

V&T Railway Reconstruction

Carson City, NV

Client

Nevada Commission for
Reconstruction of the V&T
Railway

Scope of Work

Existing Right-of-Way
Determination
Conceptual Design
Base Mapping
Preliminary Design
Obtaining NDOT Occupancy
Permits
Utility Relocations
Right-Of-Way Acquisitions
Final Design
Bid Package Preparation
Construction Management

Project Duration

2005-2011

Project Cost

\$54 million



The reconstruction of the Virginia & Truckee Railroad from Gold Hill to Carson City is without a doubt one of the most unique and significant public works projects undertaken in Northern Nevada within recent history. The re-creation of the famous railroad will not only provide a major tourism attraction for our region but also gives our generation an opportunity to rebuild a major component of our local history.

The railroad infrastructure and track design, NEPA compliance and permitting, right-of-way engineering and construction management for the partially federally funded 16.5-mile long project from American Flat to Carson City is currently being led by Manhard personnel under the direction of Ken Dorr in our Carson City office. Ken is the overall Project Manager for the entire effort heading up both Manhard staff and several specialized sub-consultants. This multi-phase, multi-year project involves numerous challenges including determination of right-of-way

requirements, cultural and environmental clearances, and preparation of detailed design work complicated by the need to follow the original railroad's alignment and narrow roadbed width. This project includes numerous key components and requirements, just a few of which are highlighted below:

- Base Ownership Determination
- Control, Topographic and Existing Facility Surveying & Base Mapping
- Full NEPA Compliance including Environmental and Cultural Resource Identification Mitigation
- Right-of-Way Engineering and Acquisition Document Preparation in conformance w/1970 Uniform Relocation Act



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- Railroad and Access Road Horizontal, Vertical & Cross-Section Design
- Cut Slope Scaling and Rock Fall Mitigation Design
- Existing Embankment and Cut Slope Stability Analysis
- Tunnel Rehabilitation Exploration Design and Design-Build Construction Management
- “Cut & Cover” Tunnel and Railroad Bridge Design
- Drainage Facility Design
- Terminal Yard Track and Depot Infrastructure Planning & Design
- Detailed Contract Document and Cost Estimate Preparation for Commission
- BLM Right-of-Way Acquisition Documentation & Coordination
- Yearly Budget Preparation & Updates
- Coordination w/ NDOT under Stewardship Agreement w/ Commission
- PUC Road/Railroad Crossing Applications & Coordination
- Coordination w/FHWA & EDA for Project funding and administrative requirements
- Preparation and administration of Material Acquisition Contracts
- Federal/State/Local Permitting
- Adjacent Property Owner Liaison
- Public Informational & Design Meeting Leadership
- Project Presentations to Lay Boards and Technical Regulatory Agency Staff

