River Supply Conduit Improvement
Upper Reach ~ Unit 7
(RSC 7)
COMMUNITY MEETING
October 2018
Work Area 3
Johnny Carson South Park

Presented by: Johan Torroledo, M.S.,P.E.
LADWP Project Management

Putting Customers First

Purpose of Community Meeting

- Provide overall project description
- Review construction work on Work Area 3
- Review mitigation measures

Meeting Agenda

1. Presentation
   - Project Team
   - Project Information
   - Community Outreach & Mitigations
   - Construction Updates
     - ✓ Work Area 3
   - Project Schedule
   - Contact Information
2. Q & A
3. Open House: One-on-One with Project Team

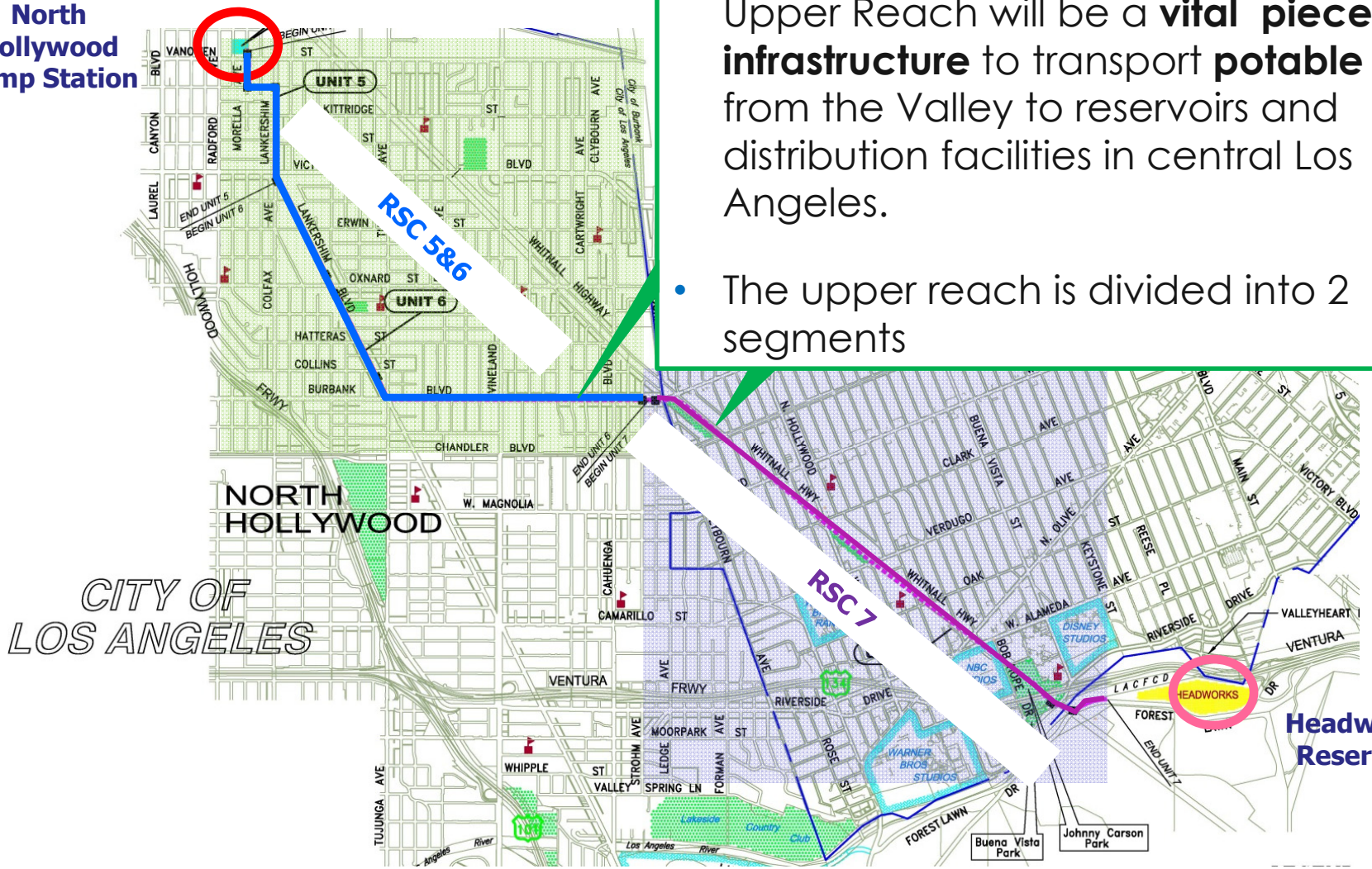
Project Team

Construction Phase Team	
General Contractor:	Frontier-Kemper
LADWP Project Management Team:	Johan Torroledo, Project Manager (PM)
	Ali Sabouni, Construction Manager
	Sarah LaCombe, Assistant PM
	Fidel Zabalza, Resident Engineer (RE)
LADWP Community Relations Team:	Stephanie Spicer
	Jason Stinnett
On site Phone Number:	To be provided once a phone line is set on the trailer.
Project Website	Project Team Contact Information Available at • **www.ladwp.com/RSC7** **sign up for updates**

Project Overview

River Supply Conduit - Upper Reach

- The River Supply Conduit Project - Upper Reach will be a **vital piece of infrastructure** to transport **potable water** from the Valley to reservoirs and distribution facilities in central Los Angeles.
- The upper reach is divided into 2 segments

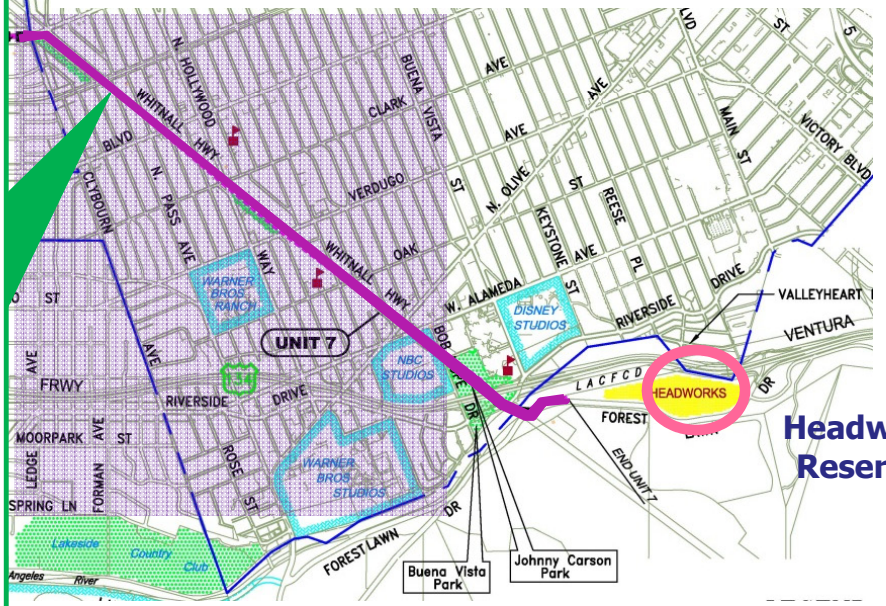


Project Overview

River Supply Conduit - Upper Reach

RSC 7 Project Details

1. **Location:** Primarily along Whitnall Hwy
2. **Diameter:** 78 inch diameter potable water pipeline.
3. **Length:** 13,325 feet, or approximately 2.5 miles
4. **Estimated Overall Duration**: 3 Years total
5. **Method Of Construction**:
   a. Tunneling
   b. Cut and Cover
6. **Number of Work Areas:** 3 Work Areas



Project Overview

Why is this project necessary?

This project is required for compliance with federal and state water quality regulations.

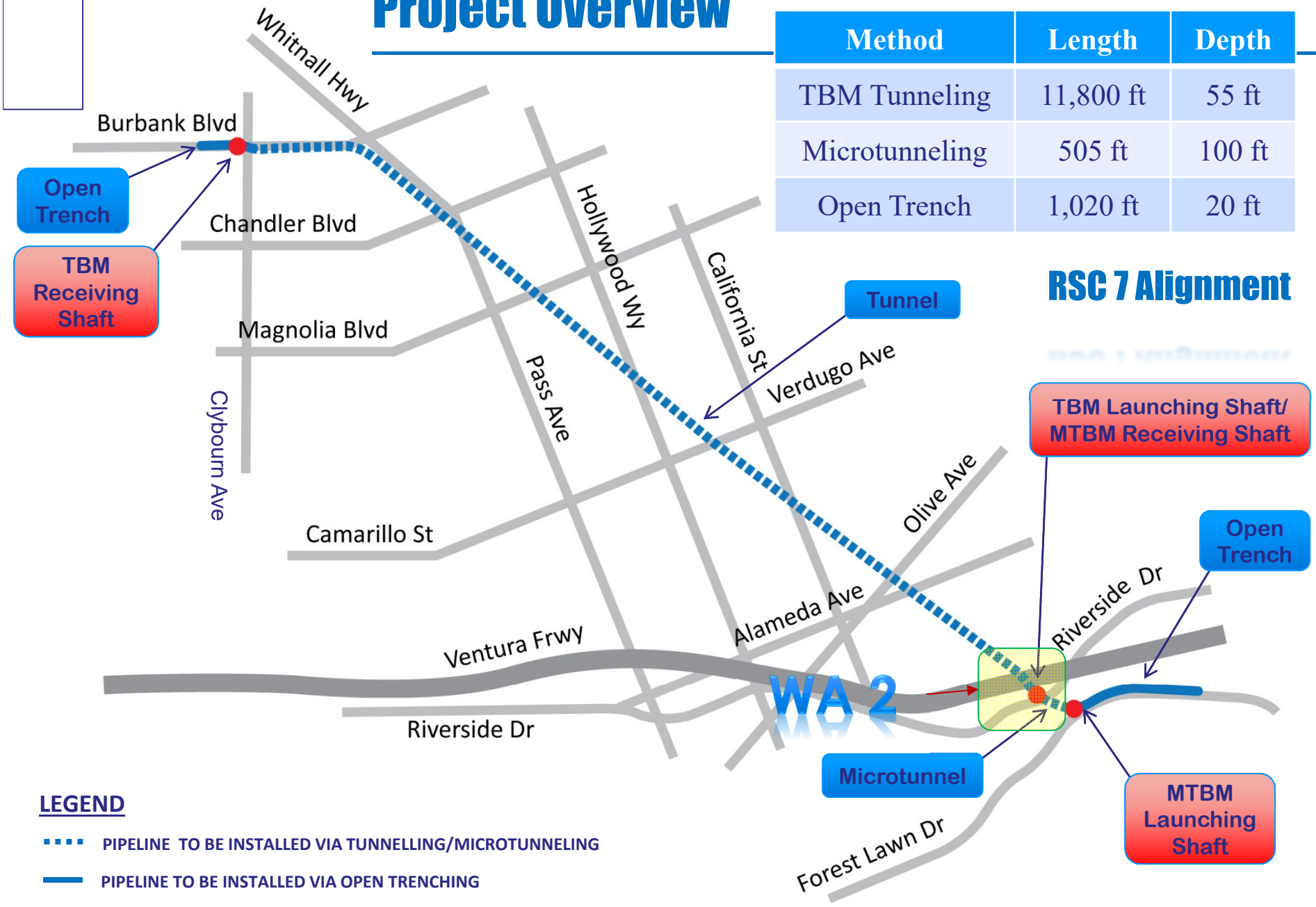
1. **Safety**:
   a. Replace **aging infrastructure**
   b. Increased water pressure required to meet California Department of Public Health requirements.

2. **Reliability:**
   a. Provide a more **reliable supply of water** to the central Los Angeles area .
   b. **Increased pipeline capacity**: Drought & Removal of open-air reservoirs which reduce in-city water supply.
   c. Allow **greater operational flexibility** and an **improved water distribution** system for the City of Los Angeles.

Project Overview

Method	Length	Depth
TBM Tunneling	11,800 ft	55 ft
Microtunneling	505 ft	100 ft
Open Trench	1,020 ft	20 ft

RSC 7 Alignment



LEGEND

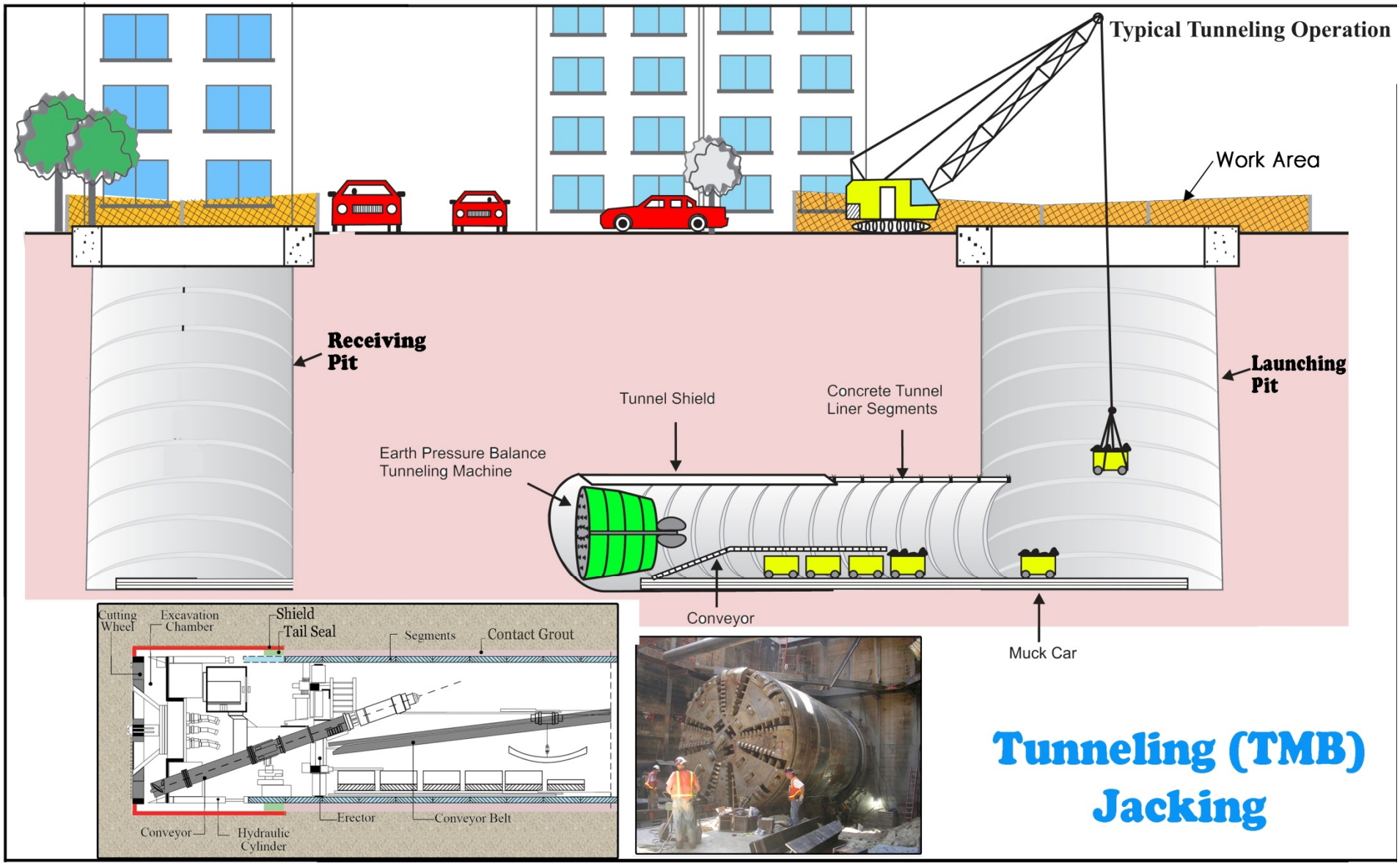
- PIPELINE TO BE INSTALLED VIA TUNNELLING/MICROTUNNELING
- PIPELINE TO BE INSTALLED VIA OPEN TRENCHING
- SHAFT

Construction Update: WA 3

Construction Update: WA 3

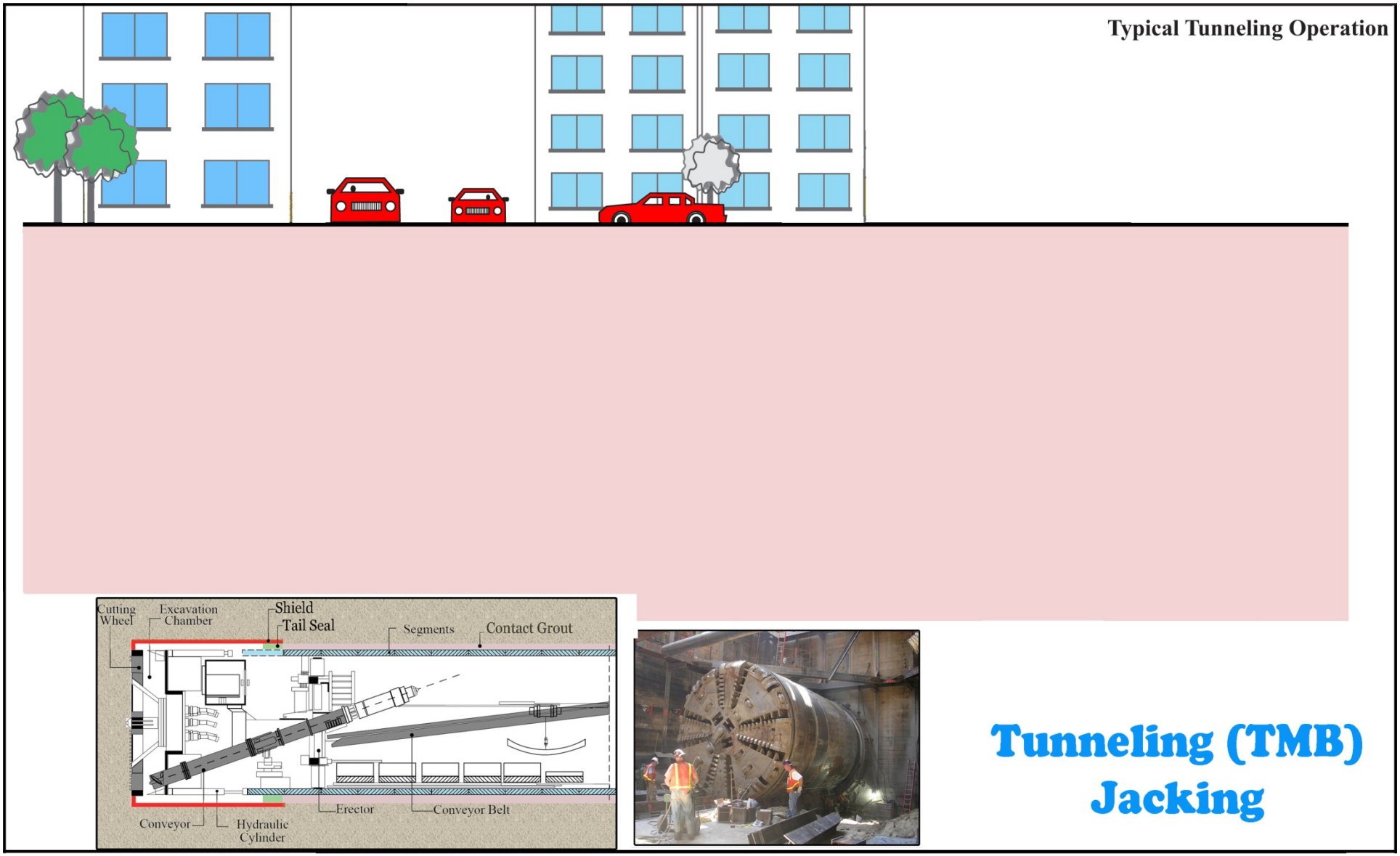
Work Area 3: Launching Pit WA Size: ±74,000 sf	
Above-Ground Work Hours Outside WA	• 7:00 a.m. to 7:00 p.m. Monday – Friday • 8:00 a.m. to 5:00 p.m. Saturday • No work Sundays and national holidays
Below-Ground Work and Work within WA	• Contractor will request a work hour variance permit from COB to work 24 hours, Monday to Saturday. • Working 24 hours is critical to complete construction on schedule.
Hauling	• Restricted to above-ground work hours only. • Haul Route will be determined by the Contractor and Haul Route Permit application will be submitted to City of Burbank.

Project Overview → Method: Tunneling (TBM)



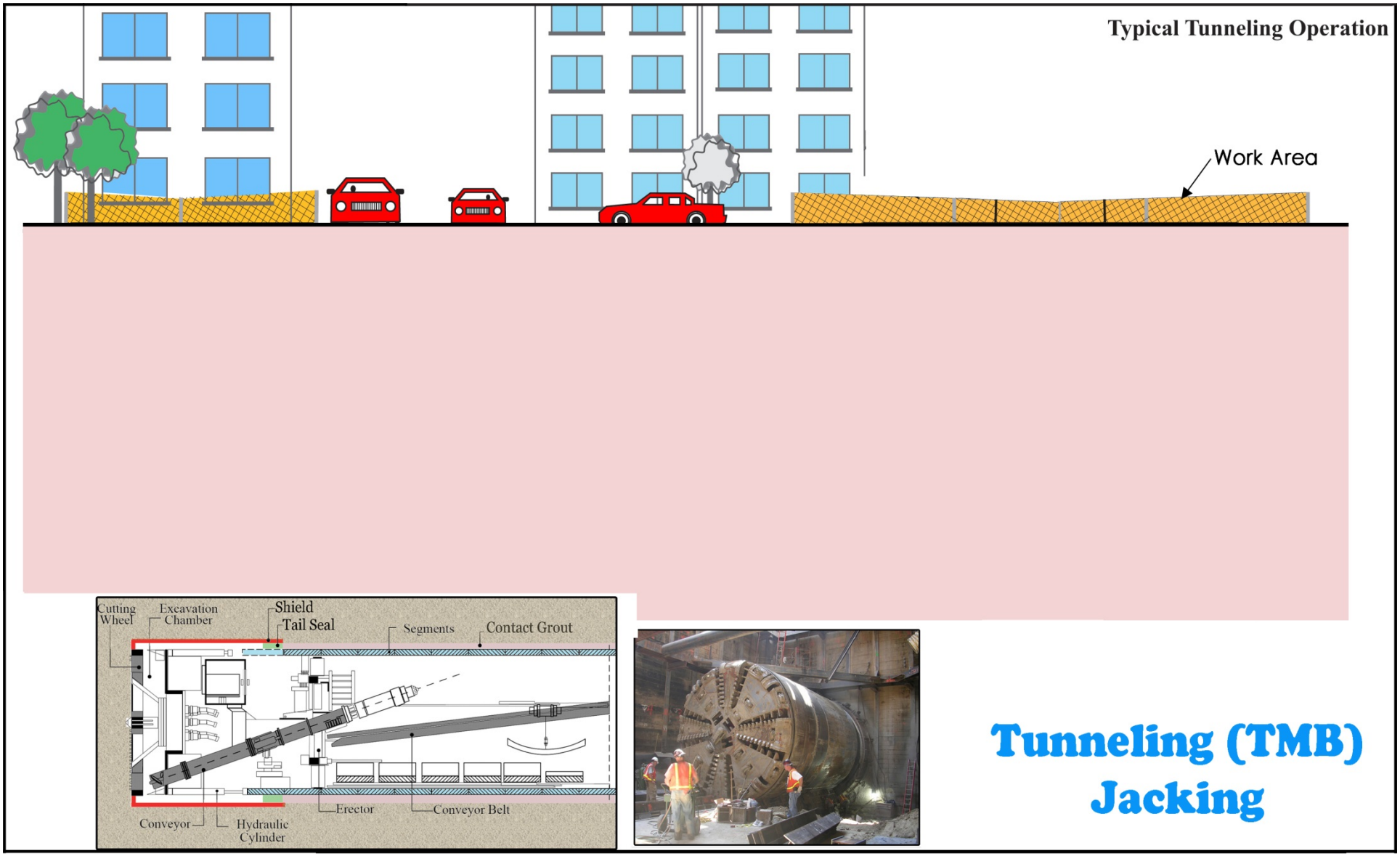
Tunneling (TMB)
Jacking

Project Overview → Existing Site



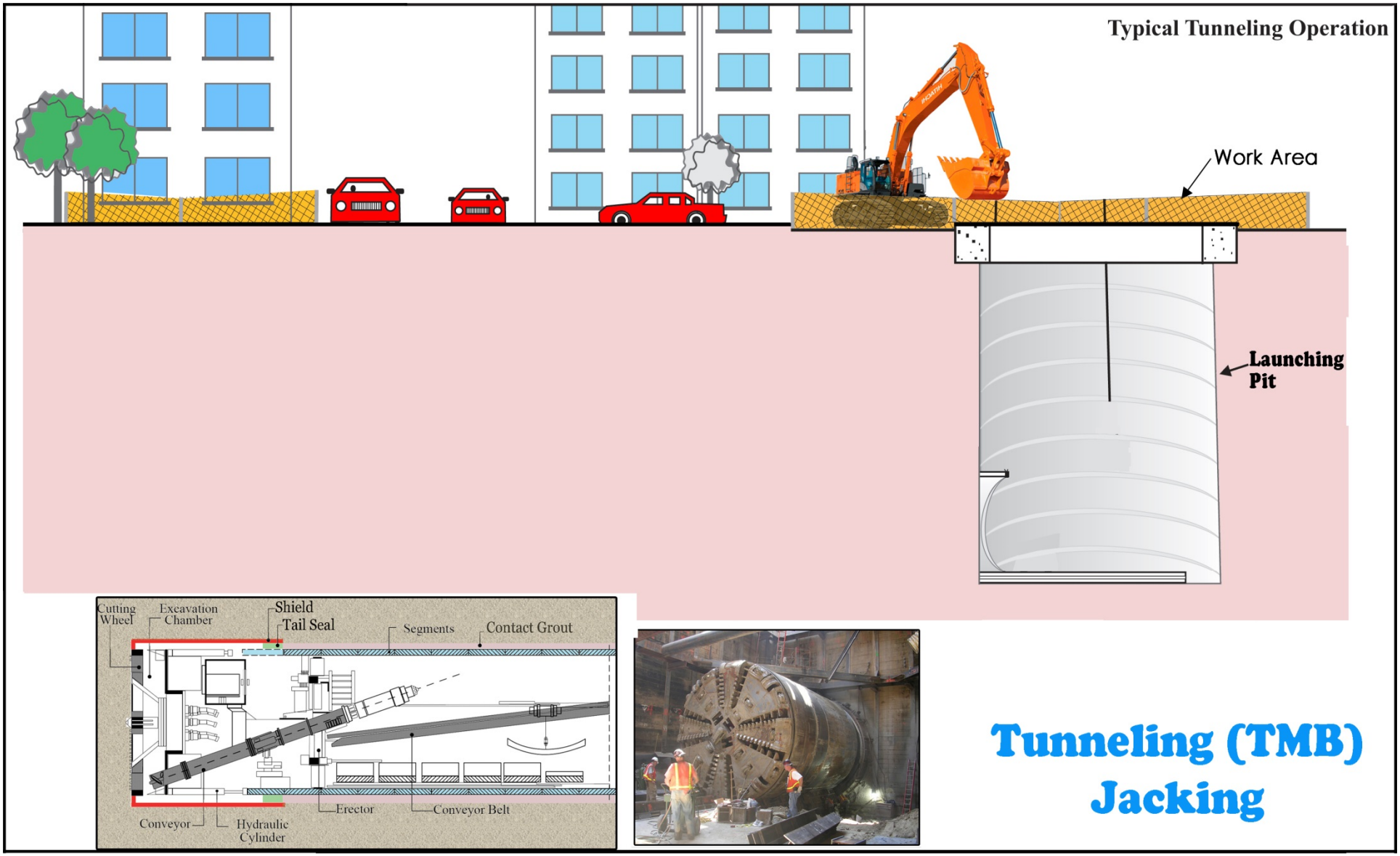
Tunneling (TMB) Jacking

Project Overview → Set up Traffic Control Plan & Sound Walls



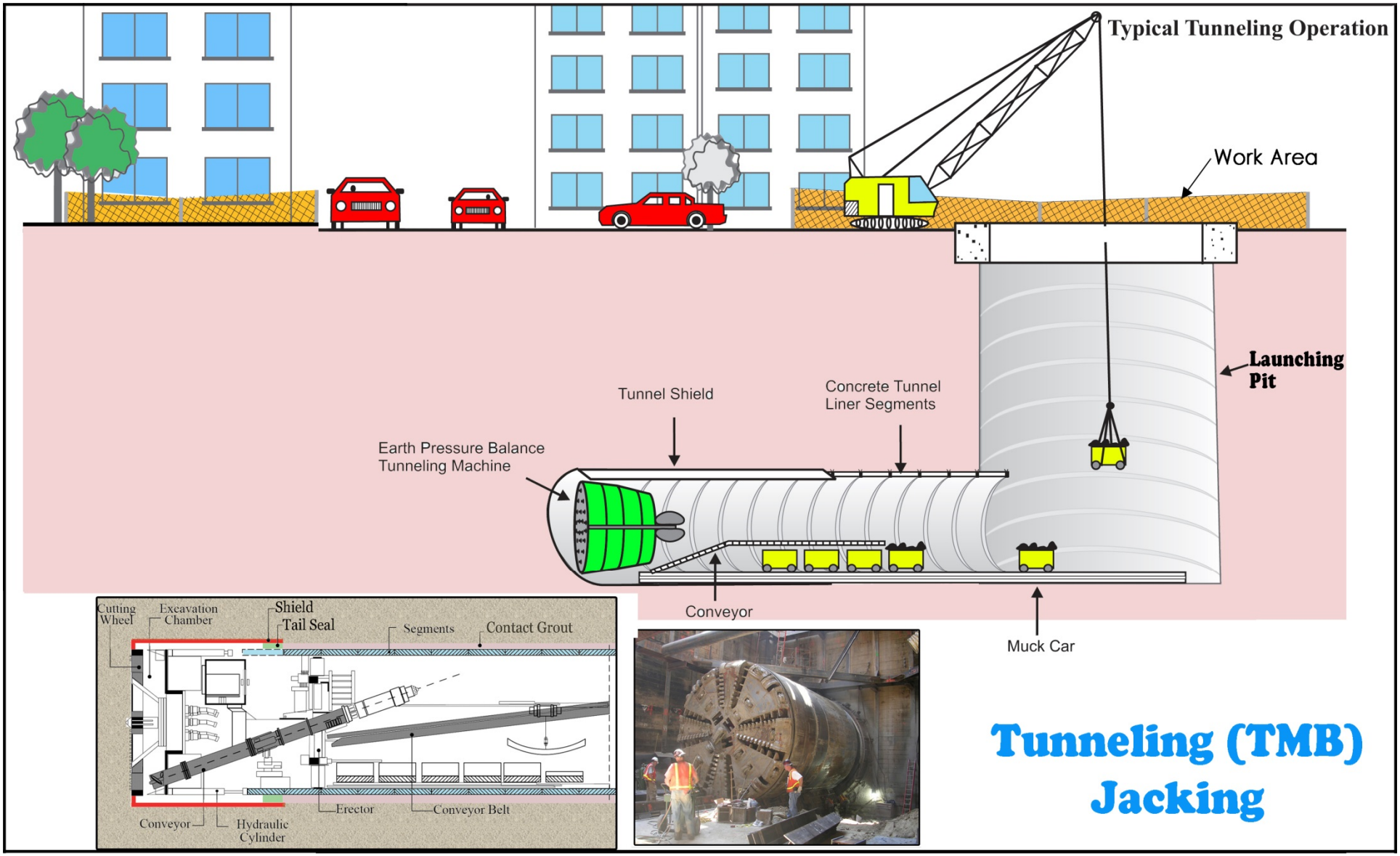
Tunneling (TMB) Jacking

Project Overview → Excavation and Shoring



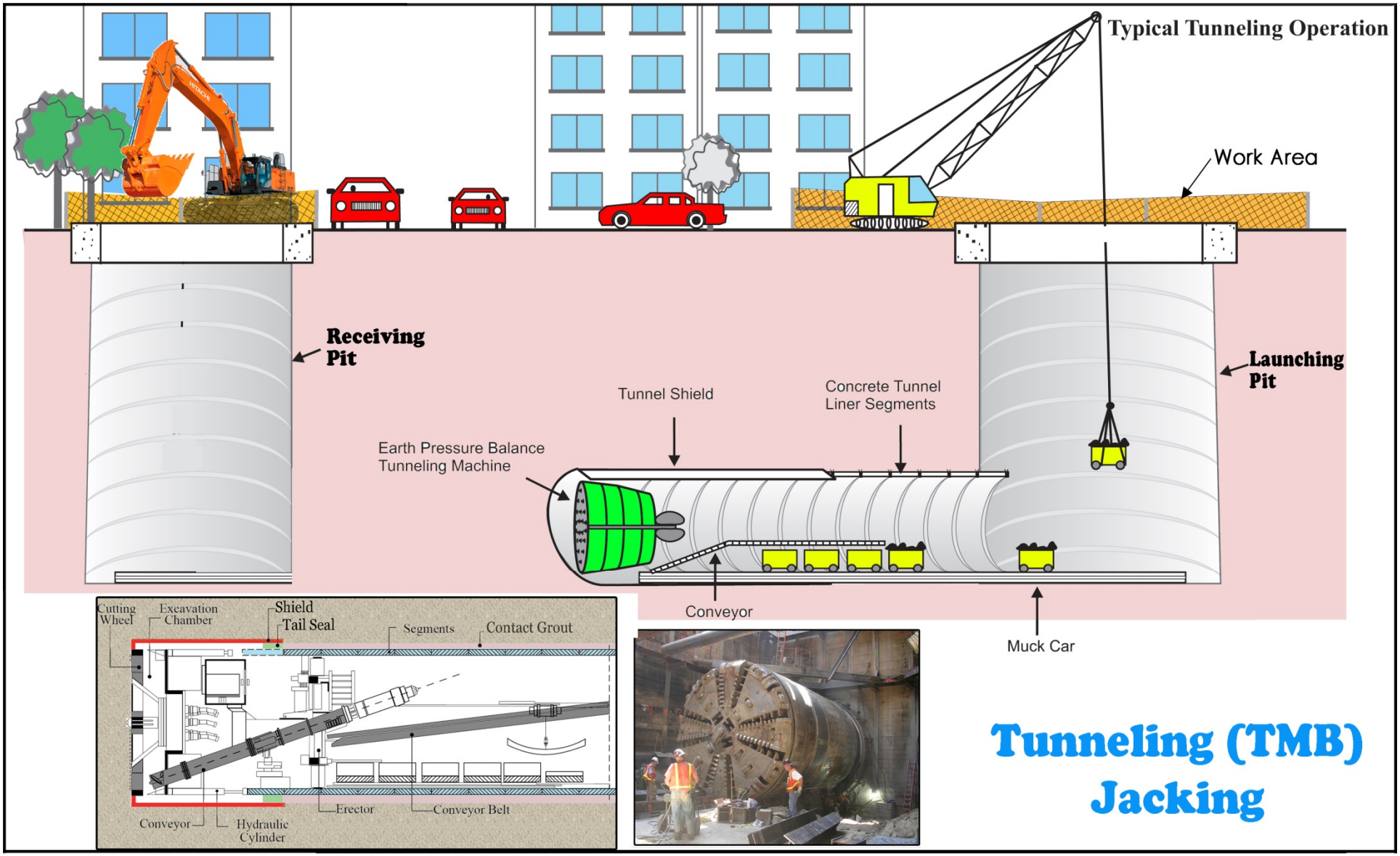
Tunneling (TMB) Jacking

Project Overview → Start Tunneling



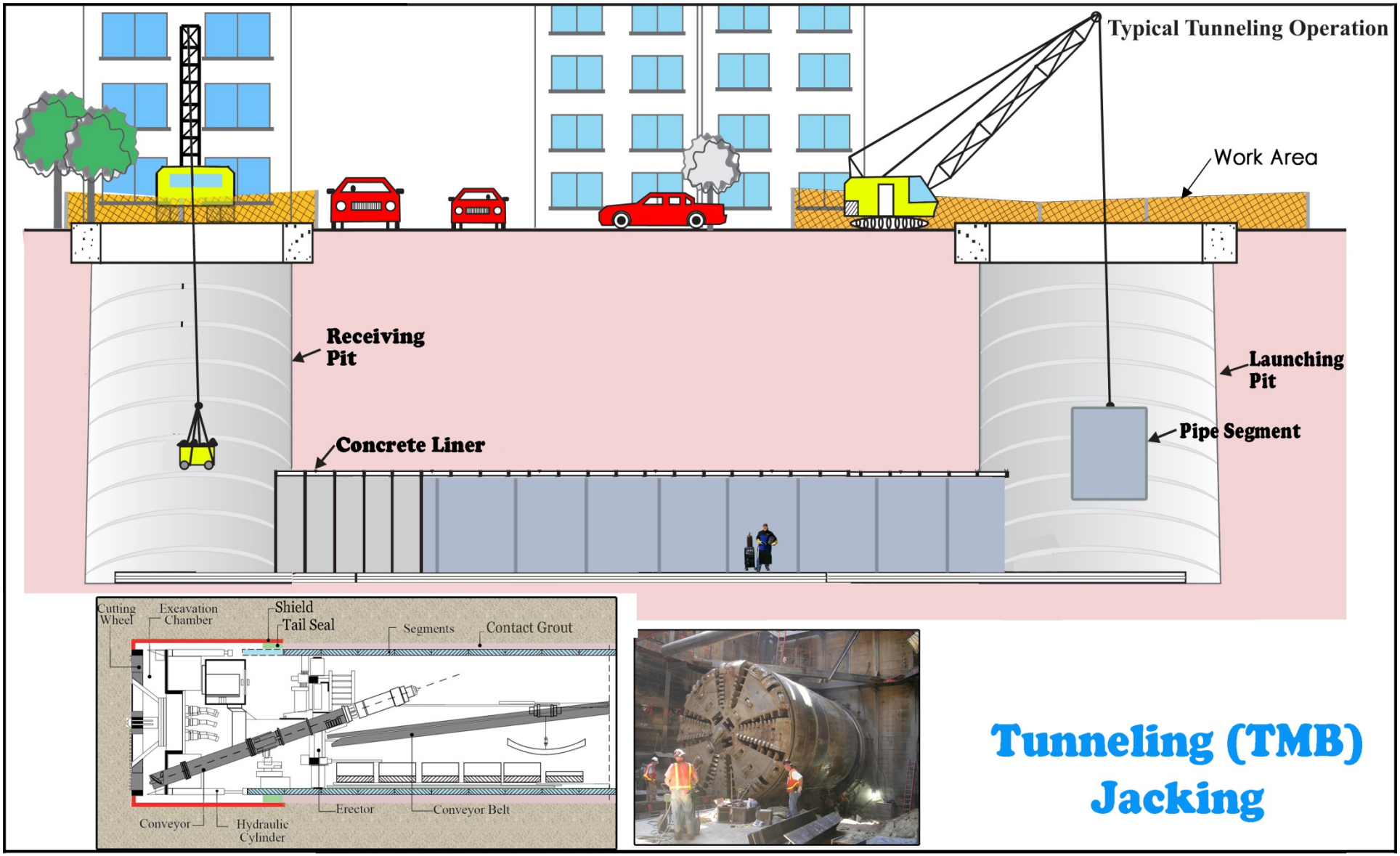
Tunneling (TMB) Jacking

Project Overview → Prepare Receiving Pit



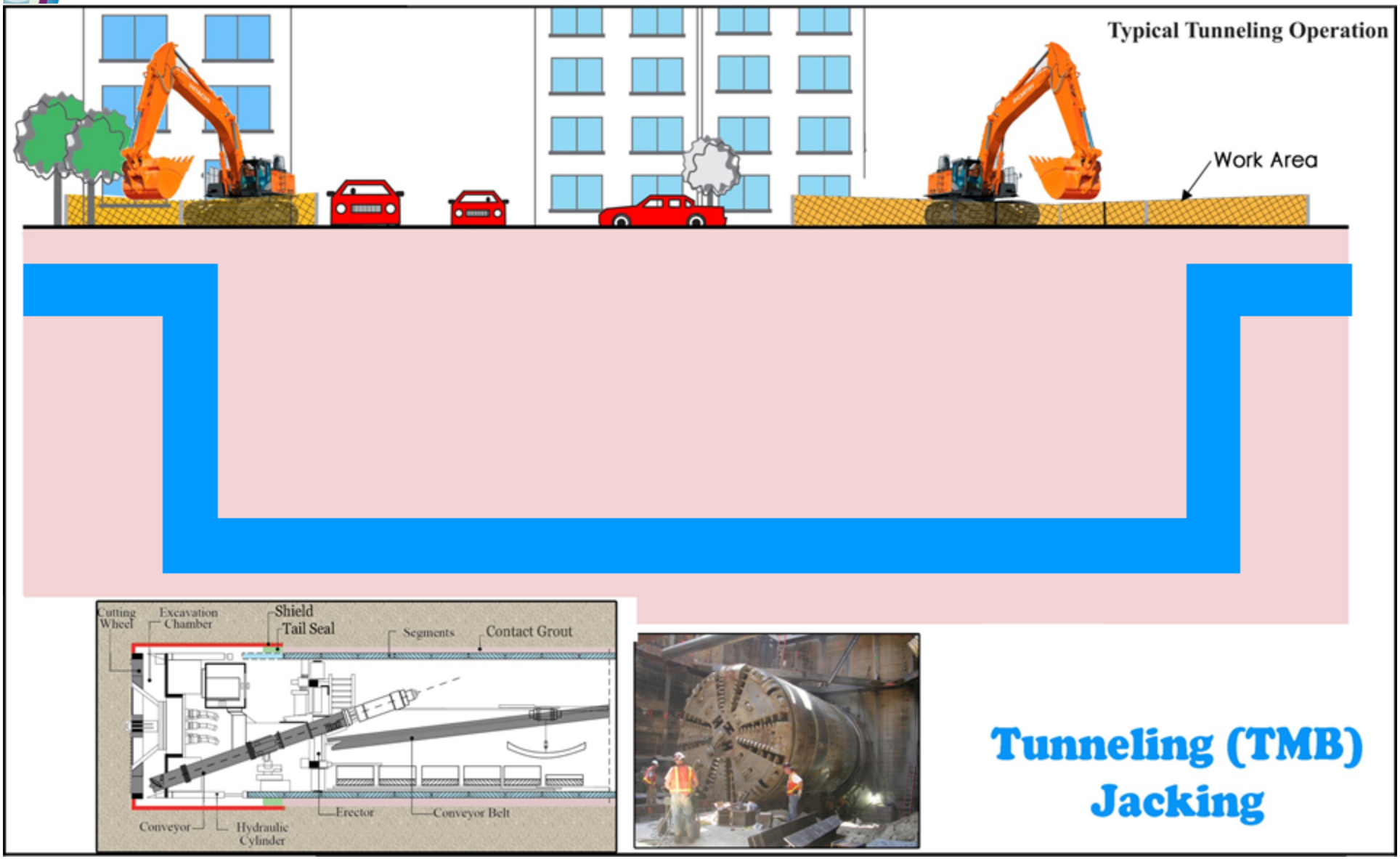
Tunneling (TMB)
Jacking

Project Overview → Pipe Installation



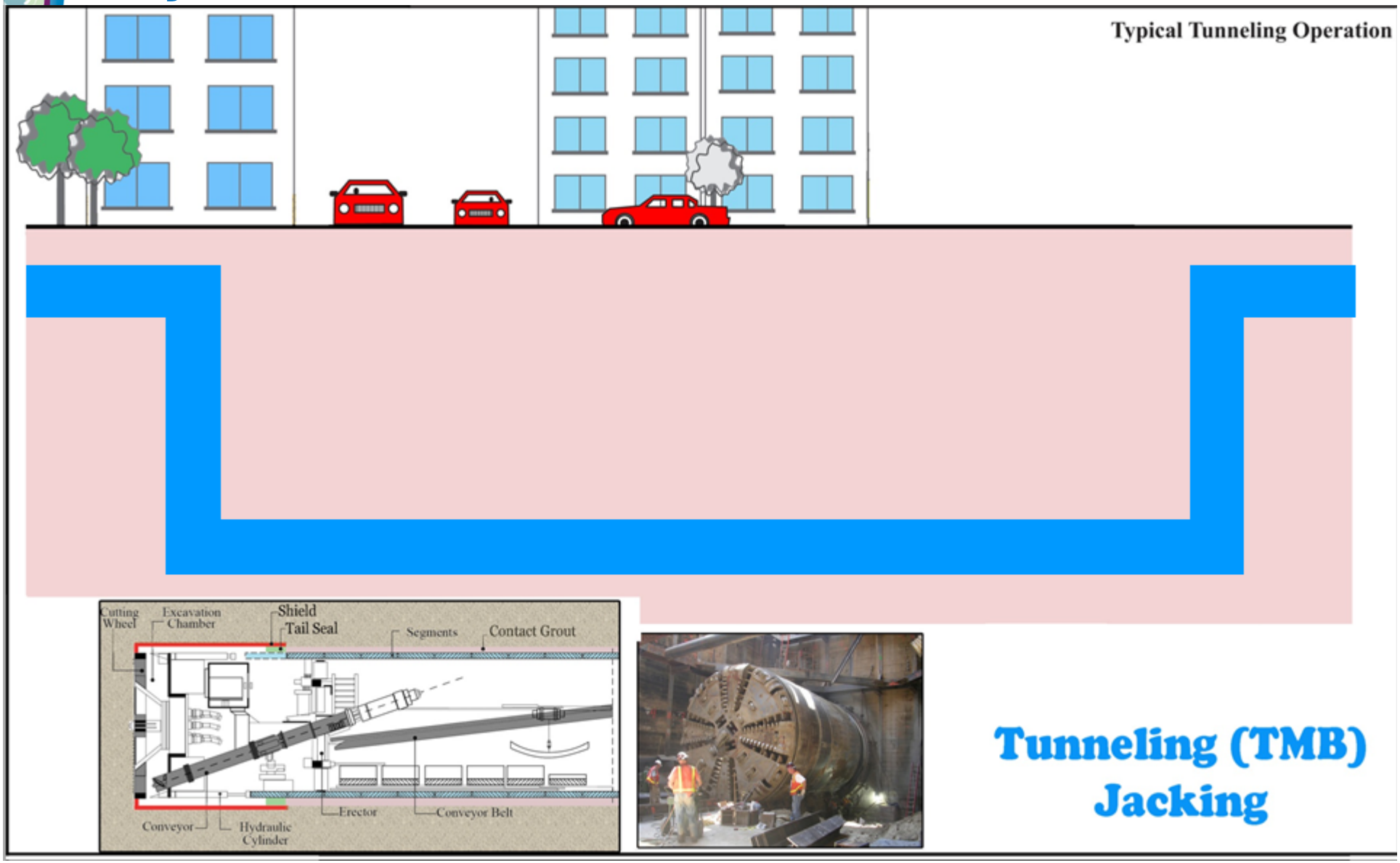
Tunneling (TMB)
Jacking

Project Overview → Backfilling



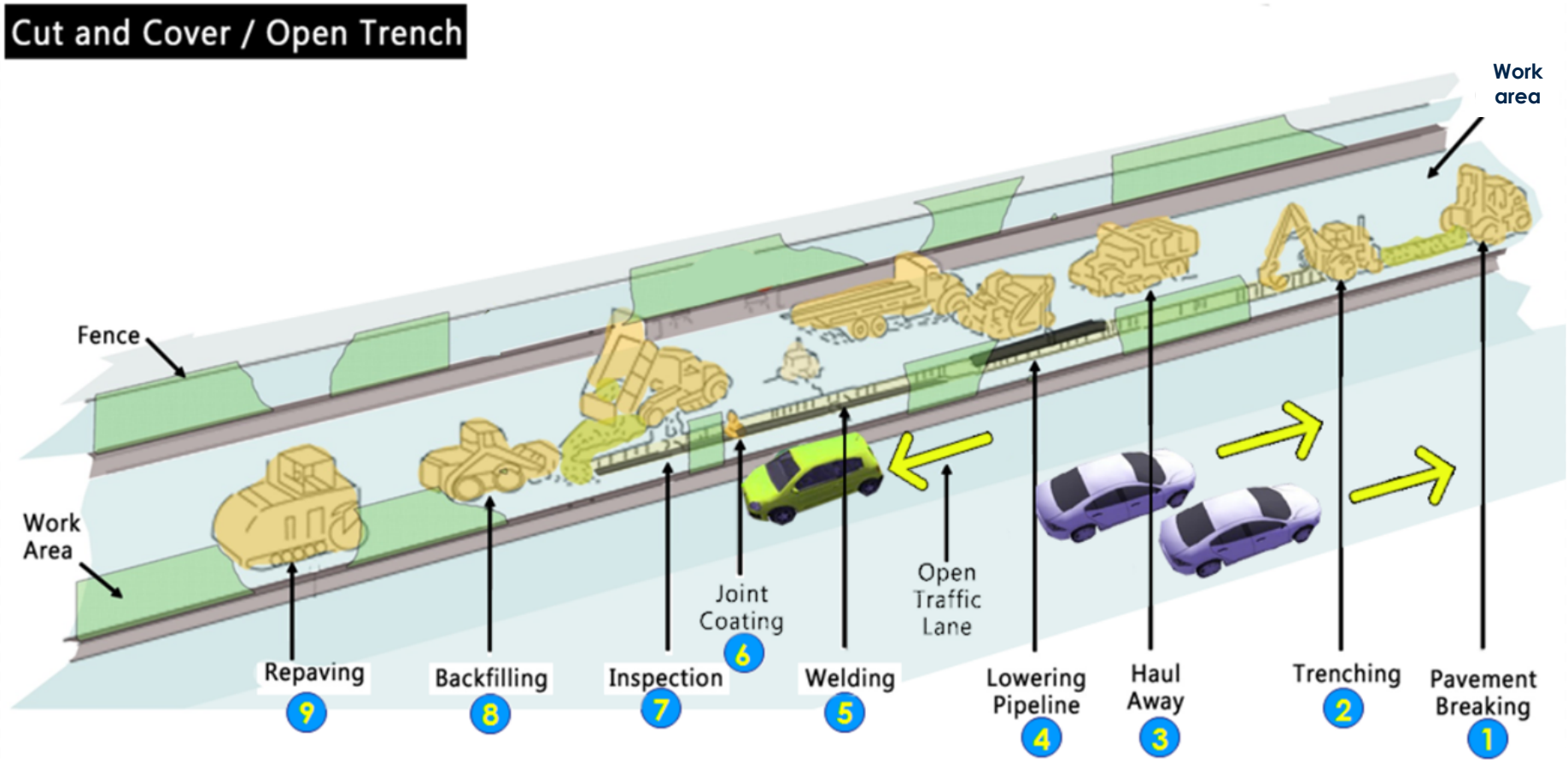
Tunneling (TMB)
Jacking

Project Overview → Site Restoration



Tunneling (TMB) Jacking

Project Overview → Method: Cut and Cover



Project Overview

Community Outreach

Pre-Construction Outreach Activity Phases	Date
• Environmental Documentation Outreach & EIR	2007 -2008
• Preconstruction Phase Outreach	June 2018

A study of the proposed project description, location, alignment, alternatives, and impacts was executed in the EIR process.

- Main community concerns identified via outreach efforts:

Noise & Vibration	Dust

- **Mitigation Measures**→ Modifications/efforts implemented to reduce and manage impacts from construction activities
  - Integrated into project design and enforced through contract specifications.

Community Outreach: Mitigation Measures

Noise Control:

- No equipment allowed on site which emits noise levels greater than 75 dBA at a distance of 50-ft.
    - Ex. Vacuum cleaner (70 dB); Passenger car at 65 mph at 25 ft (77 dB)
- Sound walls required to shield residences or other noise-sensitive receptors from direct exposure to construction noise.
- Contractor to submit a project noise control plan.

Vibration Control:

- Levels shall not exceed a peak particle velocity of 0.2 inches per second (Construction vibration limit to prevent structural damage to structures).

Table A: Guideline Vibration Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources[2]
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans Transportation- and Construction-Induced Vibration Guidance Manual, June 2004.

[1] Transient sources create a single, isolated vibration event, such as blasting or drop balls.

[2] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Community Outreach: Mitigation Measures

Land Use and Planning:
•Public notifications via press releases, notification letters, websites, on site community meetings, social media.

Recreation:
•Coordinate with Parks and Recreation on construction and recreational activities at JCP South.

Transportation/Traffic
•Traffic Control Plan requirements and approval by LADOT and City of Burbank.
•Warning signs and flaggers.
•Provide access to emergency vehicles.
•Provide uninterrupted mail and trash pick up services.
•Maintain access to homes and businesses.
•Provide notification of disrupted access.
•Maintain bike lanes at Forrest Lawn.

Community Outreach: Mitigation Measures

Tunnel Instrumentation to Monitor Settlement and Vibration:

- Monitor shaft walls, street intersections, and existing substructures
- Instrumentation every 150-ft over the centerline of tunnel alignment
- Each leg of every transmission line tower between Burbank Blvd shaft and Forest Lawn Dr shaft.

Street Restoration

- Limits identified in design drawings.
- LADWP, City of Burbank, and Contractor will conduct a pre- and post-construction job walk to determine additional restoration needed along haul routes (once identified).

JCP Restoration:

- Contractor to restore irrigation (up to code) and turf.
- Payment to City of Burbank for removal of trees (appraised value)

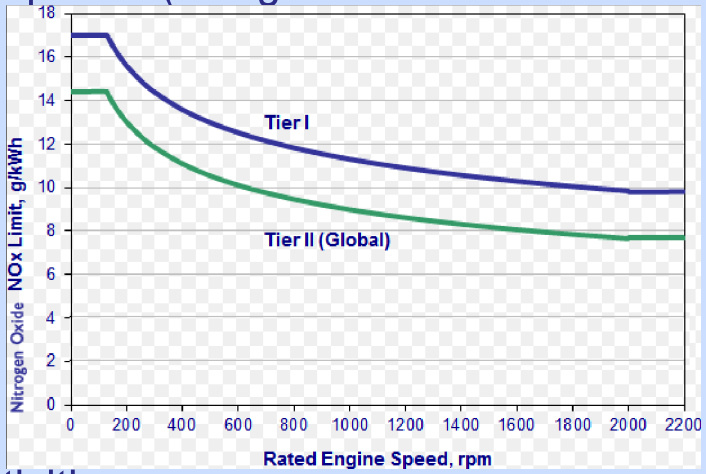
Community Outreach: Mitigation Measures

Aesthetics:

- Sound wall around work area at JCP South.
- Use minimum amount of construction lighting. Shield lighting away from adjacent properties.
- Keep work site and adjacent areas clean and free of rubbish/debris.
- Restore work areas.

Air Quality and Dust Control:

- Use only Tier 2 non-road diesel mobile construction equipment (stringent standard for emission levels).
- No idling of vehicles.
- Compliance with regulations (SCAQMD, CARB, EPA)
- Use water trucks and street sweepers to maintain clean access.
- Remove mud, dust, dirt, debris from streets, ramps, parkways, and sidewalks.
- Inspectors (COB, LADWP) to enforce above-ground activities.



Community Outreach: Mitigation Measures

Schedule

- Condense project duration wherever possible, without compromising safety
- Option to work from 9pm-7am, inside tunnel to reduce duration (LAPD approval required LA City and COB Public Works at Burbank)

Open Communication & Updates

- Community meetings: Community meeting will be held for each work area and project website will contain updates.
- Dedicated project staff including Resident Engineers, and Community Liaisons

Sound wall.


Bob Hope Dr
Carson Park
Riverside
Bob Hope
Forest Lawn


Bob Hope Dr

Construction Update: WA 3

Estimated Schedule *: Work Area 3

		Estimated Start	Estimated Finish
	WORK AREA 3		
1	Start of Construction	Dec 2018	
2	Set Up Traffic Control Plan (TCP)	January 2019	
3	Sound Wall	January 2019	February 2019
4	Excavation Pit & Shoring	March 2019	June 2019
5	Tunneling Work	June 2019	Sept 2020
6	Tunnel Pipe Installation	Sept 2020	March 2021
7	Backfill and Pave	March 2021	Sep 2021
8	Sound Wall Removal	Oct 2021	
9	Remove TCP	Dec 2021	

*Pending contractor schedule update

Project Schedule Summary

RSC 7 Estimated Dates	
Start of Construction	December 2018
Construction End	December 2021

Contact Information

Project Manager:

Johan Torroledo
213-367-2296
Johan.Torroledo@ladwp.com

Sign up for updates at
www.LADWP.com/RSC7