

August 8th, 2019

Calpipe Security Bollards
19440 S Dominguez Hills Drive
Rancho Dominguez, CA, 90220
Attn: Greg Davidson

Re: K12 Engineered Bollard Design and Analysis-Mesa Temple
10" Deep Mount Single Removable Bollard

This letter briefly summarizes my engineering review and analysis of K12 bollard designs. I have Received and reviewed engineering drawings entitled:

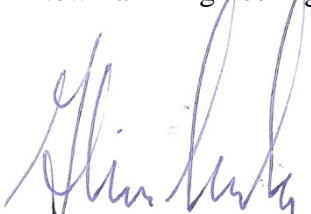
- PDTDS22R- 10" Deep Mount Removable K12/M50 Bollards, Single Bollard

In addition, I performed engineering calculations including equivalent static Finite Element analysis for the fixed deep mount single bollard and reinforced foundation to be installed for Mesa Temple facility. The assumptions, analysis and results of this analysis are contained in an accompanying Engineering Report. A copy of this report will be made available upon request. The engineering analysis for the retractable 10" PDTDS22R bollard was performed for placing bollards in accordance with the foundation configuration shown on the contract drawings.

Based on my engineering analyses and the analyses and details provided, the designs and engineering details as shown in the drawings referenced in this letter and accompanying calculation analysis are suitable to meet or exceed K-12 crash ratings, meaning that they are capable of arresting a 15,000 medium duty truck traveling 50 mph.

We trust that this will address all the concerns.

Newmark Engineering, P.C.



Glenn Newmark, P.E.
President

