with exotics under normal soil conditions.

The area between the SFWD service road and Canada Road where new trail construction/ground disturbance is proposed supports serpentine grassland habitat. Species present here are all herbaceous, aside from occasional coyote brush. Areas of mixed soil types support a greater density of annual grasses (wild oat (*Avena fatua*) is most common), where areas dominated by serpentine soils support a variety of native, serpentine plants. The rare plants that have the potential to be present include white-rayed pentachaeta (*Pentachaeta bellidiflora*), fragrant fritillary (*Fritillaria liliacea*), Marin dwarf flax (*Hesperolinon congestum*), San Mateo woolly sunflower (*Eriophyllum latilobum*), Crystal Springs

lessingia (*Lessingia arachnoidea*), and Crystal Springs fountain thistle (*Cirsium fontinale* var. *fontinale*). In addition, dwarf plantain (*Plantago erecta*), host plant for the federally threatened Bay checkerspot butterfly (*Euphydryas editha bayensis*), is present wherever serpentine soils are present. The Bay Checkerspot butterfly previously existed at Edgewood Park, four miles to the southeast of the project site. The species has not been observed at Edgewood Park since 2003.

As shown in the Project Plans (Figures 4-12 of this document), replacement of existing fencing would be required at the Highway 92 trail entrance and possibly along the newly constructed portion of the trail near Canada Road. Fence removal may require workers to walk through serpentine areas and dig out the existing fence posts. New fence installation would require workers to once again walk through serpentine areas, using old fence postholes where possible but likely also digging new postholes. In addition, grading would occur within serpentine grassland along the 520-foot section of trail that is constructed between the service road and Canada Road. The following mitigation measure would avoid or reduce the impacts to serpentine grasslands to less than significant levels.

**Mitigation Measure BIO-1:** Prior to project construction in serpentine grassland habitat, a rare plant survey will be conducted to determine the presence of rare plants, as defined by the California Native Plant Society or the California Natural Diversity Database. A fence or fences shall be erected around any rare plants found on site to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage. If salvage is not possible then the species shall be used in the revegetation of the unofficial trails.

**b. Involve construction on slope of 15% or greater?**

**Not Significant.** The completed trail project, in keeping with the Americans with Disabilities Act of 1991, would not exceed a slope of 8.33%. To avoid exceeding this maximum, two portions of the trail that exceed 8.3% would be re-graded, including a small segment of trail just after it leaves Highway 92 and drops down to the SFWD service road and a 370-foot section that would connect the existing service road to Canada Road.

**c. Be located in an area of soil instability (subsidence, landslide or severe erosion)?**

**Not Significant.** The underlying bedrock at the proposed trail location is classified as serpentinite, greenstone, and sheared rock (mélange) (Brabb et al. 1998), which means that it is relatively stable. The project area is characterized as having "few landslides" by the USGS (1997) and a "very low" susceptibility to liquefaction in the case of a San Andreas Fault Zone earthquake (ABAG 2001). Also, since most of the trail would be installed within an existing road prism, there is little risk that unstable soils would be encountered.

**d. Be located on, or adjacent to, a known earthquake fault?**

**Not Significant.** The San Andreas Fault runs directly under Crystal Springs Reservoir and therefore is located just west of the proposed trail segment (ABAG 2007). The Modified Mercalli Intensity Shaking Severity Level system is used by the Association of Bay Area Governments (ABAG) to describe the intensity of shaking associated with various earthquake scenarios from "very violent" to "light". Shaking along the

proposed trail segment is characterized predominately as “very violent” if the Peninsula portion, or the entirety of the San Andreas Fault, were to experience a strong earthquake. If the San Andreas Fault in Santa Cruz or north of the Golden Gate were to rupture, shaking at the proposed trail segment would be “moderate” (ABAG 2007).

The National Earthquake Hazards Reduction Program (NEHRP) has defined five soil types based on their shear-wave velocity (Vs). The proposed trail segment is classified under the NEHRP as “c” meaning it includes some Quaternary sands, sandstones and mudstones, some Upper Tertiary sandstones, mudstones and limestone, some Lower Tertiary mudstones and sandstones, and Franciscan melange and serpentinite. Somewhat significant amplification of shaking by these soils is generally expected. The Expansion Index for the proposed trail’s soils was not calculated because the project is not proposing the creation of any new buildings. Since there are no buildings, steep cliffs, or other natural features in the landscape adjacent to the trail that would normally cause serious injury as a result of an earthquake event, the potential impact is considered not to be significant.

**e. Involve Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?**

**No Impact.** The soils mentioned in item d. above are not conducive to agricultural production.

**f. Cause erosion or siltation?**

**Not Significant.** Construction of the 0.9-mile trail segment would take place entirely within unincorporated San Mateo County. This project is being prepared to County Department of Public Works (DPW) design standards as a biddable project. No Building or Grading Permit will be secured. The County Watershed Protection Maintenance Standards will be met. The majority of the trail will take place on the existing SFWD road, and the only place that the project will disturb native soil is the new path leading from the SFWD road to Canada Road. In this area, a total of 15,400 square feet (0.35 acre) of native soil will be disturbed. Therefore, since the project will not disturb more than 1 acre, no construction permit will be required from the San Francisco Bay Regional Water Quality Control Board.

The existing pavement would be removed, the road and adjacent shoulder would be re-graded, and then resurfaced with asphaltic concrete. The existing road has strategically placed culverts and a v-shaped ditch along the uphill side of the road to control the movement of water and thus minimize erosive impacts. A visual inspection of the roadway found no evidence of significant erosion. Since the new trail would be almost exclusively placed in the footprint of the existing road, little change in erosion potential is expected. In addition, the trail design includes the preservation or reconstruction of culverts and v-shaped ditches along the roadway.

Erosion control during construction will be accomplished with coir rolls and other methods as appropriate, to be determined at the time the contractor prepares the SWPPP. Permanent erosion control measures will consist of hydroseeding with native grasses and forbs. The hydroseed process will include a standard mulch slurry material.

A 520-foot length of new trail would be constructed through undisturbed grassland. Short-term, construction-related erosion and/or siltation could occur during construction of this trail section. The San Mateo County Public Works Department has created the following list of conservation

principles that would be integrated into a system of control measures and management techniques to control erosion and reduce off-site sediment:

- Minimize the extent and duration of exposure: Schedule construction activities to minimize the exposed area and the duration of exposure. Stabilize disturbed areas as quickly as possible.
- Protect areas to be disturbed from stormwater runoff: Use berms, diversions, pumps, and barriers to intercept runoff and divert it away from excavations and other disturbed areas. Install these measures before beginning maintenance activities.
- Stabilize disturbed areas: Removing the vegetative cover and altering the soil structure by clearing the surface increase an area's susceptibility to erosion. Apply stabilizing measures after the land is disturbed and implement temporary or permanent vegetation, mulches, or other CMPs to correspond with maintenance activities. During the winter season, November through April, no soils shall remain exposed and unworked for more than 2 days. During the summer season, May through October, no soils shall remain exposed and unworked for more than 7 days. This condition applies to all soils on site, whether at final grade or not.
- Minimize runoff velocities: Clearing existing vegetation reduces the surface roughness and infiltration rate and thereby increases runoff velocities and volumes. Use measures that break the slopes to reduce the problems associated with concentrated flow volumes and runoff velocities.
- Retain sediment on the site: Even with careful planning some erosion is unavoidable. The resulting sediment must be trapped on the site. Plan the location where sediment deposition will occur and maintain access for cleanup.
- Inspect and maintain control measures: Inspection and maintenance are vital to the performance of erosion and sedimentation BMPs. Failure of a BMP may be hazardous or damaging to roadway infrastructure, habitat, people and/or property. It is essential to inspect all BMPs to ensure that they are working properly and to ensure that problems are corrected as soon as they develop.

**g. Result in damage to soil capability or loss of agricultural land?**

**No Impact.** This project would not result in damage to soil capability or cause the loss of agricultural land as no agricultural land is within the project area.

**h. Be located within a flood hazard area?**

**Not Significant.** Lower Crystal Springs Reservoir, and the area surrounding it, is labeled as "Zone D" on the Federal Insurance Rate Map (NFIP 2009). Zone D areas are those of undetermined, but possible, flood hazard. The elevation of the spillway on Lower Crystal Springs Reservoir is 284 feet (NFIP 2009). Because the entirety of the project site is located above 325 feet in elevation (see project plans) and the proposed project does not include the building of permanent structures that may put human life or property at risk, the potential impacts from flooding are considered not to be significant.

**i. Be located in an area where a high water table may adversely affect land use?**

**No Impact.** This proposed trail segment is not located in an area where a high water table may affect land use.

j. **Affect a natural drainage channel or streambed, or watercourse?**

**No Impact.** No watercourses cross the existing SFWD service road (USGS Quad San Mateo) or the section of new trail to be construction through grassland. There are no blueline (perennial) streams within the project area.

2. **Vegetation And Wildlife**

*Will (or could) this project:*

a. **Affect federal or state listed rare or endangered species of plant life in the project area?**

**Significant Unless Mitigated.** No federal or state listed plant species have the potential to occur within the project area nor were any found during rare plant surveys conducted by TRA Senior Biologist Autumn Meisel (see Appendix A for memo detailing rare plant survey efforts). However, the following rare plant species, as defined by the California Native Plant Society (CNPS), have identified as having potential to occur within the project area based on habitat requirements, species range, and known, historical occurrences: white-rayed pentachaeta (*Pentachaeta bellidiflora*, CNPS 1B.1), Marin dwarf flax (*Hesperolinon congestum*, CNPS 1B.1), fragrant fritillary (*Fritillaria liliacea*, CNPS 1B.2), San Mateo wooly sunflower (*Eriophyllum latilobum*, CNPS 1B.1), Crystal Springs lessingia (*Lessingia arachnoidea*, CNPS 1B.2) and Crystal Springs fountain thistle (*Cirsium fontinale* var. *fontinale*, CNPS 1B.1). Of these identified rare plants, only the Crystal Springs lessingia was found to occur within the project site.

Crystal Springs lessingia is common within the project site and was found to be dominant in areas of serpentine soils, including those areas that would be disturbed for the creation of the 520-foot section of new trail. Crystal Springs lessingia is a CNPS 1B.2 plant. List 1B.2 plants are rare throughout their range, generally endemic to California, and fairly threatened in California (CNPS 2009). Implementation of Mitigation Measure BIO-1 included in 1.a. above, and BIO-2 listed below would avoid or reduce project impacts to Crystal Springs lessingia to less than significant levels.

**Mitigation Measure BIO-2:** The revegetation project shall include the use of topsoil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.

b. **Involve cutting of heritage or significant trees as defined in the County Heritage Tree and Significant Tree Ordinance?**

**Significant Unless Mitigated.** Demolition of the existing roadways and construction of the proposed trail segment would create the need to cut down trees within 2 feet of the existing roadway. As stated in the Project Description of this document, five trees will be removed and four trees will be pruned. The trees to be removed include a 6" pine, 8" oak, 5" pine, 16" oak and 3" pine. The trees to be pruned include a 6" oak, 10" oak, 9" oak, and a 36" multi-trunk oak. All measurements are at Diameter at Breast Height (DBH). In addition, branches that hang over the trail would be pruned on two coast live oaks, one on Highway 92 and one along the existing service road. None of the trees proposed for removal are

“significant” or “heritage” trees as defined by County of San Mateo Ordinance Sections 11,000 and 12,000. In order to mitigate the impact of the loss of native trees, the following mitigation measure is recommended:

**Mitigation Measure BIO-3:** The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.

- c. **Be adjacent to or include a habitat food source, water source, nesting place or breeding place for a federal or state listed rare or endangered wildlife species?**

**Significant Unless Mitigated.** Two listed species, the California red-legged frog (*Rana draytonii*, Federal Threatened, State Candidate) and San Francisco garter snake (*Thamnophis sirtalis tetrataenia*, State and Federal Endangered) have potential to occur in the vicinity of the project area. California red-legged frog and San Francisco garter snake have been recorded in the Crystal Springs Reservoir (CNDDDB 2009; USFWS 2006). The project area itself includes upland habitat along and adjacent to an existing road. Upland habitat adjacent to aquatic features is an important habitat component for both red-legged frog and SF garter snake. The project site at its nearest proximity is approximately 225 feet from the edge of the reservoir. The average distance of the project site to the reservoir is 400 feet. The project area does not support breeding habitat for either of these species. Due to the location of Highways 92 and 280 just east of the project area, the likelihood of these species moving from the reservoir and crossing through the project area is small as there is no suitable destination for these species east of the project area. However, there is a small potential for these species to utilize upland habitat within or adjacent to the project area. The majority of the project site within which construction is proposed is already paved or is within close proximity to trails used recreationally, thus the potential for use by CA red-legged frog or SF garter snake is extremely low. Construction activities may impact upland habitat in those areas where the existing footprint of the road will be widened by two feet, particularly in those areas located on the west side (downslope to the reservoir) of the existing road.

Therefore, Mitigation Measures BIO-4, BIO-5 and BIO- 6 would avoid or reduce project impacts to California red-legged frog and San Francisco garter snake to less than significant levels.

**Mitigation Measure BIO-4:** Project construction shall be limited to the dry season (June 1- November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.

**Mitigation Measure BIO-5:** All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.

**Mitigation Measure BIO-6:** A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the

open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require daily monitoring prior to any vegetation removal.

**d. Significantly affect fish, wildlife, reptiles, or plant life?**

**Significant Unless Mitigated.** Aside from the issues listed above, the project would not result in any significant effect to fish, wildlife, or reptiles. The majority of the project is within or alongside an existing road. The project is not within an aquatic area and would not result in erosion or run-off, and thus fish would not be affected by the project. Wildlife, including reptiles, California red-legged frog, and San Francisco garter snake may be temporarily impacted during construction due to presence in the area, noise disturbance and ground vibration. With the implementation of the Mitigation Measures BIO-4, BIO-5, and BIO-6, no temporary construction-related impacts are expected. No permanent impacts are expected after the construction phase has been completed.

Some plant life will be permanently impacted by the expansion of the existing road. Areas of temporary disturbance will be restored with native seeds. In addition, existing trails that are not official will be closed and restored. Mitigation for impacts to Crystal Springs lessingia is described under Mitigation Measures BIO-1 and BIO-2 above.

**e. Be located inside or within 200 feet of a marine or wildlife reserve?**

**Not Significant.** The proposed trail extension would be located on San Francisco Water Department watershed lands. The watershed acts as a wildlife reserve and is monitored by the California Department of Fish and Game. In order to prevent trespass into the watershed, fencing would be placed parallel to the trail, on both the upslope and downslope sides, to ensure trail use is restricted to permitted areas.

**f. Infringe on any sensitive habitats?**

**Significant Unless Mitigated.** As discussed above in Section 2.a and 2.b, serpentine areas surround the proposed trail segment and have the potential to be impacted by temporary construction and permanent operational activities related to the proposed trail segment. Permanent impacts would be minimized through the use of an exclusionary fence that would keep trail users on the trail and out of sensitive serpentine habitat and other watershed lands. Furthermore, as stated in the Project Description section of this document, the project includes restoration of approximately 0.35 acre of disturbed serpentine grassland, which could result in a net gain of serpentine grassland. Finally, Mitigation Measure BIO-1, discussed above in Section 1.a., minimizes construction-related impacts on a sensitive serpentine plant a less than significant level.

**g. Involve clearing land that is 5,000 sq. ft. or greater (1,000 sq. ft. within a County Scenic Corridor), that has slopes greater than 20% or that is in a sensitive habitat or buffer zone?**

**Significant Unless Mitigated.** Construction of the proposed trail would require the clearing, grading, and paving of 15,400 square feet of serpentine grassland. Of this only 4,800 square feet (0.11 acre) would be permanently disturbed. Slopes in this area are less than 20%.

Furthermore, the project includes restoration of approximately one-half acre of disturbed serpentine grassland, which would result in a net gain of serpentine grassland. Mitigation Measure B10-1, discussed above in Section 1.a, minimizes or avoids construction-related impacts to a sensitive serpentine plant to less than significant levels.

### 3. Physical Resources

*Will (or could) this project:*

a. **Result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, oil, trees, minerals or topsoil)?**

**No Impact.** The proposed trail project would not remove any natural resource (e.g., rock, sand, gravel, oil, trees, minerals or topsoil) for commercial purposes.

b. **Involve grading in excess of 150 cubic yards?**

**Not Significant.** The project involves removing 184 cubic yards of material, including 31 cubic yards of asphalt and base rock, and 65 cubic yards of subgrade soils on the existing service road. It also involves the removal of 88 cubic yards of existing soil at the new southern connection to Canada Road. As stated in the Project Description section of this document, this project is being prepared to County Department of Public Works (DPW) design standards as a biddable project. No Building or Grading Permit will be secured. The County Watershed Protection Maintenance Standards will be met. The majority of the trail will take place on the existing SFWD road, and the only place that the project will disturb native soil is the new path leading from the SFWD road to Canada Road. In this area, a total of 15,400 square feet (0.35 acre) of native soil will be disturbed. Therefore, since the project will not disturb more than 1 acre, no construction permit will be required from the San Francisco Bay Regional Water Quality Control Board.

c. **Involve lands currently protected under the Williamson Act (agricultural preserve) or an Open Space Easement?**

**No Impact.** The site is not protected under the Williamson Act, nor are any portions of the site in an Open Space Easement. A recreational easement was assigned to the trail segment by the SFPUC in order to allow recreational use the public.

d. **Affect any existing or potential agricultural uses?**

**No Impact.** The project area is not currently used for agriculture nor does it support appropriate soils suitable for agricultural production or use.

#### **4. Air Quality, Water Quality, Sonic**

*Will (or could) this project:*

- a. **Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area?**

**Not Significant.** Construction of the 0.9-mile trail segment would generate temporary, construction-related emissions of Criteria Air Pollutants and Greenhouse Gases in the form of dust from grading and ground clearing activities and diesel fuels from heavy equipment use. The proposed Crystal Spring Trail would not generate any long-term emissions. The Bay Area Air Quality Management District (BAAQMD) regulates short-term, construction-related activities as they pertain to air quality. The BAAQMD sets forth thresholds of significance for construction-related activities in the form of Best Management Practices (BMPs) for Criteria Air Pollutants and Precursors and Greenhouse Gases (BAAQMD 2009). The County of San Mateo would strictly apply all of the BMPs listed in Section 2.5.1 above through the inclusion of these BMPs in the construction specifications, therefore, the impacts to local air quality are not considered significant (BAAQMD 2009).

- b. **Involve the burning of any material, including brush, trees and construction materials?**

**No Impact.** The proposed project would not involve the burning of any material, including brush, trees, or construction material.

- c. **Be expected to result in the generation of noise levels in excess of those currently existing in the area, after construction?**

**Not Significant.** Upon completion of the construction, the proposed trail would support an increased number of visitors using the area for recreation. This could slightly increase background noise levels in the area of the trail. However, given the proximity of the trail to Highways 92 and 280, and the fly-over traffic from the San Francisco International Airport, existing background noise is expected to far exceed any noise generated by the bicyclists, hikers, and joggers using the trail.

- d. **Involve the application, use or disposal of potentially hazardous materials, including pesticides, herbicides, other toxic substances, or radioactive material?**

**No Impact.** With the exception of the use of asphaltic oil in the paving of the roadbed, the project would not involve the application, use, or disposal of potentially hazardous materials. The asphaltic oil would have been premixed in the asphaltic concrete and contained in a haul truck, therefore, the likelihood of a spill is remote.

- e. **Be subject to noise levels in excess of levels determined appropriate according to the County Noise Ordinance or other standard?**

**No Impact.** Although the trail is near major highways and is subject to aircraft overflight, the proposed project would not expose trail users to noise levels that exceed noise standards of the County of San Mateo's Noise Ordinance (2715) for the type of use proposed.

**f. Generate noise levels in excess of levels determined appropriate according to the County Noise Ordinance standard?**

**No Impact.** The proposed trail would increase noise levels during construction, however, there are no sensitive receptors in the vicinity of the project area that would be affected by the temporary increased noise levels. Furthermore, the project would not generate permanent noise levels that exceed noise standards of County of San Mateo's Noise Ordinance (2715).

**g. Generate polluted or increased surface water runoff or affect groundwater resources?**

**Not Significant.** The proposed trail would result in the creation and or replacement of approximately 47,520 square feet (0.9 miles of 10 foot-wide trail) of impervious surface. The proposed project would result in a total of 55,528 square feet of temporary ground disturbance (0.9 miles of 10 foot-wide trail plus four total feet of rocked shoulder). In order to minimize the short-term and long-term water quality and runoff impacts to less than significant levels, the County of San Mateo must meet or exceed those requirements set forth in the Municipal Regional Stormwater NPDES Permit (BARWQCB 2007). These requirements include: 1.) Implementing construction site BMPs; 2.) Filing a Notice of Intent with the State Water Quality Control Board; 3.) Creating a site-specific Stormwater Pollution Prevention Program; and 4.) Complying with Provision C.3 of the Municipal Regional Stormwater NPDES permit. The County fully intends to meet all of the requirements of the BARWQCB for this project. The requirements will be set forth in the construction specifications for the project. For a full explanation of the regulatory framework and compliance requirements of the San Mateo Countywide NPDES permit, see Section 2.5.2.

**h. Require installation of a septic tank/leach field sewage disposal system or require hookup to an existing collection system which is at or over capacity?**

**No Impact.** The restroom facility planned for the project would be a self-contained vault toilet that does not require a new septic tank/leach field or sewage disposal system (See Sheet 4).

**5. Transportation**

*Will (or could) this project:*

**a. Affect access to commercial establishments, schools, parks, etc.?**

**No Impact.** The proposed trail project would not affect access to any commercial establishments, schools, parks or any other facility. The SFWD service road would continue to be used by the SFPUC for access to the Watershed as needed.

**b. Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?**

**Significant Unless Mitigated.** The proposed trail segment is likely to increase pedestrian traffic between the parking area at the intersection of Highway 92 and Skyline Boulevard and the trailhead alongside Highway 92, as well as along Canada Road, where pedestrians would cross Canada Road to access the Ralston Trail trailhead. In order to reduce potential safety hazards on pedestrians the following mitigation measure is recommended:

**Mitigation Measure TRAF-1.** The County of San Mateo shall consult with the County and Caltrans traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks, use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings.

**c. Result in noticeable changes in vehicular traffic patterns or volumes (including bicycles)?**

**Not Significant.** Although the creation of a new trail is likely to slightly increase vehicular and bicycle traffic above existing conditions, it is not expected to exceed the vehicular or parking capacity of Highway 92 or Canada Road. It should also improve safety for bicyclists, as some recreationists will be able to use the trail instead of traveling on Canada Road.

**d. Involve the use of off-road vehicles of any kind (such as trail bikes)?**

**No Impact.** Off-road vehicle use would not be allowed on the trail.

**e. Result in or increase traffic hazards?**

**Not Significant.** The only potentially significant traffic hazard created by this project is the increase in pedestrian crossings at Highway 92 and Canada Road. See Mitigation Measure TRAF-1 above for more information. The only other potential traffic hazard is the increase in pedestrian traffic alongside Highway 92, between Skyline Boulevard and where the trail veers away from the road. As part of the project design, protective k-railing would be placed at Highway 92 along the portion of the trail that is adjacent to the road. All other hiking and bicycling traffic would be set away from the road and would not pose any additional traffic hazard. With the installation of the k-rail, the potential for traffic hazards are not considered significant.

**f. Provide for alternative transportation amenities such as bike racks?**

**No Impact.** Since there are no trailhead features and or amenities proposed, no bicycle racks are necessary.

**g. Generate traffic which will adversely affect the traffic carrying capacity of any roadway?**

**No Impact.** Although the creation of this new trail segment may slightly increase vehicular traffic to the area, none of the major roads in the area are at or near carrying capacity and therefore this potential impact is not considered significant. Furthermore, most traffic generated by the project would occur on weekends when traffic levels are typically lower.

**6. Land Use and General Plans**

*Will (or could) this project:*

**a. Result in the congregating of more than 50 people on a regular basis?**

**Not Significant.** Congregations of 50 or more people are possible along this 0.9-mile reach of trail, particularly on weekends. However, since this is a through trail with no picnic areas suitable for large groups or organized special events, people would only congregate for short periods of time, if at all.

**b. Result in the introduction of activities not currently found within the community?**

**No Impact.** All of the activities that are allowed on the new trail segment would be those that are already allowed on the adjacent trail segments.

**c. Employ equipment which could interfere with existing communication and/or defense systems?**

**No Impact.** The rehabilitation of the existing SFWD service road as a recreational trail and the construction and use of the new trail segment connecting the SFWD service road to Canada Road would not employ any equipment that could interfere with existing communication or defense systems. Traditional construction equipment would be used including backhoes and dumptrucks.

**d. Result in any changes in land use, either on or off the project site?**

**Not Significant.** The new trail segment would not change any land uses as the area is already used heavily by bicyclists and lightly by hikers and walkers. However, the new trail segment would expand the regional trail system in the area, so it may bring in more recreationalists. Since this trail segment is only 0.9 miles long and does not offer any picnic facilities or other gathering places, the project would not create a significant change in land use.

**e. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?**

**No Impact.** The trail traverses an area currently owned by SFWD and managed for water storage. Directly to the west of the trail corridor is Lower Crystal Springs Reservoir and to the east is Canada Road and State Highway 280. Although a recreational trail is an appropriate use for these lands, urban development is not. The trail project does not require the expansion of public utilities that could accommodate additional changes in land use, particularly new development. As stated above, the area currently accommodates recreational activities, so use of the proposed trail is not a new use of the area.

**f. Adversely affect the capacity of any public facilities (streets, highways, freeways, public transit, schools, parks, police, fire, hospitals), public utilities (electrical, water and gas supply lines, sewage and storm drain discharge lines, sanitary landfills) or public works serving the site?**

**No Impact.** The construction and operation of the 0.9-mile trail segment would not tax the capacities of public facilities, public utilities, or public works. The trail segment would be operated in conjunction with the longer trail and existing police, fire and medical services would not need to be expanded to meet the demand of additional users. The bathroom is a self-contained unit that would be periodically pumped. The project would not require the expansion of water lines and there are no phone or wireless hookups proposed as part of the project. No additional electricity would be needed to serve the project.

**g. Generate any demands that will cause a public facility or utility to reach or exceed its capacity?**

**No impact.** Refer to response to f. above.

**h. Be adjacent to or within 500 feet of an existing or planned public facility?**

**No Impact.** The trail segment is not located within 500 feet of an existing or planned public facility. The nearest public facility is the San Mateo County Juvenile Hall, located at 21 Tower Road, San Mateo, CA, which is approximately 1,000 feet to the west of Canada Road and the trail corridor.

**i. Create significant amounts of solid waste or litter?**

**Not Significant.** The proposed trail segment is expected to increase recreational user-ship on all portions of the trail. Increased user-ship would likely lead to the generation of more trash, but this increase is not expected to be significant, and garbage bins would be installed along the new trail segment.

**j. Substantially increase fossil fuel consumption (electricity, oil, natural gas, coal, etc.)?**

**No Impact.** The trail project is being constructed to increase the use of non motor vehicle recreation and does not involve a substantial use of fossil fuels.

**k. Require an amendment to or exception from adopted general plans, specific plans, or community policies or goals?**

**No Impact.** The project does not require an amendment to or exception from adopted general plans, specific plans or community policies.

**l. Involve a change of zoning?**

**No Impact.** The project would not require any changes to the San Mateo County Zoning Ordinance.

**m. Require the relocation of people or businesses?**

**No Impact.** The trail project would be sited on SFWD lands that do not support housing or businesses, therefore, no people or businesses would need to be relocated as a result of this project.

**n. Reduce the supply of low-income housing?**

**No Impact.** The trail project area does not support low-income housing, nor is it designated for future low income housing.

**o. Result in possible interference with an emergency response plan or emergency evacuation plan?**

**No Impact.** The trail project would not cause any interference with an emergency response or evacuation plan.

**p. Result in creation of or exposure to a potential health hazard?**

**No Impact.** The trail project would not create or expose recreationalists to potential health hazards, except those related to traffic as discussed in Section 5.b. above.

**7. Aesthetic, Cultural and Historic**

*Will (or could) this project:*

**a. Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?**

**Not Significant.** State Highway 280 is a State listed scenic road and is located east and up-slope from the proposed trail segment. However, Highway 280 is far enough upslope from the proposed trail that motorists traveling in either direction of the Highway cannot observe the trail. Canada Road is a County scenic road located parallel to the entire portion of the proposed trail. Short-term, construction-related visual impacts may be experienced from motorists traveling southbound along Canada Road. However, the existing trail is mostly hidden from the road

due to the angle of the slope. Pedestrians using the trail would be able to be seen from some portions of Canada Road. Pedestrian traffic is not considered a significant impact as it is not expected to significantly degrade the visual character of the vista from Canada Road.

**b. Obstruct scenic views from existing residential areas, public lands, public water body, or roads?**

**No Impact.** The proposed trail extension would not obstruct scenic views from existing residential areas, public lands, public water bodies, or roads.

**c. Involve the construction of buildings or structures in excess of three stories or 36 feet in height?**

**No Impact.** No buildings would be constructed as a result of this trail project, with the exception of a small self-contained restroom.

**d. Directly or indirectly affect historical or archaeological resources on or near the site?**

**Not Significant.** Since most of the trail would be constructed along an existing roadway, the chance of encountering historical or archaeological resources during construction is remote. Furthermore, the project includes a provision that in the event cultural resources are encountered during construction, all activities within 50 feet must stop and the County shall be notified. An archaeologist would be called in to determine how to deal with the find.

**e. Visually intrude into an area having natural scenic qualities?**

**Not Significant.** As stated above, the proposed trail project would introduce recreationalists into a trail corridor that does not currently support such a use. However, numerous bike lanes and walking trails exist in the area, so while this area has significant natural scenic qualities, the project would not introduce a new use into the area. Further, most of the trail is not visible from Highway 280 or Canada Road, and there are no sensitive visual receptors across Lower Crystal Springs Reservoir to the west. At the northern end of the trail segment, motorists from Highway 92 would be able to view trail users, but motorists viewing recreationalists on a trail is not considered a visual intrusion.

4.0 **RESPONSIBLE AGENCIES.** Check what agency has permit authority or other approval for the Project.

AGENCY	YES	NO	TYPE OF APPROVAL
U.S. Army Corps of Engineers (CE)		X	Not Applicable
State Water Resources Control Board		X	Preparation of a Storm Water Pollution Prevention Plan (SWPPP) for compliance with the State of California's NPDES General Permit for Storm Water Discharges Associated with construction Activity.
Regional Water Quality Control Board		X	Preparation of a Storm Water Pollution Prevention Plan (SWPPP) for compliance with the State of California's NPDES General Permit for Storm Water Discharges Associated with construction Activity.
State Department of Public Health		X	Not Applicable
San Francisco Bay Conservation and Development Commission (BCDC)		X	Permit for intertidal grading work and project development on land within 100 feet of the Bay shoreline.
U.S. Environmental Protection Agency (EPA)		X	Not Applicable
County Airport Land Use Commission (ALUC)		X	Not Applicable
CalTrans	X		Any changes proposed to state roadways must be approved by Caltrans. An encroachment permit would be required for work along the Highway 92 shoulder.
Bay Area Air Quality Management District		X	The project must include BMPs related to construction related air quality emissions.
U.S. Fish and Wildlife Service		X	Not Applicable
Coastal Commission		X	Not Applicable
City		X	Not Applicable
Sewer/Water District:		X	Not Applicable
Other:			NONE

5.0 MITIGATION MEASURES

Yes No

Mitigation measures have been proposed in project application.

X \_\_\_\_\_

Other mitigation measures are needed.

\_\_\_\_\_ X \_\_\_\_\_

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

**Mitigation Measure BIO-1:** Prior to project construction in any areas that support serpentine grassland habitat, a rare plant survey shall be conducted to determine if they are present in the area to be affected by trail construction. Fences shall be erected around any rare plants found to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage, or if not practical, then the species shall be used in the revegetation of the unofficial trails.

**Mitigation Measure BIO-2:** The revegetation project shall include the use of top soil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.

**Mitigation Measure BIO-3:** The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.

**Mitigation Measure BIO-4:** Project construction shall be limited to the dry season (June 1- November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.

**Mitigation Measure BIO-5:** All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.

**Mitigation Measure BIO-6:** A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require monitoring.

**Mitigation Measure TRAF-1.** The County of San Mateo shall consult with the County and Caltrans traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks; use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings.

6.0 MANDATORY FINDINGS OF SIGNIFICANCE

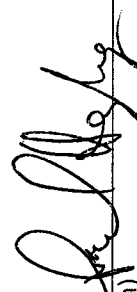
	Yes	No
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal, or eliminate important examples of the major periods of California history or prehistory?		X
2. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?		X
3. Does the project have possible environmental effects which are individually limited, but cumulatively considerable?		X
4. Would the project cause substantial adverse effects on human beings, either directly or indirectly?		X

On the basis of this initial evaluation:

I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Current Planning Section.

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

  
(Sign)

Senior Planner  
(Title)

1/26/10  
Date

## 7.0 SOURCE LIST

- A. Field Inspection
- B. County General Plan 1986
  - a. General Plan Chapters 1-16
  - b. Local Coastal Program (LCP) (Area Plan)
  - c. Skyline Area General Plan Amendment
  - d. Montara-Moss Beach-EI Granada Community Plan
  - e. Emerald Lake Hills Community Plan
- C. County Ordinance Code
- D. Geotechnical Maps
  - 1. USGS Basic Data Contributions
    - a. #43 Landslide Susceptibility
    - b. #44 Active Faults
    - c. #45 High Water Table
  - 2. Geotechnical Hazards Synthesis Maps
- E. USGS Quadrangle Maps, San Mateo County 1970 Series (See F. and H.)
- F. San Mateo County Rare and Endangered Species Maps, or Sensitive Habitats Maps
- G. Flood Insurance Rate Map – National Flood Insurance Program
- H. County Archaeologic Resource Inventory (Prepared by S. Dietz, A.C.R.S.) Procedures for Protection of Historic and Cultural Properties – 36 CFR 800 (See R.)
- I. Project Plans or EIF
- J. Airport Land Use Committee Plans, San Mateo County Airports Plan
- K. Aerial Photography or Real Estate Atlas – REDI
  - 1. Aerial Photographs, 1941, 1953, 1956, 1960, 1963, 1970
  - 2. Aerial Photographs, 1981

- 3. Coast Aerial Photos/Slides, San Francisco County Line to Año Nuevo Point, 1971
- 4. Historic Photos, 1928-1937

L. Williamson Act Maps

M. Soil Survey, San Mateo Area, U.S. Department of Agriculture, May 1961

N. Air Pollution Isoleth Maps – Bay Area Air Pollution Control District

O. California Natural Areas Coordinating Council Maps (See F. and H.)

P. Forest Resources Study (1971)

Q. Experience with Other Projects of this Size and Nature

R. Environmental Regulations and Standards:

Federal	-	Review Procedures for CDBG Programs	24 CFR Part 58
	-	NEPA 24 CFR 1500-1508	36 CFR Part 800
	-	Protection of Historic and Cultural Properties	Executive Order 11988
	-	National Register of Historic Places	Executive Order 11990
	-	Floodplain Management	
	-	Protection of Wetlands	
	-	Endangered and Threatened Species	24 CFR Part 51B
	-	Noise Abatement and Control	24 CFR 51C
	-	Explosive and Flammable Operations	HUD 79-33
	-	Toxic Chemicals/Radioactive Materials	24 CFR 51D
	-	Airport Clear Zones and APZ	

State	-	Ambient Air Quality Standards	Article 4, Section 1092
	-	Noise Insulation Standards	

S. Consultation with Departments and Agencies:

- a. County Health Department
- b. City Fire Department
- c. California Department of Forestry
- d. Department of Public Works
- e. Disaster Preparedness Office
- f. Other

(1/22/07)

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8.0 REPORT PREPARERS

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## **APPENDIX A**

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## Memo

**To:** Bill Harris, Harris Design  
Sam Herzberg, San Mateo County  
**From:** Autumn Meisel, Sr. Biologist  
**Job Code:** ECST  
**Subject:** Crystal Springs Trail: Chronological Account of TRA's Consultation with the  
USFWS on Special Status Species Potentially Present at the Project Site  
**Date:** January 22, 2010

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This memo summarizes our communication with the USFWS regarding the Crystal Springs Trail Project. *Plantago erecta*, host plant for the federal threatened Bay checkerspot butterfly (*Euphydryas editha bayensis*) occurs within the project area, as identified during my visits to the site in the spring and summer of 2009. The proposed project would result in impact to this plant due to grading. The plant is protected where the butterfly is present. The nearest, extant, location of Bay checkerspot butterfly is south of San Jose.

We had sent you both a memo documenting the issues on May, 27, 2009 (attached at the end of this document). We had asked for an additional \$3,000 of budget to address these issues. This budget was spent on meeting a representative of the United States Fish and Wildlife Service (USFWS) on site, and ongoing communication with USFWS staff. This memo serves as our work product for the budget augmentation, documenting the process TRA performed in addressing the issues.

I first contacted Angela Picco, San Mateo County contact at the USFWS in May 2009, to discuss proposed impacts to plantago. I sent Ms. Picco information on the project and she consulted with USFWS entomologist Mr. Nagano Nagano, Chief- Endangered Species Division, ((916) 414-6600). Mr. Nagano verbally stated to Ms. Picco that the USFWS would consider the project site to be potential Bay checkerspot butterfly habitat, and would thus regulate any impact to the butterfly's host plant. However, Mr. Nagano provided no formal consultation or response, and it is not clear that he ever reviewed the project information. I left Mr. Nagano several voice messages to discuss these issues, but Mr. Nagano never replied. From the months of June to August, I persisted in trying to get someone at the USFWS to review and comment on this project. I spoke with USFWS staff person Melisa Helton in July, who was our contact on other TRA projects. As Ms. Helton was changing positions, she could not take on this project, but she did put pressure on USFWS Supervisor Ryan Olah to have the project assigned. Mr. Olah

assigned Ben Solvesky, another biologist working for Mr. Nagano at the Sacramento USFWS office, to this project in August.

On September 10, 2009 Mr. Solvesky met Bill Harris, Sam Herzberg, Christine Schneider and myself at the project site. Prior to our meeting, I had sent Mr. Solvesky the current project plans and discussed the project purpose over the phone. We walked the site of new trail construction where plantago occurs. Mr. Solvesky stated to the group that he was not concerned about impacts to Bay checkerspot butterflies at this site. He stated that he wanted to see avoidance measures for red-legged frog and SF garter snake. He stated he would then provide us with these avoidance measures for the frog and snake. However, to this date, avoidance measures have not been provided.

I prepared a Biological Assessment (BA) for this project (dated October 6, 2009), and sent it to Mr. Solvesky on that date. On October 7, Mr. Solvesky sent me an email that acknowledged receipt of the BA, but questioned our requirement of project approval from the USFWS. I replied in an email on that date that *"We actually don't; it is just due diligence. The project does require CEQA review, and based on Mr. Nagano's initial reaction to this project; we would like to ensure that the USFWS has no concerns. We need no formal approval or consultation; a letter would suffice."* On the same day, Mr. Solvesky replied back to this email stating *"I plan to write a "no take" letter, but it may not get signed that way."*

On October 20, 2009, Mr. Solvesky sent another email asking for clarification on the project, and stating that he *"was willing to attempt to write a "no take" letter for the 520 foot trail construction, but that he was "not willing to write the letter for the entire project without a lot more information about repaving the access road."* I replied on October 26, 2009 with the following:

*"We do not need the USFWS to address the whole length if you are not comfortable doing this as an Initial Study is being prepared and the project is being addressed in the Initial Study Checklist (IS) under CEQA. Our purpose of contacting the USFWS was to discuss the impact to Plantago erecta, as, unlike with San Francisco garter snake and red-legged frog, there is not clear policy on how host plants are treated that are outside of the current range of the Bay checkerspot. I understood from our meeting that we were on the same page in feeling that as the nearest population is located south of San Jose, the plantago on site does not provide habitat for the species [Bay checkerspot]. As an additional item, you offered to suggest avoidance measures for the red legged frog and SF garter snake. These species are already being addressed in the IS, although we would appreciate your input into how to write these measures. TRA has boiler plate avoidance measures for SF garter snake and red legged frog that have been developed over the years with input from the USFWS and the California Department of Fish and Game (CDFG), but it is always useful to receive more and updated advice, and guidance does change as new research and understanding into these species' life history is obtained.*

*It would suffice for you to treat only the area of new trail. The remainder of the trail was actually addressed in 1994 in a previous IS for the entire Crystal Springs Trail; the reason for reopening the*

*project is that the area of newly constructed trail that would be ADA accessible is a new feature and was not included in the older project description. Hence a new IS is being prepared that includes this feature."*

I have not received any further communication from Mr. Solvesky or anyone else at the USFWS since this time. We have done our due diligence in providing the USFWS with information on the project and giving them an opportunity to respond early to the project. The IS addresses all listed species considered for their potential to occur on site, including the Bay Checkerspot butterfly, red legged frog and SF garter snake. The USFWS will have an opportunity to comment on the project during the IS comment period, and TRA will respond to comments as part of our existing contract.



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## Memo

**To:** Bill Harris, Harris Design  
**From:** Autumn Meisel, Sr. Biologist  
Christine Schneider, Sr. Project Manager  
**Job Code:** ECST  
**Subject:** Crystal Springs Trail: Presence of rare plant (*Plantago erecta*, or dwarf  
plantain) at serpentine slope at site  
**Date:** May 27, 2009

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Our scope of work to prepare the CEQA environmental review (Initial Study/Mitigated Negative Declaration, or IS/MND) included a survey of the project area to assess the potential for special-status plants to occur along the segment. The rare plants that have the potential to be present include the dwarf plantain, Marin dwarf flax (*Hesperolinon congestum*), San Mateo woolly sunflower (*Eriophyllum latilobum*), Crystal Springs lessingia (*Lessingia arachnoidea*) and Crystal Springs fountain thistle (*Cirsium fontinale* var. *fontinale*). We allotted a total of 20 hours for this effort. Autumn has now gone to the site three times, and will have to go back in June to complete her surveys. We still have remaining money to perform the rare plant survey report that will provide our findings, and to address the presence/absence of rare plants within the trail corridor in the biology section of the IS Checklist.

However, on Autumn's field surveys she has discovered that the dwarf plantain plants within the proposed trail corridor occur everywhere within the area of new trail that would connect the existing trail with the Ralston Trail at Canada Road. Dwarf plantain is the host plant for the Bay Checkerspot butterfly (*Euphydryas editha bayensis*), which is listed as Threatened on the federal Endangered Species List. The Bay Checkerspot butterfly previously existed at Edgewood Park, four miles to the southeast of the project site. The species disappeared from Edgewood Park in 2003.

Due to the project site's close proximity to previously occupied habitat, guidance from the United States Fish and Wildlife Service (USFWS) with respect to potential impacts to this plant resulting from trail construction is required. Autumn has spoken to Angela Picco at the USFWS who consulted with Mr. Nagano Nagano, the USFWS entomologist for the San Francisco Bay

region. Mr. Nagano stated that the USFWS would consider the project site to be potential Bay Checkerspot butterfly habitat, and would thus regulate any impact to the butterfly's host plant. Mr. Nagano strongly recommended avoidance, and stated that the USFWS may require a take permit if impacts to the plant will occur.

If the USFWS wants to assume presence of the dwarf plantain, this could be seen as a significant unmitigable impact, and if so, an EIR would need to be prepared instead of an IS/MND.

While our scope of work does not include USFWS consultation, we would like to offer this service to you and to the County of San Mateo Parks Department. We could spend 24 hours, or \$3,000 to work with Mr. Nagano and Sam Herzberg of the Parks Department. These hours would include coordination with USFWS staff, a site visit with Mr. Nagano, Mr. Herzberg and yourself, and a writeup of any determination by USFWS staff. How would you like us to proceed?

## **APPENDIX B**

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## Appendix B.

### Mitigation, Monitoring and Reporting Plan Crystal Springs Trail South of Highway 92 Project

This Mitigation, Monitoring and Reporting Plan (MMRP) has been prepared pursuant to CEQA Guidelines, which state the following:

"In order to ensure that the mitigation measures and project revisions identified in the Initial Study/Mitigated Negative Declaration are implemented, the Lead Agency (San Mateo County Parks Department) shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." (§15097(a)) and;

"The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both." (§15097 (c))

Table 1, on the next page, lists the Impacts, Mitigation Measures, and Timing of the Mitigation Measure (when the measure will be implemented) related to the Crystal Springs Trail Project. All of the mitigation measures listed here will be implemented by the District or by their appointees.

According to CEQA Guidelines Section 15126.4 (a) (2), "Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design." Therefore, all mitigation measures as listed in this MMRP will be adopted by the San Mateo County Parks Director when the project is approved.

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p><b>Impact BIO-1:</b> Fence removal may require workers to walk through serpentine areas and dig out the existing fence posts. New fence installation would require workers to once again walk through serpentine areas, using old fence postholes where possible but likely also digging new postholes. In addition, grading would occur within serpentine grassland along the 520-foot section of trail that is constructed between the service road and Canada Road.</p>	<p><b>Mitigation Measure BIO-1:</b> Prior to project construction in any areas that support serpentine grassland habitat, a rare plant survey shall be conducted to determine if they are present in the area to be affected by trail construction. Fences shall be erected around any rare plants found to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage, or if not practical, then the species shall be used in the revegetation of the unofficial trails.</p>	<p><b>Implementation:</b> The San Mateo County Parks Department shall incorporate this measure into building/grading permit plans and all construction contracts; San Mateo County Parks Department staff shall implement these measures</p> <p><b>Timing:</b> Add mitigation language to project plans or contracts prior to approval of final plans.</p> <p>San Mateo County Parks Department staff to ensure pre-construction measures occur before start of construction.</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff to make site inspections during construction to ensure contractor is implementing construction measures.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p><b>Impact BIO-2:</b> Crystal Springs lessingia (<i>Lessingia arachnoidea</i>, CNPS 1B.2) is common within the project site and was found to be dominant in areas of serpentine soils, including those areas that would be disturbed for the creation of the 520-foot section of new trail. The proposed project includes rototilling and revegetating unofficial trails in the project vicinity that may impact this plant.</p>	<p><b>Mitigation Measure BIO-2:</b> The revegetation project shall include the use of top soil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction specifications.</p> <p><b>Timing:</b> Before final construction specifications are completed.</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this limitation is included in the construction specifications.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>
<p><b>Impact BIO-3:</b> Five trees will be removed and four trees will be pruned. The trees to be removed include a 6" pine, 8" oak, 5" pine, 16" oak and 3" pine. The trees to be pruned include a 6" oak, 10" oak, 9" oak, and a 36" multi-trunk oak.</p>	<p><b>Mitigation Measure BIO-3:</b> The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction specifications.</p> <p><b>Timing:</b> Before final construction specifications are completed.</p>	<p><b>Monitoring:</b> Site visit check by San Mateo County Parks Department staff after construction is completed.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>
<p><b>Impact BIO-4:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake</p>	<p><b>Mitigation Measure BIO-4:</b> Project construction shall be limited to the dry season (June 1-November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this limitation is included in the construction</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p>(<i>Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>		<p>specifications. <b>Timing:</b> Before final construction specifications are completed.</p>	<p>specifications.</p>	
<p><b>Impact BIO-5:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>	<p><b>Mitigation Measure BIO-5:</b> All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff <b>Timing:</b> Prior to start of construction period</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall note that this training has been performed.</p>	<p><b>Initials:</b> _____ <b>Date:</b> _____</p>
<p><b>Impact BIO-6:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>	<p><b>Mitigation Measure BIO-6:</b> A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require monitoring.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff <b>Timing:</b> Prior to start of construction period</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this survey has been performed.</p>	<p><b>Initials:</b> _____ <b>Date:</b> _____</p>
<p><b>Impact TRA-1:</b> The proposed trail segment is likely to increase</p>	<p><b>Mitigation Measure TRA-1:</b> The County of San Mateo shall consult with the County and Caltrans</p>	<p><b>Implementation:</b> San Mateo County</p>	<p><b>Monitoring:</b> San Mateo County Parks</p>	<p><b>Initials:</b> _____</p>

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p>pedestrian traffic along Highway 92, as well as along Canada Road, where pedestrians would cross Canada Road to access the Ralston Trail trailhead.</p>	<p>traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks; use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings.</p>	<p>Parks Department staff   <b>Timing:</b> Prior to start of construction period</p>	<p>Department staff.</p>	<p>Date: _____</p>



## Mitigation, Monitoring and Reporting Plan Crystal Springs Trail South of Highway 92 Project

This Mitigation, Monitoring and Reporting Plan (MMRP) has been prepared pursuant to CEQA Guidelines, which state the following:

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"The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both." (§15097 (c))

Table 1, on the next page, lists the Impacts, Mitigation Measures, and Timing of the Mitigation Measure (when the measure will be implemented) related to the Crystal Springs Trail Project. All of the mitigation measures listed here will be implemented by the District or by their appointees.

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Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p><b>Impact BIO-1:</b> Fence removal may require workers to walk through serpentine areas and dig out the existing fence posts. New fence installation would require workers to once again walk through serpentine areas, using old fence postholes where possible but likely also digging new postholes. In addition, grading would occur within serpentine grassland along the 520-foot section of trail that is constructed between the service road and Canada Road.</p>	<p><b>Mitigation Measure BIO-1:</b> Prior to project construction in any areas that support serpentine grassland habitat, a rare plant survey shall be conducted to determine if they are present in the area to be affected by trail construction. Fences shall be erected around any rare plants found to prevent inadvertent damage during trail construction work and/or fence installation. Any plants found that cannot be avoided, should be assessed for possible salvage, or if not practical, then the species shall be used in the revegetation of the unofficial trails.</p>	<p><b>Implementation:</b> The San Mateo County Parks Department shall incorporate this measure into building/grading permit plans and all construction contracts; San Mateo County Parks Department staff shall implement these measures</p> <p><b>Timing:</b> Add mitigation language to project plans or contracts prior to approval of final plans.</p> <p>San Mateo County Parks Department staff to ensure pre-construction measures occur before start of construction.</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff to make site inspections during construction to ensure contractor is implementing construction measures.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p><b>Impact BIO-2:</b> Crystal Springs lessingia (<i>Lessingia arachnoidea</i>, CNPS 1B.2) is common within the project site and was found to be dominant in areas of serpentine soils, including those areas that would be disturbed for the creation of the 520-foot section of new trail. The proposed project includes rototilling and revegetating unofficial trails in the project vicinity that may impact this plant.</p>	<p><b>Mitigation Measure BIO-2:</b> The revegetation project shall include the use of top soil taken from the trail construction area. This soil, which includes Crystal Springs lessingia and other native plant seeds, should be scraped from the serpentine area and then be placed on top of the rototilled soil of the former compacted, degraded unofficial trail sites.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction specifications.</p> <p><b>Timing:</b> Before final construction specifications are completed.</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this limitation is included in the construction specifications.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>
<p><b>Impact BIO-3:</b> Five trees will be removed and four trees will be pruned. The trees to be removed include a 6" pine, 8" oak, 5" pine, 16" oak and 3"pine. The trees to be pruned include a 6" oak, 10" oak, 9" oak, and a 36" multi-trunk oak.</p>	<p><b>Mitigation Measure BIO-3:</b> The County of San Mateo shall replace any coast live oaks, or other native trees or shrubs removed during project construction at a ratio of 1:1, using 5 or 15-gallon, nursery grown coast live oak trees as replacements. All trees shall be planted along the trail segment corridor under the direction of San Mateo County Department of Parks staff.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction specifications.</p> <p><b>Timing:</b> Before final construction specifications are completed.</p>	<p><b>Monitoring:</b> Site visit check by San Mateo County Parks Department staff after construction is completed.</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>
<p><b>Impact BIO-4:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake</p>	<p><b>Mitigation Measure BIO-4:</b> Project construction shall be limited to the dry season (June 1-November 1) when California red-legged frog and SF garter snake are highly unlikely to be moving to and from aquatic sites.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the construction</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this limitation is included in the construction</p>	<p><b>Initials:</b> _____</p> <p><b>Date:</b> _____</p>

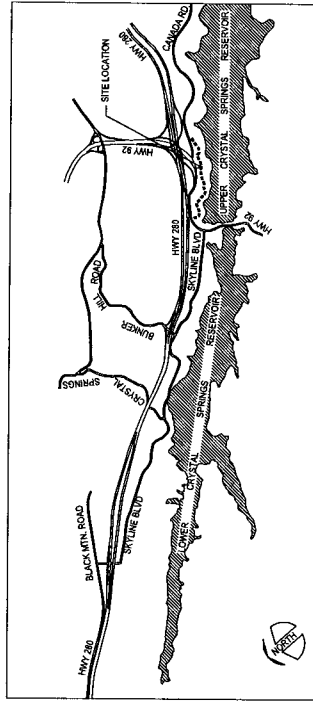
Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p><i>(Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>		<p>specifications. <b>Timing:</b> Before final construction specifications are completed.</p>	<p>specifications.</p>	
<p><b>Impact BIO-5:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>	<p><b>Mitigation Measure BIO-5:</b> All construction staff shall receive training from a qualified biologist on identification, avoidance, and project measures and conditions related to California red-legged frog and San Francisco garter snake. Staff shall not begin work on the project until the training has been completed.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff <b>Timing:</b> Prior to start of construction period</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall note that this training has been performed.</p>	<p><b>Initials:</b> _____ <b>Date:</b> _____</p>
<p><b>Impact BIO-6:</b> Construction activities may impact upland habitat for California red-legged frog (<i>Rana draytonii</i>, Federal Threatened, State Candidate) and San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>, State and Federal Endangered) particularly in those areas located on the west side (downslope to the reservoir) of the existing SFWD road.</p>	<p><b>Mitigation Measure BIO-6:</b> A qualified biologist shall conduct a pre-construction survey of the project area prior to the start of work. In addition, daily monitoring of the site in the morning prior to the start of work will be conducted at the discretion of the biologist. Work within the open, serpentine grassland would not require a monitor, while trail work along the existing road in the vicinity of willows and other wetland vegetation would require monitoring.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff <b>Timing:</b> Prior to start of construction period</p>	<p><b>Monitoring:</b> San Mateo County Parks Department staff shall ensure that this survey has been performed.</p>	<p><b>Initials:</b> _____ <b>Date:</b> _____</p>
<p><b>Impact TRA-1:</b> The proposed trail segment is likely to increase</p>	<p><b>Mitigation Measure TRA-1:</b> The County of San Mateo shall consult with the County and Caltrans</p>	<p><b>Implementation:</b> San Mateo County</p>	<p><b>Monitoring:</b> San Mateo County Parks</p>	<p><b>Initials:</b> _____</p>

Impact	Mitigation Measure	Implementation & Timing	Monitoring Responsibility	Verified Implementation
<p>pedestrian traffic along Highway 92, as well as along Canada Road, where pedestrians would cross Canada Road to access the Ralston Trail trailhead.</p>	<p>traffic engineers to determine the best methods for preventing pedestrian safety hazards related to the road crossings. Such methods may or may not include: installing painted crosswalks; use of visual and audible countdown pedestrian lights, pedestrian light controls, or flashing pedestrian crosswalk lights, and installing pedestrian signs at critical intersections or crossings. An Encroachment Permit will be secured from CalTrans prior to any work being initiated in the Highway 92 Right of Way.</p>	<p>Parks Department staff will secure an Encroachment Permit from CalTrans prior to any work being initiated in the Highway 92 Right of Way.   <b>Timing:</b> Prior to start of construction period within Highway 92 Right of Way</p>	<p>Department staff.</p>	<p>Date: _____</p>
<p><b>Impact TRA-2:</b> The proposed trail segment is likely to increase traffic hazards if movement for wildlife is not facilitated.</p>	<p><b>Mitigation Measure TRA 2:</b> The County of San Mateo shall incorporate into its Final Design Plans that the k rail barrier along Highway 92 10 foot long sections of tri-beam guard rail (MBGR) at 200 foot intervals throughout the 650 foot stretch of the trail to allow for wildlife movement. The MBGR will still provide protection and separation of the trail from the travelled way while allowing gaps that would allow small wildlife to cross the roadway relatively unhindered.</p>	<p><b>Implementation:</b> San Mateo County Parks Department staff shall ensure that this item is contained in the Final Design Plans.   <b>Timing:</b> Before final construction Design Plans are completed.</p>	<p>San Mateo County Parks Department staff.</p>	

SAN MATEO COUNTY PARKS DEPARTMENT

CONSTRUCTION PLANS FOR  
CRYSTAL SPRINGS TRAIL EXTENSION  
SOUTH OF STATE HIGHWAY 92

SHEET INDEX	SHEET TITLE
1	TITLE SHEET
2-5	DEMOLITION PLAN
6-9	SITE CONSTRUCTION PLAN
10-15	CONSTRUCTION DETAILS



VICINITY MAP  
NO SCALE

**GENERAL NOTES**  
THESE DRAWINGS REPRESENT THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ENGINEER FOR ANY ADDITIONAL CLARIFICATION OR DETAILS NECESSARY TO ACCOMMODATE SITE CONDITIONS OR ARCHITECTURAL DETAILS.

**CONTRACTOR'S JOB SITE CONDITIONS:** CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. CONTRACTOR SHALL APPLY CONTINGUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND MUST BE AVAILABLE TO THE COUNTY OF SAN MATEO AT ALL TIMES. OWNER AND THE LANDSCAPE ARCHITECT HOLD HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE LANDSCAPE ARCHITECT.

**SOLOPLETE BASE SHEET:** THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET. THIS BASE SHEET IS COMPILED FROM THE TOPOGRAPHIC SURVEY, OTHER ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND OTHER DATA AS MADE AVAILABLE TO THE LANDSCAPE ARCHITECT. THIS SHEET SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR ERRORS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE DATA AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR BEING AWARE OF ANY CHANGES AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME.

**THE BASE SHEET SOURCE FOR THESE DRAWINGS IS TOPOGRAPHIC SURVEY MAP OF SAN ANDREAS AND CRYSTAL SPRINGS TRAIL SEGMENTS FOR THE COUNTY OF SAN MATEO, PARKS AND RECREATION DEPARTMENT. DRAWINGS DATED 12/20/08, BY SIGMA PRIME, GEO SCIENCES, 111 VASSAR ST., HALF MOON BAY, CA 94018 (650)728-3590.**

**UTILITIES:** PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AT THE UNDERGROUND FACILITIES. THE UTILITY COMPANIES ARE MEMBERS OF THE UTILITIES SERVICE ALERT (U.S.A.) ON-CALL PROGRAM (800) 272-2800. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF THE U.S.A. AND THE COUNTY PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION IN THE VICINITY OF UNDERGROUND FACILITIES. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.

**A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. CONTRACTOR SHALL VERIFY THAT OTHER EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION AND DEPTHS OF SUCH UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.**

**TREE PROTECTION AND MAINTENANCE REQUIREMENTS:** ALL TRENCHING WITHIN THE DRINKLINE OF EXISTING TREES TO REMAIN SHALL BE BY HAND, WITH CARE TAKEN NOT TO CUT OR DAMAGE ROOTS OVER 1" DIAMETER. TREES TO REMAIN SHALL BE FENCED WITH TEMPORARY FENCING SUCH AS STEEL BENCH MARKS, 3 FEET OR GREATER WITH WIRE MESH FENCING (BEE OPEN, CHAINLINK, OR SIMILAR). HEIGHT TO BE 3 FEET MINIMUM.

**PROJECT CONSTRUCTION SHALL BE LIMITED TO THE DRY SEASON (JUNE 1 - NOVEMBER 1) WHEN REDEGEDGED FROG AND SF GARTER SNAKE ARE HIGHLY UNLIKELY TO BE MOVING TO AND FROM AQUATIC SITES.**

**ALL CONSTRUCTION STAFF SHALL RECEIVE TRAINING FROM A QUALIFIED BIOLOGIST ON IDENTIFICATION, AVOIDANCE, AND PROJECT MEASURES AND CONDITIONS RELATED TO THE CALIFORNIA REDEGEDGED FROG AND SF GARTER SNAKE. CONSTRUCTION STAFF SHALL NOT BEGIN WORK UNTIL THE TRAINING HAS BEEN COMPLETED.**

APPROVED DATE	APPROVED DATE
DAVID HOLLAND	JAMES C. PORTER
DIRECTOR OF PARKS	DIRECTOR OF PUBLIC WORKS
	A.C.E. NO. C-14856 / EXPIRES 12-31-2011

Crystal Springs Trail Extension South of Highway 92  
County of San Mateo, California  
San Mateo County Parks Department

Number for	Rev. Date	Author
1	12/20/08	JCP
2		
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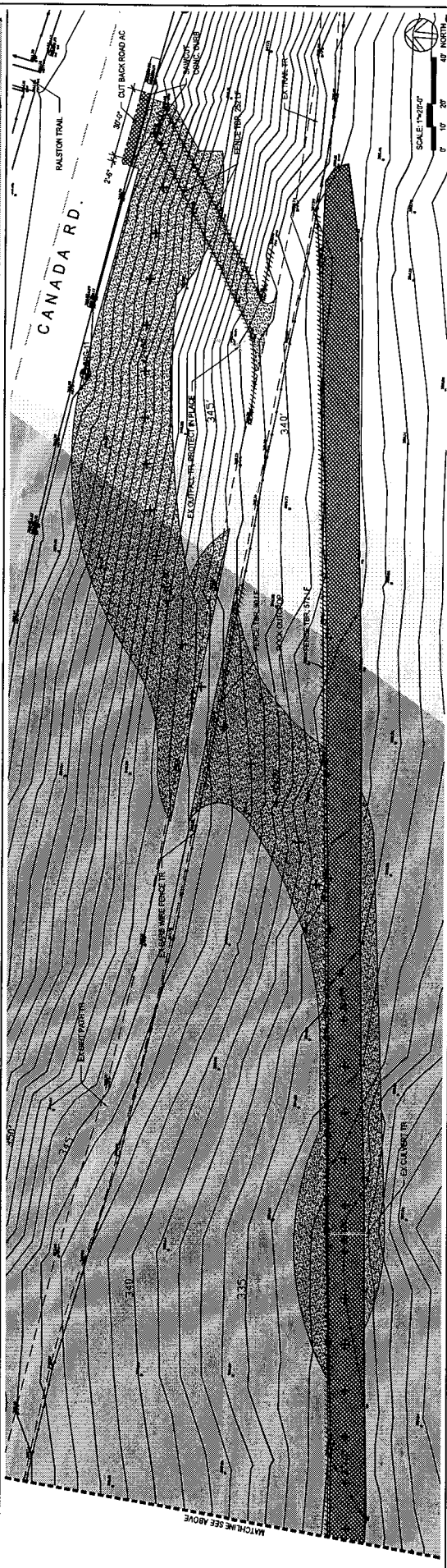
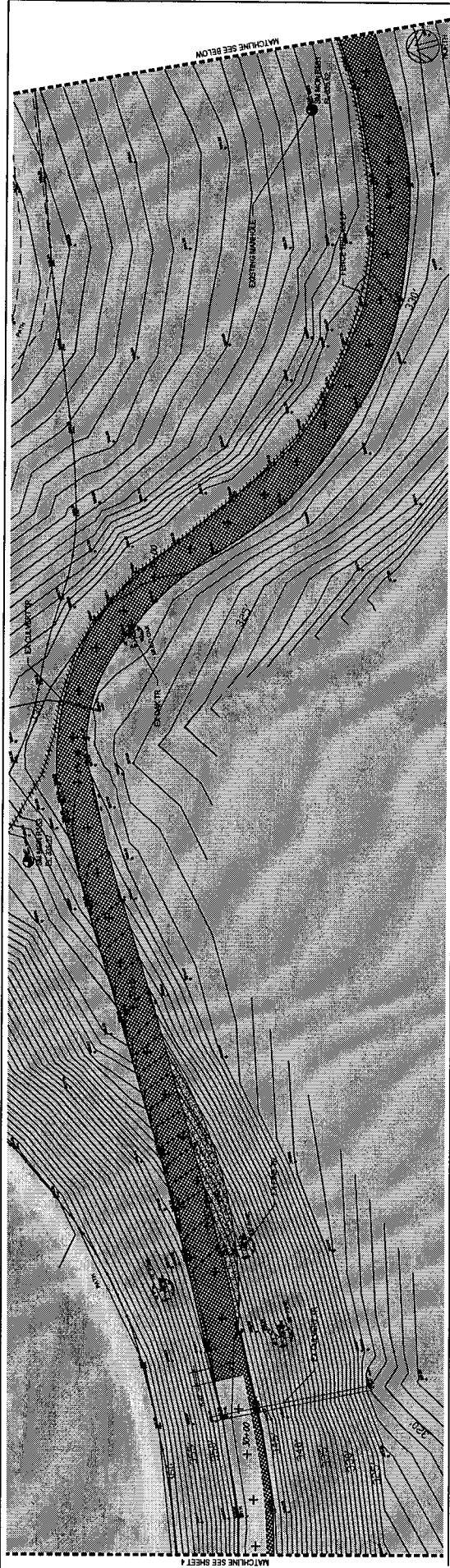
**HARRIS DESIGN**  
Landscape Architecture  
Civil & Mechanical Engineering  
Interior Design  
1000 North Avenue  
San Mateo, CA 94401  
Tel: 650.352.2200  
www.harrisdesign.com

Professional Seal: Landscape Architect, State of California, No. 12345

Drawing Title: TITLE SHEET  
Date: APRIL 2, 2010  
Scale: AS NOTED  
Project Number: 08-07  
Sheet Number: 1 of 15  
Checked by: JCP







**Crystal Springs Trail Extension South of Highway 92**

County of San Mateo,  
California  
San Mateo County Parks Department

<b>APPROVED DATE</b>	
<b>APPROVED DATE</b>	
<b>DAVID HOLLAND</b> DIRECTOR OF PARKS	
<b>JAMES C. PORTER</b> DIRECTOR OF PUBLIC WORKS P.C.E. NO. C-4886 / EXPIRES 12-31-2011	

**HARRIS DESIGN**  
Landscape Architecture  
Park & Recreation Planning  
Urban Design  
1000 S. ELGIN AVE., SUITE 200  
SAN MATEO, CA 94401  
TEL: 650.253.2500  
WWW.HARRISDESIGN.COM

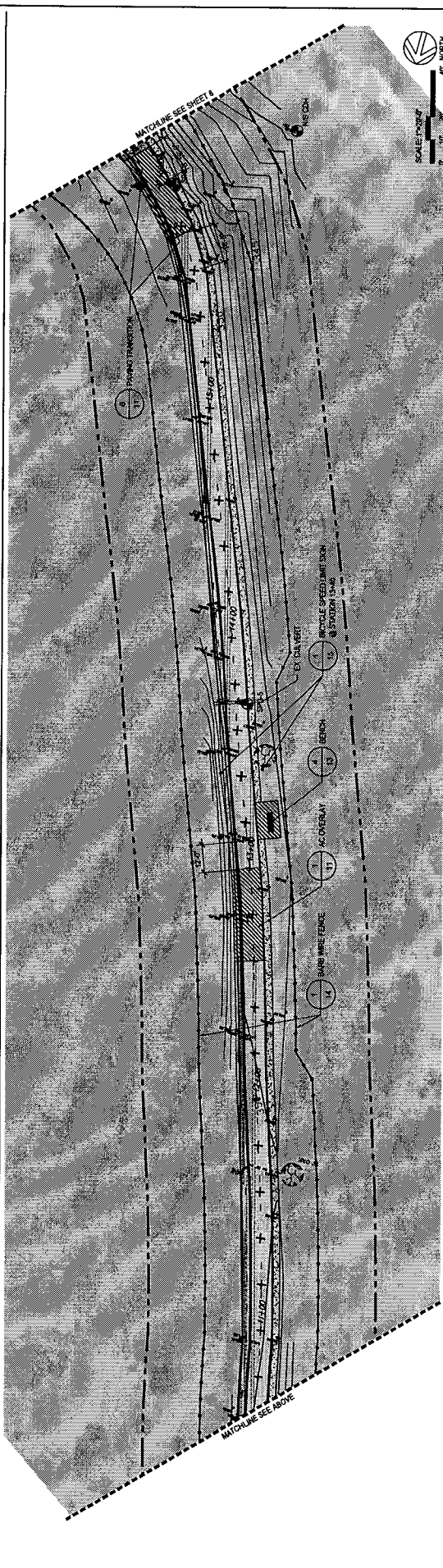
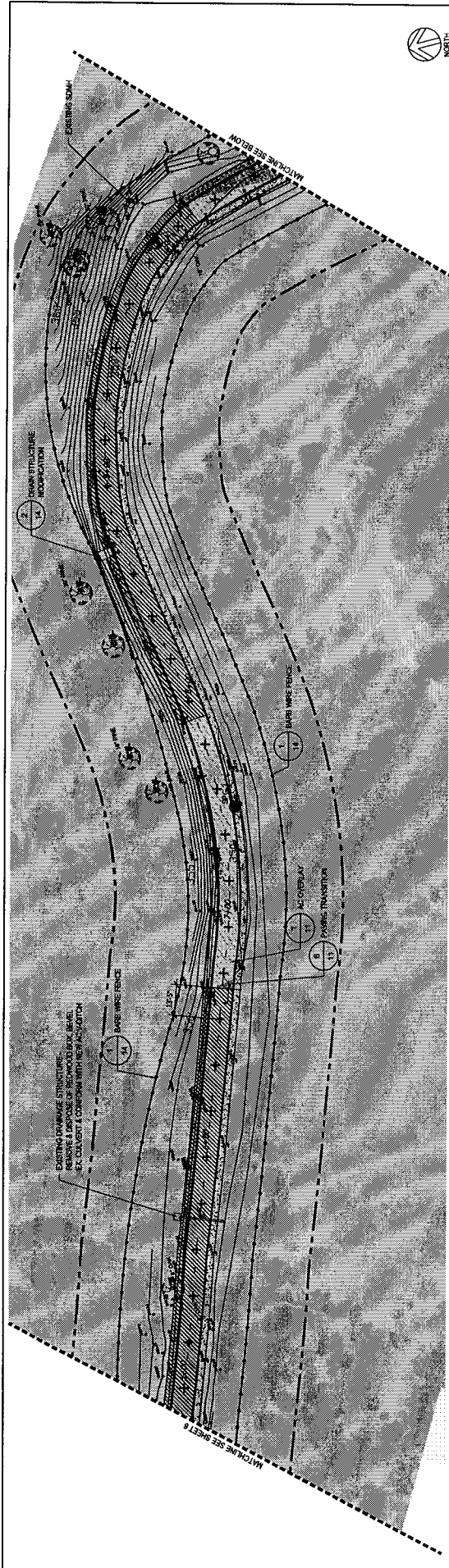
**SEAL OF THE COUNTY OF SAN MATEO**  
COUNTY ENGINEER  
JAMES C. PORTER  
P.C.E. NO. C-4886  
EXPIRES 12-31-2011

**DEMONITION PLAN**  
Date: 1. APRIL 2, 2010  
Scale: 1. 1"=20'0"  
Project Number: 1. 0807  
Sheet Number: 5  
Sheet Number: 5 of 15

Drawing Title: DEMONITION PLAN  
Scale: 1"=20'0"  
North Arrow

Drawn By: JF / as  
Checked By: BH





Drawing Title: **SITE CONSTRUCTION PLAN**  
 Date: APRIL 2, 2010  
 Scale: 1"=20'-0"  
 Project Number: 08.07  
 Sheet Number: 7 of 11



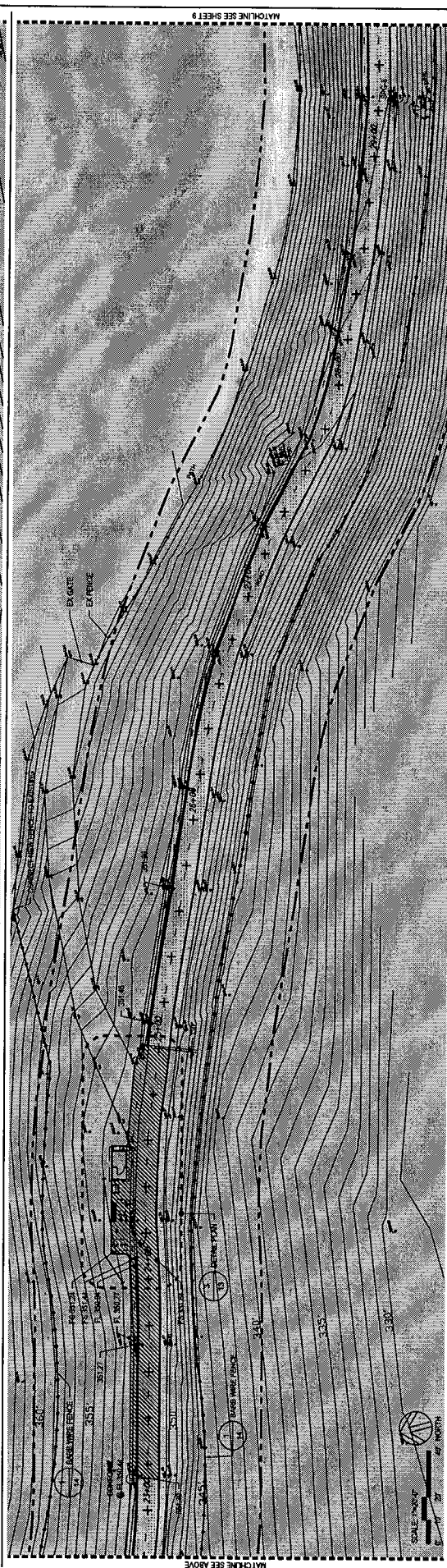
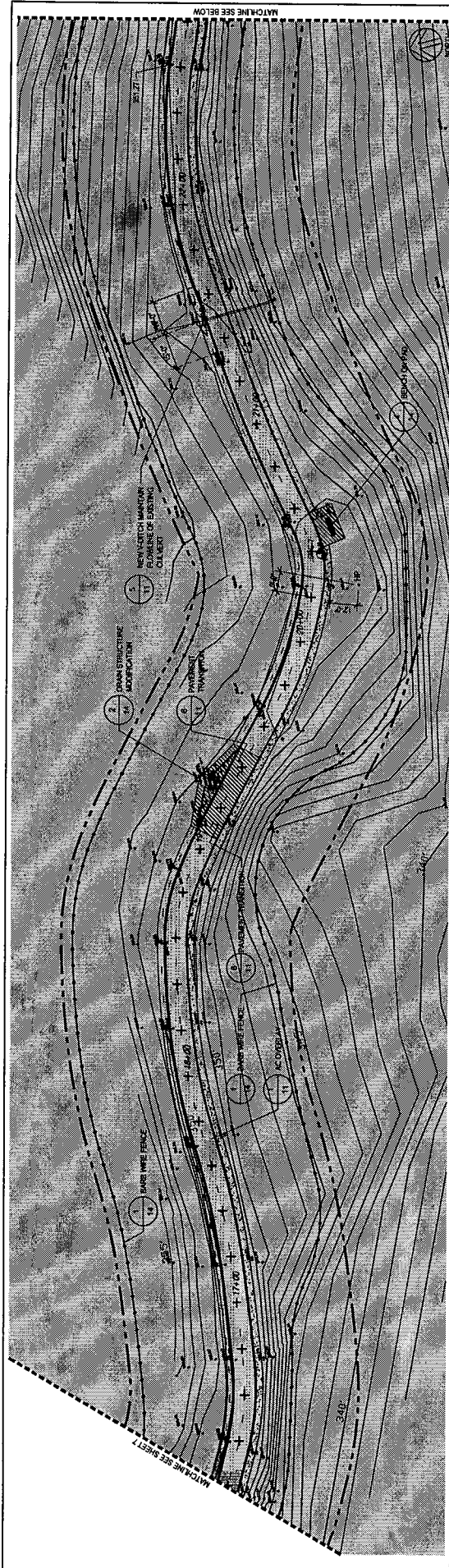
**HARRIS DESIGN**  
 Landscape Architecture  
 10000 S. HAYWARD AVE., SUITE 100  
 HAYWARD, CA 94542  
 (925) 786-1110  
 www.harrisdesign.com

Rev	Date	By	For
1	11/14/09	DAVID N. PORTER	PRELIMINARY
2	04/02/10	DAVID N. PORTER	FINAL

**Crystal Springs Trail Extension South of Highway 92**  
 County of San Mateo,  
 California  
 San Mateo County Parks Department

APPROVED DATE: \_\_\_\_\_  
 JAMES C. PORTER  
 DIRECTOR OF PUBLIC WORKS  
 P.C.E. NO. C-46856 / EXPRESS 12-31-2011

APPROVED DATE: \_\_\_\_\_  
 DAVID HOLLAND  
 DIRECTOR OF PARKS



Drawing Title: **SITE CONSTRUCTION PLAN**  
 Date: **APRIL 2, 2010**  
 Scale: **1"=20'-0"**  
 Project Number: **08.07**  
 Sheet Number: **8**  
 of **15**



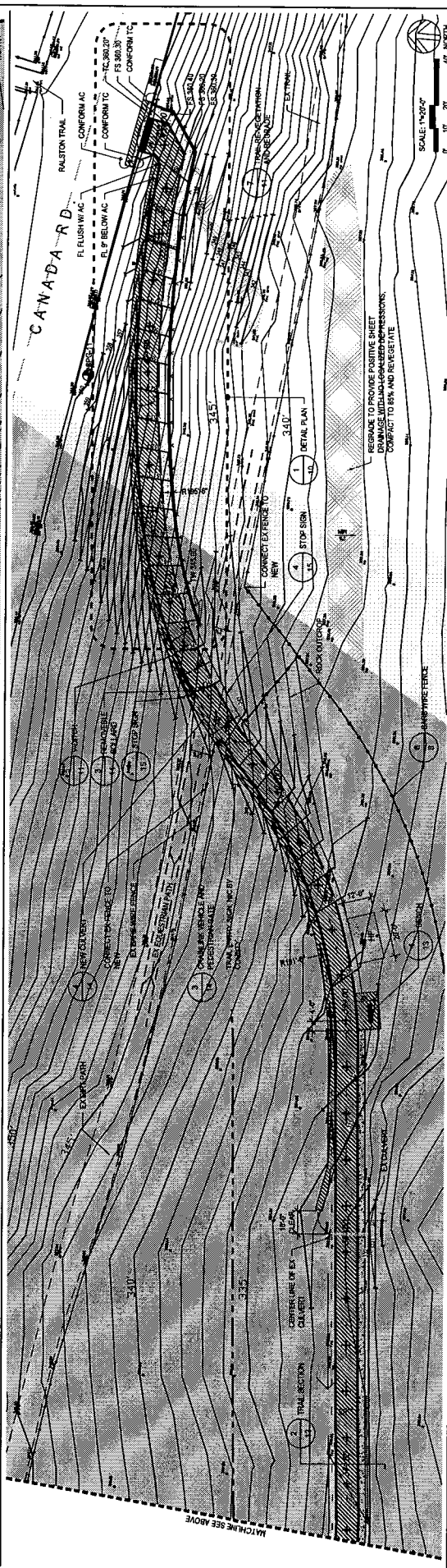
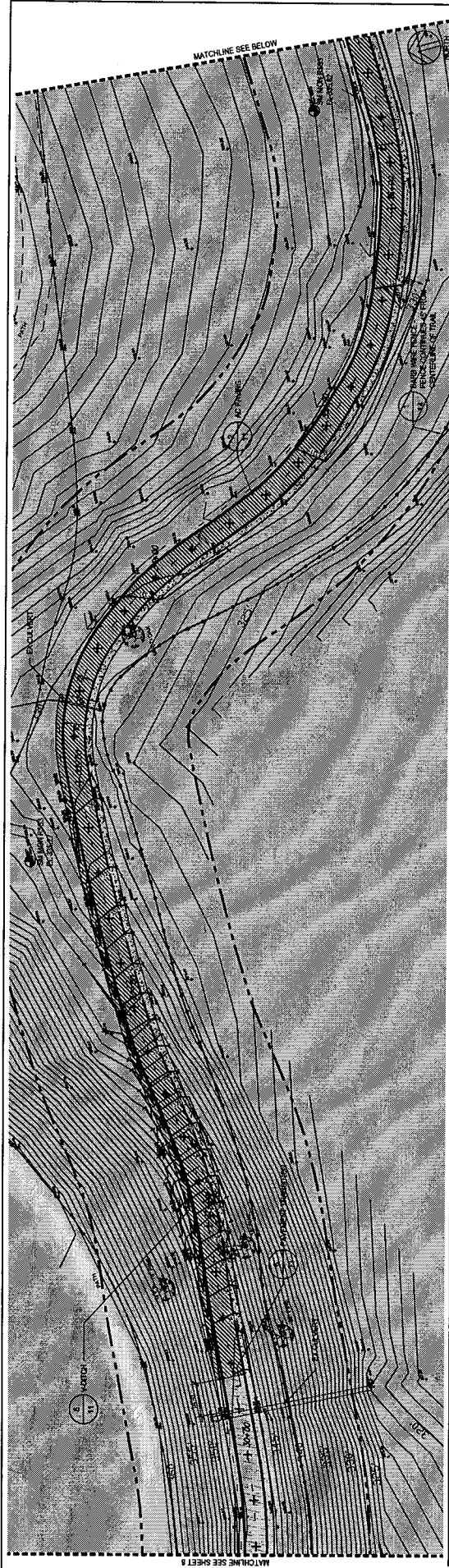
**HARRIS DESIGN**  
 Landscape Architecture  
 Park & Recreation Planning  
 14000 S. GARDEN AVENUE  
 SUITE 100  
 GARDEN GROVE, CA 92640  
 TEL: 714.261.2100  
 WWW.HARRISDESIGN.COM

Rev	Date	Description
1	04/02/10	ISSUE FOR PERMITS
2	04/02/10	ISSUE FOR PERMITS
3	04/02/10	ISSUE FOR PERMITS
4	04/02/10	ISSUE FOR PERMITS
5	04/02/10	ISSUE FOR PERMITS
6	04/02/10	ISSUE FOR PERMITS
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11	04/02/10	ISSUE FOR PERMITS
12	04/02/10	ISSUE FOR PERMITS
13	04/02/10	ISSUE FOR PERMITS
14	04/02/10	ISSUE FOR PERMITS
15	04/02/10	ISSUE FOR PERMITS

**Crystal Springs Trail Extension South of Highway 92**  
 County of San Mateo,  
 California  
 San Mateo County Parks Department

APPROVED DATE	
DIRECTOR OF PARKS	
DIRECTOR OF PUBLIC WORKS	
R.C.E. NO. C-46866 / EXPIRES 12-31-2011	

APPROVED DATE	
DIRECTOR OF PARKS	
DIRECTOR OF PUBLIC WORKS	
R.C.E. NO. C-46866 / EXPIRES 12-31-2011	



Drawing Title: **SITE CONSTRUCTION PLAN**  
 Date: APRIL 2, 2010  
 Scale: 1"=20'-0"  
 Project Number: 06.07  
 Sheet Number: 9 of 11



**HARRIS DESIGN**  
 Landscape Architecture  
 1400 17th Avenue  
 San Mateo, CA 94401  
 Tel: 650.353.1122  
 Fax: 650.353.1126  
 www.harrisdesign.com

Revised For	Rev	Date
NO. 1	1	11/10/09
NO. 2	2	1/11/10
NO. 3	3	2/11/10
NO. 4	4	3/11/10
NO. 5	5	4/11/10

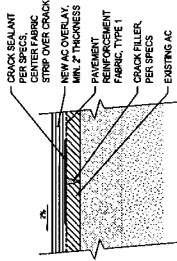
Prepared by: JCP  
 Checked by: JCP

**Crystal Springs Trail Extension South of Highway 92**  
 County of San Mateo,  
 California  
 San Mateo County Parks Department

APPROVED DATE: \_\_\_\_\_  
 JAMES C. PORTER  
 DIRECTOR OF PUBLIC WORKS  
 R.C.E. NO. C-46988 / EXPIRES 12/31/2011

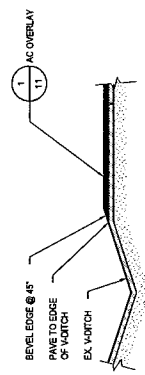
APPROVED DATE: \_\_\_\_\_  
 DAVID HOLLAND  
 DIRECTOR OF PARKS



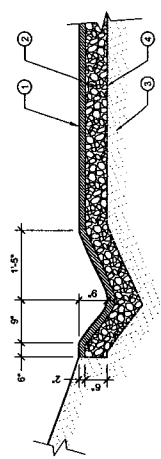


- NOTES**
- EXISTING AC SHALL BE SWEET CLEAN PRIOR TO CONSTRUCTION OF OVERLAY.
  - OVERALL THICKNESS OF AC OVERLAY SHALL BE AS SHOWN. A DRAINAGE NEED TO ACQUIRE A DRAINAGE TOWARD (E) 1/4" DITCH.

**1** AC OVERLAY SECTION SCALE: 1:12" = 1'-0"

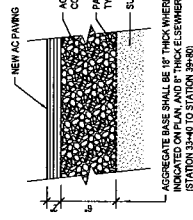


**4** V-DITCH @ OVERLAY CONDITION SECTION SCALE: 1:12" = 1'-0"



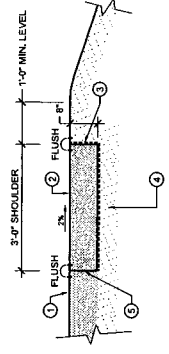
**5** V-DITCH @ NEW PAVING SECTION SCALE: 3/4" = 1'-0"

**NOTE:** RETURN TO EXISTING AC V-DITCH AT ENDS OF NEW V-DITCH.



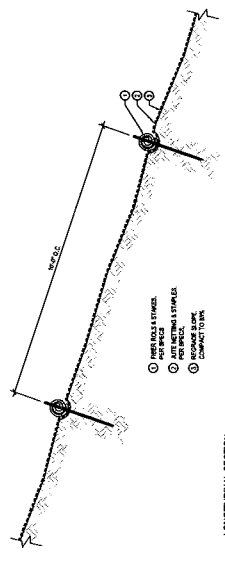
- NOTE:** FOR SMALL RESIDUE AND DISPOSE OF EXISTING PAVING. EXISTING SECTION IS APPROXIMATELY 7" AC OVER 4" BASECOURSE.

**2** AC PAVING SECTION SCALE: 1:12" = 1'-0"

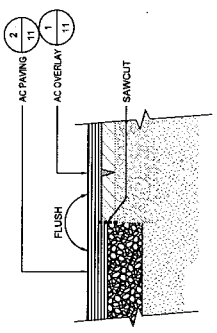


- AC OR OVERLAY
- AGGREGATE CLASS 2, COMPACT TO 95%
- GEOTEXTILE FABRIC, PER SPECS, TURN UP END OR COMPACT TO 95%
- SUBGRADE UNDISTURBED OR COMPACT TO 95%
- SAWCUT EXACT TO CLEAN EDGE

**3** SHOULDER SECTION SCALE: 3/4" = 1'-0"



**7** TRAIL REVEGETATION SECTION SCALE: 1/2" = 1'-0"



**6** PAVING TRANSITION SECTION SCALE: 1:12" = 1'-0"

CONSTRUCTION DETAILS

Date: APRIL 2, 2010

Scale: AS NOTED

Project Number: 08.07

Sheet Number: 11

Sheet Number: 11 of 15

Sheets and Signatures

DESIGNED BY: J. B. HARRIS

CHECKED BY: J. B. HARRIS

DATE: 08/07/10

**HARRIS DESIGN**

Landscaping Architecture

1000 S. GARDEN ST.

LOS ANGELES, CA 90006

TEL: 310.437.1010

WWW.HARRISDESIGN.COM

Rev

Rev. Date

Rev. Description

Crystal Springs Trail Extension South of Highway 92

County of San Mateo, California

San Mateo County Parks Department

APPROVED DATE

JAMES C. PORTER

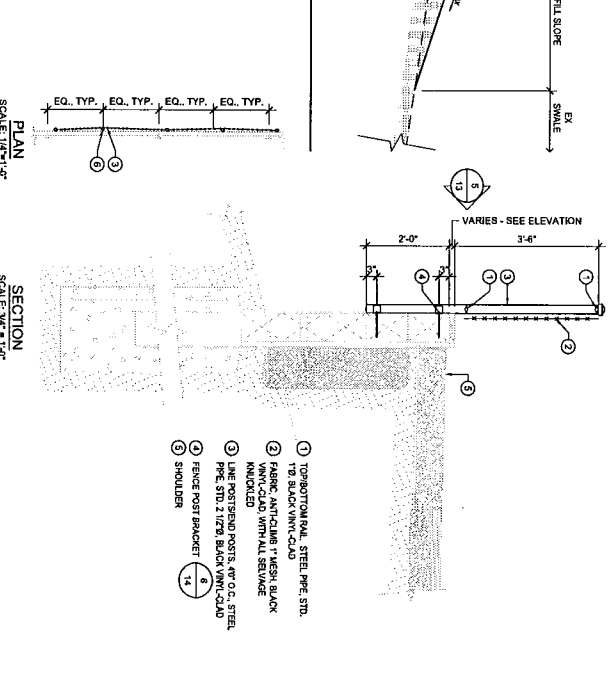
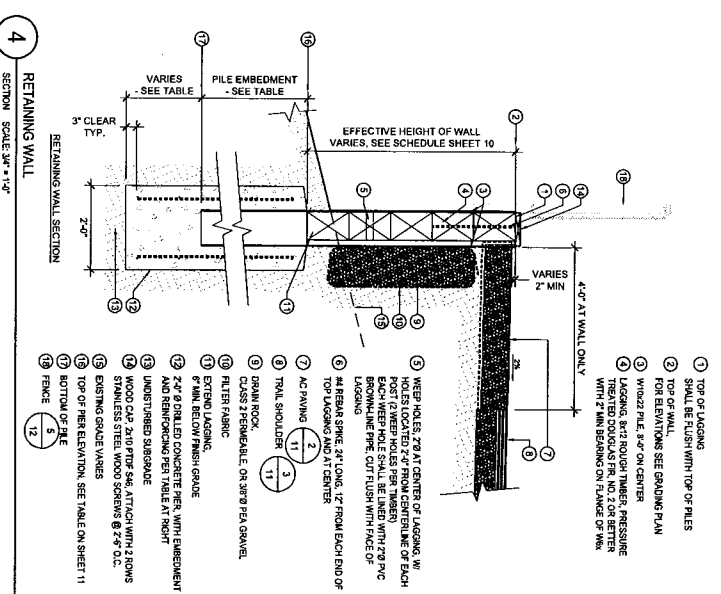
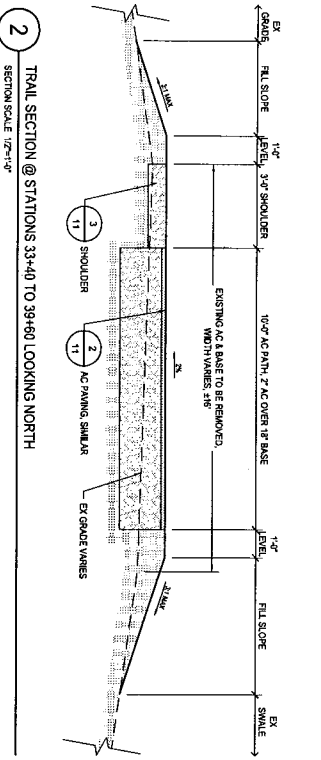
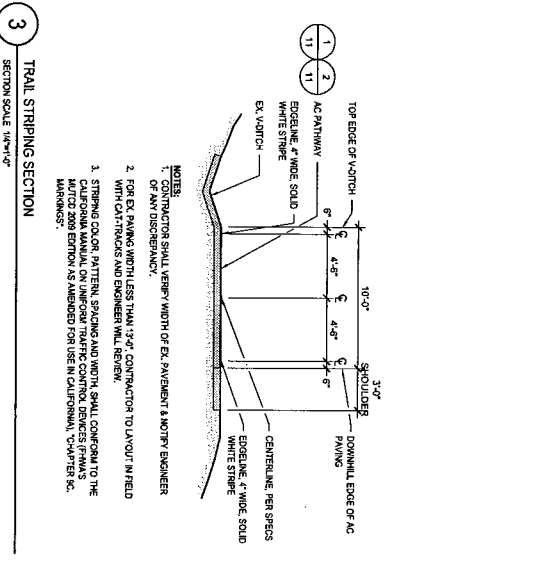
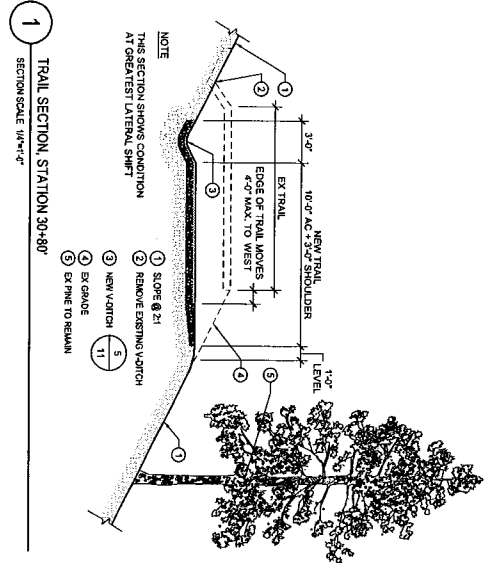
DIRECTOR OF PUBLIC WORKS

R.C.E. NO. C-48657 / EXPRESS 7A-S-1-2011

APPROVED DATE

DAVID HOLLAND

DIRECTOR OF PARKS



APPROVED DATE	APPROVED DATE
DWIGHT HOLLAND DIRECTOR OF PARKS	JAMES C. PORTER DIRECTOR OF PUBLIC WORKS
	R.C.E. INC. C. 4686 / EXPRES 12-1-2011

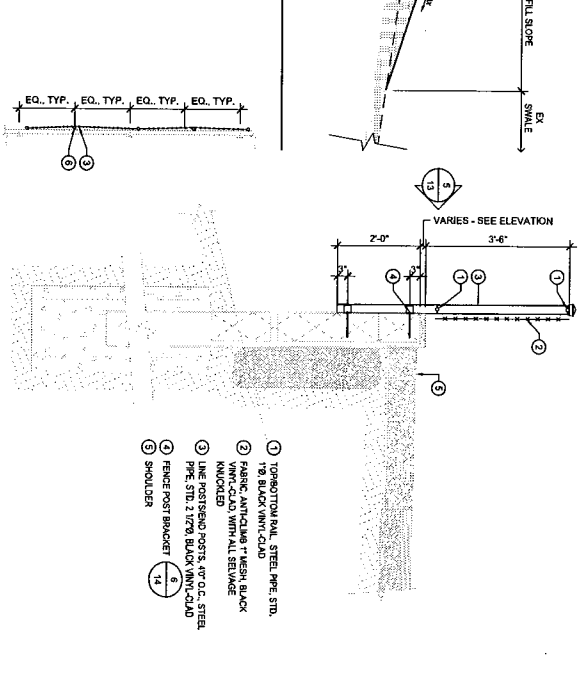
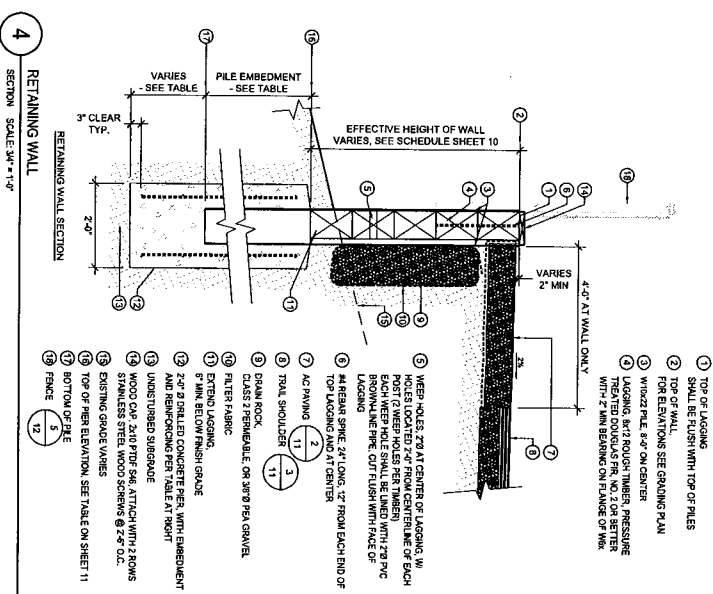
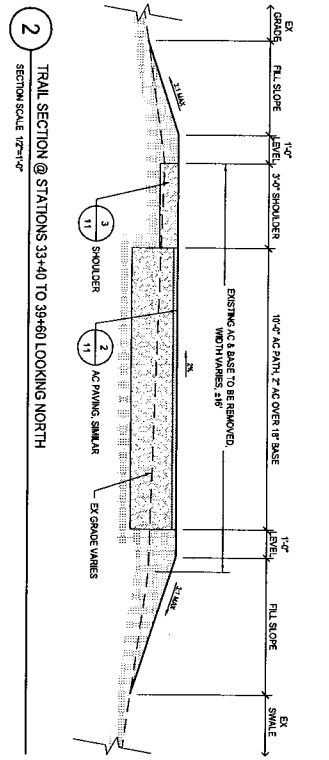
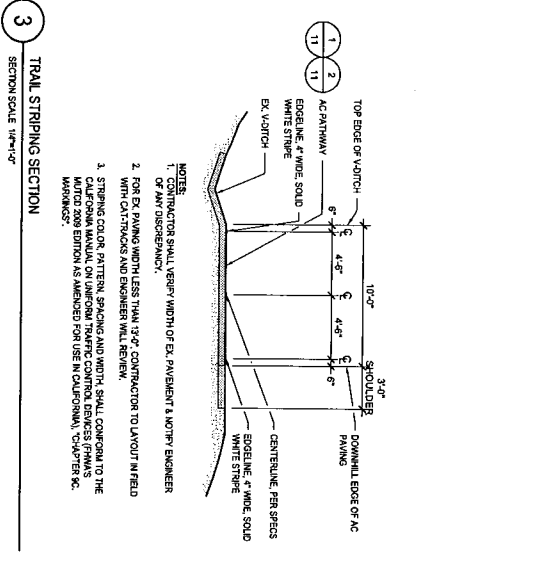
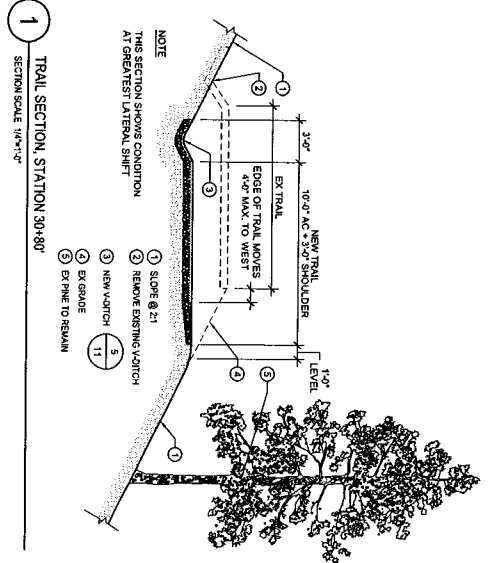
Crystal Springs Trail Extension South of Highway 92  
County of San Mateo  
California  
San Mateo County Parks Department

Revised For	Rev	Date	Author
CONSTRUCTION	1	04/02/10	AS
DESIGN	2	04/02/10	AS
PERMITS	3	04/02/10	AS
ISSUED FOR PERMITS	4	04/02/10	AS

**HARRIS DESIGN**  
Professional Engineer  
723 10th Avenue, Suite 200  
San Francisco, CA 94103  
(415) 774-1100  
www.harrisdesign.com

Scale and Signature: \_\_\_\_\_  
Date: APRIL 2, 2010  
AS NOTED  
04/07

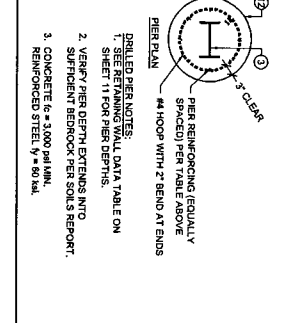
Sheet Number: 12 of 15



**PLAN**  
SCALE: 1/4"=1'-0"

**SECTION**  
SCALE: 3/4"=1'-0"

WALL HEIGHT	PILE SIZE	PILE REINFORCING	PILE EMBEDMENT
4'-0" MAX	W10x22	(4) #6	2'-0" MIN
7'-0" MAX	W10x22	(6) #6	3'-0" MIN



APPROVED DATE	APPROVED DATE
DAVID HOLLAND DIRECTOR OF PARKS	JAMES C. PORTER DIRECTOR OF PUBLIC WORKS
	R.C.E. NO. C-46666 / EXPIRES 12/31/2011

Crystal Springs Trail Extension South of Highway 92

County of San Mateo  
California

San Mateo County Parks Department

Revised For	By	Date
NO. 1	AS	12/11/07
NO. 2	AS	08/07
NO. 3	AS	08/07
NO. 4	AS	08/07
NO. 5	AS	08/07
NO. 6	AS	08/07
NO. 7	AS	08/07
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NO. 15	AS	08/07
NO. 16	AS	08/07
NO. 17	AS	08/07
NO. 18	AS	08/07
NO. 19	AS	08/07
NO. 20	AS	08/07

**HARRIS DESIGN**  
Professional Engineers and Surveyors  
1715 Highway 92 South  
San Mateo, CA 94401  
(650) 351-1177  
www.harrisdesign.com



Contract Title: CONSTRUCTION DETAILS

April 2, 2010

AS NOTED

08/07

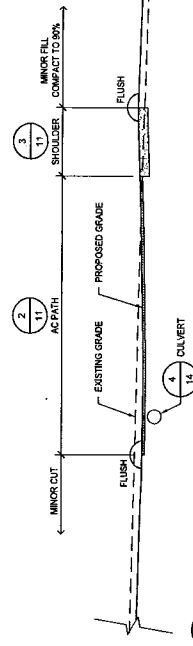
Product Number: 12

Sheet Number: 12 of 15

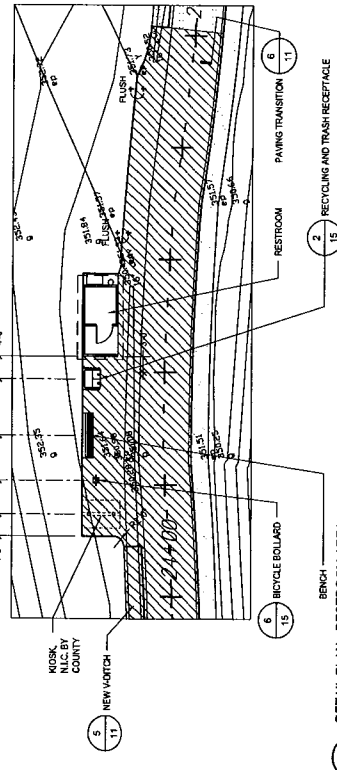


1 PLAN SCALE 1"=100'-0"

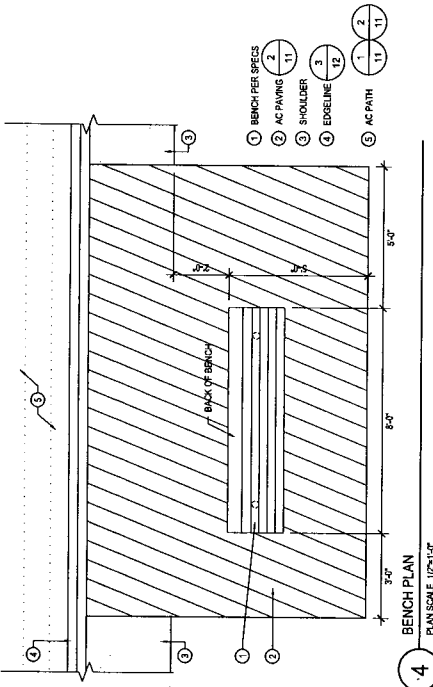
TRAIL REVEGETATION AREAS  
SEE DETAIL 2, SHEET 11



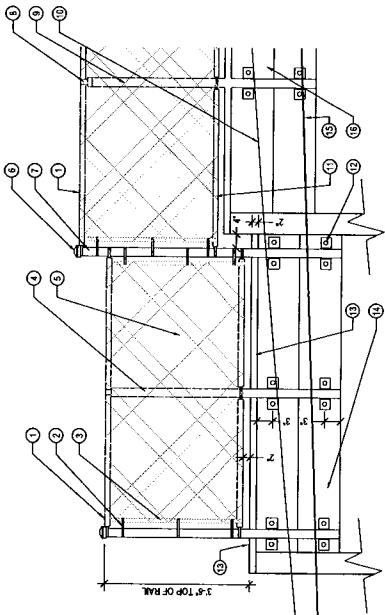
2 HORSE TRAIL  
SECTION SCALE 1/4"=1'-0"



3 DETAIL PLAN - RESTROOM AREA  
1"=10'-0"



4 BENCH PLAN  
PLAN SCALE 1/2"=1'-0"



5 CHAINLINK FENCE AT RETAINING WALL  
ELEVATION SCALE 3/8"=1'-0"

- 1 TOP RAIL
- 2 TENSION BAND
- 3 TENSION BAR
- 4 LINE POST
- 5 CHAINLINK FABRIC: WOUNDLED SELVAGE
- 6 DOMED POST CAP
- 7 LINE POST LOOP CAP
- 8 LINE POST TIES
- 9 FINISH GRADE (BEYOND 12:1 SLOPE MAX)
- 10 BOTTOM RAIL
- 11 FENCE POST BRACKET
- 12 WOOD CAP
- 13 WALL LAGGING
- 14 FINISH GRADE FRONT OF WALL
- 15 RETAINING WALL

Revision No.:	13
Revision Date:	08/17
Revision Description:	AS NOTED
Project Number:	13
Sheet Number:	13
Sheet Total:	15

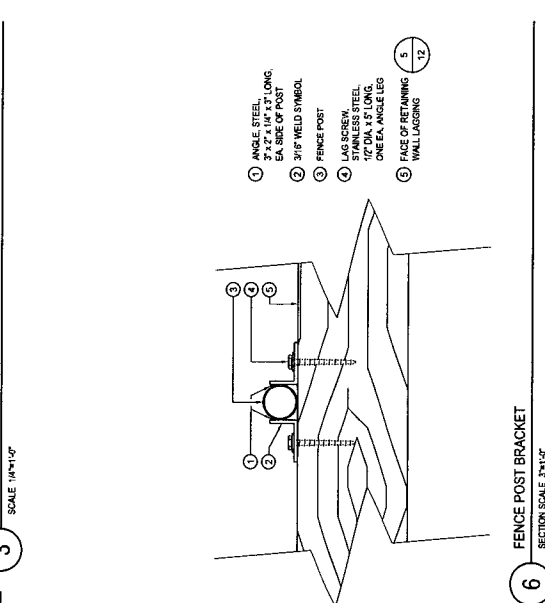
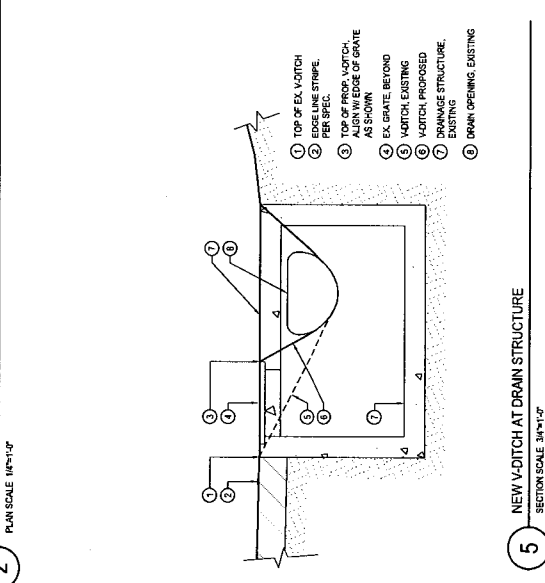
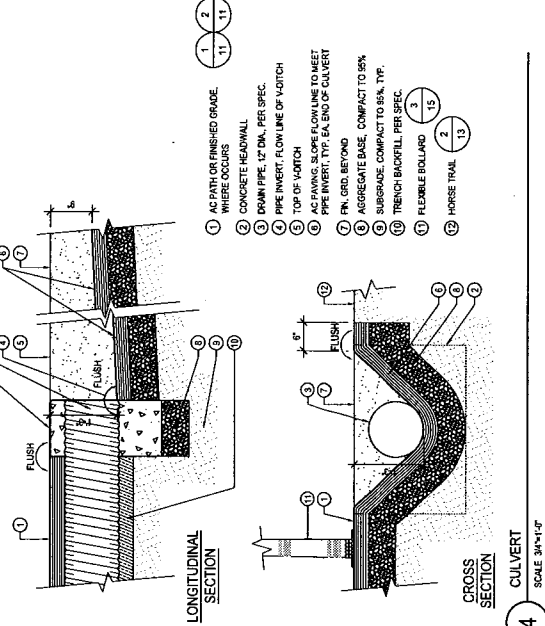
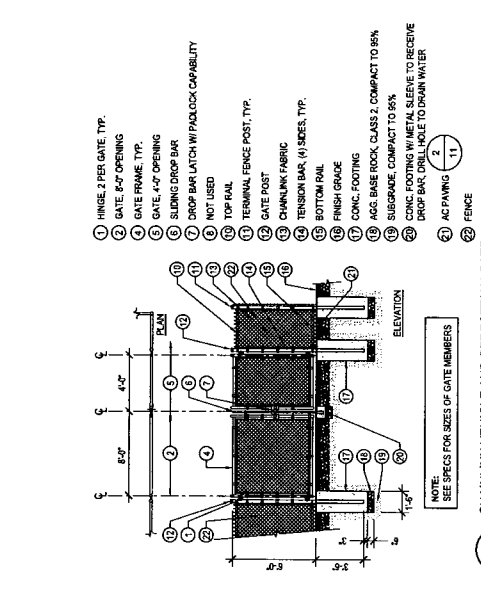
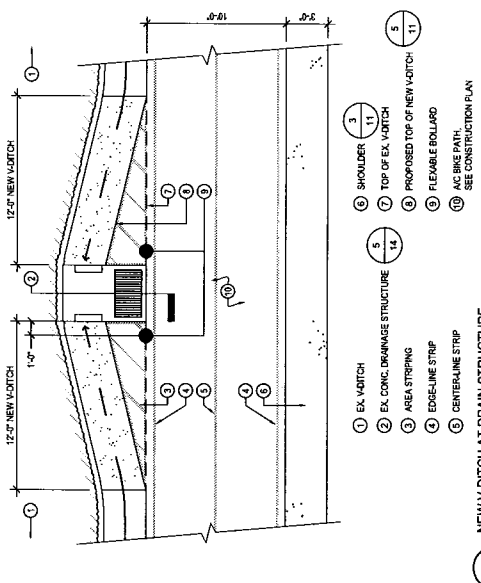
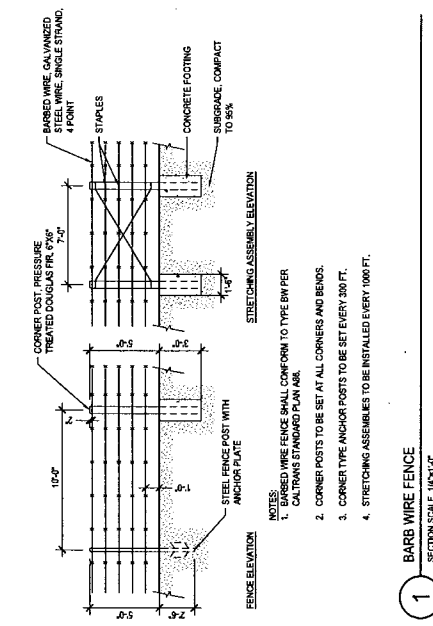
Drawn by: J. P. ...  
Checked by: R. ...

**HARRIS DESIGN**  
Landscape Architecture  
Urban Design  
401 West 7th St.  
San Mateo, CA 94403  
415.948.2014  
harrisdesign.com

Issued For	Rev. No.	Appr.
San Mateo County	1	J.P.
San Mateo County	2	J.P.
San Mateo County	3	J.P.
San Mateo County	4	J.P.
San Mateo County	5	J.P.
San Mateo County	6	J.P.
San Mateo County	7	J.P.
San Mateo County	8	J.P.
San Mateo County	9	J.P.
San Mateo County	10	J.P.
San Mateo County	11	J.P.
San Mateo County	12	J.P.
San Mateo County	13	J.P.

**Crystal Springs Trail Extension South of Highway 92**  
County of San Mateo, California  
San Mateo County Parks Department

APPROVED DATE:	
APPROVED BY:	JAMES C. PORTER DIRECTOR OF PUBLIC WORKS R.C.E. NO. C-4068 / EXPIRES 12-31-2011
APPROVED DATE:	
APPROVED BY:	DAVID HOLLAND DIRECTOR OF PARKS



APPROVED DATE	
DIRECTOR OF PARKS	

APPROVED DATE	
JAMES C. PORTER	
DIRECTOR OF PUBLIC WORKS	
R.C.E. NO. C 6858	EXPIRES 12-31-2011

**Crystal Springs Trail Extension South of Highway 92**  
County of San Mateo, California  
San Mateo County Parks Department

**HARRIS DESIGN**  
Landscape Architecture  
11000 S. DE SOTO AVE. #205  
SUNNYVALE, CA 94086  
TEL: (415) 941-1111  
WWW.HARRISDESIGN.COM

Drawn by: P / AS  
Checked by: B / AS

Project Number:	08/07
Scale:	AS NOTED
Date:	APRIL 2, 2010
CONSTRUCTION DETAILS	
Sheet Number:	14
Sheet Number:	14 of 15



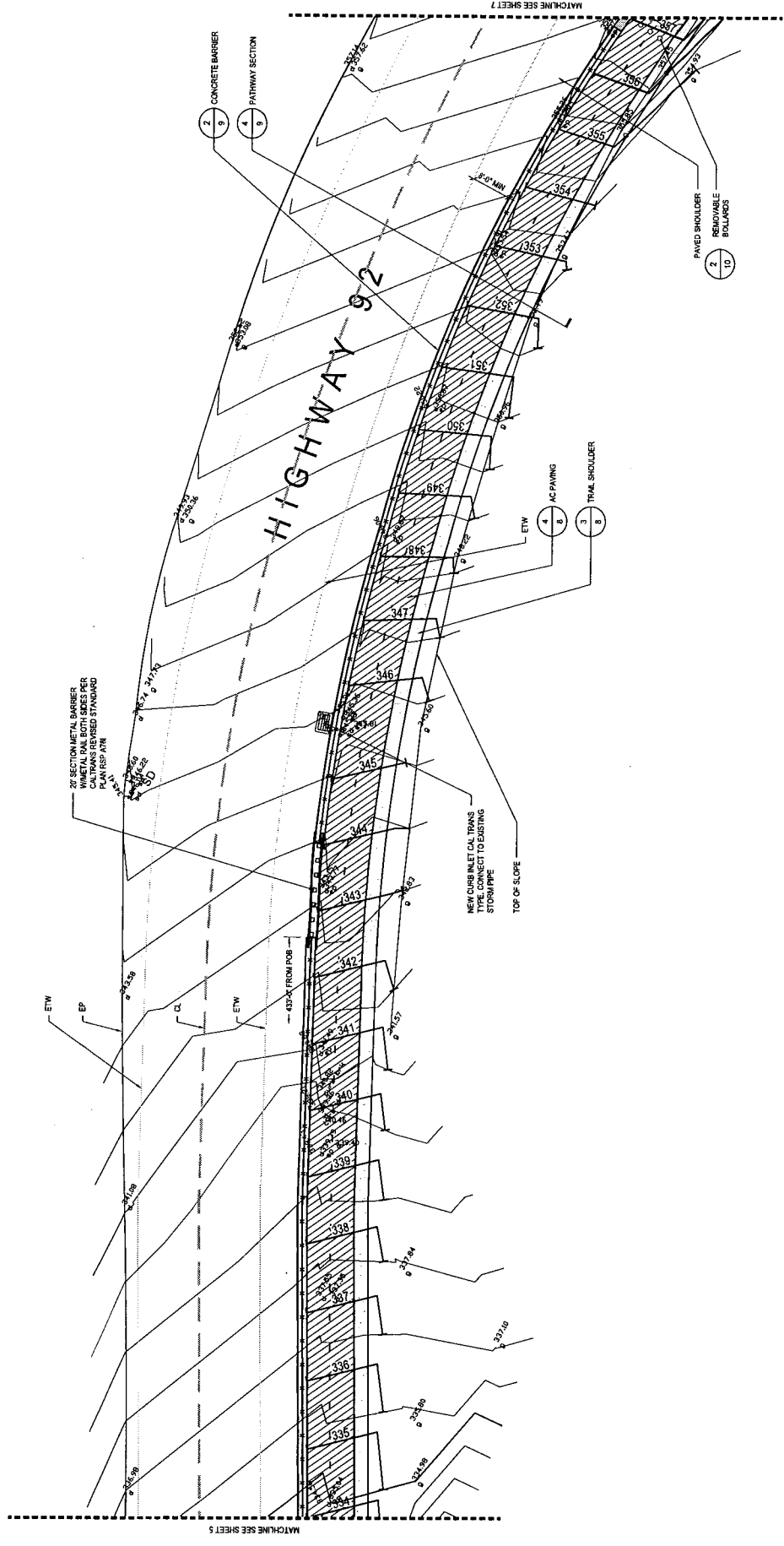












**SITE CONSTRUCTION PLAN**  
 APRIL 2, 2010  
 DATE: 1"=10'-0"  
 SCALE: 1"=10'-0"  
 PROJECT NUMBER: 08.07  
 SHEET NUMBER: 6  
 OF: 10



**HARRIS DESIGN**  
 Landscape Architecture  
 10000 E. 15th Ave.  
 Suite 100  
 Denver, CO 80231  
 Phone: 303.751.2178  
 Fax: 303.751.2179  
 www.harrisdesign.com

Seals and Signatures

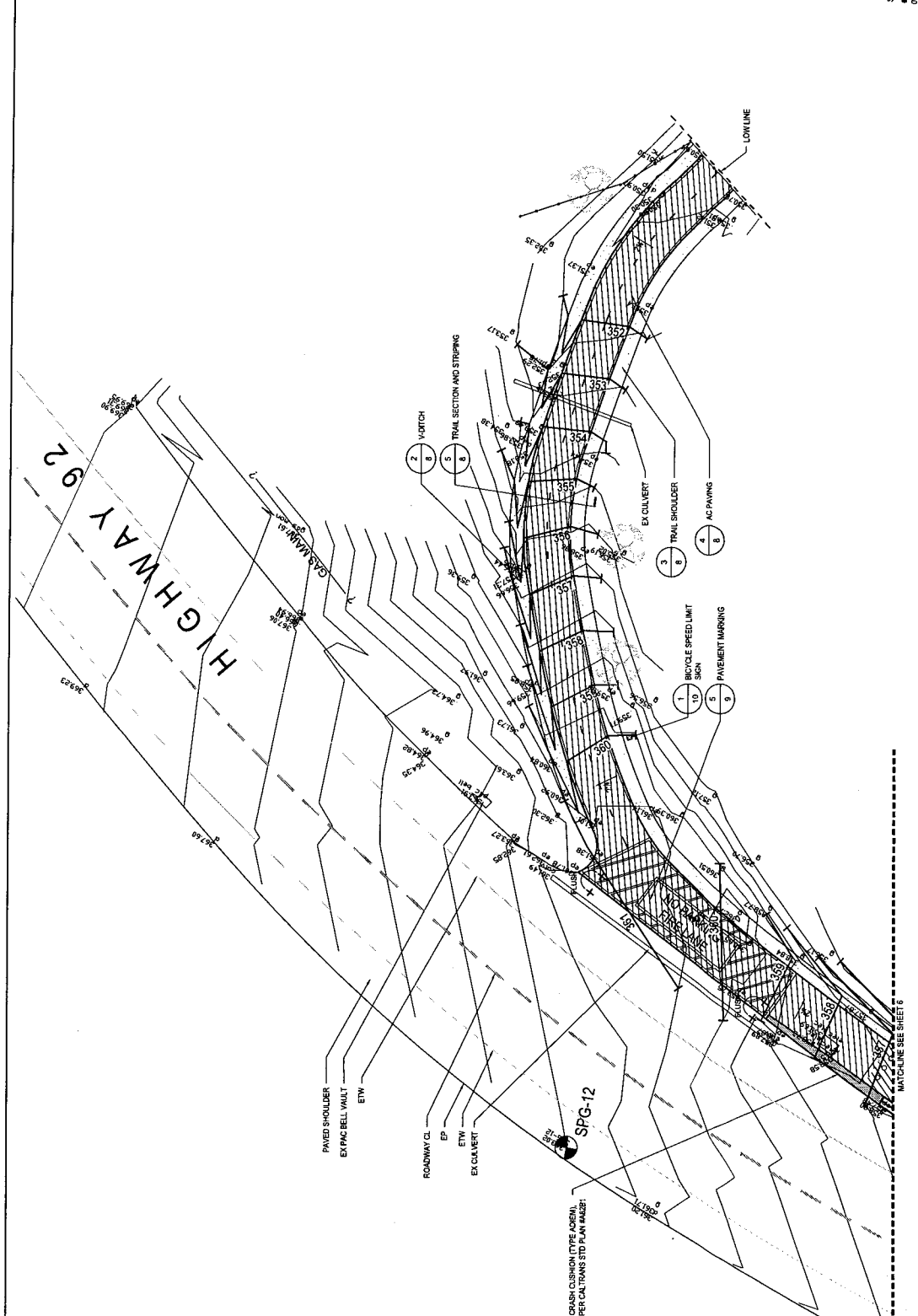
Drawn by:	Checked by:

**Crystal Springs Trail Extension Highway 92 Right of Way**

County of San Mateo,  
 California  
 San Mateo County Parks Department

APPROVED DATE	
JAMES C. PORTER DIRECTOR OF PUBLIC WORKS R.C.E. NO. C 48068 / EXPIRES 12-31-2011	

APPROVED DATE	
DAVID HOLLAND DIRECTOR OF PARKS	



SCALE: 1"=10'-0"  
 0' 5' 10' 20' NORTH

Drawing Title: **SITE CONSTRUCTION PLAN**  
 Date: **APRIL 2, 2010**  
 Scale: **1"=10'-0"**  
 Project Number: **08.07**  
 Sheet Number: **7**  
 of **10**



Drawn by: J. P. / m  
 Checked by: J. Bm

Checked for: DATE, SCALE, TITLE, AREA, DIMENSIONS, ETC.

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**HARRIS DESIGN**  
 Landscape Architecture  
 Planning & Construction Services  
 1400 North Main Street  
 Suite 100  
 San Mateo, CA 94401  
 Phone: (650) 594-1111  
 Fax: (650) 594-1112  
 www.harrisdesign.com

Crystal Springs Trail Extension Highway 92 Right of Way  
 County of San Mateo,  
 California  
 San Mateo County Parks Department

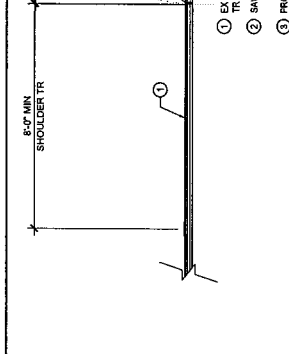
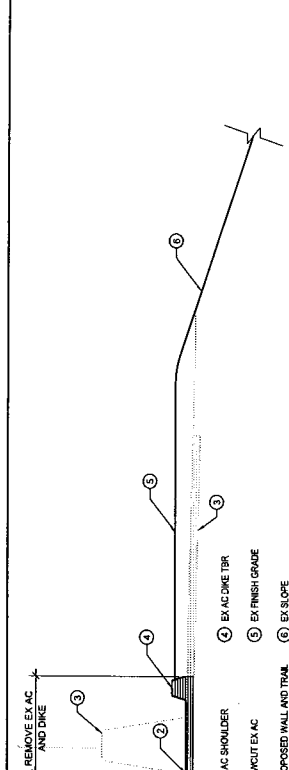
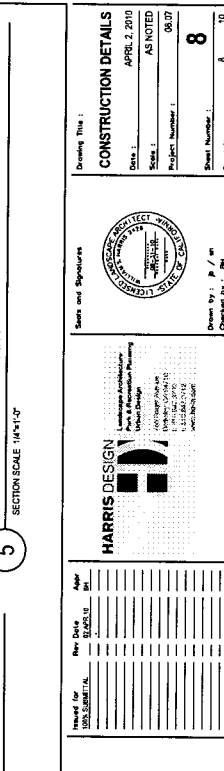
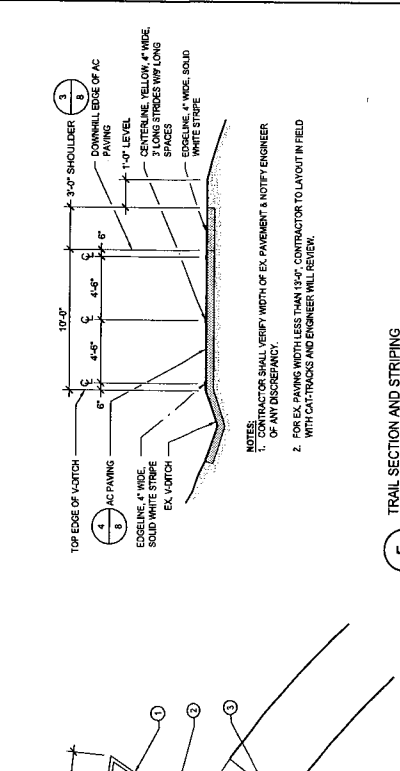
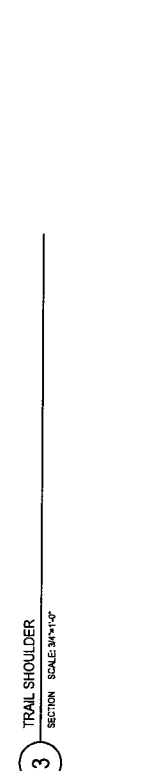
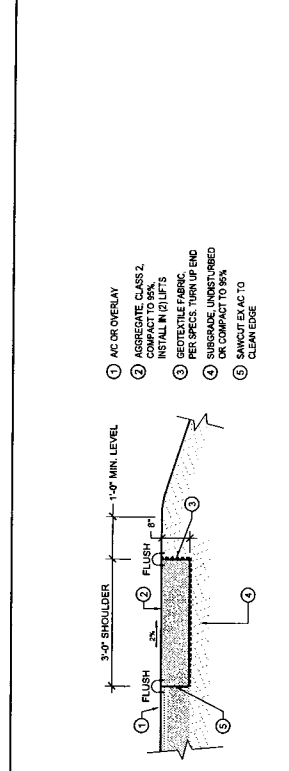
APPROVED DATE  
 JAMES C. PORTER  
 DIRECTOR OF PUBLIC WORKS  
 R.C.E. NO. C 48568 / EXPIRES 12-31-2011

APPROVED DATE  
 DAVID HOLLAND  
 DIRECTOR OF PARKS

APPROVED DATE

APPROVED DATE

APPROVED DATE



County of San Mateo, California  
San Mateo County Parks Department

APPROVED DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
JAMES C. PORTER  
DIRECTOR OF PUBLIC WORKS  
R.C.E. NO. C-48056 / EXPIRES 12-31-2011

APPROVED DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
DAVID HOLLAND  
DIRECTOR OF PARKS

APPROVED DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
DAVID HOLLAND  
DIRECTOR OF PARKS

Crystal Springs Trail Extension Highway 92 Right of Way

County of San Mateo, California  
San Mateo County Parks Department

APPROVED DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
JAMES C. PORTER  
DIRECTOR OF PUBLIC WORKS  
R.C.E. NO. C-48056 / EXPIRES 12-31-2011

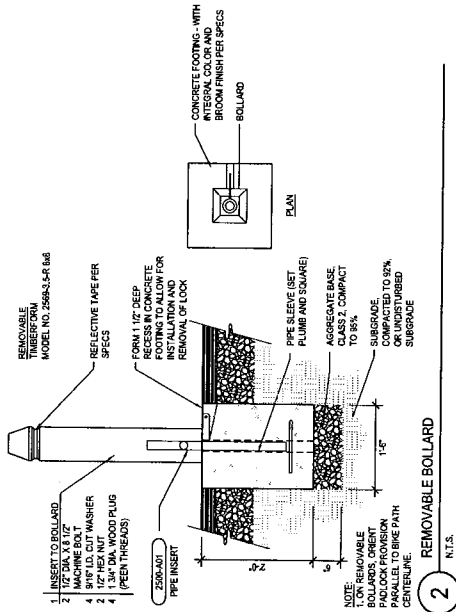
APPROVED DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
DAVID HOLLAND  
DIRECTOR OF PARKS

HARRIS DESIGN  
Landscape Architecture  
Civil Design  
1401 Tower Ave. #100  
San Mateo, CA 94401  
Tel: 650.352.1234  
www.harrisdesign.com

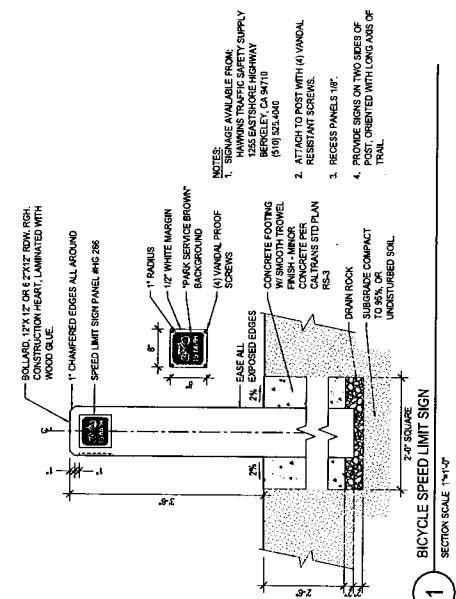
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Date: \_\_\_\_\_

CONSTRUCTION DETAILS  
Date: APRIL 2, 2010  
AS NOTED  
Scale: AS NOTED  
Project Number: 08.07  
Sheet Number: 8  
Total Number: 8 of 10

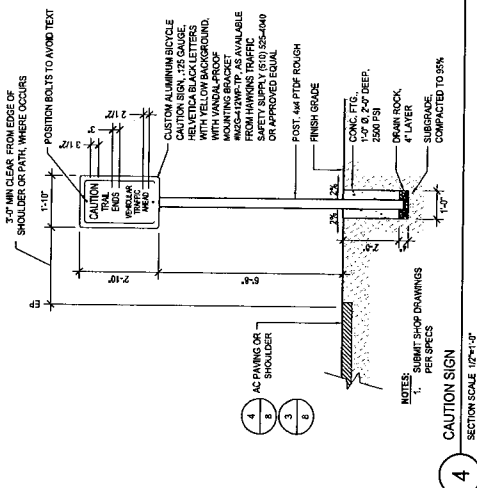




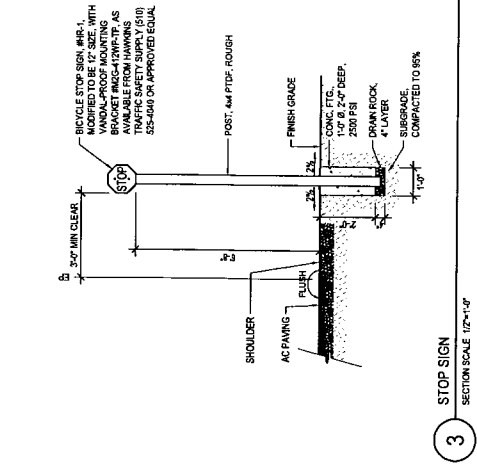
2 REMOVABLE BOLLARD  
N.T.S.



1 BICYCLE SPEED LIMIT SIGN  
SECTION SCALE 1/4\"/>



4 CAUTION SIGN  
SECTION SCALE 1/2\"/>



3 STOP SIGN  
SECTION SCALE 1/2\"/>

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

**HARRIS DESIGN**  
 Landscape Architecture  
 Planning & Design  
 1111 1/2 ST. N. #110  
 SAN MATEO, CA 94401  
 (650) 331-1100

Revised For: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 By: \_\_\_\_\_

Crystal Springs Trail Extension Highway 92 Right of Way  
 County of San Mateo,  
 California  
 San Mateo County Parks Department

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

Approved Date: \_\_\_\_\_  
 Approved By: \_\_\_\_\_

CONSTRUCTION DETAILS  
 DATE: APRIL 2, 2010  
 SCALE: AS NOTED  
 PROJECT NUMBER: 08177  
 SHEET NUMBER: 10  
 DRAWN BY: J.P./s  
 CHECKED BY: B.H.





ARNOLD SCHWARZENEGGER  
GOVERNOR March 1, 2010

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



CYNTHIA BRYANT  
DIRECTOR

Sam Herzberg  
San Mateo County  
455 County Center, 4th Floor  
Redwood City, CA 94063

Subject: Crystal Springs Trail South of Hwy 92  
SCH#: 2010012063

Dear Sam Herzberg:

The enclosed comment (s) on your Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on February 26, 2010. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2010012063) when contacting this office.

Sincerely,

A handwritten signature in black ink that reads "Scott Morgan".

Scott Morgan  
Acting Director, State Clearinghouse

Enclosures  
cc: Resources Agency

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

**DEPARTMENT OF TRANSPORTATION**

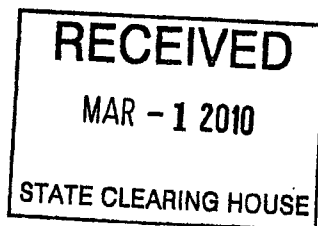
111 GRAND AVENUE  
P. O. BOX 23660  
OAKLAND, CA 94623-0660  
PHONE (510) 622-1644  
FAX (510) 286-5559  
TTY 711



*Flex your power!  
Be energy efficient!*

February 26, 2010

*Clear  
2-26-10  
late  
e*



SMVar002  
SCH#2010012063

Mr. Sam Herzberg  
San Mateo County  
Planning and Building Division  
455 County Center  
Redwood City, CA 94063

Dear Mr. Herzberg:

**CRYSTAL SPRINGS TRAIL SOUTH OF HIGHWAY 92 - NEGATIVE DECLARATION**

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Crystal Springs Trail South of Highway 92 project. The following comments are based on the Negative Declaration (ND). As the lead agency, the County of San Mateo is responsible for all project mitigation, including any needed improvements to state highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures. This information should also be presented in the Mitigation Monitoring and Reporting Plan of the environmental document. Required roadway improvements should be completed prior to issuance of the Certificate of Occupancy. Since an encroachment permit is required for work in the state right of way (ROW), and the Department will not issue a permit until our concerns are adequately addressed, we strongly recommend that the County work with both the applicant and the Department to ensure that our concerns are resolved during the environmental review process, and in any case prior to submittal of a permit application. Further comments will be provided during the encroachment permit process; see the end of this letter for more information regarding encroachment permits.

***Environmental Maintenance***

Please install 10 feet long sections of thri-beam guard rail (MBGR) interspersed with the K-rail barrier at 200 feet intervals throughout the 650 feet stretch of the trail to allow for wildlife movement. The MBGR will still provide the protection and separation of the trail from the traveled way while allowing gaps that would allow small wildlife to cross the roadway relatively unhindered.

Mr. Herzberg  
February 26, 2010  
Page 2


***Encroachment Permit***

Please be advised that work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information: <http://www.dot.ca.gov/hq/traffops/developserv/permits>.

Michael Condie, Permits Branch Chief  
California DOT, District 4  
P.O. Box 23660  
Oakland, CA 94623-0660

Please feel free to call or email Sandra Finegan of my staff at (510) 622-1644 or [sandra\\_finegan@dot.ca.gov](mailto:sandra_finegan@dot.ca.gov) with any questions regarding this letter.

Sincerely,



LISA CARBONI  
District Branch Chief  
Local Development – Intergovernmental Review

c: State Clearinghouse

**From:** "Sandra Finegan" <sandra\_finegan@dot.ca.gov>  
**To:** SHerzberg@co.sanmateo.ca.us  
**Date:** 8/10/2010 10:52 AM  
**Subject:** Re: Fwd: RE: Update

Hi Sam,

The revised drawings meet the requirements requested by the Office of Environmental Maintenance. Thank you for all your assistance.

Sandy Finegan  
Associate Transportation Planner  
Local Development - Intergovernmental Review  
Office of Transit and Community Planning  
Caltrans - District 4  
111 Grand Avenue, MS 10-D  
Oakland, CA 94623  
(510) 622-1644  
(510) 286-5559 FAX

PLEASE NOTE: This office is closed on the second, third, and fourth Fridays of each month as part of the Governor's Mandatory Furlough Order.

"Samuel Herzberg" <sherzberg@co.sanmateo.ca.us>  
08/10/2010 08:49 AM

To  
"Sandra Finegan" <sandra\_finegan@dot.ca.gov>  
cc  
"Robert S Young" <robert\_s\_young@dot.ca.gov>  
Subject  
Re: Fwd: RE: Update

Sandra,

We have made changes per your request. Please review and let us know if this meets your requirements. Thanks!

Sam

>>> "Sandra Finegan" <sandra\_finegan@dot.ca.gov> 8/5/2010 3:23 PM >>>  
Hi Sam,

I appreciate your assistance on the Cyrstal Springs Trail barrier. I look forward to seeing the revised drawing showing 2 MBG openings.

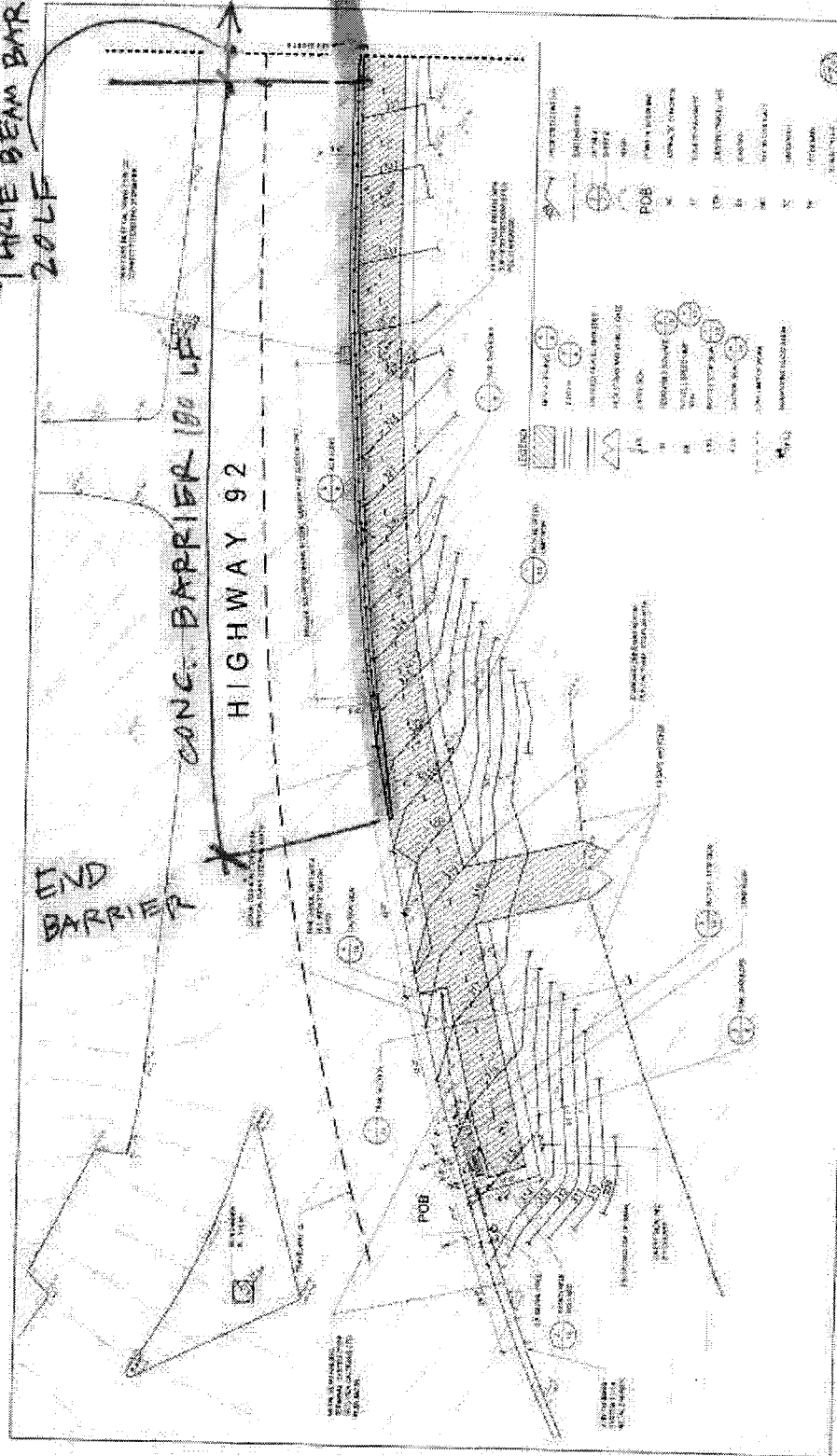
Thank you.

THREE BEAM BARRIER  
20 LF

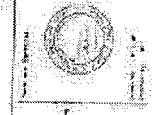
SEE  
SHEET  
6

END  
BARRIER

CONC. BARRIER 180 LFS  
HIGHWAY 92



DATE	10/20/10
SCALE	AS SHOWN
SHEET NO.	5
TOTAL SHEETS	5



**HARRIS CONSTRUCTION**  
 1000 N. 10th St.  
 Suite 100  
 Fargo, ND 58103  
 (701) 785-1111  
 www.harrisconstruction.com

Crystal Springs Trail Extension Highway 92 Right-of-Way  
 Checked by: [Signature]  
 Drawn by: [Signature]  
 Project No. 10000000000000000000

CONTRACT NO.  
 SHEET NO.  
 DATE

DATE  
 SHEET NO.  
 DATE

SHEET 5  
CRYSTAL SPRING TRAIL  
SOUTH OF HWY. 92

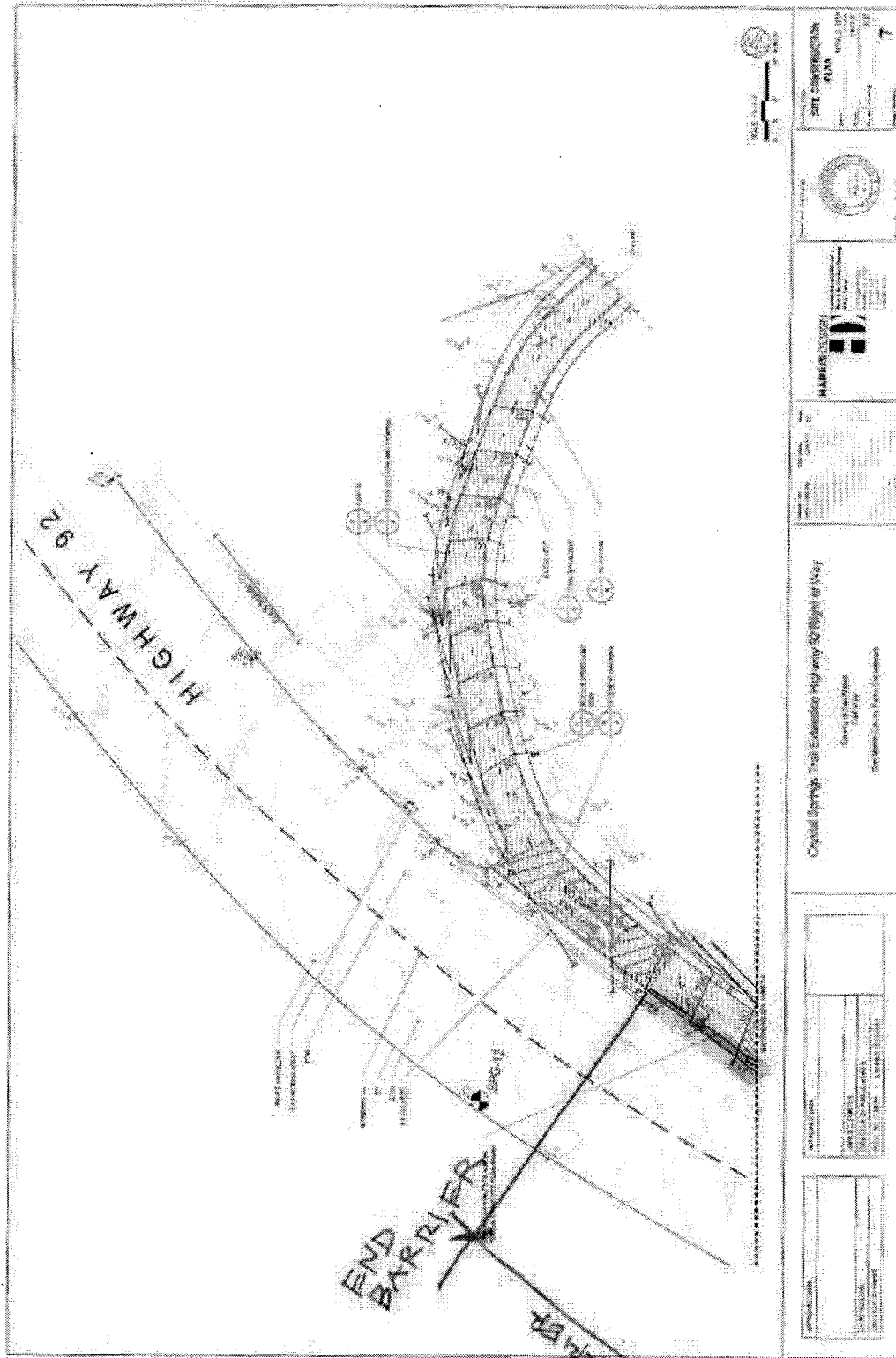
REVISED 8/9/10  
7/20/10

BARRIER DIAGRAM

180 LF  
THIS IS



SEE  
THIS SHEET



SEE  
SHEET  
6

REVISED 8/9/10  
7/20/10

SHEET 7  
CRYSTAL SPRING TRAIL  
SOUTH OF 92

BARRIER DIAGRAM