PROJECT CASE STUDY / TRANSIT · LIGHT RAIL · STATION INFRASTRUCTURE

Orange Line Station Platform Modifications

Downtown San Diego to Santee · San Diego Association of Governments (SANDAG)
CIP 1210070.2 / IFB 5001840 · Prime Contractor: West Coast General Corporation



One of the information kiosks In-Line fabricated, in service on the platform — holding the route map, the timetables, and the notice announcing the Trolley Renewal itself.

OWNER	PRIME CONTRACTOR	ENGINEER	SUBCONTRACT
SANDAG	**West Coast General Corporation**	**CH2M Hill**	**11 August 2011 · $368,713.00**

FINAL VALUE	LIQUIDATED DAMAGES
$458,786.07	**$4,700 per day**

ALMOST EVERYTHING ON THE PLATFORM, EXCEPT THE TROLLEY

SANDAG rebuilt the Orange Line — the light rail route running from downtown San Diego out through Lemon Grove, La Mesa and El Cajon to Santee. In-Line's scope was the metal that passengers touch, read and lean on at every station along it.

18
Information kiosks — 7 two-panel, 11 four-panel

36
Variable message sign structures

1,669 LF
Steel ornamental fence

4,000+ LF
Railing, fence and guardrail in total

Look at the photograph again. That kiosk is the object a passenger walks up to when they do not know when the next train is. In-Line built its frame — and seventeen more like it, in two sizes, powder coated, across the length of the line.

Most people will never notice a transit kiosk. They will notice immediately if it is not there.

WHAT IN-LINE DELIVERED

Eighteen separate bid items, priced by the foot and by the each, across a live light rail corridor.

- **18 information kiosks** — seven two-panel and eleven four-panel, fabricated and powder coated, signage by others.
- **36 variable message sign structures** — 28 with eight-foot mast arms and 8 with four-foot mast arms. These are the frames that carry the next-train displays.
- **1,526 LF of 42-inch steel ornamental fence** and **143 LF of 15-inch ornamental fence** at the tops of walls.
- **531 LF of pipe handrail.**
- **High-visibility pedestrian guardrail, 300 LF**, plus pedestrian guardrail installed and modified at **La Mesa, Euclid, Lemon Grove eastbound and westbound, and 25th & Commercial**.
- **Artwork railing at Euclid** — public art, fabricated as railing.
- **18 Braille signs** and **5 station secondary monument signs**.

- **Metal beam guardrail** and chain link where the plans called for them.
- **Field measuring, fabrication and installation** — all included, all In-Line.

SCOPE AT A GLANCE

Information kiosks | **VMS sign structures** | **Ornamental fence** | **Pipe handrail**
Pedestrian guardrail | **Artwork railing** | **Braille signage frames** | **Monument signs**
Metal beam guardrail | **Powder coat**

WHY IT WAS HARD

$4,700 a day

That is the liquidated damages figure written into In-Line's subcontract. Not the prime's — **ours.**

On a transit modernisation, the schedule is not a target. Stations come out of service in windows, and the window closes whether you are finished or not. Every item In-Line fabricated had to be ready before its station's window opened, because there was no version of arriving late that cost less than the work itself.

Eighteen bid items across a whole rail line

This was not one product delivered many times. It was kiosks in two configurations, sign structures in two mast-arm lengths, ornamental fence in two heights, guardrail installed at some stations and *modified* at others, handrail, Braille signage, monument signs and public artwork railing — each with its own drawing, its own submittal, and its own station.

In-Line carried all of it under one subcontract, through **SANDAG and CH2M Hill review**, with separate approved submittals for the kiosk signs, the platform signs, the VMS structures, the ornamental fence panels, the miscellaneous metal, the Braille signs and the guardrail.

Working a line that never really stops

Downtown San Diego to Santee, station by station, on an operating light rail system with passengers on the platforms and overhead catenary above the work.

The MTS Station Sign Design Manual

Transit signage is a system, not a product. Every kiosk, every monument sign and every frame had to conform to the agency's own design manual — because the point of the thing is that a passenger

at Santee and a passenger at 25th & Commercial read the same object the same way.

$368,713
Base subcontract

$458,786
Final value with changes

18
Separate bid items

2011–14
Contract through close-out

Issued under Master Subcontract INLINERAIL-2010-08 with West Coast General Corporation — a standing master agreement, with this project let as a project work order against it. Owner: San Diego Association of Governments. Engineer: CH2M Hill.

THE RESULT

Every station on the Orange Line, from downtown out to Santee, carries In-Line's fence, handrail, guardrail, sign structures and kiosks. The photograph shows one of them doing its job — telling a passenger when the next trolley leaves.

It is the middle chapter of an unbroken decade on San Diego transit: the 2012 Downtown Platform Trolley Renewal, this, the Poinsettia Station improvements, and the Mid-Coast extension.

Four transit contracts, three primes, one agency, one standard — and a system that kept running through all of it.

WHY TRANSIT AGENCIES AND THEIR PRIMES CALL IN-LINE

Station work is a hundred small, exactly specified objects delivered into short windows on a system that cannot stop.

- **We take the whole platform metal package.** Kiosks, sign structures, monument signs, fence, handrail, guardrail, artwork railing — one subcontractor, one submittal register, one crew.
- **We build to an agency's design manual**, so every object reads the same at every station.

- **We accept the schedule risk.** Liquidated damages at $4,700 a day, taken and delivered against.
- **We work live systems.** Passengers on the platform, catenary overhead, service running. That is what our morning safety discipline is for.
- **We hold master agreements.** West Coast General has kept a standing master subcontract with In-Line, with projects let as work orders against it — the arrangement a prime only makes with a sub it does not have to re-qualify.
- **We are certified, bonded, signatory, and safe.** DBE · SBE · SLBE · SB · HUBZone · SBA 8(a). Union affiliated, Local 89 & Local 12. CSLB C-13, C-51, C-32. Bonded through Old Republic Surety, rated A+ XV. **EMR 0.68.**

SANDAG, MTS, Caltrans, the Port of San Diego, the University of California, the FAA, cities, counties, school districts and four branches of the armed services. One standard.

HAVE A PROJECT LIKE THIS?

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