

**FINAL APPLICATION FOR LICENSE
OF MAJOR UNCONSTRUCTED PROJECT**

**EXHIBIT G
MAP OF THE PROJECT**

**LAKE ELSINORE
ADVANCED PUMPED STORAGE PROJECT
FEDERAL ENERGY REGULATORY COMMISSION
PROJECT NUMBER 14227**

Prepared by

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September 2017

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EXHIBIT G

MAP OF THE PROJECT

As required by 18 CFR 4.41(h), Exhibit G is a map of the project that must conform to the specifications of Sec. 4.39. In addition to the other components of Exhibit G, the applicant must provide the project boundary data in a georeferenced electronic format - such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format. The electronic boundary data must be positionally accurate to + 40 ft, in order to comply with the National Map Accuracy Standards for maps at a 1:24,000 scale (the scale of the USGS quadrangle maps). The electronic Exhibit G data must include a text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.) and the units of measurement (i.e., feet, meters, miles, etc.).

Three sets of the maps must be submitted on CD or other appropriate electronic media. If more than one sheet for the paper maps, is used, the sheets must be numbered consecutively, and each sheet must bear a small insert sketch showing the entire project and indicating that portion of the project depicted on that sheet. Each sheet must contain a minimum of three known reference points. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. If at any time after the application is filed there is any change in the project boundary, the applicant must submit, within a reasonable period 90 days following the completion of project construction, a final Exhibit G showing the extent of such changes. The map must show:

- (1) Location of the project and principal features. The map must show the location of the project as a whole with reference to the affected stream or other body of water and, if possible, to a nearby town or any other permanent monuments or objects, such as roads, transmission lines or other structures, that can be noted on the map and recognized in the field. The map must also show the relative locations and physical interrelationships of the principal project works and other features described under paragraph (b) of this section (Exhibit A).
- (2) Project boundary. The map must show a project boundary enclosing all project works and other features described under paragraph (b) of this section (Exhibit A) that are to be licensed. If accurate survey information is not available at the time the license application is filed, the applicant must so state, and a tentative boundary may be submitted. The boundary must enclose only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources (see paragraph (f) of this section (Exhibit E)). Existing residential, commercial, or other structures may be included within the boundary only to the extent that underlying lands are needed for project purposes (e.g., for flowage, public recreation, shoreline control, or protection of environmental resources). If the boundary is

on land covered by a public survey, ties must be shown on the map at sufficient points to permit accurate platting of the position of the boundary relative to the lines of the public land survey. If the lands are not covered by a public land survey, the best available legal description of the position of the boundary must be provided, including distances and directions from fixed monuments or physical features. The boundary must be described as follows:

(i) Impoundments.

a) The boundary around a project impoundment must be described by one of the following:

1. Contour lines, including the contour elevation (preferred method);
2. Specified courses and distances (metes and bounds);
3. If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or
4. Any combination of the above methods.

b) The boundary must be located no more than 200 feet (horizontal measurement) from the exterior margin of the reservoir, defined by the normal maximum surface elevation, except where deviations may be necessary in describing the boundary according to the above methods or where additional lands are necessary for project purposes, such as public recreation, shoreline control, or protection of environmental resources.

(ii) Continuous features. The boundary around linear (continuous) project features such as access roads, transmission lines, and conduits may be described by specified distances from center lines or offset lines of survey. The width of such corridors must not exceed 200 feet unless good cause is shown for a greater width. Several sections of a continuous feature may be shown on a single sheet with information showing the sequence of contiguous sections.

(iii) Noncontinuous features.

a) The boundary around noncontinuous project works such as dams, spillways, and powerhouses must be described by one of the following:

- (1) Contour lines;
- (2) Specified courses and distances;
- (3) If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or
- (4) Any combination of the above methods.

- b) The boundary must enclose only those lands that are necessary for safe and efficient operation and maintenance of the project or for other specified project purposes, such as public recreation or protection of environmental resources.
- (iv) The project location must include the most current information pertaining to affected federal lands as described under Section 4.81(b)(5).
- (3) Federal lands. Any public lands and reservations of the United States (Federal lands) [see 16 U.S.C. 796 (1) and (2)] that are within the project boundary, such as lands administered by the Forest Service, Bureau of Land Management, or National Park Service, or Indian tribal lands, and the boundaries of those Federal lands, must be identified as such on the map by:
 - (i) Legal subdivisions of a public land survey of the affected area (a protraction of identified township and section lines is sufficient for this purpose); and
 - (ii) The Federal agency, identified by symbol or legend, that maintains or manages each identified subdivision of the public land survey within the project boundary; or
 - (iii) In the absence of a public land survey, the location of the Federal lands according to the distances and directions from fixed monuments or physical features. When a Federal survey monument or a Federal bench mark will be destroyed or rendered unusable by the construction of project works, at least two permanent, marked witness monuments or bench marks must be established at accessible points. The maps show the location (and elevation, for bench marks) of the survey monument or bench mark which will be destroyed or rendered unusable, as well as of the witness monuments or bench marks. Connecting courses and distances from the witness monuments or bench marks to the original must also be shown.
- (4) Non-Federal lands. For those lands within the project boundary not identified under paragraph (h)(3) of this section, the map must identify by legal subdivision:
 - (i) Lands owned in fee by the applicant and lands that the applicant plans to acquire in fee; and
 - (ii) Lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired to be required or to be acquired by easement or lease.

1.0 Map of the Project

Maps are provided to FERC as required above, as part of this filing. Due to the size of the AutoCAD files (nearly 300 MB), these files are provided on electronic media submitted to FERC and available to the public. Nevada Hydro has converted these images to “B” size drawings and to pdf file (itself nearly 40 MB) following this Exhibit G. Maps include the following on 7.5 Minute USGS Topographic base maps:

- C–1 Overall Project
- C–2 North Project Portion
- C–3 South Project Portion
- C–4 Pumped Storage Sites
- C–6 Decker Canyon Facilities

The company is also providing a schematic drawing of the pumped storage facility itself:

- C–8 Hydro Drawing

In addition to the above required drawings, detailed maps showing the entire project may be found in Figure G–1 (Detailed Route Maps) and Figure G–2 (Talega-Escondido 230 kV Line Upgrade). Detailed schematic drawings for the LEAPS facility may be found in Exhibit G–3 (LEAPS Pumped Storage Facility). Detailed siting information on the use of land of the Cleveland National Forest may also be found in Volume 3 of this Application (Collaboration Between the Cleveland National Forest and Nevada Hydro).

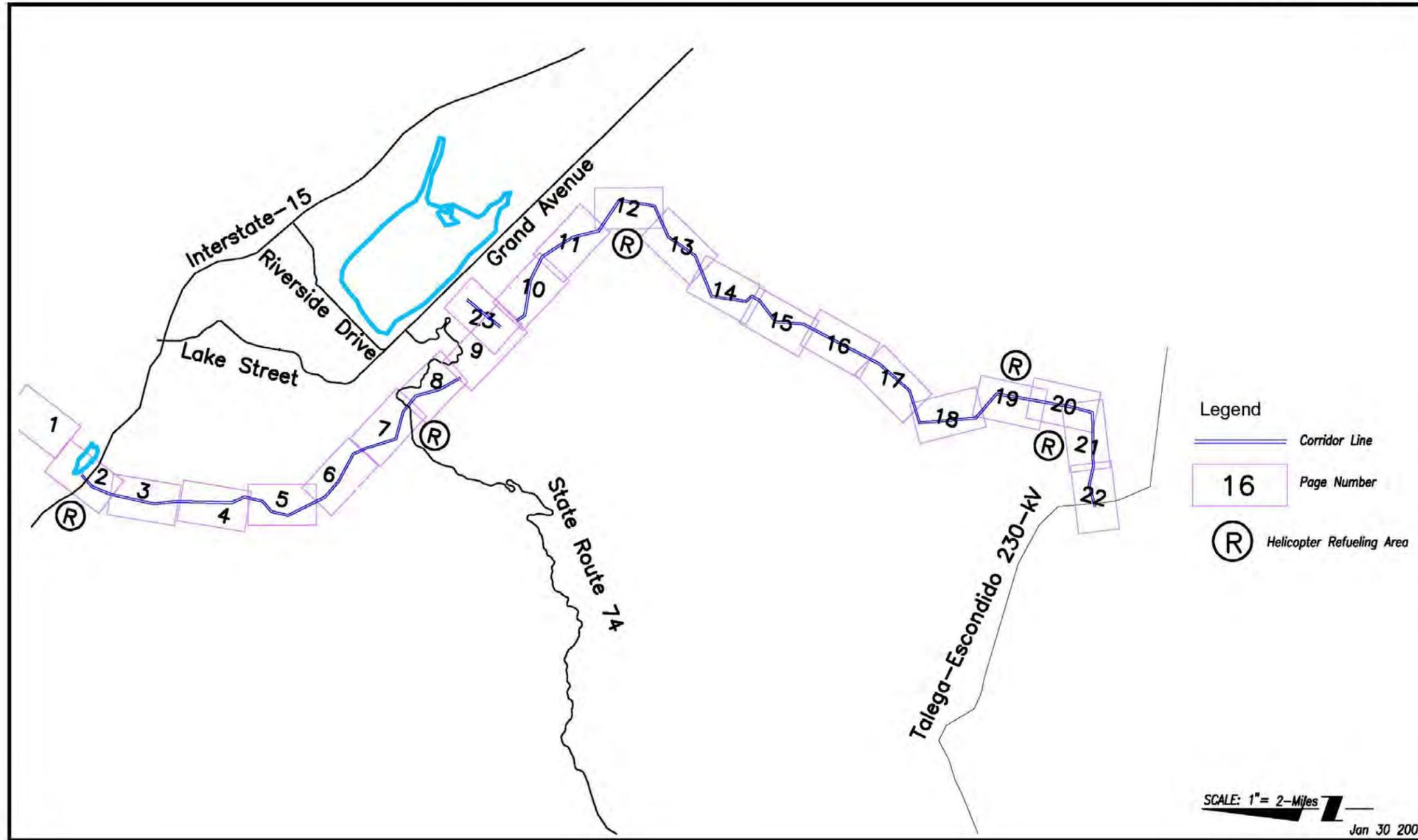


Figure G-1: Lake Elsinore Advanced Pumped Storage Route Map (Index)

Source: The Nevada Hydro Company

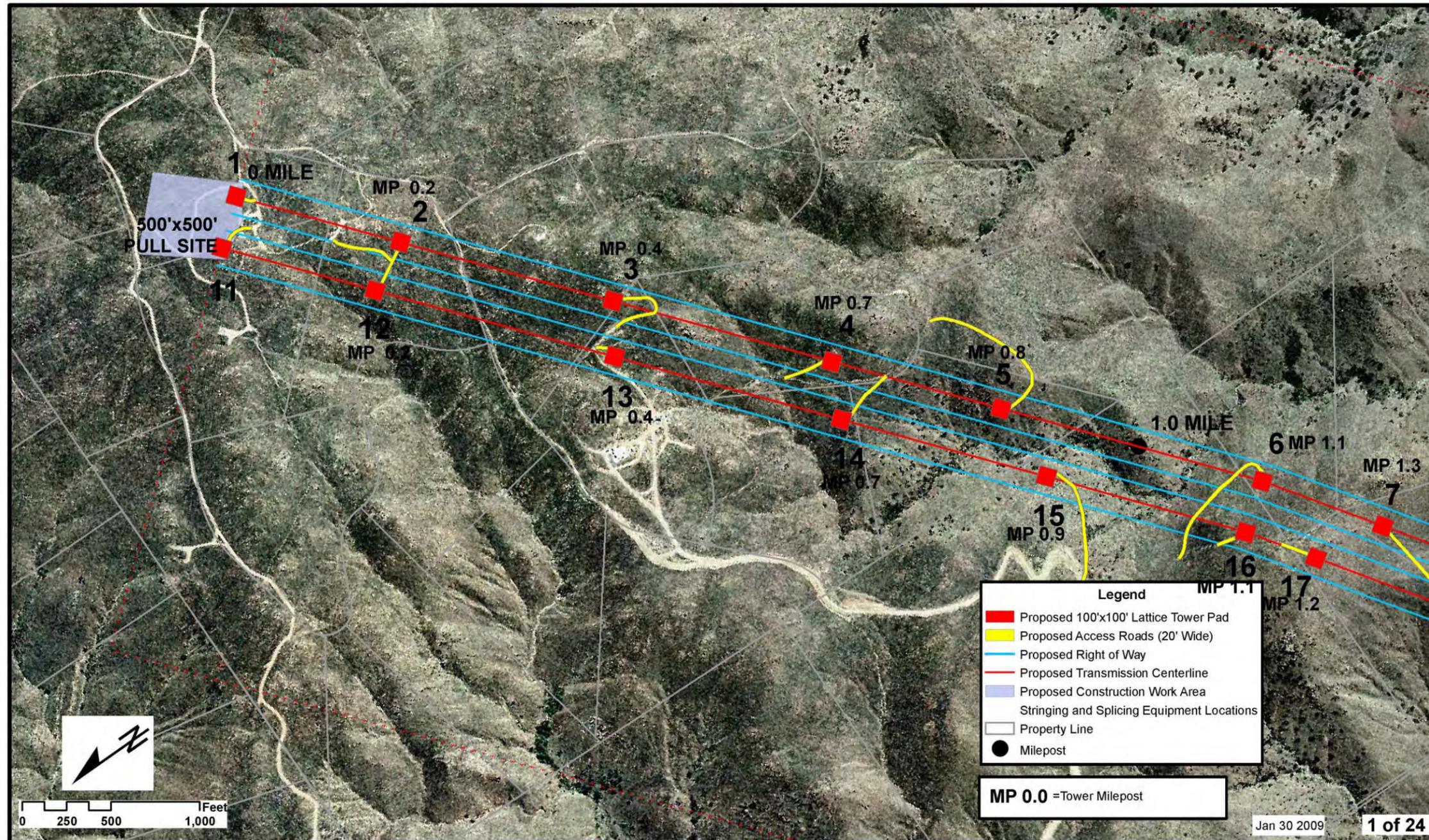


Figure G-1: (1 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

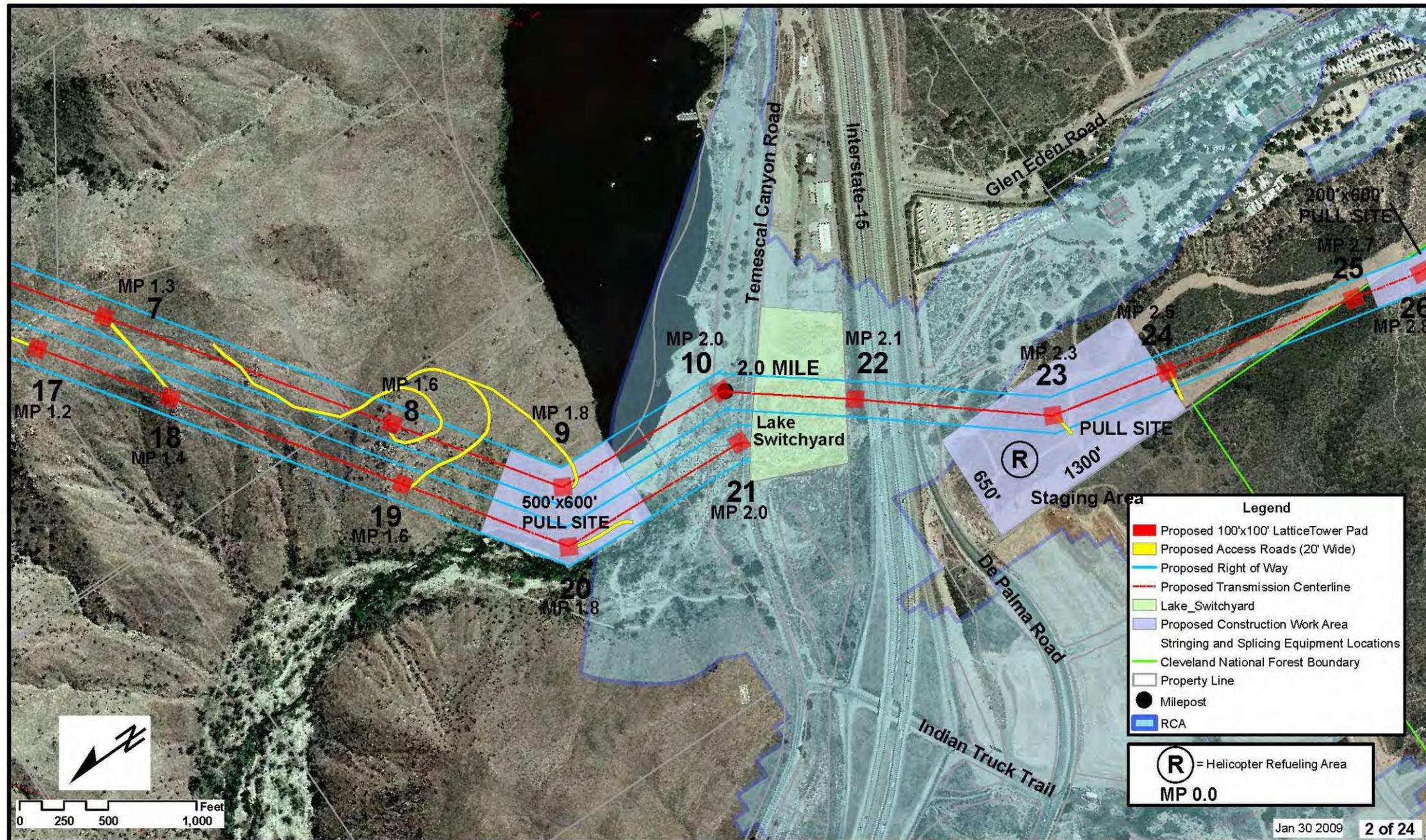


Figure G-1: (2 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

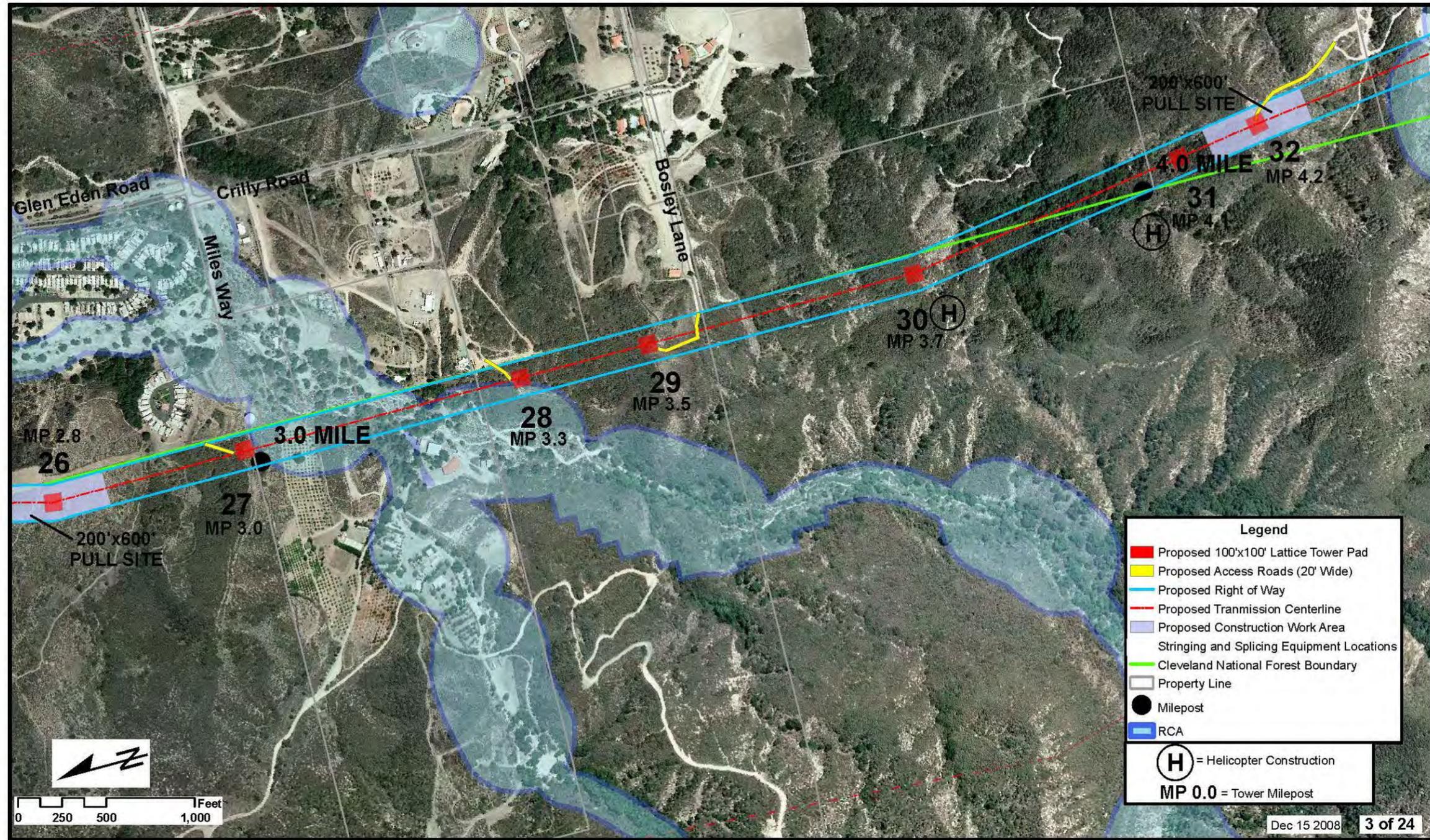


Figure G-1: (3 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

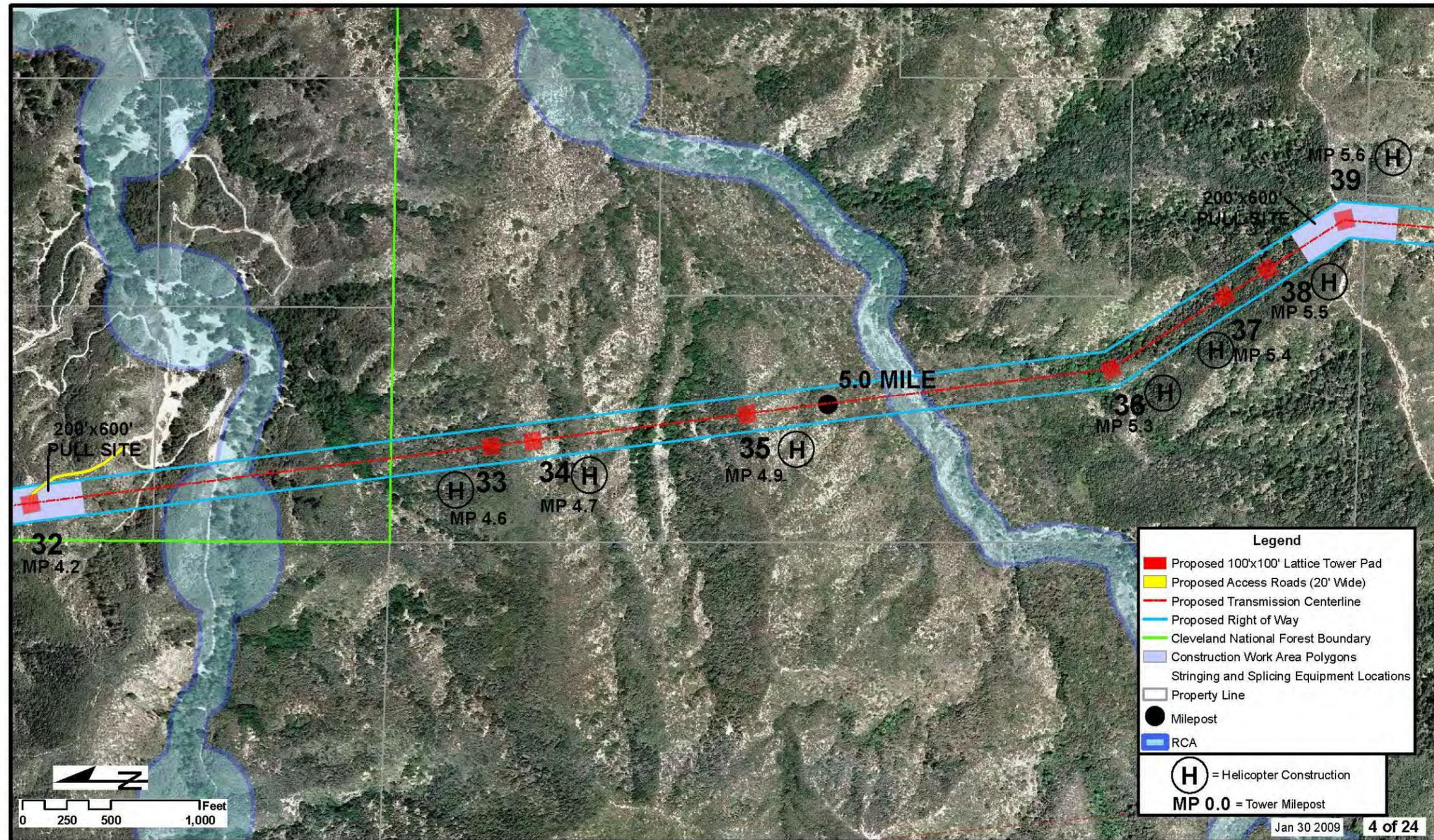


Figure G-1: (4 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company



Figure G-1: (5 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company



Figure G-1: (6 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

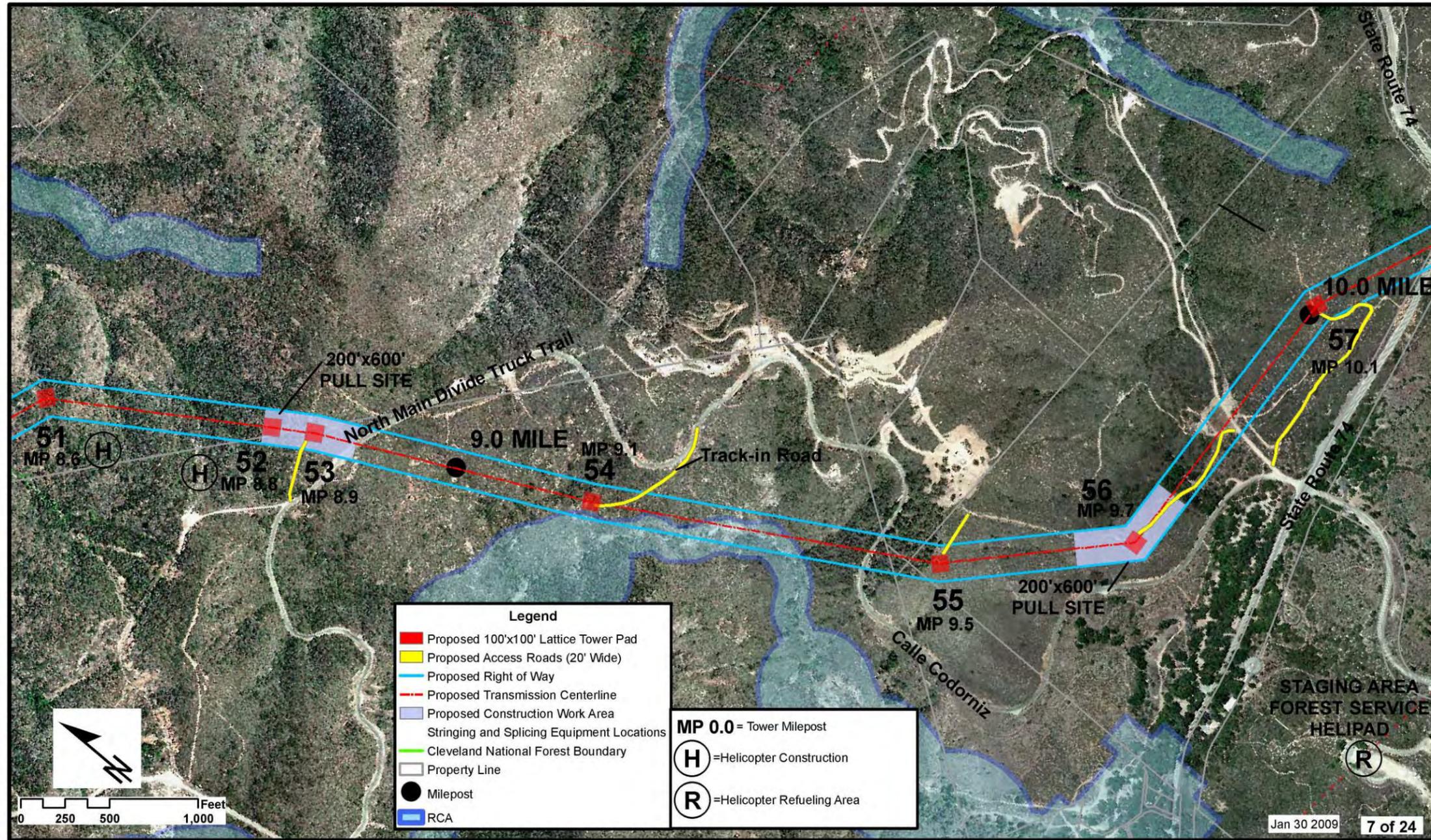


Figure G-1: (7 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

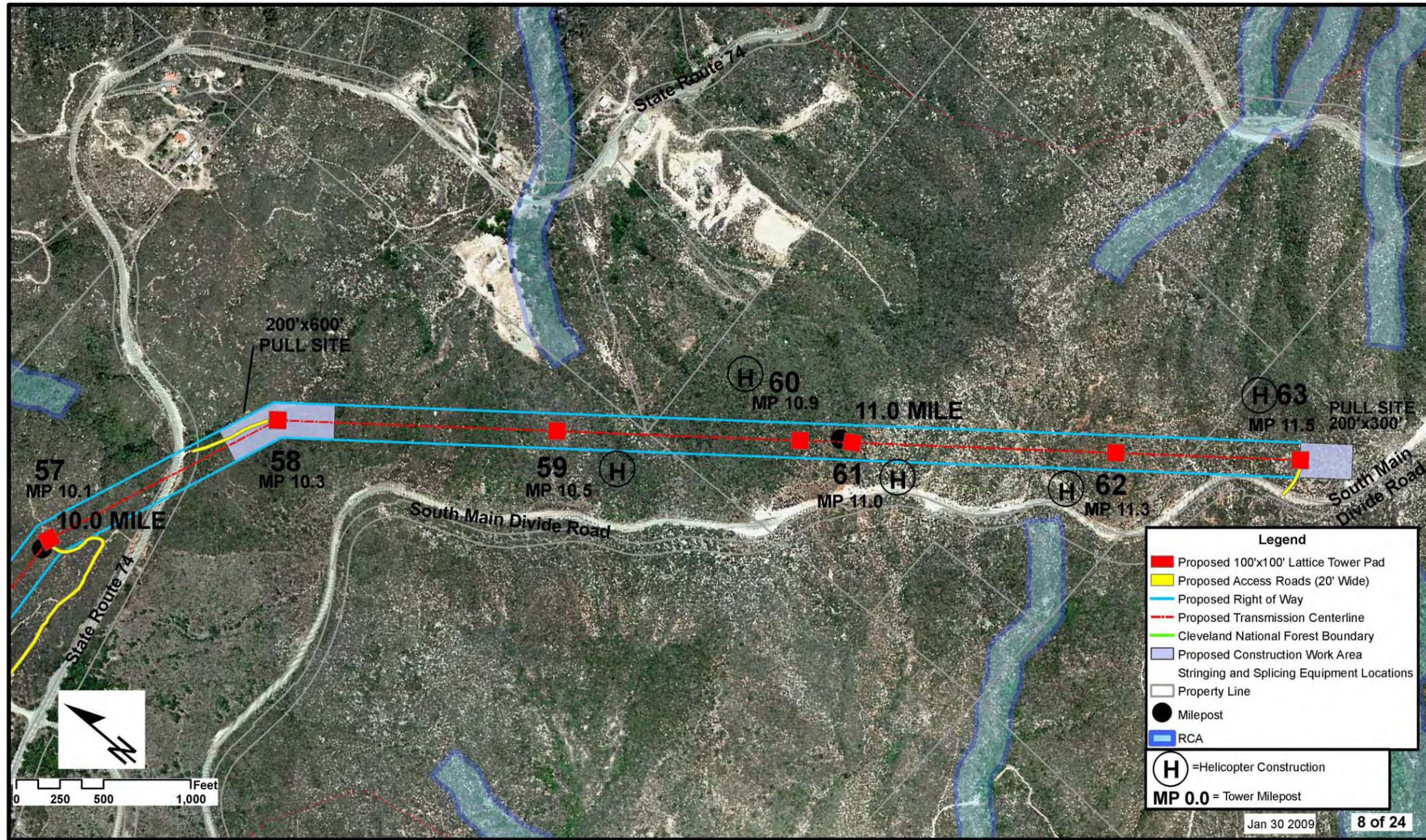


Figure G-1: (8 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

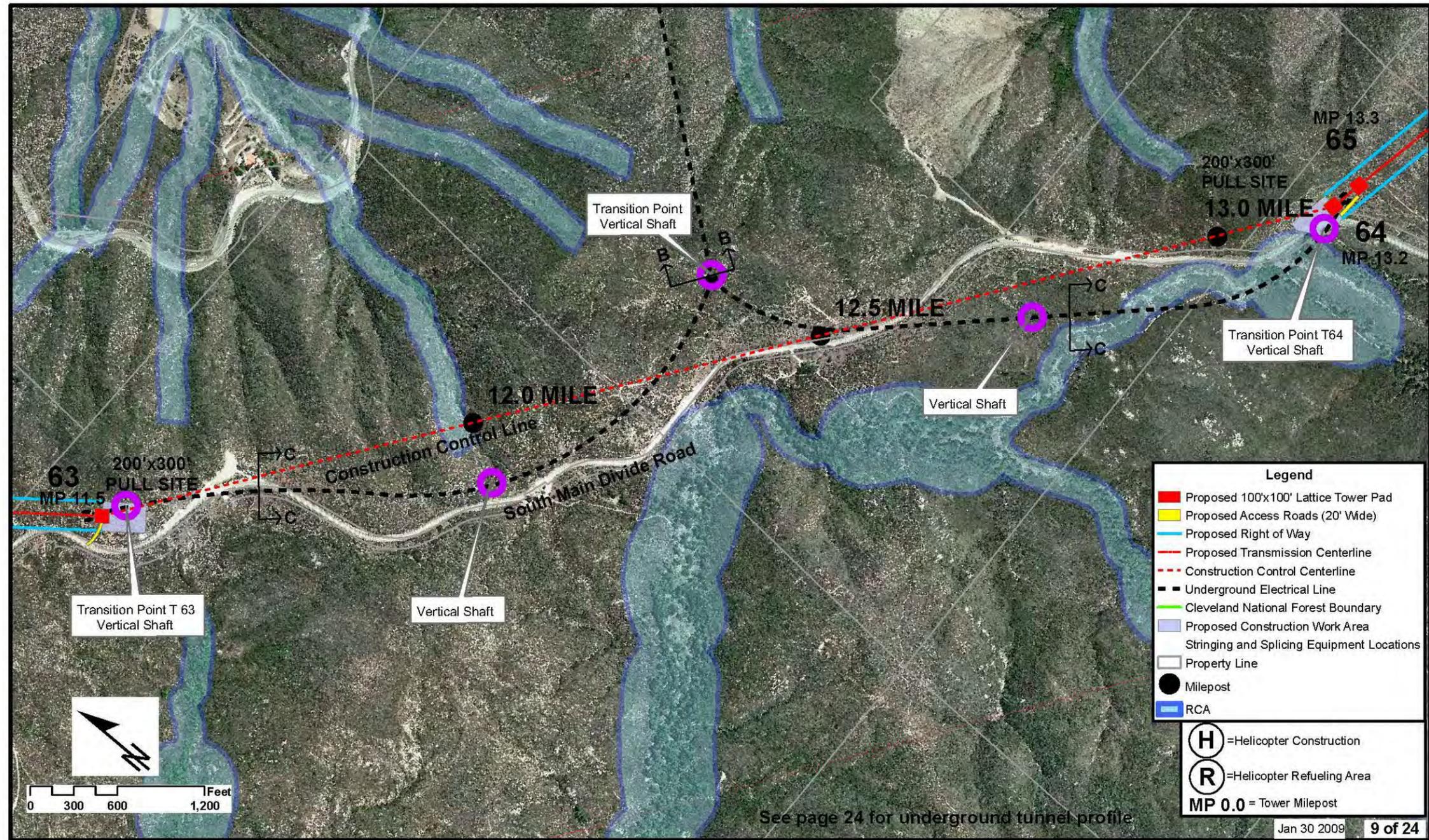


Figure G-1: (9 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

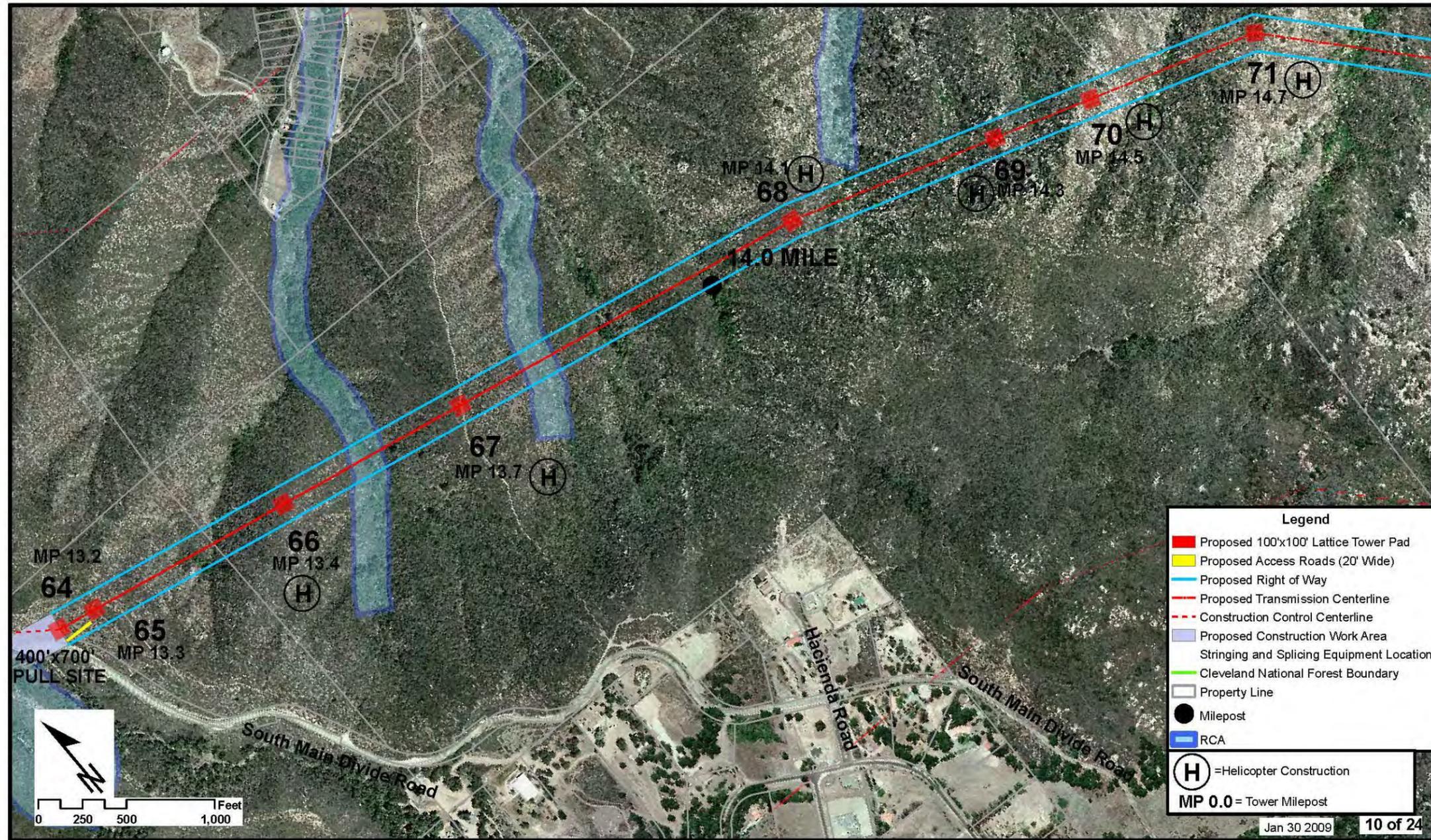


Figure G-1: (10 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

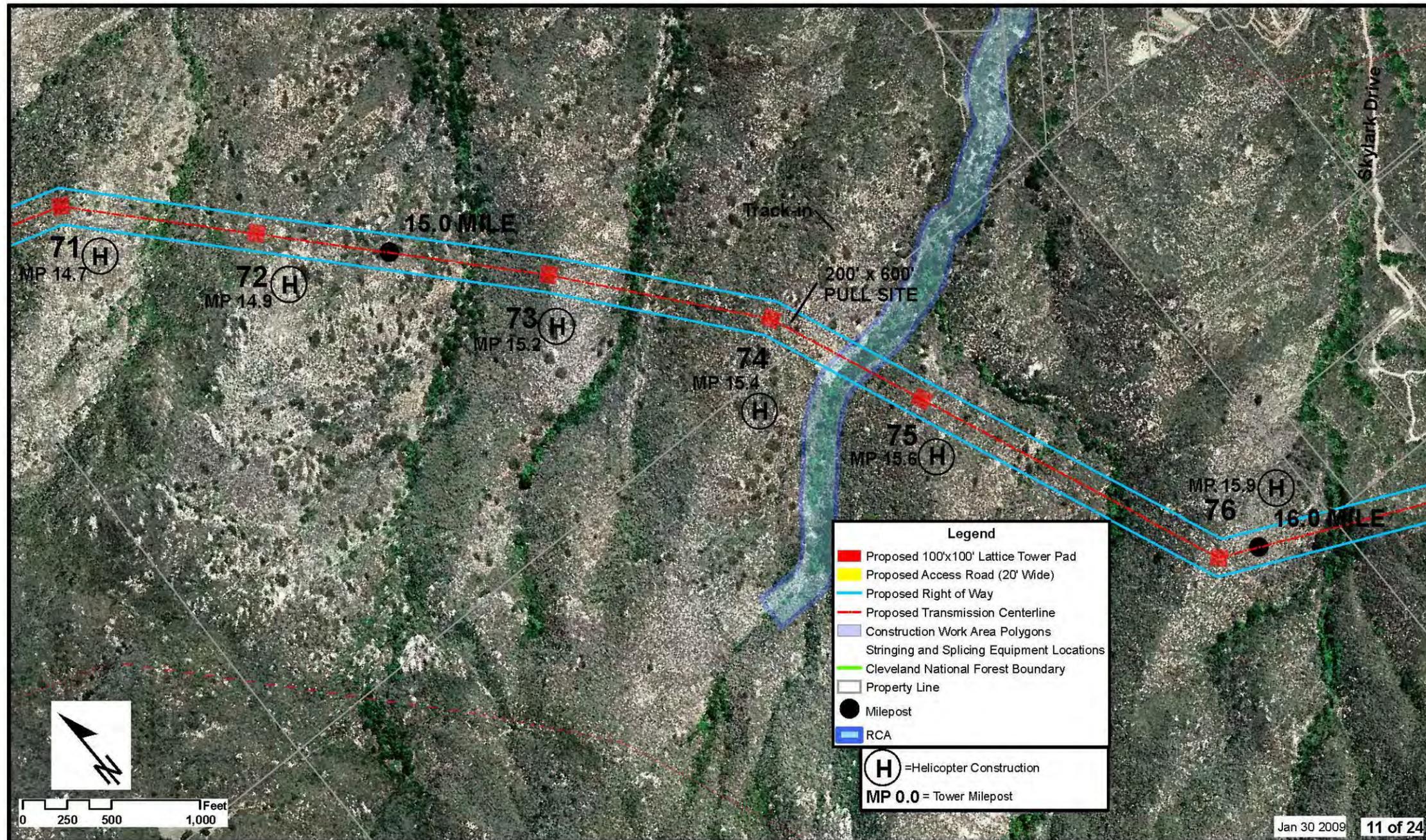


Figure G-1: (11 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

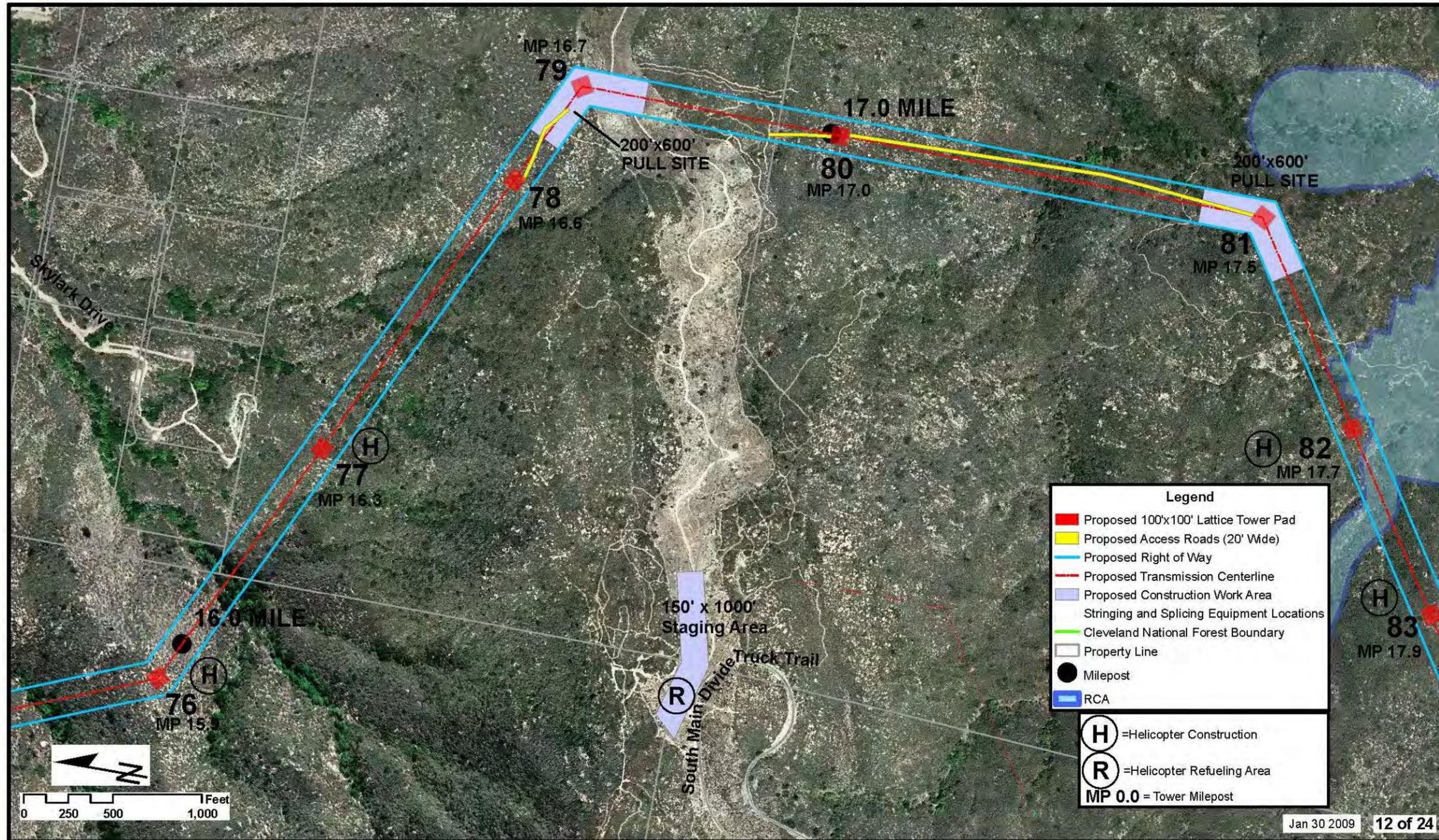


Figure G-1: (12 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

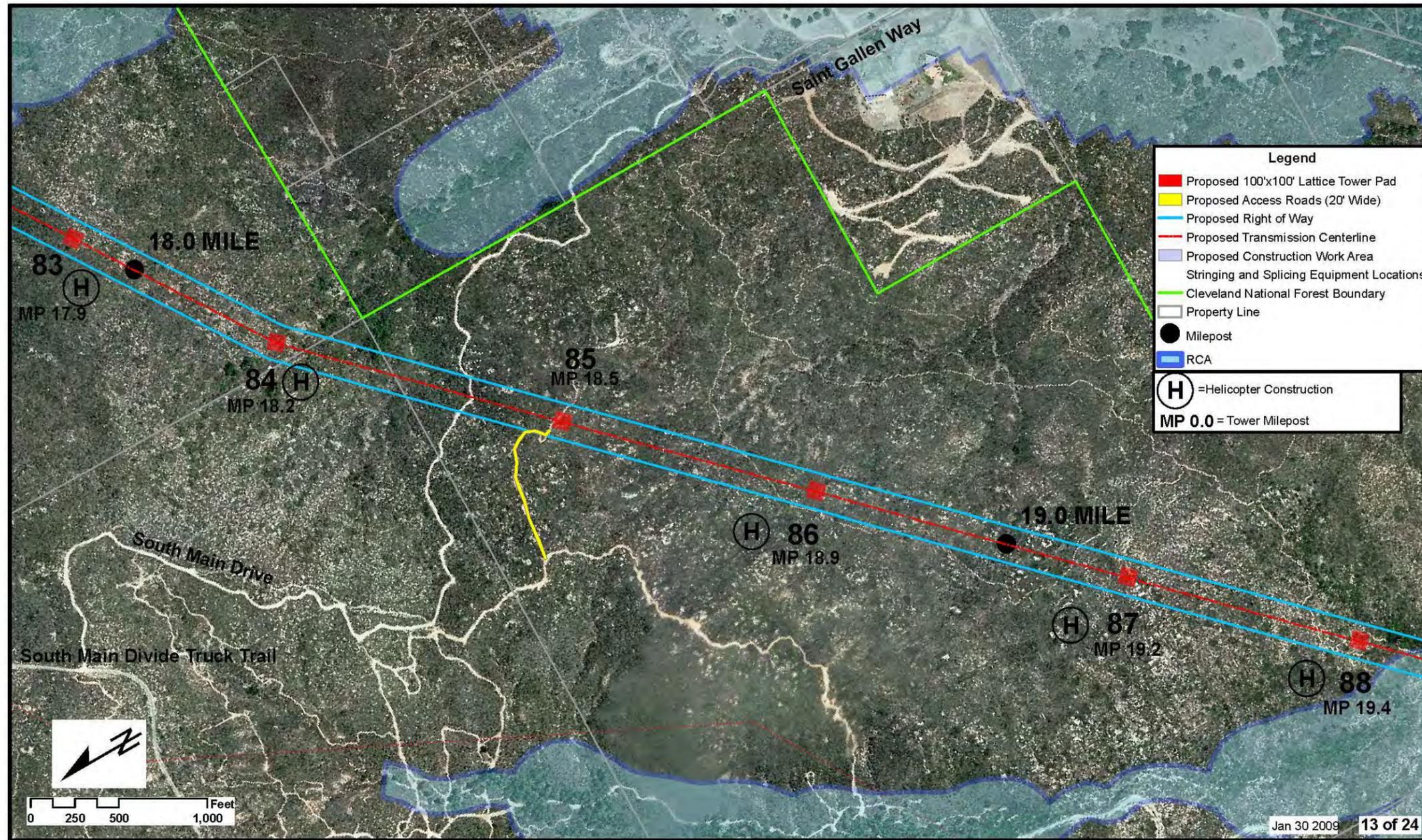


Figure G-1: (13 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

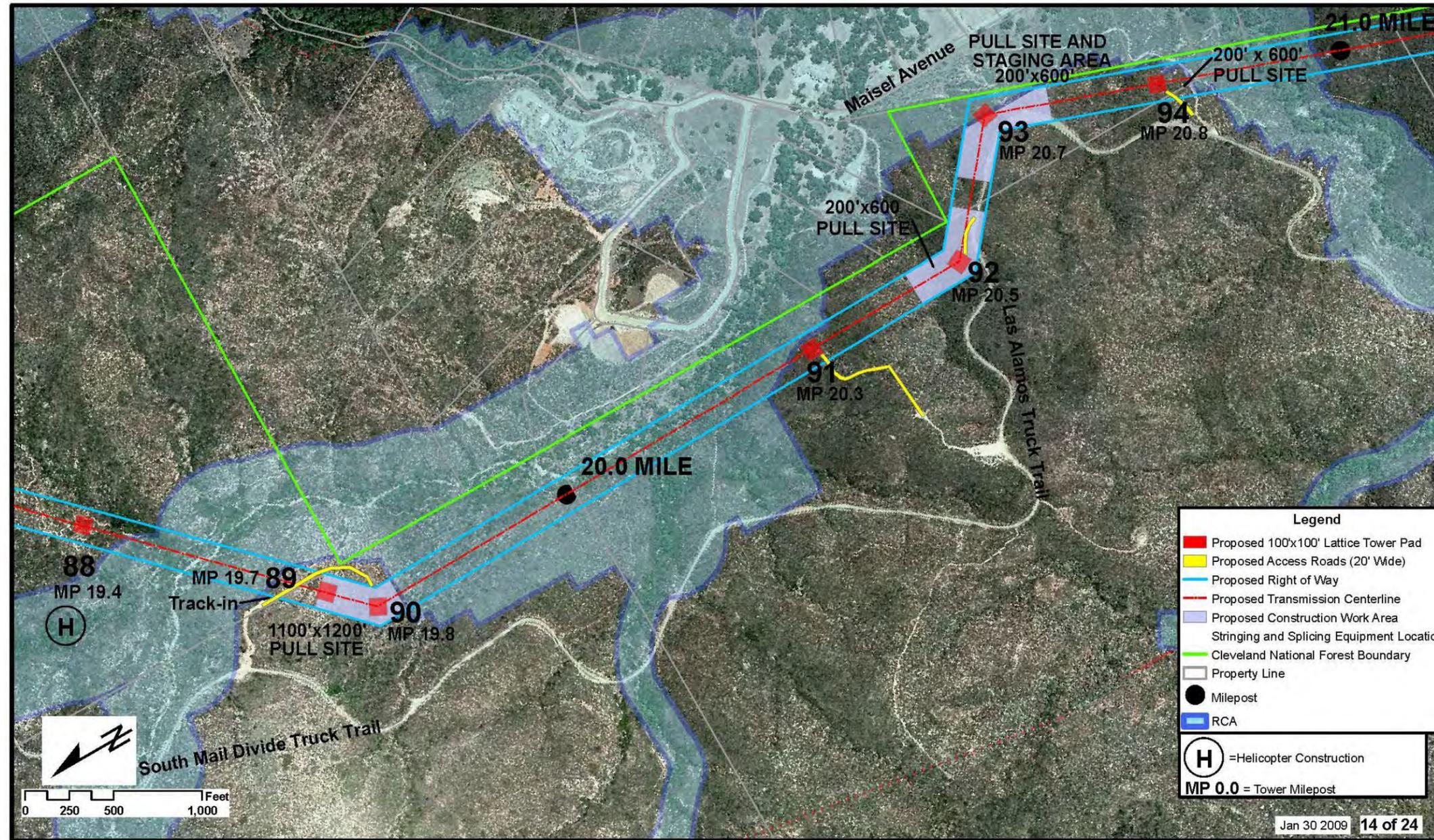


Figure G-1: (14 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

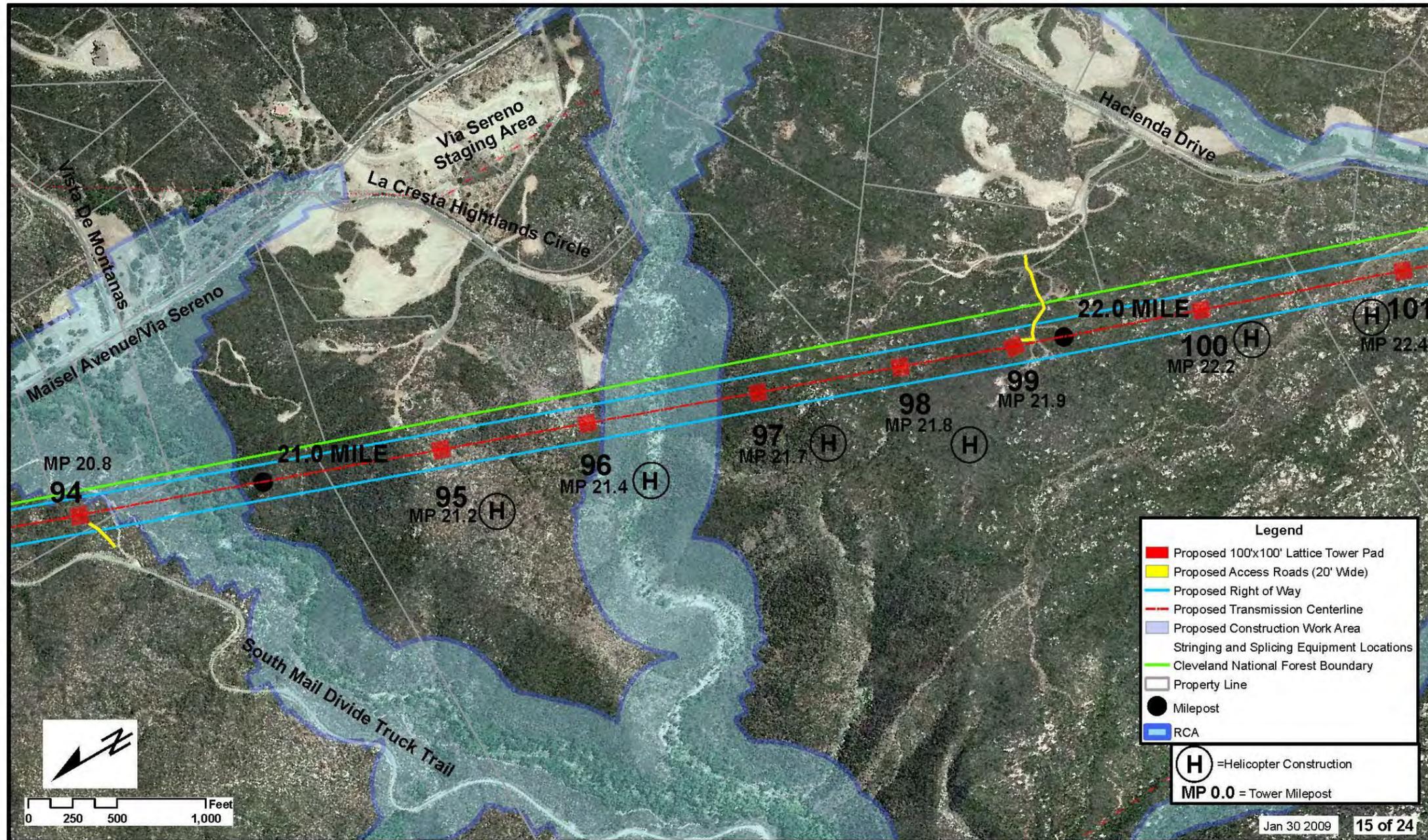


Figure G-1: (15 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

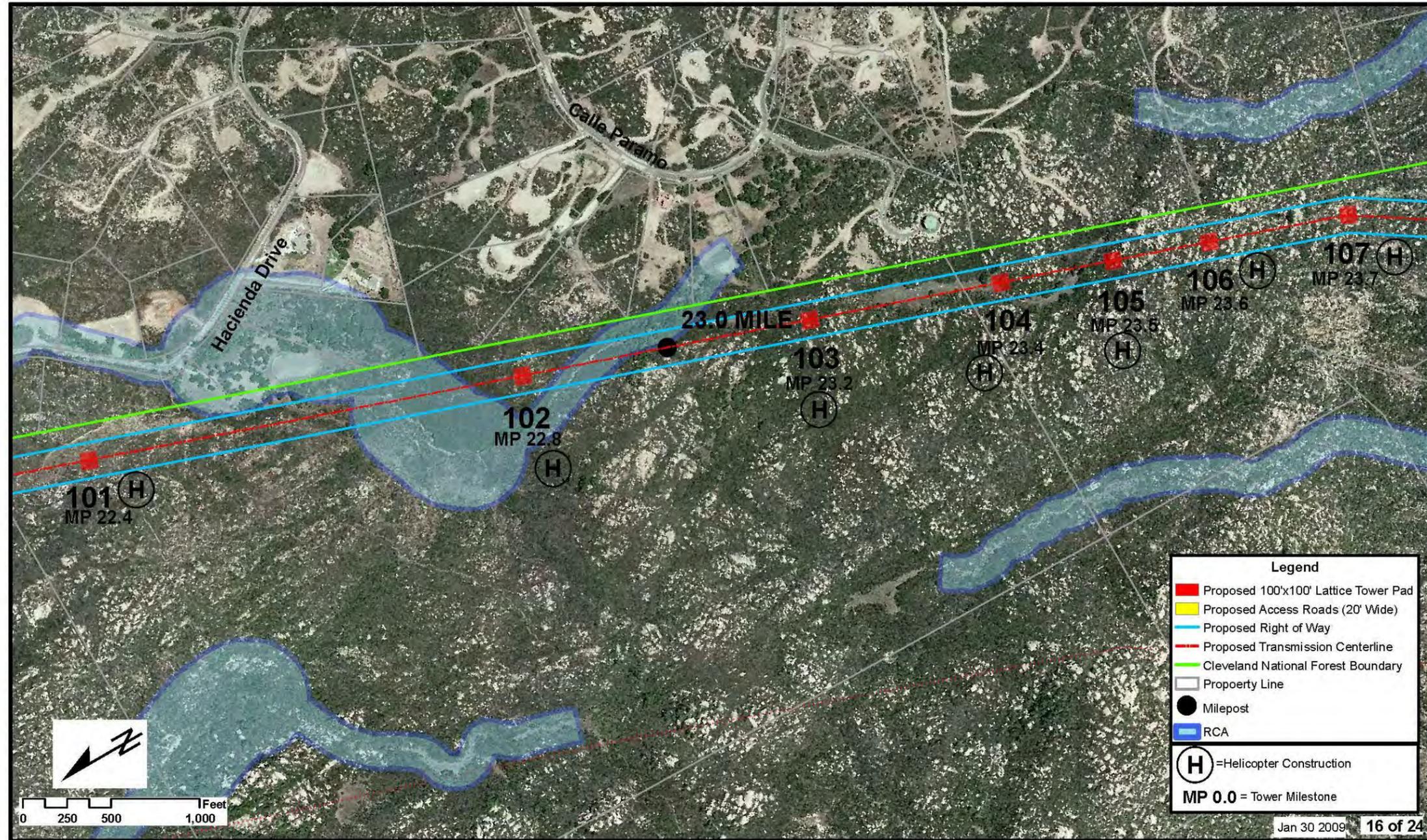


Figure G-1: (16 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

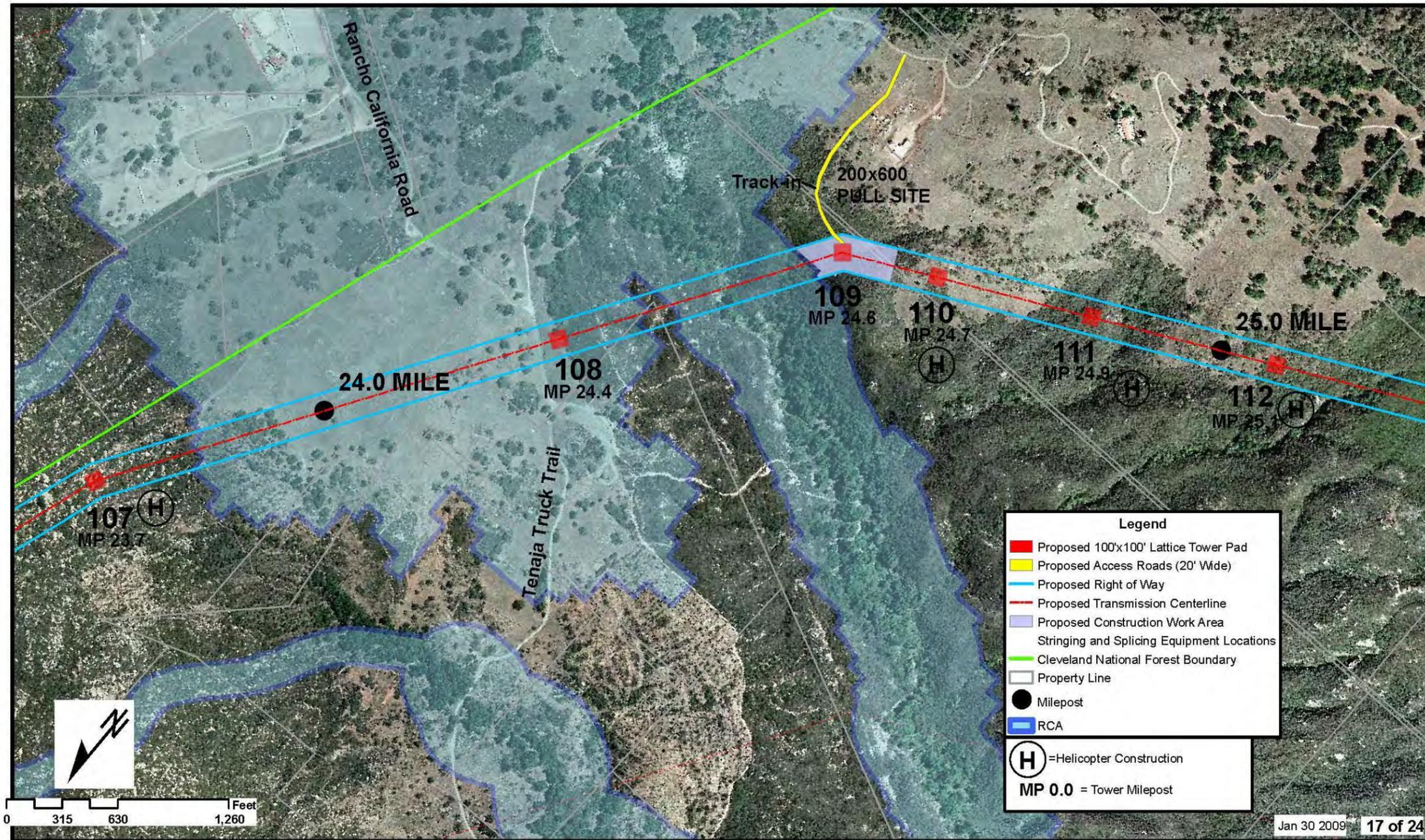


Figure G-1: (17 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

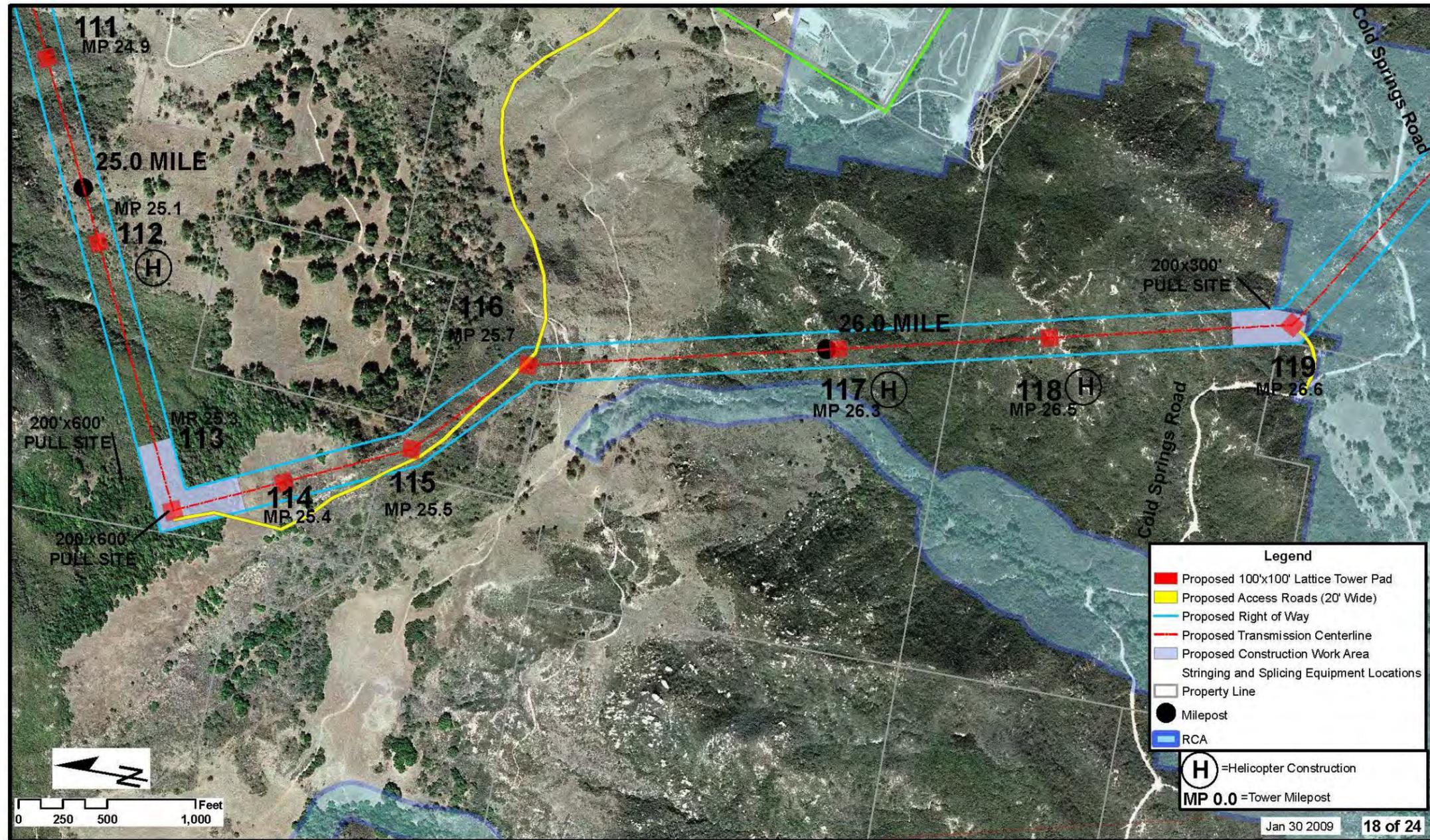


Figure G-1: (18 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

Lake Elsinore Advanced Pumped Storage Project
 Facilities Plan

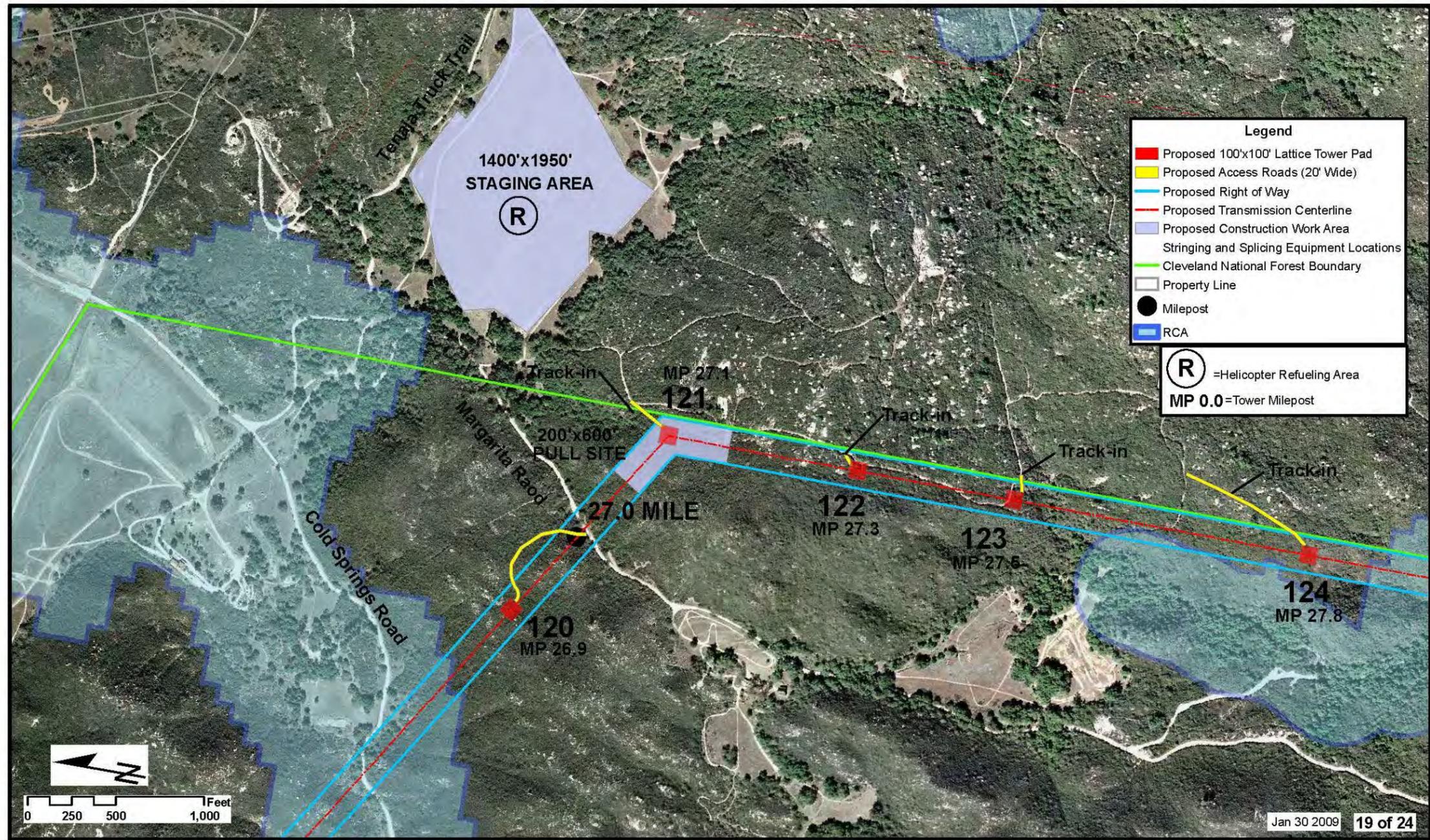


Figure G-1: (19 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

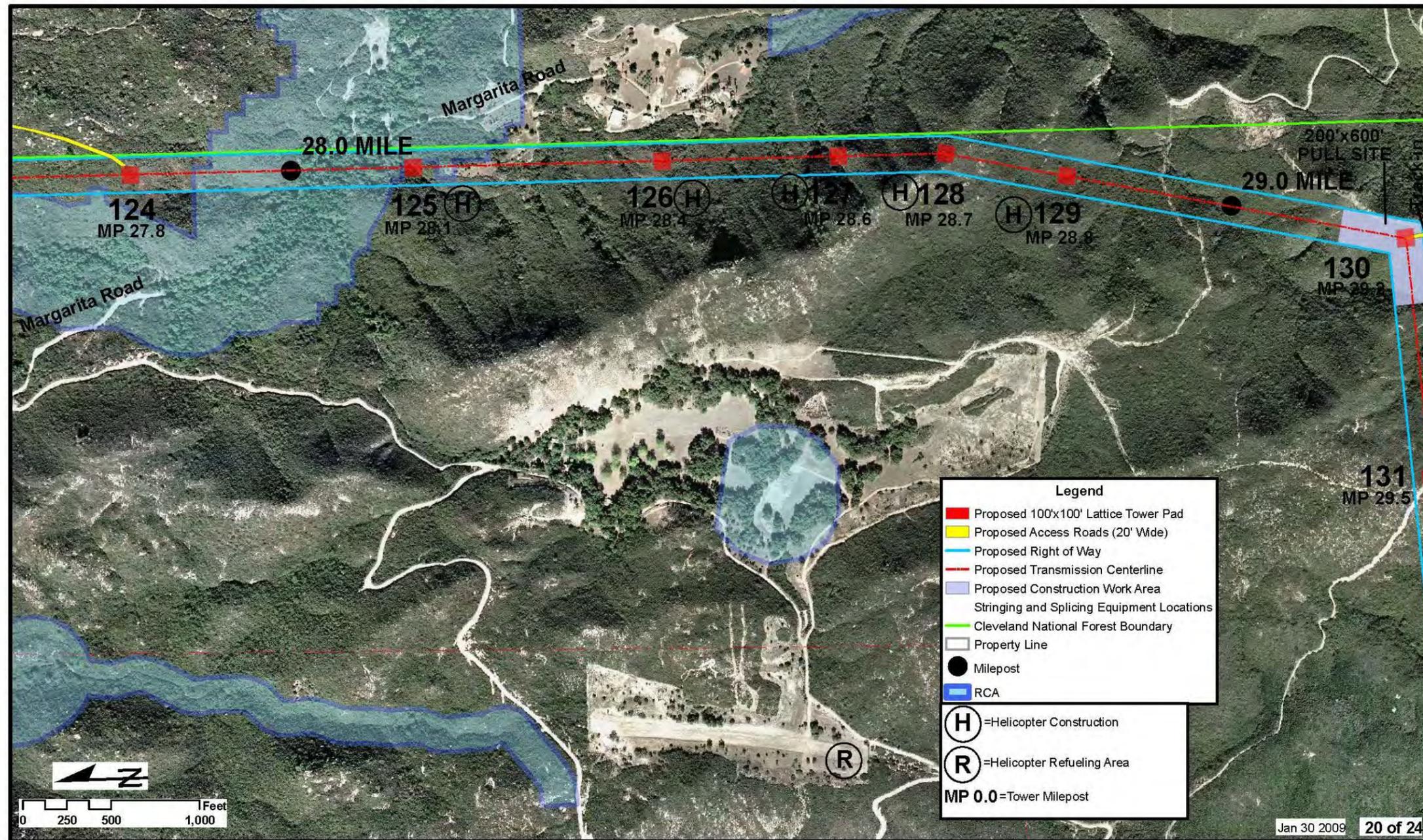


Figure G-1: (20 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

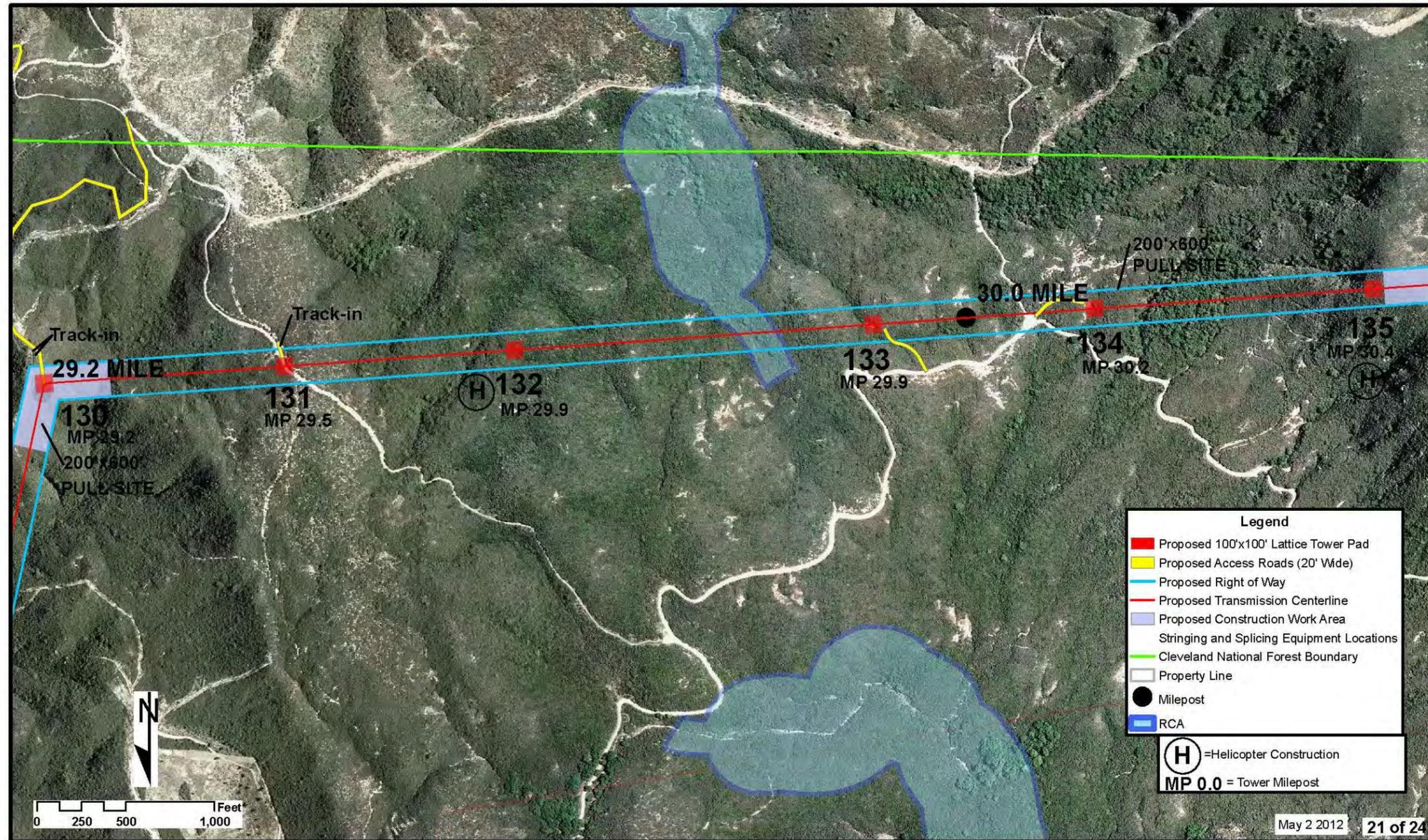


Figure G-1: (21 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

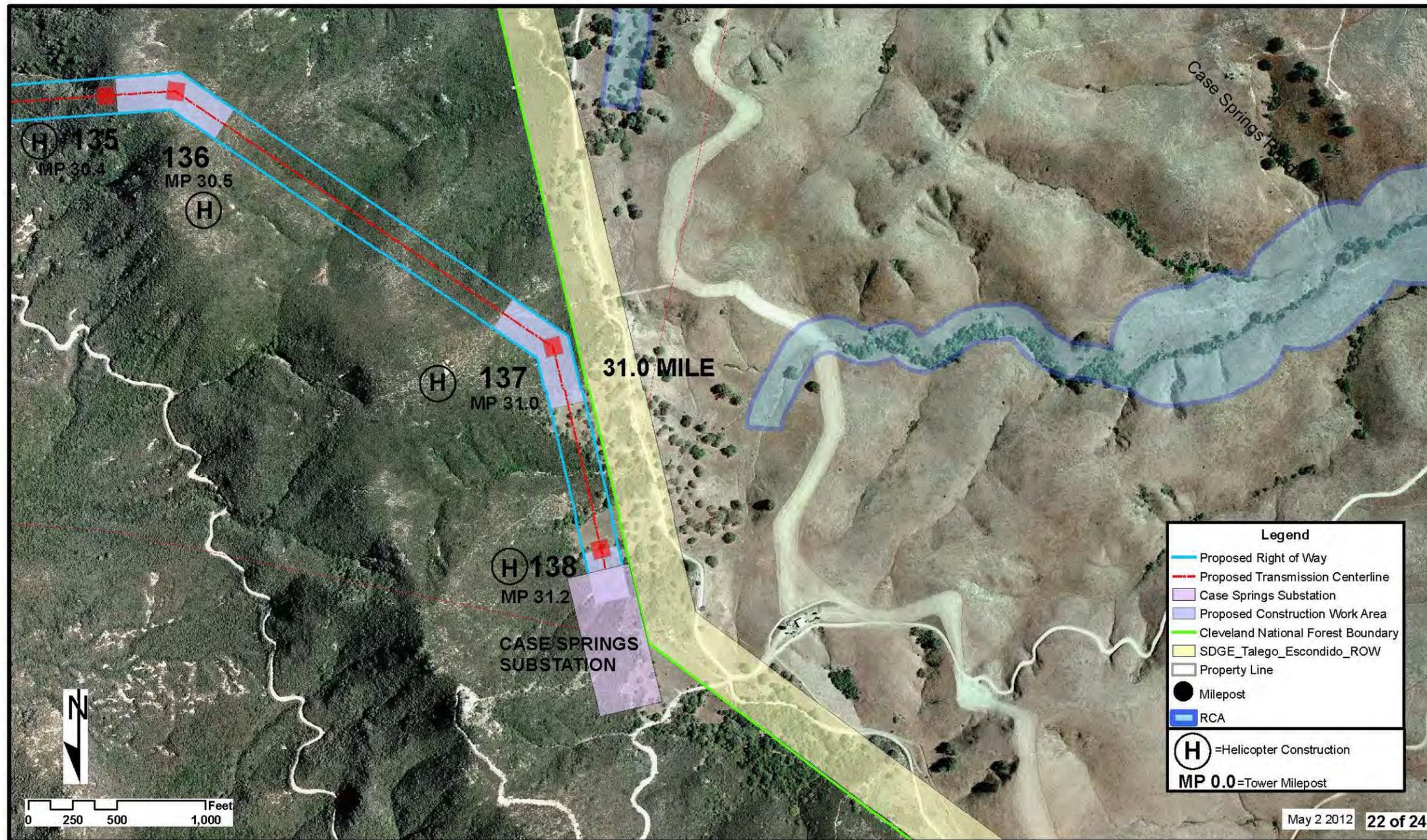


Figure G-1: (22 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company



Figure G-1: (23 of 24) Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

Lake Elsinore Advanced Pumped Storage Project
 GAS INSULATED LINE (GIL) TUNNEL PROFILES

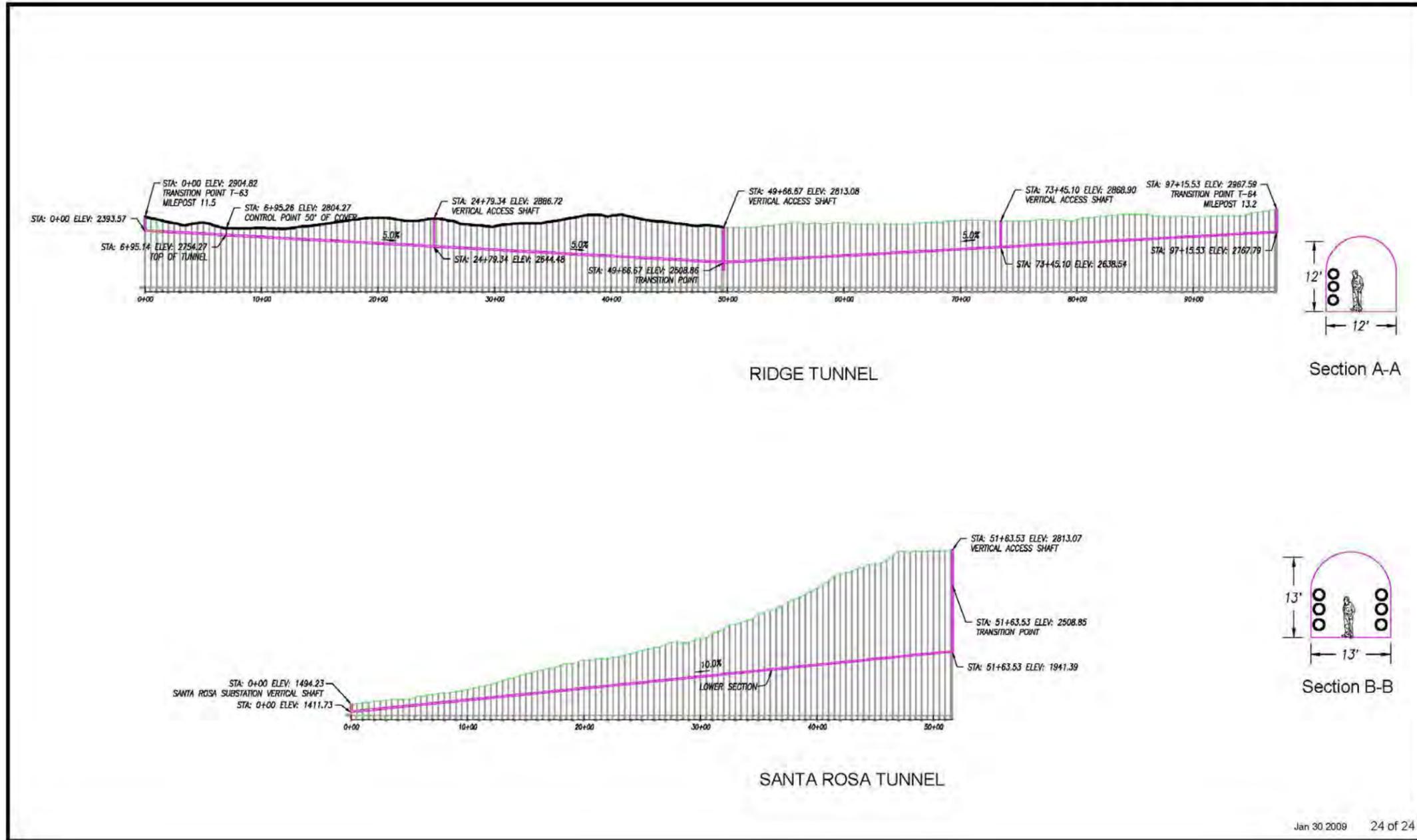


Figure G-1: (24 of 24) Project Lake Elsinore Advanced Pumped Storage Route Map
 Source: The Nevada Hydro Company

EXHIBIT G – MAP OF PROJECT
FERC Project No. 14227

Talega-Escondido/Valley-Serrano 500-kV Interconnect Project
Lake Elsinore Advanced Pumped Storage Project
Talega-Escondido Tower Upgrade Facilities Plan

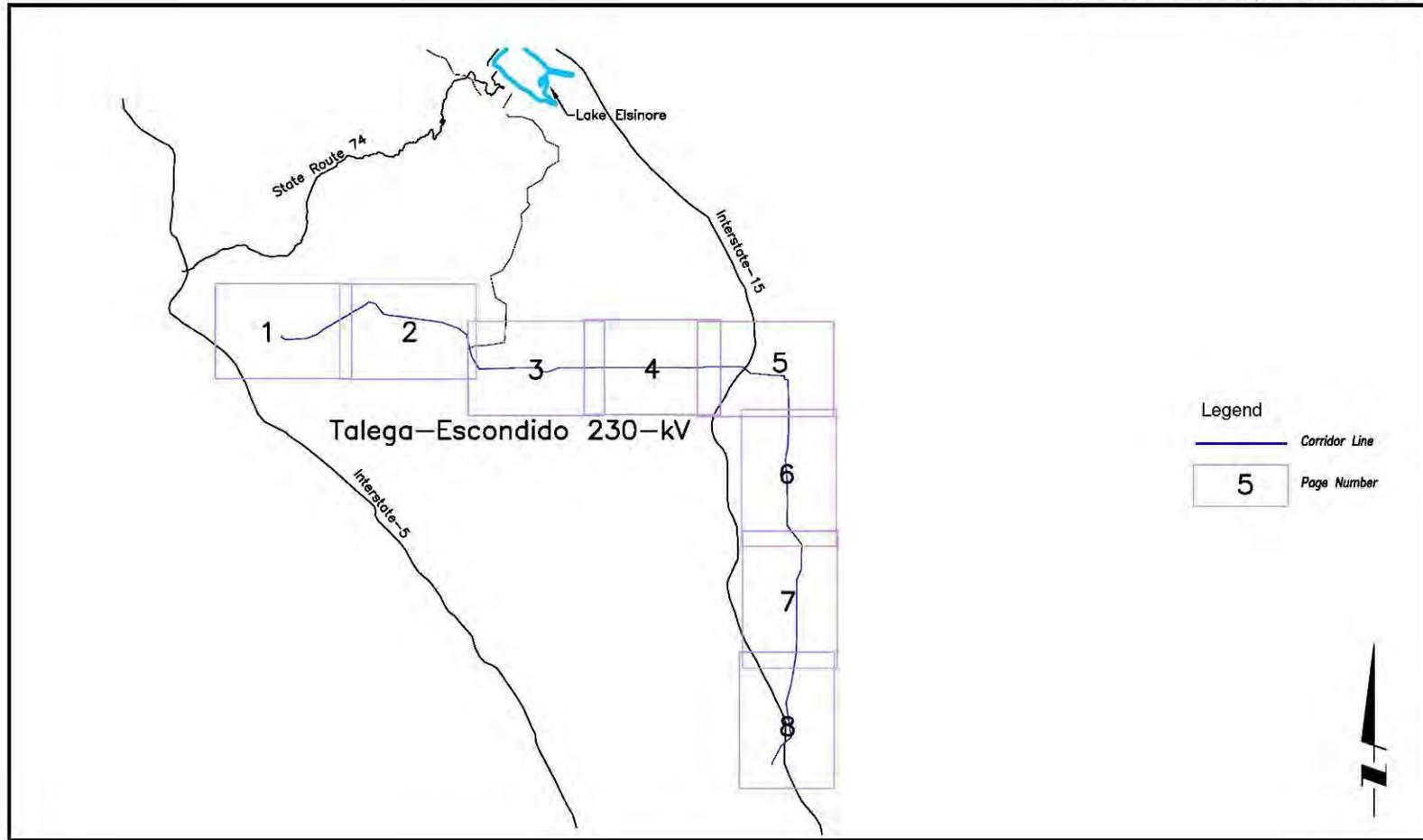


Figure G-2: Talega-Escondido 230 kV Line Upgrade (Index)

Source: The Nevada Hydro Company

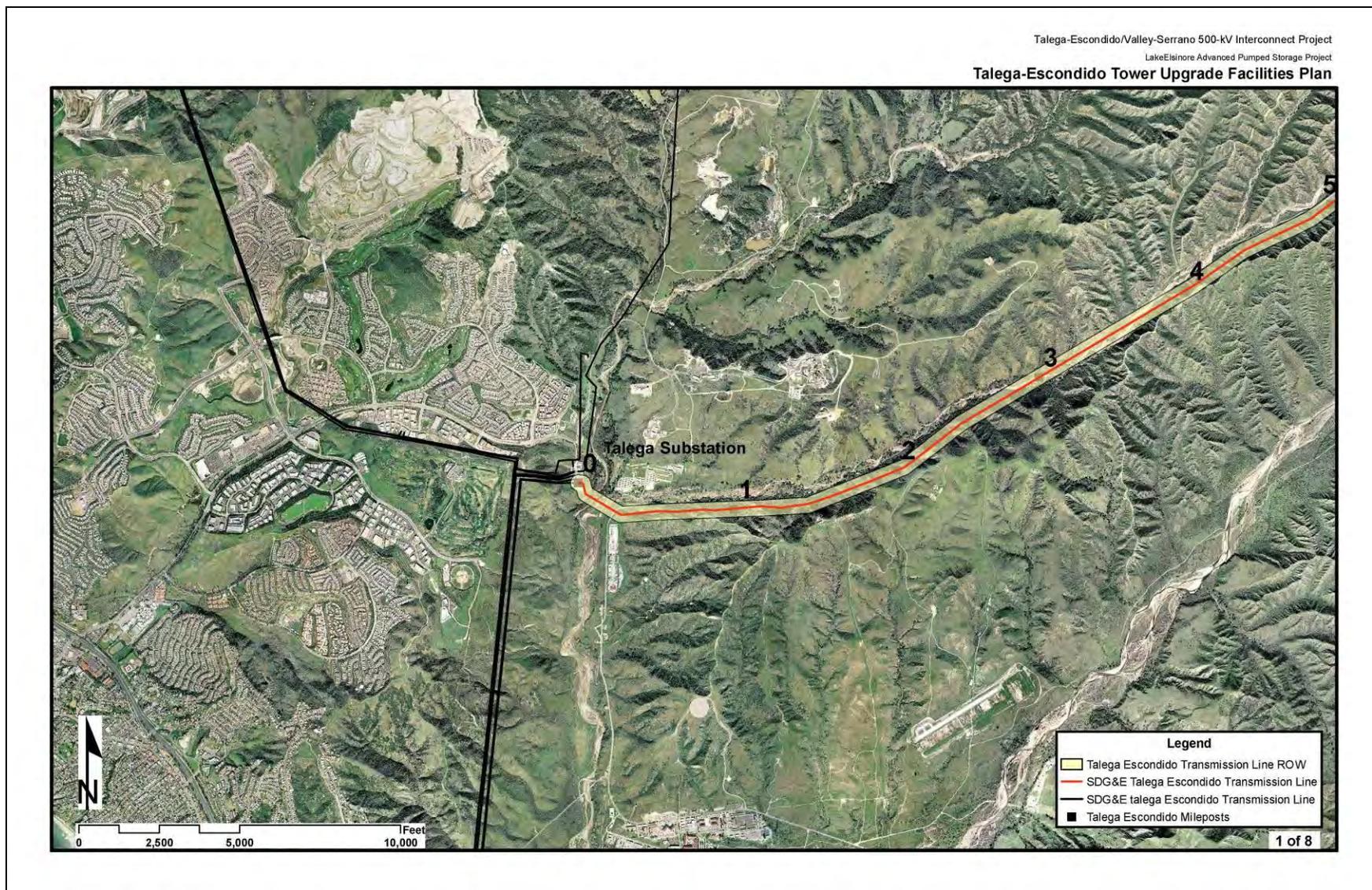


Figure G-2: Talega-Escondido 230 kV Line Upgrade (1 of 8)
Source: The Nevada Hydro Company

EXHIBIT G – MAP OF PROJECT
FERC Project No. 14227

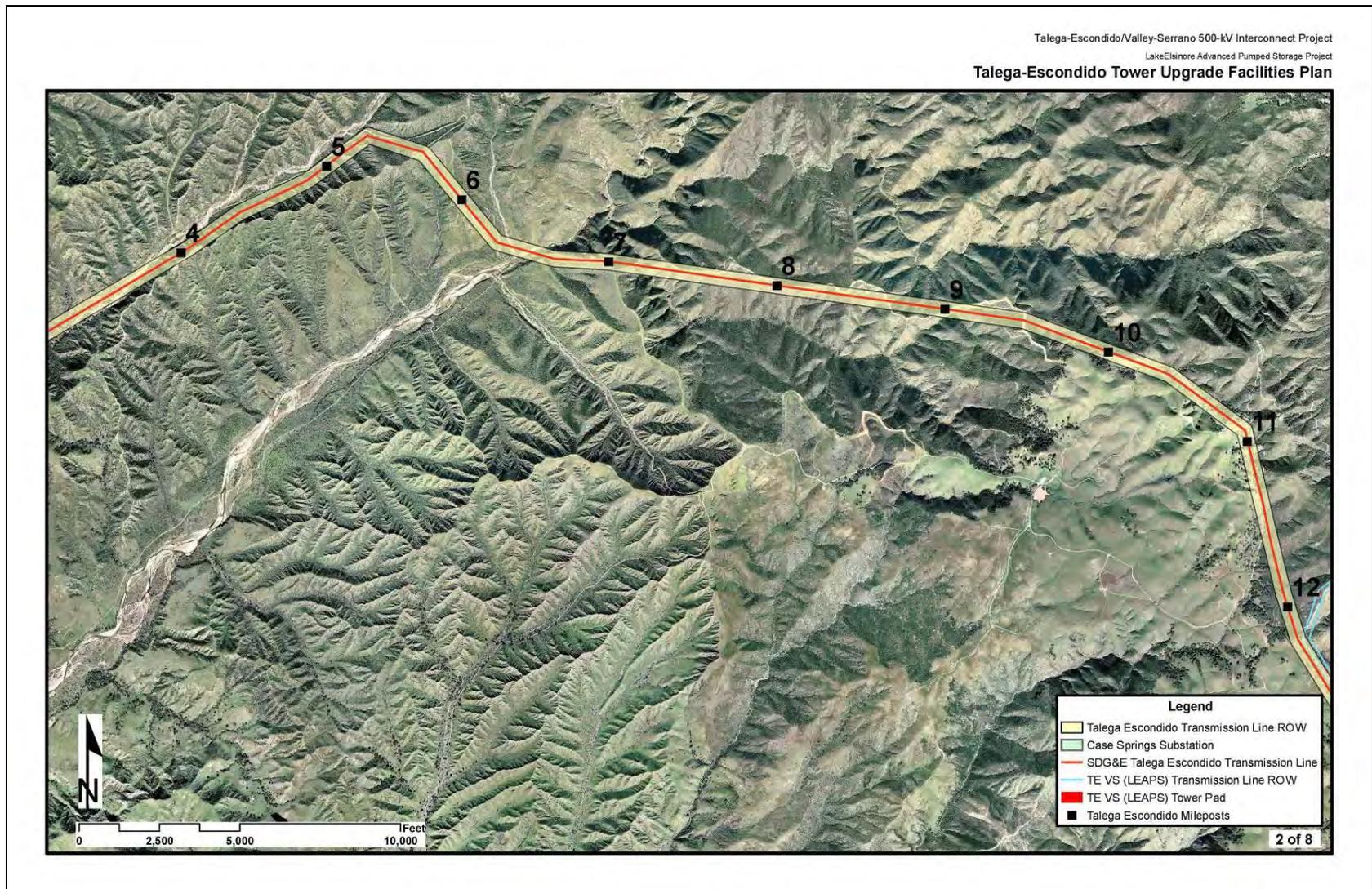


Figure G-2: Talega-Escondido 230 kV Line Upgrade (2 of 8)
Source: The Nevada Hydro Company

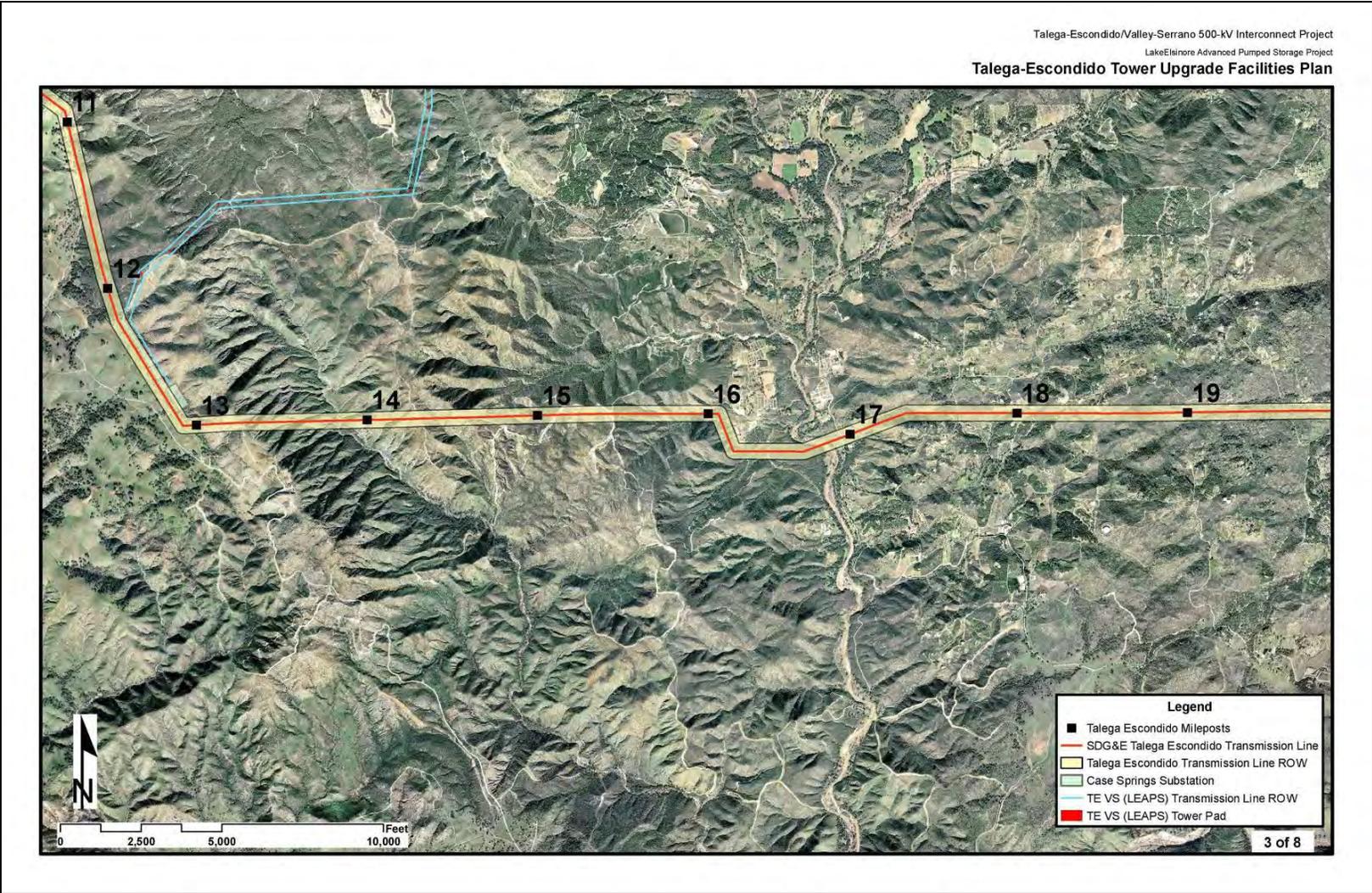


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (3 of 8)
Source: The Nevada Hydro Company

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FERC Project No. 14227

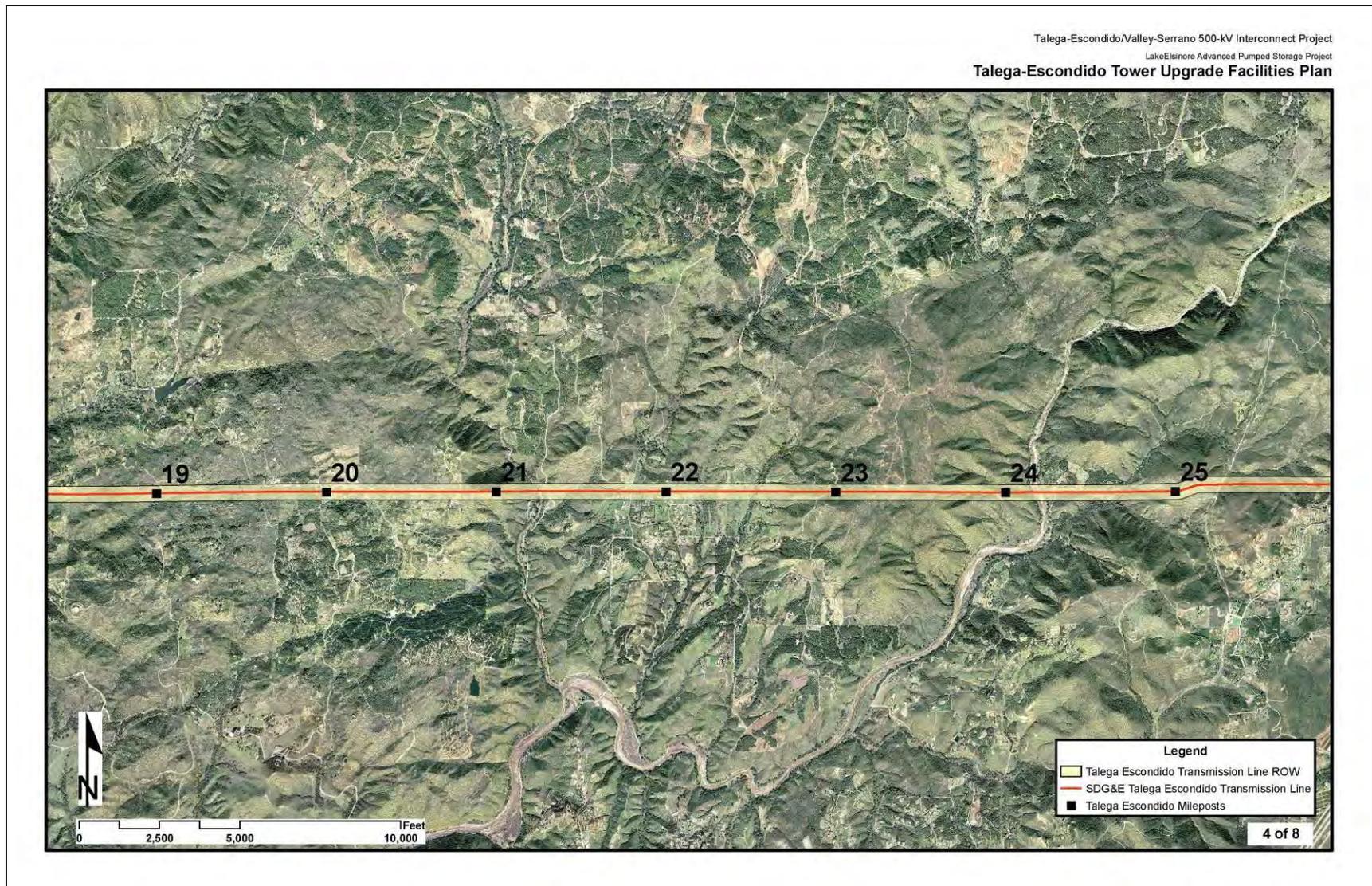


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (4 of 8)
Source: The Nevada Hydro Company

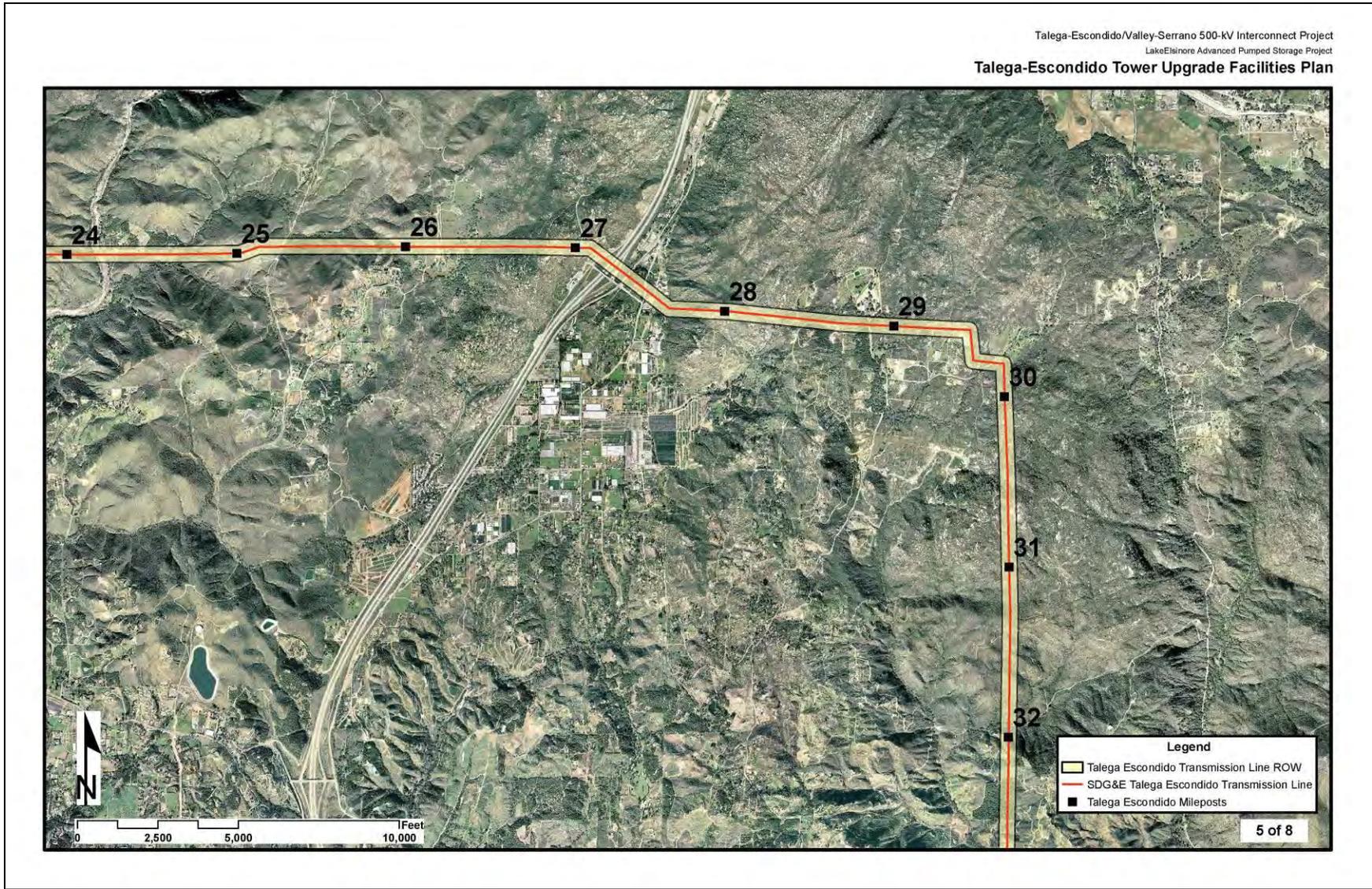


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (5 of 8)

Source: The Nevada Hydro Company

EXHIBIT G – MAP OF PROJECT
FERC Project No. 14227

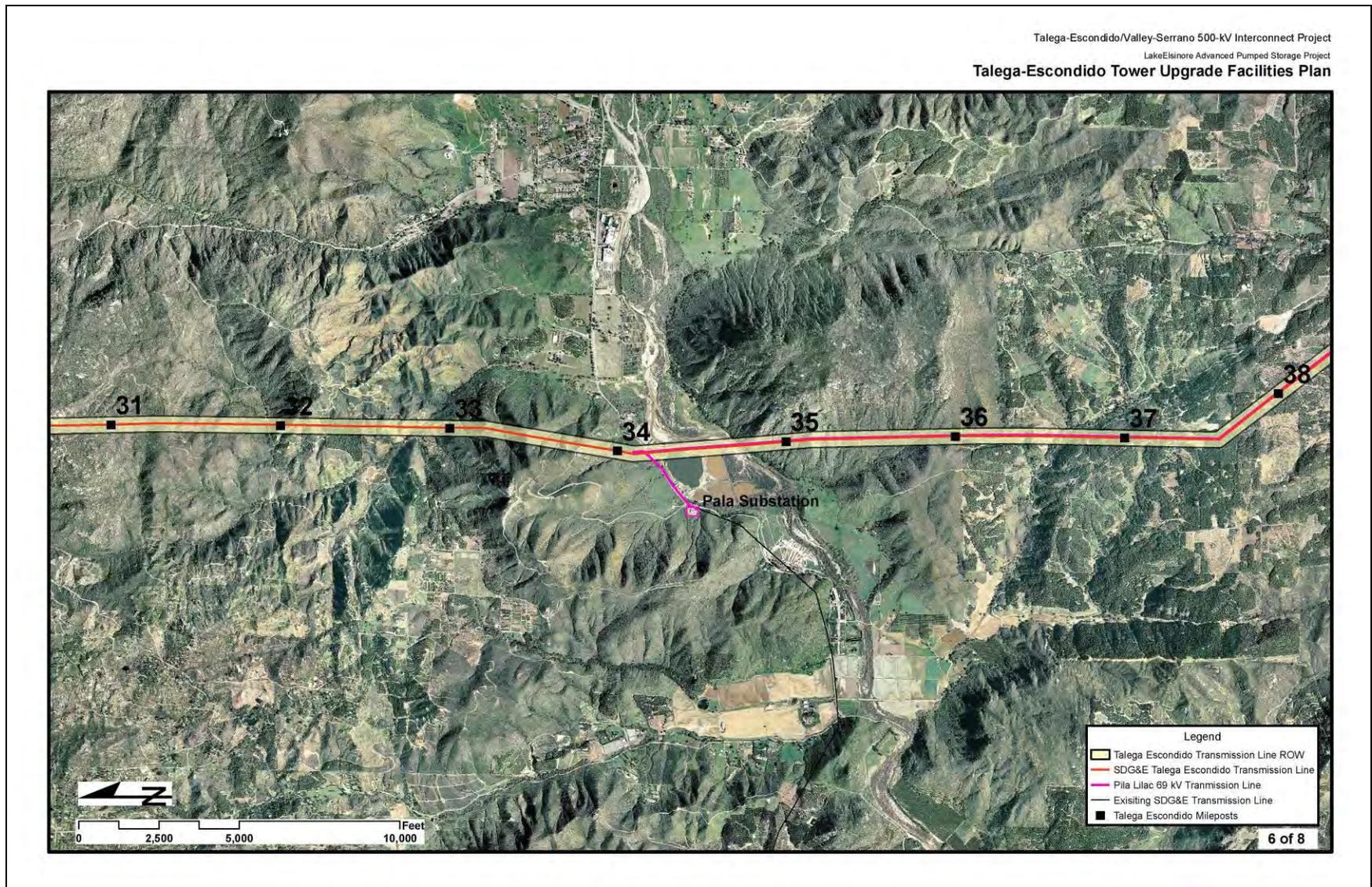


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (6 of 8)
Source: The Nevada Hydro Company

Talega-Escondido/Valley-Serrano 500-kV Interconnect Project
LakeElsinore Advanced Pumped Storage Project
Talega-Escondido Tower Upgrade Facilities Plan

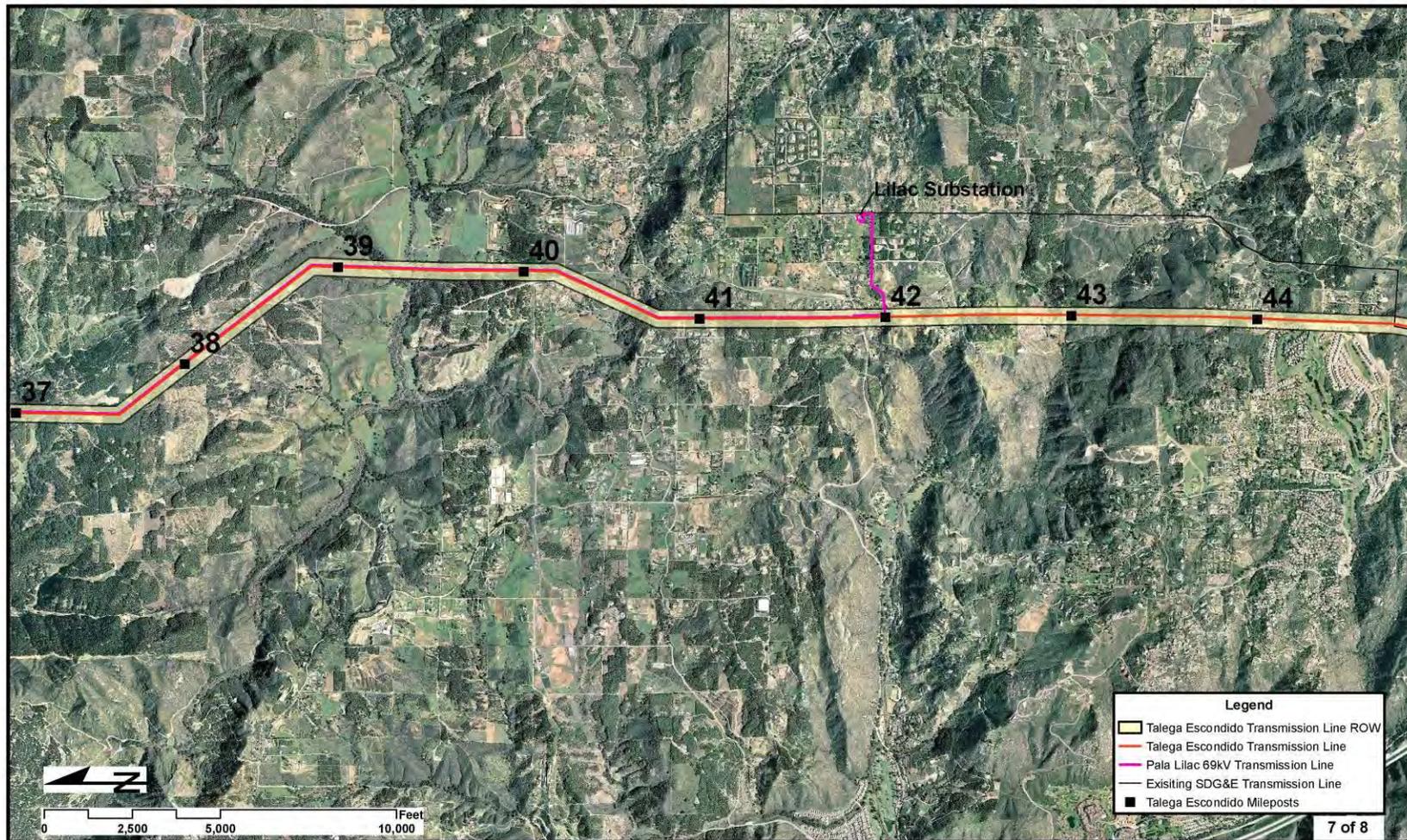


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (7 of 8)

Source: The Nevada Hydro Company

EXHIBIT G – MAP OF PROJECT
FERC Project No. 14227

Talega-Escondido/Valley-Serrano 500-kV Interconnect Project
LakeElsinore Advanced Pumped Storage Project
Talega-Escondido Tower Upgrade Facilities Plan

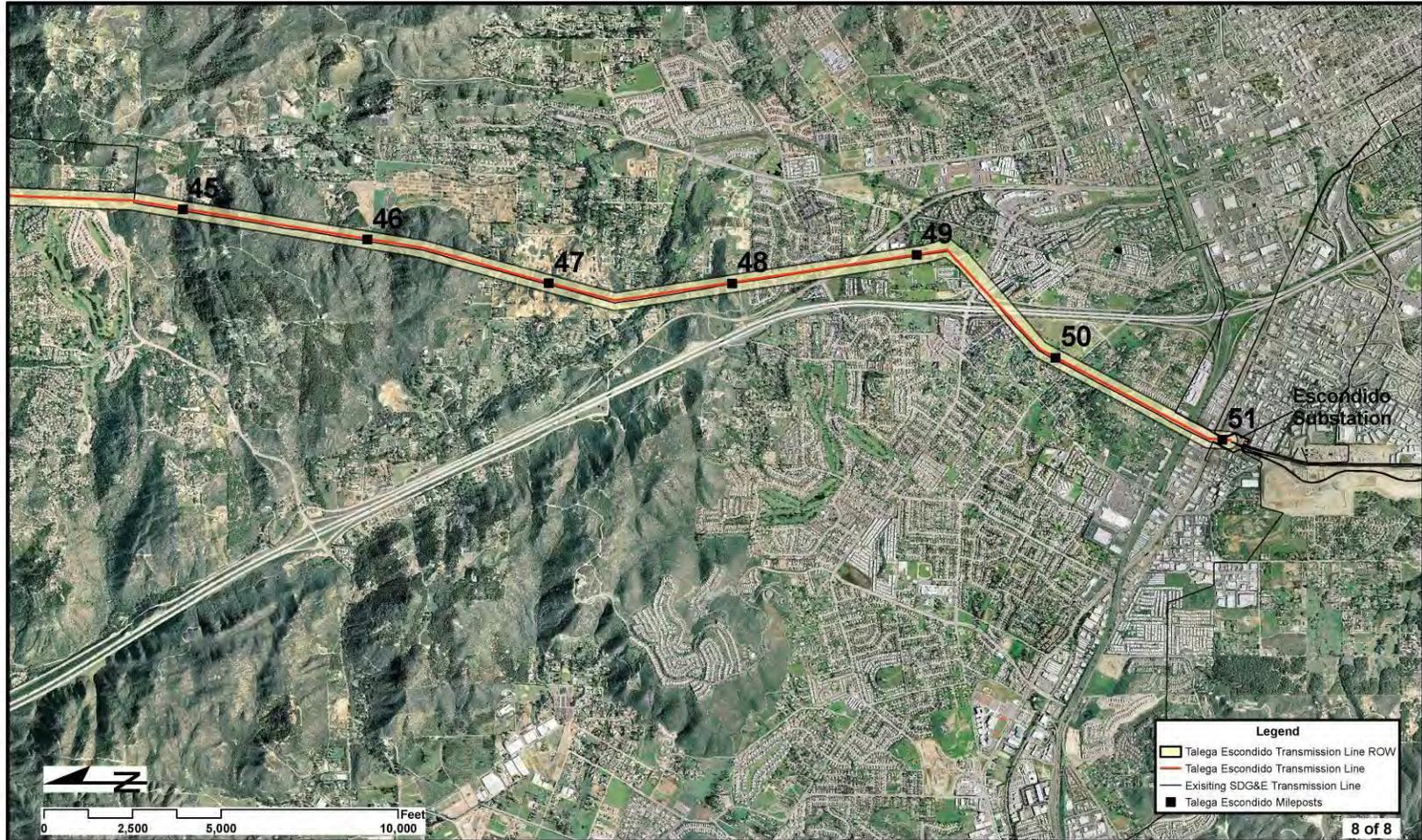


Figure G-2: Talega-Escondido 230 kV Line Upgrade Map (8 of 8)
Source: The Nevada Hydro Company

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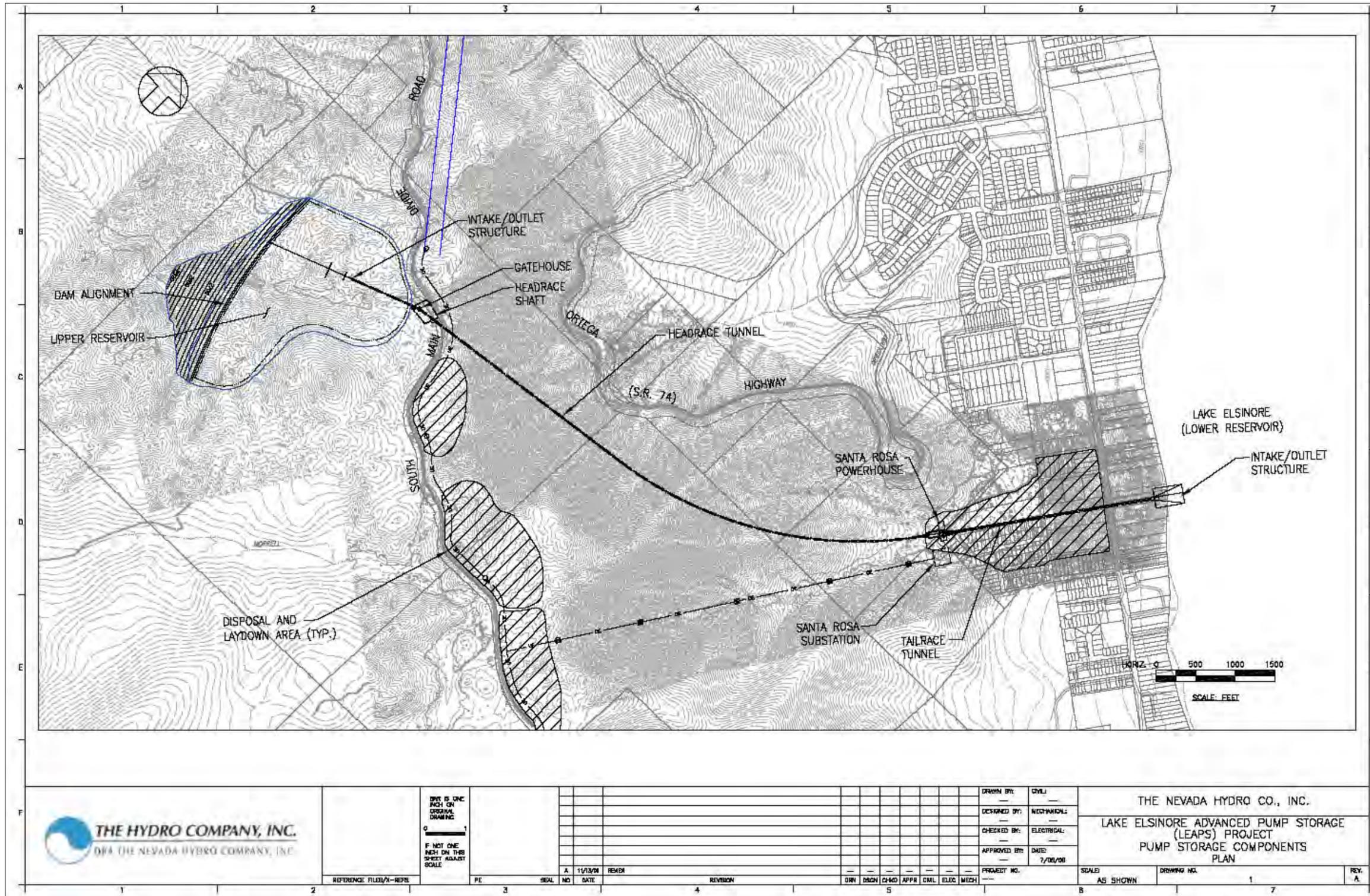


Figure G-3: LEAPS Pumped Storage Facility (1 of 2)

Source: The Nevada Hydro Company

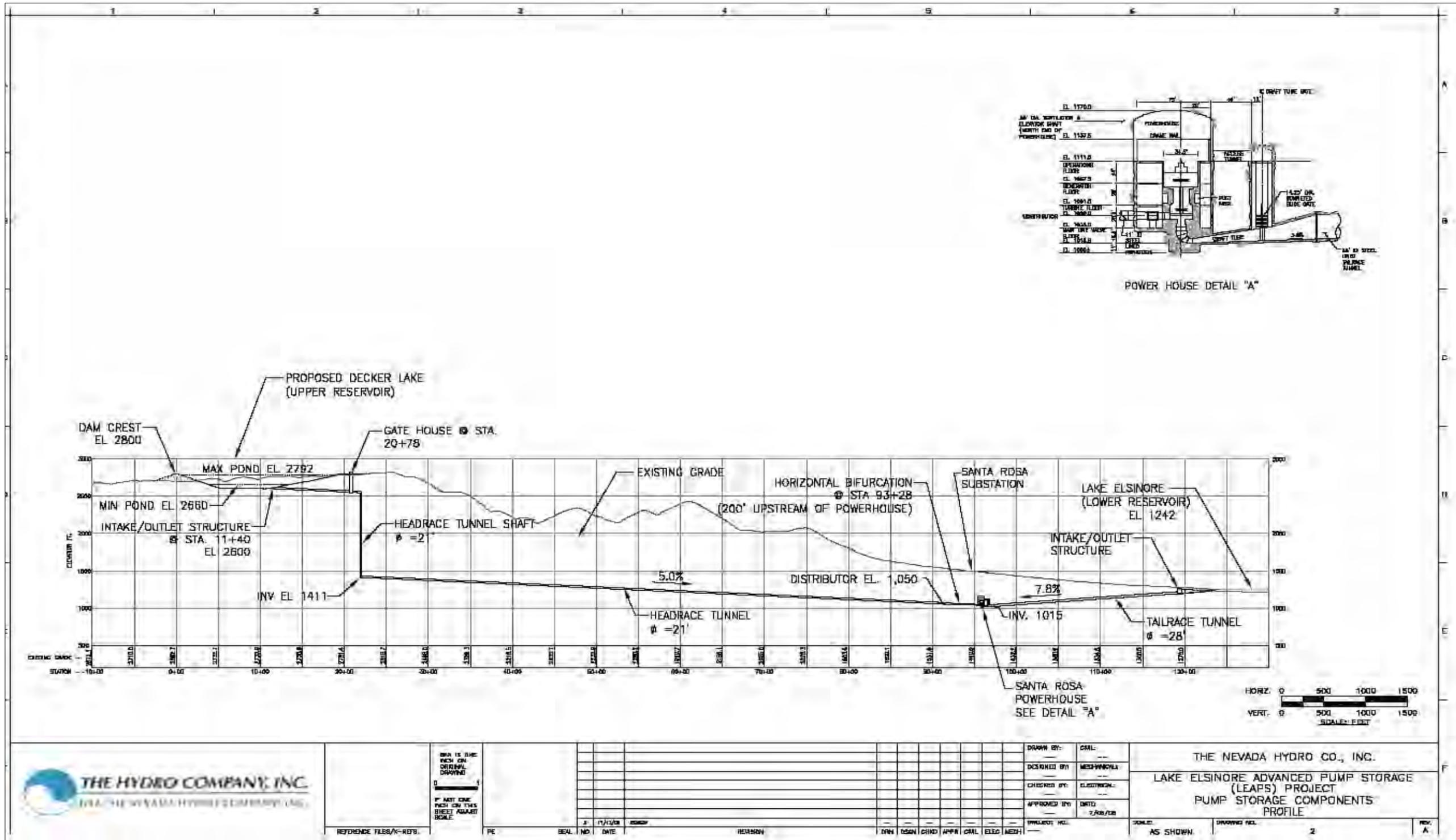


Figure G-3: LEAPS Pumped Storage Facility (2 of 2)

Source: The Nevada Hydro Company

