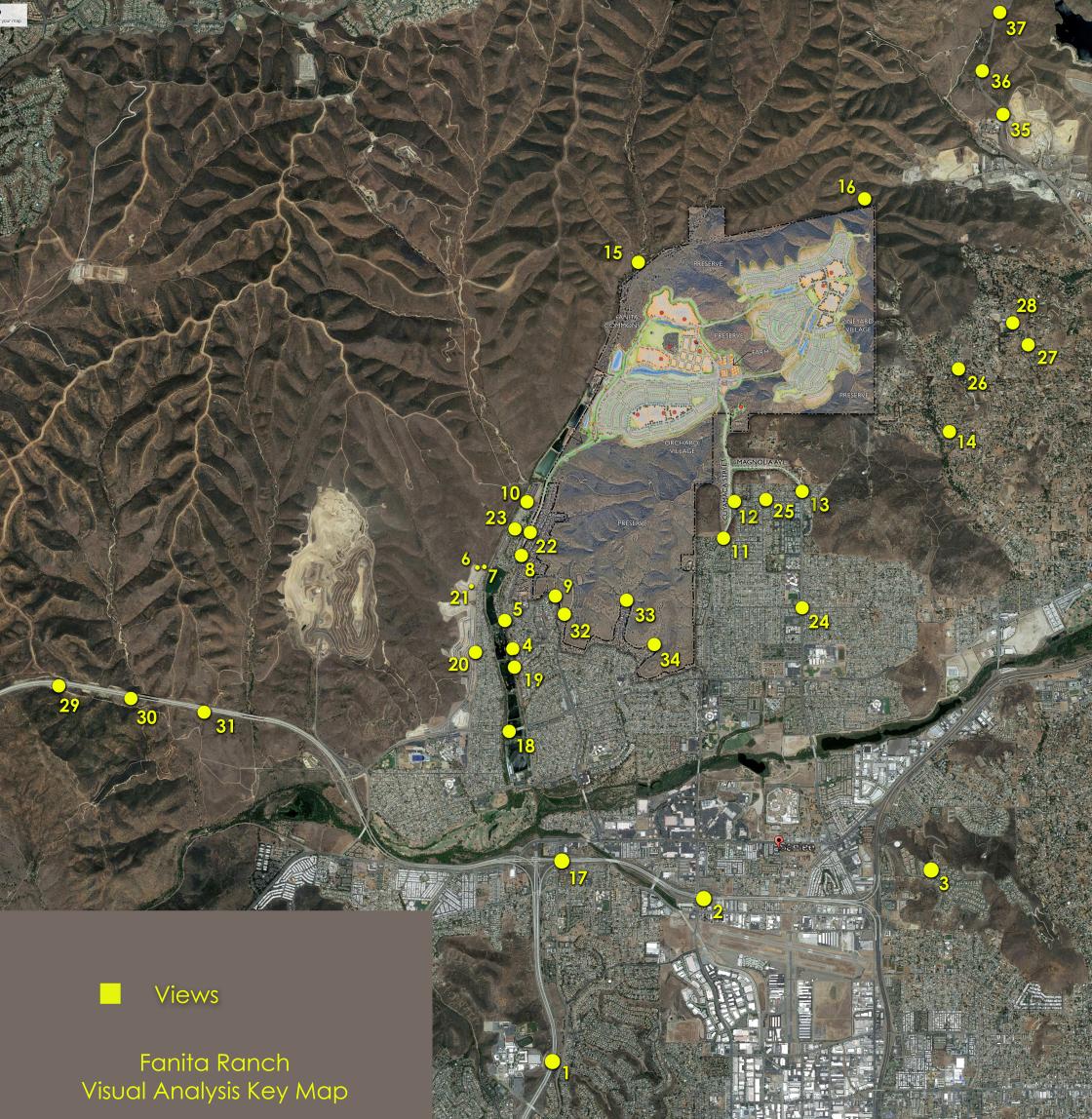
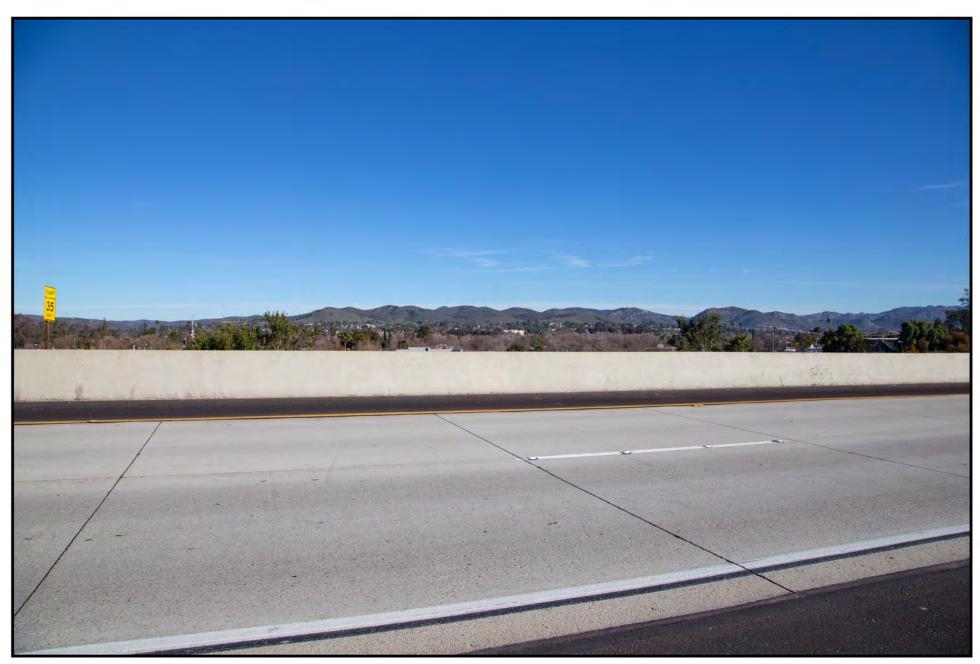
Appendix B. Photographs and Visual Simulations Process

This page intentionally left blank.





View 17 - From eastbound Highway 52

Existing Condition



View 18 - From Mast Blvd bridge over Santee Lakes

Existing Condition





View 19 - From Santee Lakes access road

Existing Condition



View 20 - From Stowe trail below Weston Road

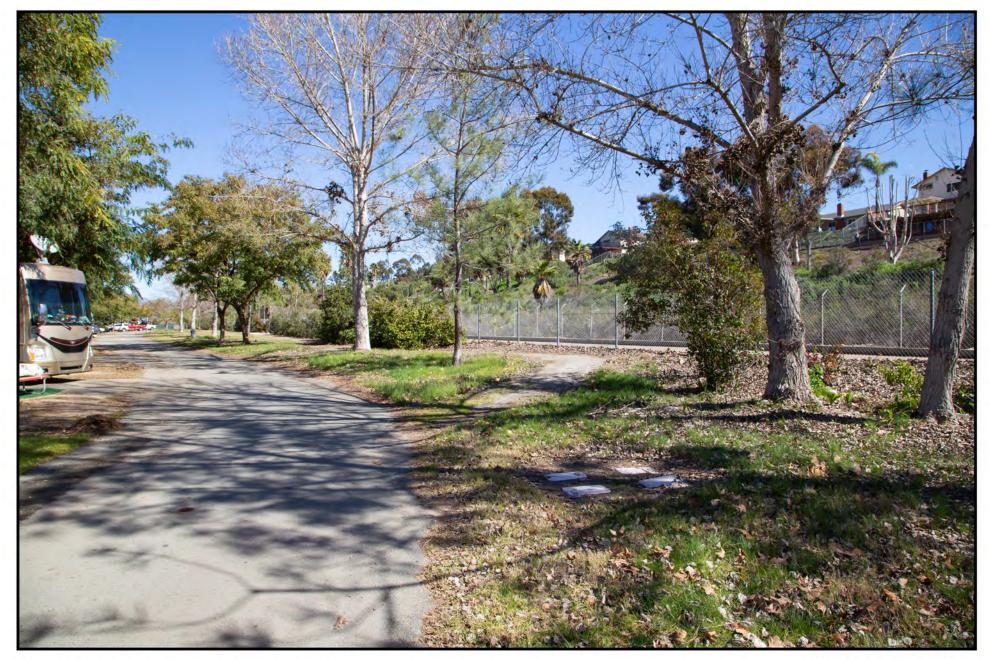
Existing Condition





View 21 - From Trailmark Way

Existing Condition



View 22 - From North end of Santee Lakes campground

Existing Condition





View 23 - From Santee Lakes Recreation Building

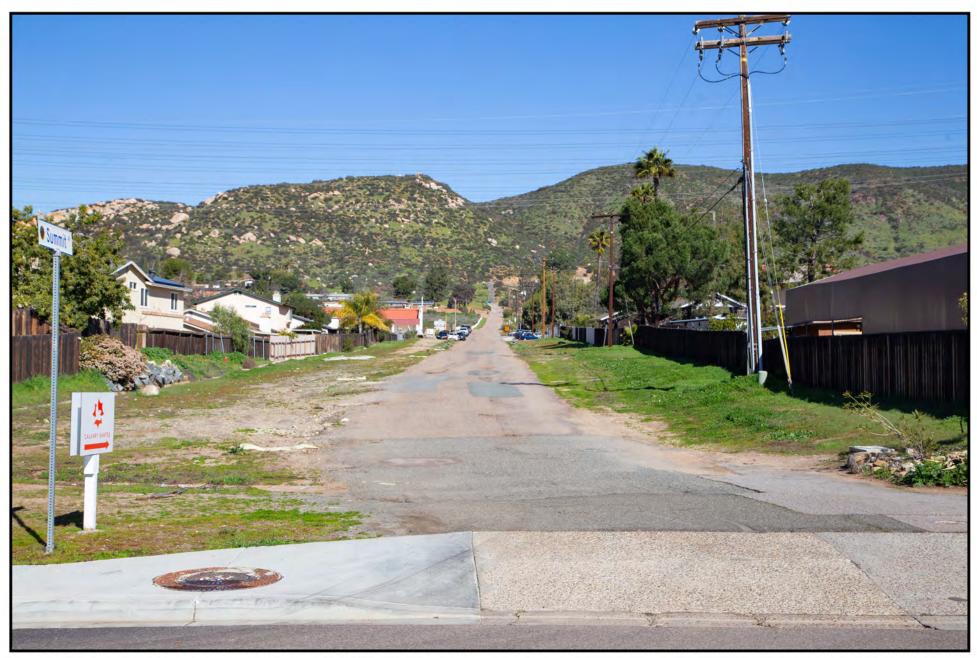
Existing Condition



View 24 - From intersectoin of Magnolia Ave and El Nopal

Existing Condition





View 25 - From Princess Joann Road and Summit Ave (private road)

Existing Condition



View 26 - From Manzanita Rd near Legendale Dr

Existing Condition





View 27 - From Valle Vista Rd near Eucalyptus High School

Existing Condition



View 28 - From Valle Vista Rd near Eucalyptus High School

Existing Condition





View 29 - From eastbound 52 near summit

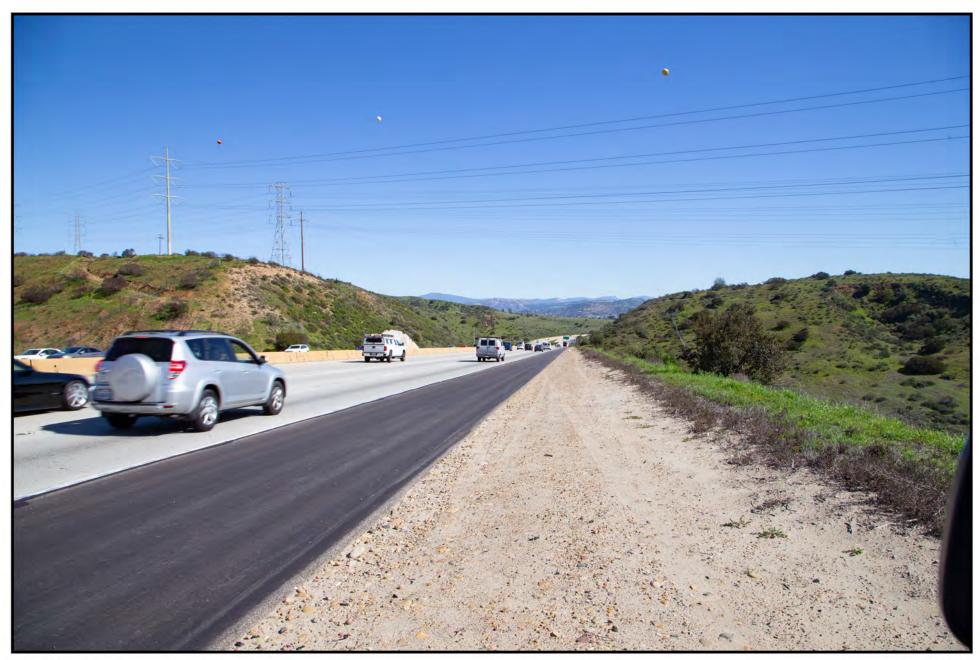
Existing Condition



View 30 - From eastbound 52

Existing Condition





View 31 - From eastbound 52 near summit

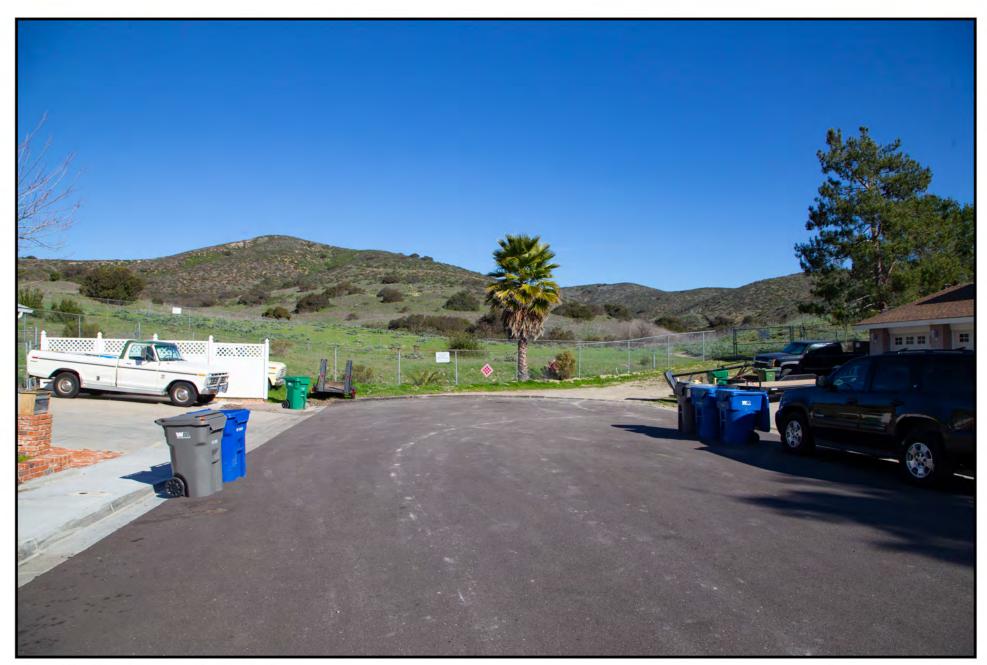
Existing Condition



View 32 - From end of Carlton Hills Road

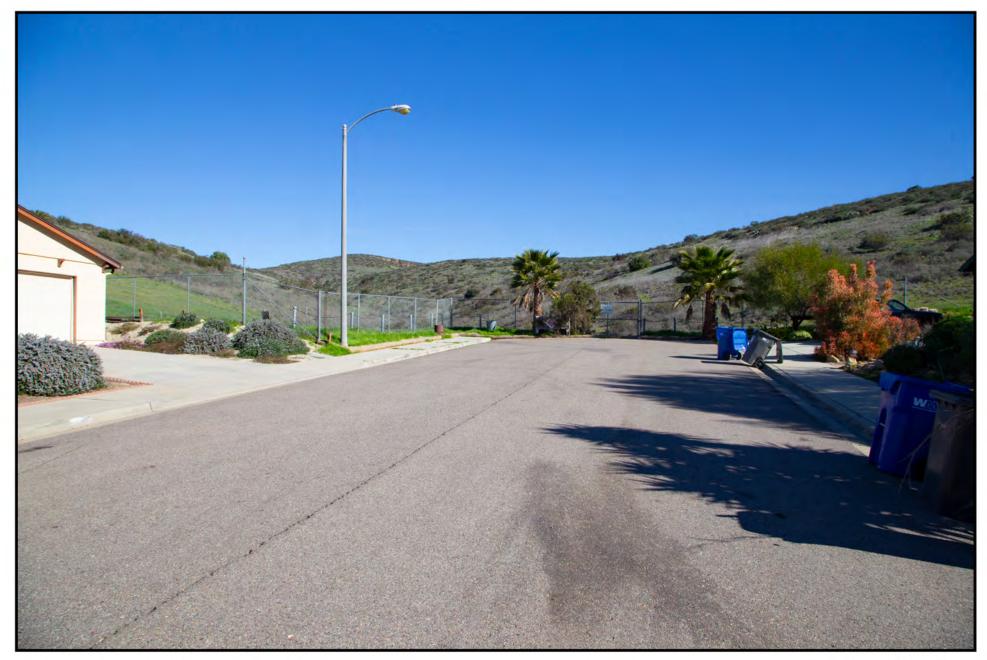
Existing Condition





View 33 - From end of Halberns Blvd

Existing Condition



View 34 - From end of Cecilwood Dr

Existing Condition





View 35 - From southbound Highway 67

Existing Condition



View 36 - From southbound Highway 67

Existing Condition





View 37 - From southbound Highway 67

Existing Condition





### The Process of Creating Accurate Visual Simulations

#### 1. Site Survey & Photography

The first step in the process involves the initial site visitation. With input from the project participants (applicant, planning staff, etc), the critical viewpoints surrounding the project are captured using a high-resolution digital equipment.

The needed views may be few or many depending on the scope of the proposed construction. They should represent the impacts from public view corridors and surrounding areas.

The next critical portion of the site visit is the gathering of Global Positioning System (GPS) data. We utilize survey-quality differential GPS tools. This highly accurate equipment provides coordinate information (horizontal and vertical) for any chosen location to within a meter. During the site visit, critical data is gathered from a variety of positions: photographic locations, existing site features such as curbs, trees, poles, as well as information for surrounding features. These physical elements will appear in the site photos, and the coordinate information for them will be included in the next step, Computer Modeling.

#### 2. Computer Modeling

At the outset of a study, we are provided with a variety of pertinent project information: surveyed topographic information, architectural design files, and details. Through the use of sophisticated computer software, this information is combined together to create an accurate three-dimensional model of the proposed project.

We use several programs for this process. Initially, the drawings received from the project consultants are coordinated in Autocadd. This is an industry-wide application, with a standard file type for cross-discipline use. All of the design information is then ported directly into a 3D architectural modeling program called 3D Studio Max. The proposed project is literally "built" in the computer. All terrain, buildings, and landscape are placed into the model.

This is a sophisticated software package capable of combining the disparate elements we have gathered: site photos, GPS coordinates, and 3D project modeling. It allows us to place a virtual camera at the selected viewpoints, and overlay the model over the photography. Within this view, all the existing surveyed markers also appear. This allows us to double check the accuracy of the placement and scale of the model. For example, a series of palm



trees may have been surveyed during the site visit. Markers for these palms appear in the model and should fall directly over their place in the photo.

The final step at this stage is to create a high-resolution render of the computer model, that is used in the next stage- Compositing. For the rendering, a representation of the sun is used that calculates the actual shade and shadow according to the time and location the photography was taken.

#### 3. Composite Imaging

The final step in the process involves the work of the digital artist. The highresolution rendering is placed over the digitized photograph. It is then composited by selecting the unchanged foreground portions and bringing them in front of the model. Landscape and entourage elements are added to realistically present the project as it will look after completion.

There are some considerations for the use of Visual Analysis images

#### 1. Image Viewing Size

In order to fairly represent the impacts of the project, the viewer must be able to view the images within the right circumstances. Just as looking at Mount Rushmore on a postage stamp doesn't equate to being there, reviewing the images in small format or small prints is not optimal. After some extensive investigation, we have developed a rule of thumb. The image width should be equal to the viewing distance. For example, if the screen is three feet wide, the viewer should be three feet away. Alternatively, a combination of detail cropped images along with overall views can provide the ability to review the project in smaller formats.

#### 2. Project Information

We build a complete computer model based on the information provided by the project team. In many circumstances, the project may be at an early design stage where many decisions have yet to be made. We make assumptions in these cases based on input from the consultants. These early decisions may differ from the ultimate design that is actually constructed.