Oakland Airport Connector



Oakland, California



One of the most well known features in the San Francisco Bay Area is the cable car. When Oakland and Bay Area Rapid Transit (BART) decided to construct the Oakland Airport Connector, the design undoubtedly had to be their own version of the famous cable car. This automated, state-of-theart cable car propulsion system draws passenger trains back and forth along a rail between two stations connecting the Oakland Coliseum and Oakland International Airport. Hot-dip galvanizing was the first choice for the propulsion designers of this project as it was the only corrosion protection capable of meeting the requirements of being affordable, efficient, and environmentally friendly.

The steel propulsion system, consisting of drive frames, return frames, deflection frames, counterweight tension towers, platform hand rail and pulley frames, was specified to be hot-dip galvanized. The drive frames holding the motors were hot-dip galvanized to help ensure the reliability and cost effectiveness of the entire system. Because the drive motors are at the station, the cars themselves are relatively light and therefore do not require a heavy rail design to support the weight. This reduces design, construction, operating and maintenance costs of the rest of the cable car system. Also, this clearly makes the system very efficient and friendly to the environment.

This state-of-the-art cable car line has a capacity to run 1,492 passengers per hour per direction along the 3.2 mile rail, so a lot of eyes are expected to see



it. The cable guide and sheave pulley assemblies are all mounted in clear view for pedestrians on much of the ground and elevated sections of rail.

Hot-dip galvanizing offers unparalleled performance to ensure these parts are visually appealing and maintenance free. The Oakland Airport Connector illustrates a great accomplishment blending the simple cable car design of the past with cutting edge technology of the future. Oakland can be proud to have such an outstanding state of the art transportation system feeding its two major transportation hubs. Perhaps this cable car system may one day be world famous for the other city by the bay.

> Galvanizer Valmont Coatings - Intermountain Galvanizing

> > Specifier, Fabricator Doppelmayr

> > > Other Lea + Elliott Flatiron / Parsons

Owner Bay Area Rapid Transit (BART)

Transportation