

BVCI Project: 161060 File: 40.1000

MEMORANDUM

To: Jose Lopez, Project Manager, SDG&E

From: Jing Liang
Date: 2/22/2010

Re: Scour and Erosion Protection at Creek Crossings

RESPONSE TO MITIGATION MEASURE, H.8a: BURY POWER LINE BELOW 100-YEAR SCOUR DEPTH.

The I-8 Underground Segment of the transmission line crosses two existing creeks on Alpine Blvd. One is located at Sta. 175+75 to 176+75 where the duct bank crosses the creek via Jack & Bore method. Alpine Boulevard was constructed to cross the existing creek via concrete box culverts, with entrance slab and exit slab. The existing entrance and exit concrete slabs outside of the box culvert were constructed to protect erosion and scour from flooding and drainage. Please see attached sketch showing the existing conditions with the proposed duct bank installation. No additional mitigation measure is required for erosion and scour protection at this location.

Another creek crossing is located at Sta. 301+50 to 303+00 on Alpine Blvd. Alpine Boulevard was constructed to cross the existing creek via a concrete bridge. The duct banks for both circuits will cross the existing creek via bridge attachment. Engineering design calls for attaching the proposed duct banks on both sides of the existing bridge under the pedestrian sidewalks. The bottom of the duct bank will match existing deck, and there is not impact to flood control capacity. This design was reviewed and approved by County of San Diego, Department of Public Work. No additional mitigation measure is required for scour and erosion protection at this location.

Attachment --- ALPINE BLVD. CREEK CROSSING

Bottom of Existing Creek San Diego Gas & Electric Company Sunrise Powerlink Project I-8 Underground Segment Scour & Erosion at Creek Crossings Existing Concrete Slab at Entrance Existing Wing Wall -Proposed Duct Bank Circuit TL23054 Alpine Blvd. West Bound **Existing Box Culvert** SECTION VIEW LONGITUDINAL VIEW Location: Station 175+75 to 176+75 (TL 23055) Station 175+70 to 176+70 (TL 23054) Alpine Blvd. (Creek Crossing) Roadway (Alpine Blvd.) Bottom of Existing Box Culvert Existing Concrete Guard Wall Proposed Duct Bank of Existing Box Culvert NOT TO SCALE NOT TO SCALE East Bound of Existing Box Culvert Top of Road Surface Concrete Slab Proposed Duct Bank Circuit TL23055 Existing Wing Wall at Entrance Existing Concrete Slab B&V Project: 161060 File: 161060.40.1000 Date: 2/18/2010 Bottom of Existing Creek