

de Boer

General Engineers

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Proposal for a multi-species bat shelter including design, construction, and installation for the El Monte site.

Scope of work:

1. Survey the site and start the design process.
2. Design the shelter/bat hotel based on the existing elevation and site survey including input from Drew Stokes field biologist of birds and mammals department and department of bioservices, San Diego Natural History Museum, as well as staff of the Earth Discovery Institute.
3. Source and acquire necessary materials. Construct the shelter/bat hotel at our facility.
4. Transport, excavate for foundation, and install the structure per design.
5. Clean up and leave the site as found.

Description of the structure

The bat structure is a 7' x 7' welded steel framed house with cement coated high density structural foam walls with an insulated corrugated steel hip roof. The outside walls have panels based on a design that we have installed on many bridges and bridge piers for CalTrans. The entire structure is supported at a height 17' on a steel vertical support. The bottom of the structure is open and has bat panels on the inside. The bottom edges are sloped to discourage bird nesting. On two opposing sides there are openings leading to a chamber in the center. The combination of bat panels and internal chambers will accommodate both crevice and cavity roosting bats species such as the pallid bat and Townsend's big-eared bat. The roof has an overhang to provide shade and contribute to controlling a constant thermal mass for the panesl.

Cost for design, materials, fabrication, delivery, transportation, equipment for installation, and installation: \$64, 000.