

# **INFORMATION HANDOUT**

**For Contract No. 11-415704**

**At 11-SD-78-0.0/R16.5**

**Identified by**

**Project ID 1113000008**

## **MATERIALS INFORMATION**

Geotechnical Design Report, July 20, 2015

Vista irrigation District Water Resource Letter, December 15, 2015

City of Oceanside Water Resource Letter, December 14, 2014

Base Structural Section Recommendation, September 14, 2015

Warranty Bond for Traffic Stripe and Pavement Marking Tape (Warranty)

# Memorandum

*Serious drought.  
Help save water!*

**To:** MR. Richard Estrada  
Traffic Project Development  
District 11 MS 230

**Date:** July 20, 2015

**File:** 11-SD-78 Variable  
EA 11-41570  
EFIS 1113000008

**From:** Ali Lari  
Transportation Engineer  
Office of Geotechnical Design-South 2, Branch-D

**Subject:** **Geotechnical Design Report for the Proposed Concrete Barriers and Metal Beam Guard Rails at Eastbound State Route 78.**

## 1.0 INTRODUCTION

Pursuant to your request, the Office of Geotechnical Design-South 2 (OGDS2) is providing this Geotechnical Design Report (GDR) to be used for project design and construction. The proposed project includes construction of concrete barriers at two locations, and construction of Metal Beam Guard Rails (MBGR) at three locations along eastbound State Route 78 (SR-78) as follows:

Location 1: Proposed MBGR located at the right shoulder of eastbound SR-78 just before the El Camino Real off-ramp and continuing along the off-ramp, Post Mile (PM) 1.2.

Location 2: Proposed concrete barrier located at the right shoulder of SR-78 between El Camino Real and College Boulevard, PM 1.9.

Location 3: Proposed MBGR located at the right shoulder of SR-78 between El Camino Real and College Boulevard, PM 2.4.

Location 4: Proposed MBGR located at the right shoulder of SR-78 just before the Mar Vista off-ramp and continuing along the off-ramp, PM 7.3.

Location 5: Proposed concrete barrier located at the right shoulder of SR-78 between Mar Vista and Sycamore Avenue, PM 8.0.

The project locations are depicted on Figures 1 through 6.

The purpose of this GDR is to document subsurface geotechnical conditions, provide engineering evaluation of site conditions, and provide recommendations relevant to the design and

construction of the project features. This report establishes a geotechnical baseline to be used in assessing the existence and scope of changed site conditions. The geotechnical information, evaluation, recommendations, and advisories contained in this GDR supersede any information that may have been previously conveyed through correspondences or documents concerning the project features addressed herein. A District Preliminary Geotechnical Report (DPGR) was prepared for concrete barrier part of this project by our office on November 21, 2013. This GDR was prepared in accordance with the guidelines set forth in the *Caltrans: Guidelines for Preparing Geotechnical Design Report (GDR), Version 1.3, December 2006*.

All units referenced in this document are United States (U.S) Customary units, unless otherwise noted.

## **2.0 FIELD INVESTIGATION AND TESTING**

A total of seven shallow hand auger borings, HA-15-001 through HA-15-007 were conducted within freeway fill embankment on 06/25/2015 and 06/26/2015 along the proposed MBGR alignments. Descriptions of the subsurface soils encountered are presented in Table 1.

The subsurface data for proposed concrete barriers was developed during the DPGR preparation for this project. A total of five shallow hand auger borings, HA-13-001 through HA-13-005 were conducted on 11/18/2013 along the proposed barrier alignments. Descriptions of the subsurface soils encountered are presented in Table 2.

The soil borings were advanced up to seven feet below the existing ground surface utilizing a hand auger. No Laboratory testing of soil or rock samples was conducted.

The approximate boring locations are shown on Figures 1 through 6.

## **3.0 GEOTECHNICAL CONDITIONS**

The following sections describe the geotechnical characteristics of the project sites that may influence design and construction.

### **3.1 Stability of Existing Slopes**

The slopes adjacent to most of the proposed barriers are inclined as steep as two horizontal to one vertical (2:1). Field reconnaissance revealed that the slopes exhibit satisfactory long-term performance. Therefore, no slope stability analysis has been conducted for the existing slopes.

### **3.2 Soil**

The project features are underlain by embankment fill. The embankment fill primarily consists of silty sand with variable amounts of gravel estimated to be medium dense.

### **3.3 Ground Water**

The groundwater table is located at a significant depth relative to the proposed construction and consequently is not anticipated to impact the project.

### **3.4 Erosion**

Existing slopes appear stable against erosion. However it is anticipated that in some areas slopes will be graded during construction. Newly graded slopes will be subject to erosion.

### **3.5 Seismic Hazards**

The proposed project features will not be adversely impacted by seismic events.

### **3.6 Surface Water**

Permanent surface water bodies do not exist in proximity to the project features. Urban storm runoff and landscape irrigation runoff are the primary sources of surface water in proximity to project features.

### **3.7 Site Conditions**

#### **A. Proposed Metal Beam Guard Rails**

##### Location 1 Eastbound SR-78, Stations 95+25 to 103+50

The proposed MBGR is located at the edge of the freeway embankment close to the top of the descending fill slope. The slope is inclined as steep as two horizontal to one vertical (2:1). The height of the slope is approximately 20 feet and it is well vegetated and performing well. The site is underlain by engineered fill predominantly comprised of clayey sand with gravel.

##### Location 3 Eastbound SR-78, Station 157+25 to 163+24

The proposed MBGR is located at the edge of the freeway embankment close to the top of the descending fill slope. The slope is inclined as steep as two horizontal to one vertical (2:1). The

height of the slope is approximately 40 feet and it is well vegetated and performing well. The site is underlain by engineered fill predominantly comprised of silty sand with gravel.

Location 4 Eastbound SR-78, Station 417+00 to 436+00

The proposed MBGR is located at the edge of the freeway embankment close to the top of the descending fill slope. The slope is inclined as steep as two horizontal to one vertical (2:1). The height of the slope is approximately 45 feet and it is well vegetated and performing well. The site is underlain by engineered fill predominantly comprised of silty sand with gravel.

**B. Proposed Concrete Barriers**

Location 2, Eastbound SR-78, Station 133+80 to 145+20

The proposed concrete barrier is located at the edge of the freeway embankment close to the top of the descending fill slope. The slope is inclined as steep as two horizontal to one vertical (2:1), although according to the cross sections, between stations 137+60 and 139+20 the existing slope is steeper than 2:1 and shoulder backing is less than three feet (3 ft). The height of the slope is approximately 30 feet and it is well vegetated and performing well. The site is underlain by engineered fill predominantly comprised of silty sand with gravel.

Location 5, Eastbound SR-78, Station 455+40 to 486+76

The proposed concrete barrier is located at the edge of the freeway embankment close to the top of the descending fill slope. Along the alignment of the concrete barrier the slope is inclined mostly as steep as two horizontal to one vertical (2:1), however in some sections the slope is steeper. The height of the slope is approximately between 10 feet and 50 feet. The slope is well vegetated and performing well. The site is underlain by engineered fill predominantly comprised of silty sand with gravel.

**4.0 GEOTECHNICAL ANALYSIS AND DESIGN**

The following sections describe the geotechnical analyses, parameters, and design criteria for concrete barriers that should be utilized by project designers in the continued development of the project.

The proposed concrete barriers will replace existing metal beam guardrails. The recommendations for the concrete barrier types in this report are on the basis of cross sections, field observations of the slope geometry and conditions at each barrier location. At areas where three feet (3 ft.) or more of level shoulder backing exists between the barrier and a descending slope inclined no steeper than 2:1 a Type 60 barrier is recommended. At locations with less

than three feet (3 ft) shoulder backing, and or slopes inclined steeper than 2:1, it may be necessary to construct the concrete barriers utilizing Type 60 Modified concrete barrier. A Type 60 modified concrete barrier is similar to a Caltrans Standard Plan Concrete Barrier Type 60 Section B (sheet A76B), except that an embedment depth may be necessary to provide sufficient lateral resistance to forces that will act on the barrier. An illustrative sketch of a Type 60 modified concrete barrier is provided in Figure 7.

The recommended concrete barriers are presented in the Table 3.

## **5.0 RECOMMENDATIONS**

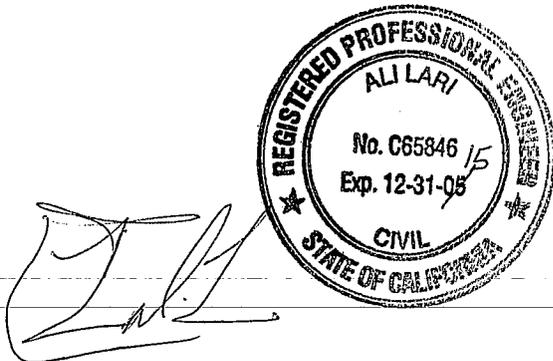
- The design of concrete barriers should follow the design criteria presented in Section 4.0 of this report.
- Appropriate erosion control measures should be implemented to protect the newly graded slope faces.
- Concentrated surface water should not be allowed to pond behind the concrete barriers. Surface water should be contained by appropriate drainage improvements.
- Concentrated runoff should not be directed to drain over the slopes.
- The on-site soils may generally be excavated with conventional equipment.
- The subsurface condition is suitable to drill for MBGR posts.

## **6.0 ACTUAL VS. REPORTED SITE CONDITIONS**

The characterizations of geotechnical conditions along the project alignment and presented in this report are based on the review of the design information provided, proposed project features, as-built plans, geologic maps, geologic literature, archival reports, exploration by OGDS2, and laboratory testing. The evaluations and recommendations contained in this report are based on the information discovered and data gathered. If conditions are encountered during the project that appear to differ from the conditions conveyed in this report, or if construction difficulties related to soil conditions are encountered, a representative of OGDS2 Branch D should be consulted to assist with the assessment of the prevailing geotechnical conditions and to assist in formulating appropriate strategies to facilitate project completion.

Should project design features vary significantly from those described in this report an updated GDR should be prepared by OGDS2 Branch D to address the geotechnical considerations related to those features.

Our Office will be available for further assistance as needed. Should you have any questions, please call Ali Lari at (858) 467-6922.



Ali Lari, PE

Transportation Engineer (Civil)  
Office of Geotechnical Design-South2  
Branch-D

A handwritten signature of Brian Hinman in black ink.

Brian Hinman, P.E.

Senior Transportation Engineer  
(Civil)  
Office of Geotechnical Design-  
South2, Branch-D

**ATTACHMENTS:**

- Figures 1-6: Project Layout Plans
- Figure 7: Type 60 Modified Concrete Barrier
- Table 1: Subsurface Soil Descriptions for MBGR
- Table 2: Subsurface Soil Descriptions for Concrete Barrier
- Table 3: Concrete Barrier Type

**CC:**

Art Padilla  
Abbas Abghari  
Shawn Wei  
Mike Dispenzieri  
<http://10.160.173.158/>  
District Construction RE Pending File

District Materials Engineer  
Office Chief, OGDS2  
Branch Chief, Branch D, OGDS2  
Project Engineer  
Geotechnical Archive  
[RE\\_Pending\\_File@dot.ca.gov](mailto:RE_Pending_File@dot.ca.gov)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	78	0.0/R16.5		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	No.	DATE
	12/31/15	
STATE OF CALIFORNIA CIVIL		

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTE:**  
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**SAN DIEGO**



Aproximate PM 1.21  
 Sta 95+25 "SD-78"  
 BEG REMOVE DIKE  
 Beg C DIKE

A1+ IN-LINE TEMINAL SYSTEM

Sta 96+00 "SD-78"  
 BEG MGS  
 BEG REMOVE MBGR  
 END TYPE C DIKE  
 BEG TYPE F DIKE

Sta 96+33 "SD-78"  
 Beg REMOVE MBGR

Sta 97+11 "SD-78"  
 END REMOVE MBGR  
 EXISTING TYPE E DIKE

Sta 99+11 "SD-78"  
 END REMOVE DIKE  
 END TYPE F DIKE

Sta 103+50 "SD-78"  
 END MGS  
 END ANCHOR ASSEMBLY (TYPE SFT)

LEGEND:

BORING LOCATION

SCALE: 1" = 50'

FIGURE 1

LOCATION 1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**TRAFFIC PROJECT DEVELOPMENT**  
 FUNCTIONAL SUPERVISOR: RICHARD ESTRADA  
 CALCULATED/DESIGNED BY: MIKE DISPENZIERI  
 CHECKED BY: MIKE DISPENZIERI  
 REVISOR BY: MIKE DISPENZIERI  
 DATE REVISOR: MIKE DISPENZIERI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC PROJECT DEVELOPMENT

REVISOR BY  
 DATE

DESIGNED BY  
 CHECKED BY

FUNCTIONAL SUPERVISOR  
 RICHARD ESTRADA

DESIGNED BY  
 CHECKED BY

FUNCTIONAL SUPERVISOR  
 RICHARD ESTRADA

DESIGNED BY  
 CHECKED BY

**NOTE:**  
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 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**SAN DIEGO**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	78	0.0/R16.5		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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Approximate PM 1.94  
 Sta 133+80 "SD-78"  
 Beg REMOVE DIKE  
 END EXISTING E DIKE  
 Beg EXISTING F DIKE

Sta 134+00 "SD-78"  
 Beg REMOVE MBGR  
 Beg CONCRETE BARRIER  
 END EXISTING C DIKE  
 BEG EXISTING F DIKE

Sta 138+28 "SD-78"  
 END REMOVE DIKE  
 END EXISTING F DIKE

Sta 145+20 "SD-78"  
 END REMOVE MBGR  
 END CONCRETE BARRIER

LEGEND:  
 BORING LOCATION

FIGURE 2  
 LOCATION 2

**NOTE:**

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**SAN DIEGO**



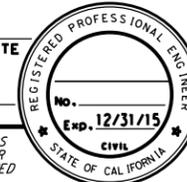
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	78	0.0/R16.5		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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Approximate PM 2,39  
Sta 157+25 "SD-78"  
REMOVE F DIKE  
Beg C DIKE

Sta 158+00"SD-78"  
A/I IN-LINE TERMINAL SYSTEM

Sta 158+00"SD-78"  
END EXISTING F DIKE  
Beg MGS  
Beg F DIKE  
END C DIKE

Sta 162+64.7 "SD-78"  
Beg REMOVE EXISTING MBGR

Sta 00+24.45 "SD-78"  
END F DIKE  
END MGS  
Beg TYPE 60 BARRIER TO  
TYPE 50 BARRIER TRANSITION BLOCK

Sta 163+24.45 "SD-78"  
END REMOVE F DIKE  
END REMOVE MBGR  
END TYPE 60 BARRIER TO  
TYPE 50 BARRIER TRANSITION BLOCK

LEGEND:

BORING LOCATION

FIGURE 3  
LOCATION 3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC PROJECT DEVELOPMENT  
 FUNCTIONAL SUPERVISOR  
 RICHARD ESTRADA  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 MIKE DISPENZIERI  
 REVISOR BY  
 DATE REVISOR



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	78	0.0/R16.5		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

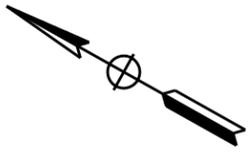
  

REGISTERED PROFESSIONAL ENGINEER	No.
Exp. 12/31/15	CIVIL
STATE OF CALIFORNIA	

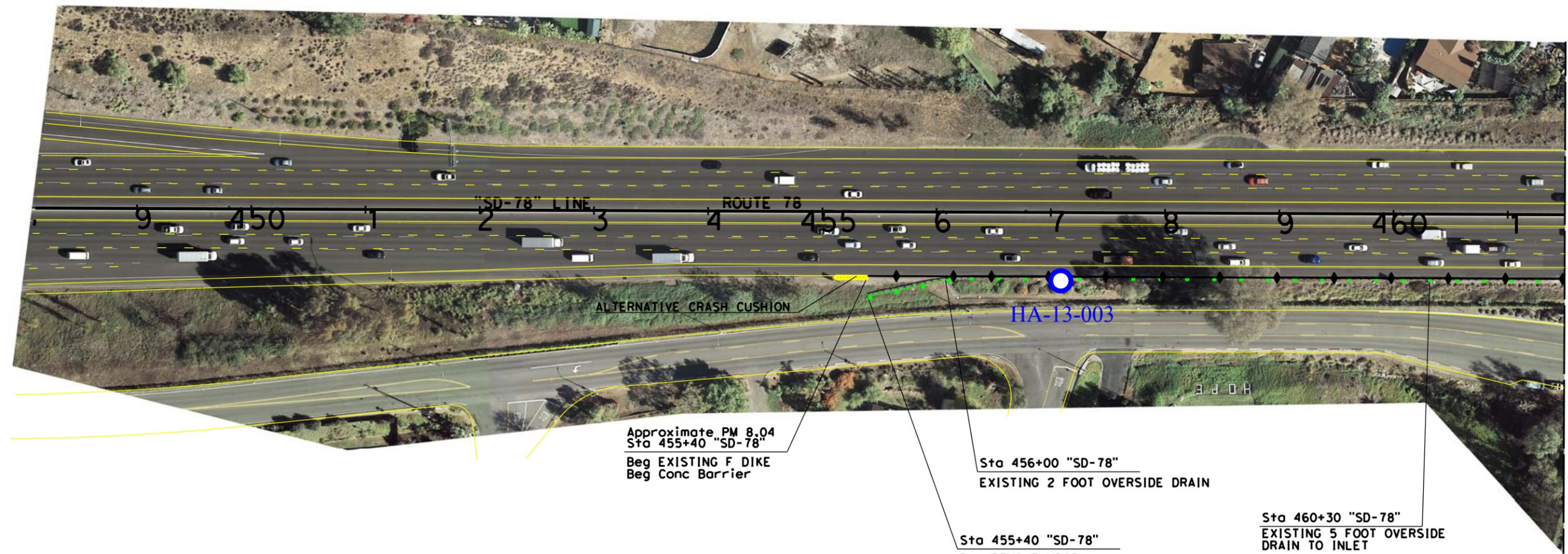
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**SAN DIEGO**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC PROJECT DEVELOPMENT  
 FUNCTIONAL SUPERVISOR  
 RICHARD ESTRADA  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 MIKE DISPENZIERI  
 REVISED BY  
 DATE REVISED



Approximate PM 8.04  
 Sta 455+40 "SD-78"  
 Beg EXISTING F DIKE  
 Beg Conc Barrier

Sta 456+00 "SD-78"  
 EXISTING 2 FOOT OVERSIDE DRAIN

Sta 455+40 "SD-78"  
 Beg REMOVE MBGR

Sta 460+30 "SD-78"  
 EXISTING 5 FOOT OVERSIDE DRAIN TO INLET

LEGEND:  
 BORING LOCATION

FIGURE 5  
 LOCATION 5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC PROJECT DEVELOPMENT

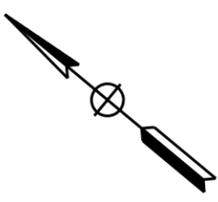
FUNCTIONAL SUPERVISOR  
 RICHARD ESTRADA

CALCULATED-DRAWN BY  
 CHECKED BY  
 MIKE DISPENZIERI

REVISED BY  
 DATE REVISED

**NOTE:**  
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

**SAN DIEGO**

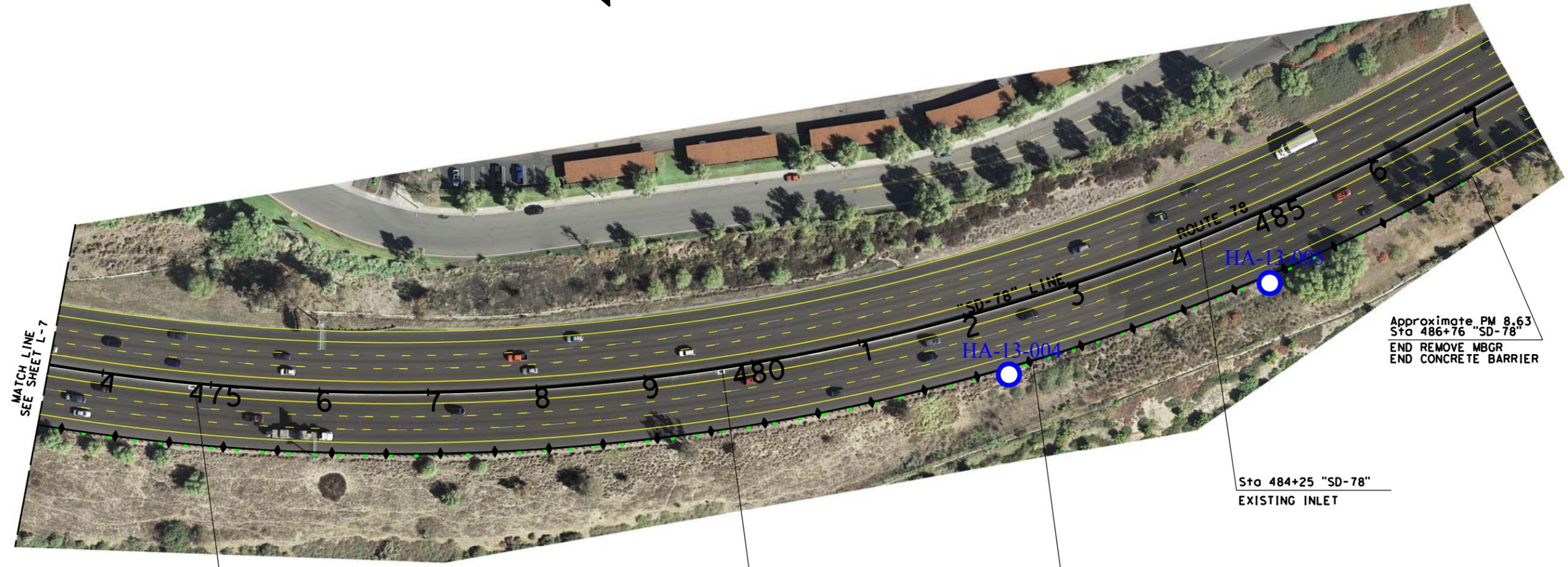


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	78	0.0/R16.5		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

PLANS APPROVAL DATE \_\_\_\_\_

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Approximate PM 8.41  
 Sta 474+85 "SD-78"  
 EXISTING INLET

Sta 479+75 "SD-78"  
 EXISTING INLET

Sta 482+45 "SD-78"  
 BEG EXISTING TYPE F DIKE

Sta 484+25 "SD-78"  
 EXISTING INLET

Approximate PM 8.63  
 Sta 486+76 "SD-78"  
 END REMOVE MBGR  
 END CONCRETE BARRIER

LEGEND:  
 BORING LOCATION

FIGURE 6  
 LOCATION 5

**Table 1**

**Subsurface Soil Description**  
**For MBGR**

<b>Location</b>	<b>Boring Number</b>	<b>Boring Date</b>	<b>Soil Description</b>
<b>1</b>	<b>HA-15-001</b>	06/25/2015	CLAYEY SAND with GRAVEL (SC), light brown, fine SAND and GRAVEL, LOW PLASTICITY. At 7 feet: End of drilling. (Fill).
<b>1</b>	<b>HA-15-002</b>	06/25/2015	SILTY SAND with GRAVEL (SM), light brown, fine to coarse SAND and fine GRAVEL At 3 feet: SILT (ML), light blue. At 4 feet: End of drilling. (Fill).
<b>3</b>	<b>HA 15-003</b>	06/25/2015	SILTY SAND with GRAVEL (SM), light brown. At 4 feet: Could not advance due to rock. Move down slope about 4 feet and restart rilling. At 4 feet: SILT (ML), hard. At 7 feet: End of Drilling. (Fill).
<b>3</b>	<b>HA 15 004</b>	06/25/2015	SILT (ML), light blue At 7 feet: End of drilling. (Fill).
<b>4</b>	<b>HA-15-005</b>	06/26/2015	SILTY SAND with GRAVEL (SM), brown/black, fine SAND and GRAVEL. At 6.5 feet hit rock. At 6.5 feet: End of drilling.
<b>4</b>	<b>HA-15-006</b>	06/26/2015	SILTY SAND (SM), brown, fine SAND At 7 feet: End of drilling.
<b>4</b>	<b>HA-15-007</b>	06/26/2015	SILTY SAND (SM), brown, fine to coarse SAND. At 6.5 feet hit rock. At 6.5 feet: End of drilling.

**Table 2**

**Subsurface Soil Description**  
**For Concrete Barrier**

<b>Location</b>	<b>Boring Number</b>	<b>Boring Date</b>	<b>Soil Description</b>
<b>2</b>	<b>HA-13-001</b>	11/18/2013	AC/AB At 1 foot: SILTY SAND (SM), light brown, fine grained. At 3 feet: SILT with SAND (ML), light gray, fine SAND. At 7 feet: End of drilling. (Fill).
<b>2</b>	<b>HA-13-002</b>	11/18/2013	AC/AB At 1 foot: SILTY SAND with GRAVEL (SM), reddish brown, fine grained. At 3 feet: SILT with fine SAND (ML), light brown. At 4 feet: End of drilling. (Fill).
<b>5</b>	<b>HA 13-003</b>	11/18/2013	AC/AB At 1 foot: SILTY SAND with GRAVEL (SM), dark brown. At 3 feet: poorly graded SAND (SP), dark gray, fine to coarse. At 4 feet: encountered rock, End of Drilling. (Fill).
<b>5</b>	<b>HA 13 004</b>	11/18/2013	AC/AB At 1 foot: SILTY SAND, (SM), light brown, fine grained. At 2 feet: poorly graded SAND (SP), light brown, fine to coarse. At 3 feet: End of drilling. (Cut).
<b>5</b>	<b>HA-13-005</b>	11/18/2013	AC/AB At 1 foot: SILTY SAND (SM), light brown. At 2 feet SILT (ML), light brown. At 4 feet: End of drilling.

**Table 3**  
**Concrete Barriers Types**

<b>Location</b>	<b>Begin Station</b>	<b>End Station</b>	<b>Barrier Type</b>
<b>2</b>	<b>134+00</b>	<b>137+60</b>	<b>Type 60</b>
<b>2</b>	<b>137+60</b>	<b>139+20</b>	<b>Modified Type 60</b>
<b>2</b>	<b>139+20</b>	<b>145+20</b>	<b>Type 60</b>
<b>5</b>	<b>455+40</b>	<b>486+76</b>	<b>Type 60</b>

Note: For Modified Type 60 Concrete Barrier See Figure 7.

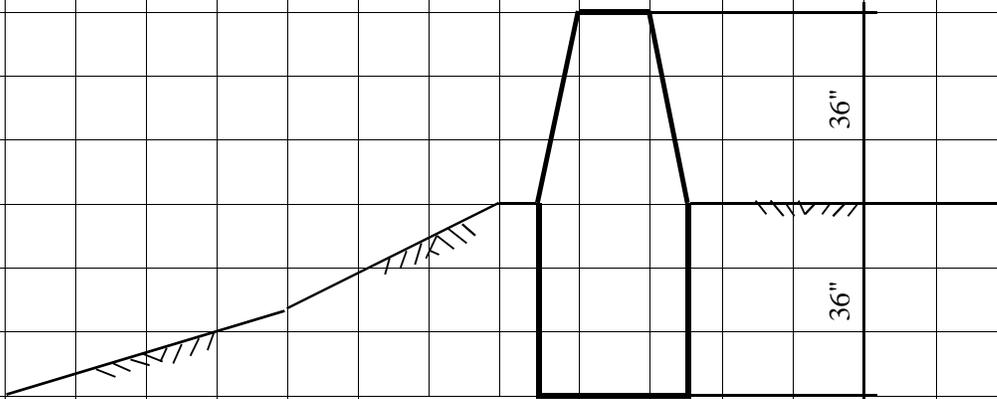
Geotechnical Design Report

For Concrete Barriers/MBGR at SR-78

EA: 11-41570/EFIS: 1113000008

**Modified Concrete Barrier**

**Type 60**



**Barrier at Slope Top Hinge**

Station: 137+60 to 139+20

**FIGURE 7**



1391 Engineer Street • Vista • California 92081-8840  
Phone: (760) 597-3100 • Fax: (760) 598-8757  
[www.vid-h2o.org](http://www.vid-h2o.org)

December 15, 2015

Mike Dispenzieri  
State of California  
Department of Transportation (Caltrans), District 11  
4050 Taylor Street  
San Diego, CA 92110

Re: Your Project Number: 1113000008; Your Contract No. 11-415704

Dear Mr. Dispenzieri:

The Vista Irrigation District (District) is in receipt of your correspondence dated November 9, 2015, regarding water availability for the Caltrans District 11 Project No. 1113000008 at various locations in our District on State Route 78 (SR-78) between Interstate 5 (I-5) and Interstate 15 (I-15) (post miles 0.0 to R16.5).

The District has no objections with providing water for construction purposes for the above mentioned Project. The California Department of Transportation (Caltrans) and/or the construction contractor working on behalf of Caltrans will be responsible for all costs associated with obtaining temporary construction meter(s) and water usage during construction. The temporary construction meter applications are available at our Engineering Department front counter. There is an existing Caltrans 2" meter (Account No. 9912-050) located at Highway 78 and Mar Vista Drive.

Water availability is subject to all District requirements in effect at the time of application. The Vista Irrigation District has implemented mandatory water conservation measures associated with a Water Supply Response Program Level 2 condition. Customers must water landscaping on assigned days (Monday and Friday for public agencies) before 8 AM or after 8 PM, eliminate irrigation run-off, not wash down driveways or sidewalks, only use re-circulated water to operate fountains and repair leaks within 48 hours of being notified by the District. For more details, please visit [www.vid-h2o.org](http://www.vid-h2o.org) or call us at (760) 597-3160.

Additionally, during a Level 2 condition, turf/plant establishment is allowed if required by a landscape permit or necessary for erosion control, landscape renovation after a natural disaster or establishment, repair or renovation of public use fields for schools or parks. New turf/plantings are exempt from irrigation limitations regarding assigned days and times for a period of thirty (30) days following the date of planting. After the thirty (30) days, turf/plants must be watered on assigned days and in compliance with all other mandatory water use restrictions.

Should you have any questions, please feel free to contact Brett Hodgkiss, Administrative Services Manager, at (760) 597-3162 or Jay Vittachi, Engineering Specialist II, at (760) 597-3122.

Sincerely,

Al Ducusin  
Engineering Department Manager

Board of Directors

Jo MacKenzie, *President*  
Paul E. Dorey  
Marty Miller  
Randy L. Reznicek  
Richard L. Vásquez

Administrative Staff

Roy A. Coox  
*General Manager*  
Eldon L. Boone  
*Assistant General Manager / Treasurer*  
Lisa R. Soto  
*Board Secretary*  
Joel D. Kuperberg  
*General Counsel*



# CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

December 14, 2014

Mr. Mike Dispenzieri, P.E.  
District 11 Traffic Project Development  
4050 Taylor Street  
San Diego, CA 92110 / MS 230

RE: Construction Meter for Caltrans SR-78 Concrete Barrier, Guardrail, Striping, and Lighting Project

Dear Mr. Dispenzieri:

We have received your request dated November 24, 2015 regarding the available water supply from the City of Oceanside Water Utilities to serve the SR-78 Concrete Barrier, Guardrail, Striping, and Lighting Project in San Diego County. The City of Oceanside currently has adequate potable water supply to meet the approximate demand of 23,000 gallons of water during the estimated 180 day construction period that is anticipated to start December 2016. Currently, there is no available recycled water in the vicinity of the Project.

The City reserves the right to uphold the requirements of the drought response levels established by the City Council and implemented based on California's latest drought situation.

If you have any questions, please contact Mabel Uyeda at (760) 435-5819 or me at (760) 435-5827.

Sincerely,

Cari Dale  
Water Utilities Director

Cc: Mabel Uyeda, Assistant Engineer

# Memorandum

To : Michael Dispenzieri (MS 230)  
Project Engineer  
Traffic Project Development

Date: September 14, 2015

File: 11-SD-78  
PM 0.0/R16.5  
EA 41570x  
EFIS 11130000081

From : DEPARTMENT OF TRANSPORTATION - DISTRICT 11  
PAVEMENT ENGINEERING SECTION

Subject: BASE STRUCTURAL SECTION RECOMMENDATION

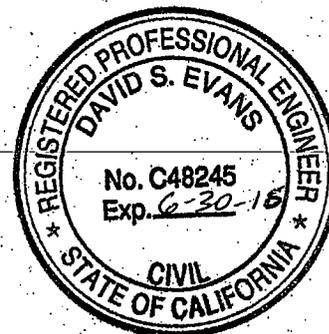
Per your request dated September 11, 2015, the following structural section is furnished for the base material under the Type 60 concrete barrier.

Place 0.50' Compacted Aggregate Base – Class 2

If you have questions with regards to this memorandum, please contact me at 619-954-8568



David Evans  
District Pavement Engineer  
District 11 Materials Lab



cc: A Ochoa (DME)  
R Cather (MS 330)  
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**WARRANTY BOND  
FOR TRAFFIC STRIPE AND PAVEMENT MARKING TAPE (WARRANTY)**

TM-D11-0001 (REV 2016.08.17)

CONTRACT NUMBER			BOND NUMBER		BUSINESS NAME OF PRINCIPAL	
<b>LOCATION</b>	DISTRICT	COUNTY	ROUTE	POST MILE	PREMIUM AMOUNT	EFFECTIVE DATE

**INSTRUCTIONS TO SURETY COMPANY**

**On the Surety Bond, under the "Description of Attached Document," on the line labeled "Title or Type of Document," the Surety Company shall list the description of WARRANTY BOND FOR TRAFFIC STRIPE AND PAVEMENT MARKING TAPE (WARRANTY) and shall also include the CONTRACT NUMBER.**

**KNOW ALL PERSONS BY THESE PRESENTS,**

**THAT WHEREAS,** The State of California (State), acting by and through the Department of Transportation, has awarded to \_\_\_\_\_ ("Contractor"), a contract ("Contract") for the construction work described as follows:

\_\_\_\_\_  
\_\_\_\_\_; and

**WHEREAS,** The Contractor is required by the Contract to arrange for a warranty bond ("this Bond"), in connection with traffic stripe and pavement marking tape items of work bid as warranty items under said Contract, guaranteeing the faithful performance of the tape-related warranty obligations under the Contract; and

**WHEREAS,** The Contract allows either the Contractor or tape manufacturer ("Tape Manufacturer") to act as Principal for this Bond; and

**WHEREAS,** If agreed between the Contractor and Tape Manufacturer, the Tape Manufacturer shall act as the Principal; otherwise, the Contractor shall act as Principal; and

**WHEREAS,** The \_\_\_\_\_ shall be known forthwith as Principal; and  
*(Indicate one: Business Name of "Contractor" or Business Name of "Tape Manufacturer")*

**WHEREAS,** The Principal is required by the Contract, sections 3-1.09 and 84-7, to warrant the completed traffic stripe and pavement marking tape items of work bid as warranty items under said Contract, and to furnish a warranty bond guaranteeing the faithful performance of the tape-related warranty obligations for the periods, of five (5) years for traffic stripe and of two (2) years for pavement marking, as described under the Contract thereof.

**NOW, THEREFORE,** We, the undersigned Principal and \_\_\_\_\_  
\_\_\_\_\_ ("Surety"), a Surety Company qualified and duly licensed to do business in the State of California, are held and firmly bound unto the State in the penal sum of \_\_\_\_\_ Dollars No/100-dollars (\$ \_\_\_\_\_), lawful money of the United States of America, to be paid to the said State or its certain attorney, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH:**

1. The Contract documents are incorporated by reference herein.
2. That if the above bound Principal, or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in connection with warranty work for traffic stripe and pavement marking tape items of work bid as warranty

items in the foregoing Contract, including any and all amendments, supplements, and alterations thereto made as therein provided in connection with warranty work for traffic stripe and pavement marking tape items of work bid as warranty items, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the State, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise, it shall be and remain in full force and virtue, it being expressly understood and agreed that the liability of Surety for any and all claims hereunder shall in no event exceed the Bonded Sum.

3. Surety's obligations under this Bond shall include the Principal's obligation to pay its subcontractors, suppliers, and mechanics for warranty-related work or supply.
4. This Bond shall cover the cost to perform required warranty work, but shall not cover any damages of the type specified to be covered by any professional liability insurance, whether or not such insurance is provided in an amount sufficient to cover such damages.
5. Whenever Principal shall be, and is declared by the State to be, in default with respect to its warranty obligations under the Contract Documents, provided that the State is not then in material default thereunder, Surety shall promptly take one of the following actions with the consent of the State:
  - 5.1. Arrange for Principal to perform and complete the warranty obligations of the Contract
  - 5.2. Complete the warranty work in accordance with the terms and conditions of the Contract documents then in effect, through its agents or through independent contractors
  - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the State for a contract for performance and completion of the warranty work (as defined in the Contract), through a procurement process approved by the State, arrange for a contract to be prepared for execution by the State and the contractor selected with the State's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract
  - 5.4. Waive its right to perform and complete, arrange for completion or obtain a new contractor; and then with reasonable promptness under the circumstances:
    - 5.4.1. After investigation, determine the amount for which it may be liable to the State and, as soon as practicable after the amount is determined, tender payment therefore to the State, or
    - 5.4.2. Deny liability in whole or in part and notify the State citing reasons therefore.
6. If Surety does not proceed as provided in Paragraph 5 with reasonable promptness, Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the State to Surety demanding that Surety perform its obligations under this Bond, and the State shall be entitled to enforce any remedy available to the State. If Surety proceeds as provided in Subparagraph 5.4, and the State refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice the State shall be entitled to enforce any remedy available to the State.
7. After the State has terminated the Principal's right to complete the Contract, and if Surety elects to act under Subparagraph 5.1, 5.2, or 5.3 above, then the responsibilities of Surety to the State shall not be greater than those of the Principal under the warranty requirements under the Contract, and the responsibilities of the State to Surety shall not be greater than those of the State under the warranty requirements under the Contract. To the limit of the Bonded Sum, but subject to commitment of the unpaid balance of the mitigation costs and damages in connection with securing the faithful performance of the tape-related warranty obligations under the Contract, Surety is obligated without duplication for:
  - 7.1. The responsibilities of the Principal for correction of defective work
  - 7.2. Actual damages, including additional legal, design professional and delay costs resulting from Principal's default, and resulting from the actions or failure to act of Surety under Paragraph 5.
8. The said Surety agrees that no change, extension of time, alterations, additions, omissions or other modifications of the terms of the Contract, or in the work to be performed with respect to the project, or in the specifications or plans, or any change or modification of any terms of payment or extension of time for any payment pertaining or relating to the Contract, or any recession or attempted recession of the Contract, or this Bond, or any conditions precedent or subsequent in this Bond attempting to limit the right of recovery of claimants otherwise entitled to recover under this Bond, or any fraud practiced by any other person other than the claimant seeking to recover from this Bond, shall in any way affect its obligations on this Bond, and it does hereby waive notice of such changes, extension of time, alterations, additions, omissions or other modifications.

BUSINESS NAME OF PRINCIPAL		DATE
BUSINESS ADDRESS OF PRINCIPAL		BUSINESS PHONE
CITY	STATE	ZIP CODE
PRINT OR TYPE NAME AND TITLE OF AUTHORIZED SIGNATURE		AUTHORIZED SIGNATURE

NOTE: Signatures of those executing for the Principal must be properly acknowledged.

**CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT**

State of California

County of \_\_\_\_\_

On \_\_\_\_\_, before me, a notary public in and for the county and state aforesaid, personally  
 (Date)

appeared \_\_\_\_\_  
 who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the instrument and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature(s) on the instrument, the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal:

\_\_\_\_\_  
 Signature of Notary Public (SEAL)

BUSINESS NAME OF SURETY		DATE
BUSINESS ADDRESS OF SURETY		BUSINESS PHONE
CITY	STATE	ZIP CODE

***I certify (or declare) under penalty of perjury that I have executed the foregoing bond under an unrevoked power of attorney. Executed on (date) \_\_\_\_\_ in (CITY) \_\_\_\_\_ (STATE) \_\_\_\_\_ under the laws of the State of California.***

PRINT OR TYPE NAME OF ATTORNEY-IN-FACT FOR SURETY	SIGNATURE OF ATTORNEY-IN-FACT FOR SURETY
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NOTE: Signatures of those executing for the Surety must be properly acknowledged, and a Power of Attorney attached.

**CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT**

State of California

County of \_\_\_\_\_

On \_\_\_\_\_, before me, a notary public in and for the county and state aforesaid, personally  
(Date)

appeared \_\_\_\_\_  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the instrument and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature(s) on the instrument, the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal:

\_\_\_\_\_  
*Signature of Notary Public* (SEAL)