Project Update for

Downtown Quiet Zone Improvements From Peach Street to 13th Street



December 21, 2021

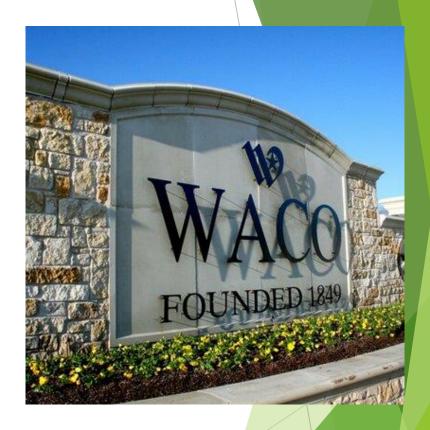
Agenda

- Project Background/History
- Quiet Zone Implementation
- Project Location
- Progress to Date
- Proposed Improvements
- Cost
- Schedule Overview
- Questions



Project Background/History

- Project Objective <u>increase safety</u> to implement a Quiet Zone through downtown Waco from Peach Street to 13th Street.
- Quiet Zone Definition A quiet zone is a section that contains one or more consecutive at-grade rail crossings at which locomotive horns are not routinely sounded when trains are approaching the crossings.
- An initial diagnostic for the same project limits occurred in 2017 and with planning efforts run internally.
- Kimley-Horn requested to help with the planning and design stages end of 2020 to assist with implementation of the Quiet Zone.





Quiet Zone Implementation

- Re-Diagnostic Request
- Role & Responsibilities
 - Waco Initiation, Engineering, & Funding
 - ▶ Union Pacific Railroad Signal Design & Construction
 - Federal Railroad Administration Guidance & Approval





Planning Stage

- Determine Quiet Zone Risk Index (QZRI)
- Diagnostic Meeting
- Identify Supplemental Safety Measures (SSMs)



Design & Notice of Intent (NOI)

- City of Waco
- Union Pacific Railroad



Construction & Maintenance Agreement (C&M)



Installation

- City of Waco
- Union Pacific Railroad



Notice of Establishment (NOE)

Project Location



Progress to Date

- ► Re-Diagnostic & Planning Stage 100% Complete
 - ▶ Re-Diagnostic with UPRR & FRA December 15-16, 2020
 - FRA follow-up with pedestrian trespassing concern Jan '21
 - Re-Diagnostic NOI attachment review Feb '21 to March '21
 - Address Re-Diagnostic Comments April '21
 - Post Diagnostic Meeting May '21
 - NOI attachment revisions Sep '21
- City Improvements 40% Complete
 - Design Contract NTP May '21
 - Data Collection (Survey, Record Drawings, etc.) July '21
 - Preliminary Design Submittal Sep '21
 - Prelim Design Review Oct '21 to Nov'21
 - Address Plan Comments Nov '21 to Present
- Union Pacific (UP) Improvements 15% Complete
 - ▶ Updated Design & Estimate started Oct '21



Proposed Improvements

CROSSING PANEL (BY UPRE

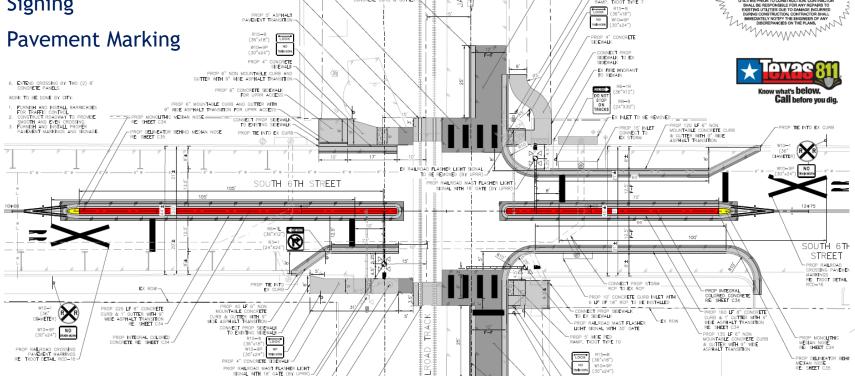
EX RAILROAD FLASHER LIGHT SIGNAL TO BE REMOVED (BY UPRR)-EX TELECOMMUNICATIONS MANHOLE TO BE ADJUSTED TO PROP GRADE (BY OTHERS

PROP 5' ASPHALT PAVEMENT TRANSITION

City Work

- Concrete Raised medians
- Concrete Curb & Gutter Bulb-outs
- Asphalt Level-up
- Concrete Sidewalk
- Signing

AT UPRR RAILROAD RAILROAD MILEPOST 845.25



Union Pacific (UP) Work

- New Signal Gates
- Signal Control Housing
- **Concrete Crossing Panels**



Proposed Improvements

Trespassing Prevention

- Convert Jackson Ave to One-Way traffic (recently implemented)
- Install 4' tall metal fencing between crossing locations from University Parks Drive to 8th Street
- Install swing gate and mountable curb for Union Pacific (UP) access to right-of-way

Improvement Construction Costs

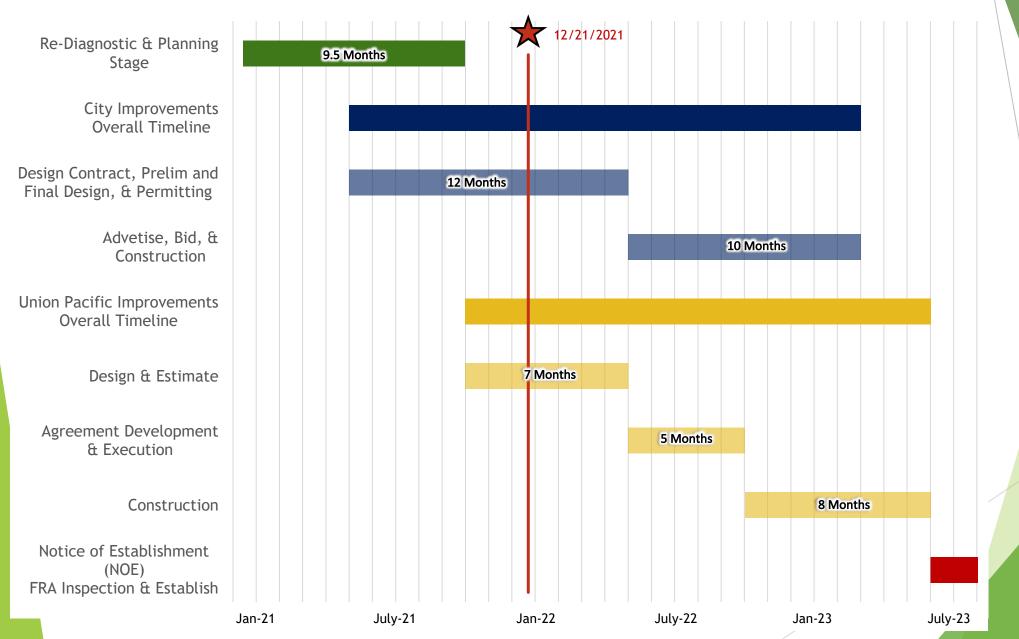
Crossing Location	City Construction Cost	UPRR Signal Construction Cost	Total
Peach Street	\$ 30,000	\$ 0	\$ 30,000
University Parks Dr	\$45,000	\$ 475,000	\$ 490,000
2 nd Street	\$ 145,000	\$ 450,000	\$ 595,000
3 rd Street	\$ 195,000	\$ 470,000	\$ 665,000
4 th Street	\$100,000	\$ 500,000	\$ 600,000
5 th Street	\$ 80,000	\$ 340,000	\$ 350,000
6 th Street	\$ 125,000	\$ 380,000	\$ 505,000
8 th Street	\$ 145,000	\$ 465,000	\$ 610,000
11 th Street	\$ 120,000	\$ 215,000	\$ 335,000
13 th Street	\$ 115,000	\$ 30,000	\$ 145,000
Jackson Ave Fencing	\$ 150,000	\$ 0	\$ 150,000
Maintenance Cost	\$ 0	\$ 125,000	\$ 125,000
TOTAL*	\$ 1,250,000	\$ 3,450,000	\$4,700,000

^{*}Opinion of Probable Construction Cost - Basis for Cost Projection at Preliminary Design Stage

Total Project Cost Summary

Project Task	Estimated Cost
City Design Costs	\$ 190,000
Union Pacific Design Costs	\$ 210,000
Construction & Agreement Cost	\$ 4,700,000
TOTAL PROJECT BUDGET ESTIMATE	\$5,100,000

Schedule Overview



Questions?

