Data Request 93:

As presented in the AFC, there is no outlet structure at the end of the channel to equally dissipate flows across the width at the channel mouth. Please explain and provide revised drawings, as needed, to show how the channelized flows would be converted to sheet flow at the channel outlet.

Response:

The drawings that were presented in the AFC have been revised to show the proposed outlet structure. Please see page S-8 of Data Response No. 45 and Attachment DR-45, sheets C1, C4, and C7, included in the Supplemental Data Request Responses submitted to the CEC on August 18, 2008. These sheets show the conceptual location and details of the outlet structure.

Data Request 94:

On Figure C-4, the southern half of the "outlet" slopes toward the center of the channel, forcing flows to concentrate rather than dissipate. Please explain and provide revised drawings, as needed, to show how this proposed channel configuration returns channelized flow to sheet flow at the channel outlet.

Response:

The channel grades have been revised at the "outlet" to produce a sheet flow condition. Please see the revised sheet C4 included in Attachment DR-45 of the Supplemental Data Request Responses, submitted to the CEC on August 18, 2008.

Data Request 95:

The right (eastern) bank of the artificial channel intercepts a natural swale that likely conveys water during wet periods. This artificial barrier would cause flows to accumulate, concentrate, and flow down the eastern edge of the structure. This condition would likely cause excessive erosion along the edge of the structure and deposition of sediment on the neighboring property. Please explain and provide revised drawings, as needed, to show what erosion/sedimentation control measures would be implemented in this area.

Response:

The applicant does not believe that the re-aligned channel intercepts a natural swale. To the east of the re-aligned channel, from the 90 degree bend on the south east corner to the area where the channel begins to widen, is the property line of the Beacon site. The property line is located on a slight berm (not swale) and the expected runoff from the Beacon property will drain directly into the re-aligned channel. The expected runoff to the east of the Beacon property will continue along its current path of travel and drain into the "outlet" or transition area of the channel. Any expected runoff that drains to the small triangular area in the south east (located between the new channel and the property line in the SE corner) will drain into the channel at a location where rock slope protection exists, and no additional erosion control measures are proposed.