



KEEPING THE COMMUNITY MOVING

California's San Gabriel Trench Project

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A significant part of the right of way business revolves around the transfer of property interests to allow for regional infrastructure improvements. In the last decade, Southern California has experienced a significant surge in the number of street widenings, highway upgrades, port expansions and grade separations designed to move consumer goods, people and automobiles more safely and efficiently. While construction of these projects tends to make the headlines, we rarely hear about the human interest side—the stories about the residents and local businesses directly affected by right of way activities, and the behind-the-scenes work that agencies and consultants do to preserve the fabric of impacted communities.

The San Gabriel Trench Grade Separation Project (Trench Project) is a prime example of how the Alameda Corridor – East Construction Authority (ACE), Paragon Partners Ltd. (Paragon), the City of San Gabriel, and the

community came together in support of a public benefit project, and successfully preserved a Los Angeles community without resorting to a single condemnation. Upon completion in Fall 2017, the Trench Project will significantly improve safety, health and convenience for the local community.

Rail services in the San Gabriel Valley, which lies just east of Downtown Los Angeles, are a critical connector from the busy Ports of Los Angeles and Long Beach to the rest of the United States. It is estimated that \$314 billion worth of trade will be distributed through these ports by the year 2020 and ACE's program, which consists of multiple construction projects including safety improvements at 39 crossings and 22 grade separations, was conceived not only to enhance the movement of consumer goods by rail, but to improve rail and vehicular safety, air quality and the overall quality of life for the residents of the region.

The Project

ACE is a single-purpose construction authority that was created in 1998 by the San Gabriel Valley California Council of Governments to mitigate the impacts of increased rail traffic over 70 miles of mainline railroad in the valley. At over two miles long, 65 feet wide, and 30 feet deep, the Trench Project, which involves separating the Union Pacific Rail Road (UPRR) track from at-grade vehicular traffic by lowering the existing track into a trench and constructing bridges to allow vehicles and pedestrians to pass safely overhead, is ACE's largest endeavor.

The construction required for the finalization of this Project is extensive. It commenced in 2012 with the relocation of numerous underground utilities including sanitary sewers, storm drain systems and fiber optics. In mid 2013, the construction of a temporary track bypass route within the existing railroad right of way was undertaken in order to facilitate the crucial movement of freight while the Trench Project is being completed over the next three years. Trains began operating on the bypass track in late 2014, allowing the Project to enter its main phase—the construction of the roadway bridges at the city's four elevated railroad crossings. The bridge construction phase is expected to be

completed in 2015, at which time workers will begin digging the trench. For this phase, earthmovers will excavate a 1.4 mile section of Union Pacific railroad that measures 65 feet wide and 30 feet deep, in order to construct a new track in the concrete-walled open trench.

Approximately 90,000 rail cars currently pass through the Project area train crossings every day, and train blockages at the crossings cause an estimated 1,744 vehicle-hours of delay each day or approximately 636,560 vehicle-hours of delay every year. The Trench Project will eliminate at-grade train crossings in the Project area and provide a number of benefits to the surrounding community including the creation of over 6,000 full-time jobs during construction, the alleviation of traffic congestion and delay caused by train traffic at crossings, as well as the reduction of air pollution and greenhouse gas emissions by an estimated 213 tons/year by 2030. In addition, the Project will eliminate the possibility of train-vehicle collisions, improve emergency vehicle response times to the community and render the need for noisy train horn warnings at intersections obsolete. Upon completion, the Trench Project will significantly improve the overall quality of life for the residents and business owners along the project's path.

Respecting History

Unique to the Trench Project is its proximity to the San Gabriel Mission, an area of sacred, historical land. At the start of the Project, a team of archeologists excavated the dig area and uncovered a remarkable inventory of Native-American artifacts, including pottery and arrow heads from the Gabrieleno Tongva Tribe, as well as the remains of a historic mill. In recognition of the historical significance of the area, ACE donated a pre-fabricated, elevated viewing platform to the San Gabriel Unified School District to host archeological and Native-American led interactive tours, demonstrations and exhibits for school and community groups.

Local and national elected officials have noted the Project's commitment to respecting the local area's history. U.S. Congresswoman Judy Chu commented on the contribution to the community, saying the construction authority's "...efforts to protect the San Gabriel Mission while improving transportation infrastructure are critical to the preservation and re-discovery of the unique history of our region." This important theme of balancing progress with preservation resonated strongly for everyone involved in the right of way phase of the Project.



Grade separations, as shown in this computer-generated image, will allow cars to safely cross underneath and over train tracks, reducing accidents, traffic and pollution.

Funding and Requirements

Funding for the Trench Project is provided through a combination of federal (14 percent), state (39 percent), Metropolitan Transportation Agency (43 percent), and local (4 percent) funds. Originally, the cost of the Project was estimated to be nearly half a billion dollars. However, due to effective value engineering, right of way management, cost containment and effective partnering, project costs were eventually reduced by one third, from \$498.5 million to \$336.9 million.

Federal funding administrative requirements mandated California Department of Transportation (Caltrans) right



Above, U.S. Congresswoman Judy Chu spoke at a groundbreaking event about the project's significance to the local community. At right, ACE's CEO Mark Christoffels offers a briefing to U.S. Representative Ed Royce, U.S. Transportation Secretary Anthony Foxx and U.S. Representative Grace Napolitano, who visited the project site in 2014.



of way certification. Per the Caltrans Right of Way Manual, projects requiring certification include "any construction project where Federal funds will participate in all or a portion of the cost of right of way acquisition or construction." Due to a compressed construction schedule for the Project, right of way certification was required within seven months after National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental clearances were obtained. In order to successfully meet the aggressive construction schedule and not jeopardize funding commitments, Paragon developed a comprehensive program and certification strategy that satisfied Caltrans' requirement that ACE have control over all of the required properties, and the Project was certified on time to meet both construction and funding deadlines.

Minimizing Impacts

Clustered around the mission and its artifacts sits a tightly knit community of older residential households and well-established businesses. Roughly 22 homes and 26 businesses in the neighborhood were impacted by the Project. Due to economic conditions at the time and the realization that displacing homeowners and businesses could very well create a severe hardship to the community, a goal to minimize impacts to the homes and businesses in the Project area was

established. With nearly two-dozen impacted homes along the Trench Project's proposed alignment, this was no easy task.

To avoid full fee acquisitions and minimize the impacts to the properties, the design team incorporated the use of tiebacks, which are ground anchors used to support retaining walls, into the trench design. This engineering strategy not only provides support for the trench walls, but also minimizes surface impacts. The tiebacks are underground, extending beneath impacted areas up to a depth of 30 feet. As a result, only partial and temporary easement interests were required, and no residents were permanently displaced.

Challenges and Solutions

The Project was not without challenges. Two structures in particular put the team's abilities to the test and required the coordinated efforts of ACE, Paragon and the City of San Gabriel.

A dangerous, unpermitted garage/makeshift living quarters that was built in violation of city codes was encroaching into the UPRR right of way. The resident of the property was an elderly 30-year tenant whose family lived in a neighboring house. Rather than demolish the property, and permanently displace the occupant, our team crafted a solution benefitting both the tenant and the community. Paragon

successfully negotiated the construction of a new structure that no longer encroached into the right of way required for the Project.

The elderly resident was temporarily relocated with her family while the old structure was demolished and a new one was built to code. With ACE's support, Paragon obtained the required permits, developed a construction plan, processed the entitlements, sought approval from the planning commission, and oversaw construction of a fully permitted and refurbished unit. The resident took possession of the "granny flat" grateful that she did not have to leave the safety and security of the neighborhood that had become her home for the last three decades. The community was preserved, and the city was able to add an additional elderly housing option to its roster.

Another challenge was a 379-unit public storage facility, All-Aboard Storage, from which a partial acquisition was originally envisioned. However, the right of way required from this property was significant and ultimately would have necessitated the removal of two of the company's four storage unit buildings. Early negotiations with the business owner revealed that the removal of the two storage buildings would effectively eliminate the profitability margin of the business and a full fee acquisition was pursued.



Fiber optic lines are relocated along the railroad right of way in preparation for the installation of a temporary rail detour route.

this project is proof positive that public infrastructure projects—whether large or small—can indeed strike a harmonious balance between progress and preservation, while laying the tracks for a city’s future growth.

Commissioner Fran Inman of the California Transportation Commission recently commented on the Project and its extensive economic effect. “Investment in freight infrastructure projects, like the ACE project, is key to maintaining our regional, state and national economic competitiveness as well as community support for Southern California as a leading trade gateway and corridor.” 🌟

The 86,263 square-foot fee acquisition of the property required the relocation of all the personal property stored in approximately 235 rental units, as well as the on-site property manager and his family. Our team developed an approach that allowed the manager and his family to remain on site during the 18-month relocation of the storage units as an employee of All-Aboard Storage with wage reimbursement by ACE. The manager collected rents, performed the vacancy inspections of the storage units, and provided on-site security for the property. Once the storage units were vacated, he and his family were provided with replacement housing, and he continued his employment with All-Aboard Storage.

The vacant All-Aboard Storage property presented yet another challenge to ACE in terms of security, vandalism, illegal activity and the threat of occupancy by vagrants. These issues were resolved by offering local businesses the use of the remaining units to store business related equipment and utilizing the remaining buildings as a field

office and equipment and storage yard for the Trench Project construction team. By maintaining a strong physical on-site presence, the safety of the neighborhood was insured, and potentially unsafe and illegal activity was circumvented.

Lasting Success

As construction on the Trench Project moves forward, Project proponents are keeping local residents informed through project videos, news releases and quarterly progress newsletters in English, Chinese and Spanish, all of which are available on the centralized ACE project website (www.theaceproject.org) and distributed to the local community. The team has also continually provided environmental, community and school outreach for the Project as it moves through each phase.

The completed Trench Project will transform a community accustomed to long waits and pollution issues resulting from at-grade train traffic. With the number of rail cars projected to more than double over the next few decades,



Amy serves as Paragon Partners’ Right of Way Supervisor for the Trench Project. She applies legal, administrative and project coordination skills to acquisition, relocation assistance and property management projects.



As a Right of Way Program Manager for the Trench Project, Mark oversees all planning and supervision of turnkey right of way services. Previously, he headed the Metropolitan Water District of Southern California’s Real Estate Services Department.



Jeremy oversees the acquisition of commercial, residential and industrial properties for the Trench Project. He also coordinates property management for ACE-acquired properties and property demolition.