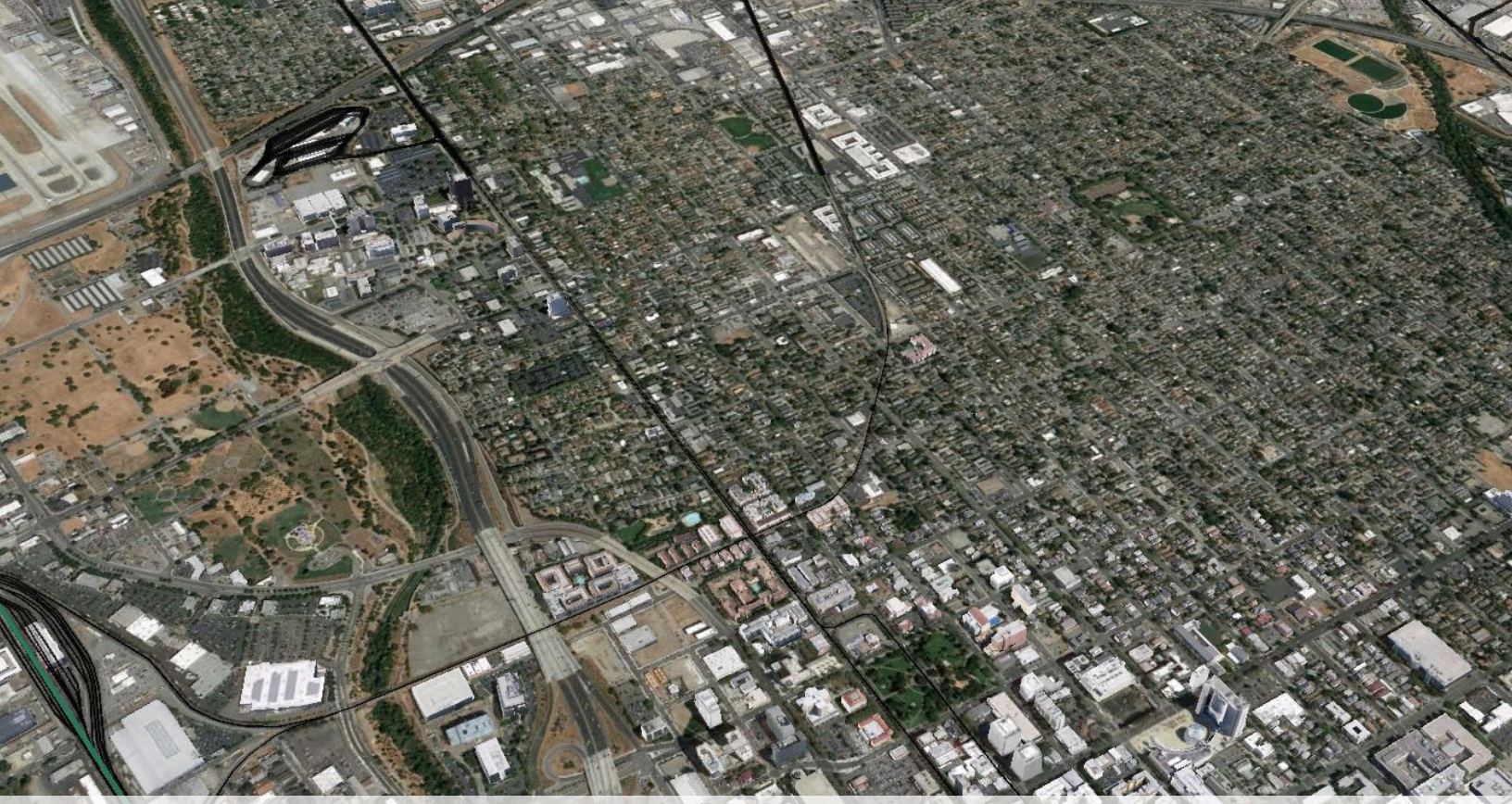

FEASIBILITY STUDY

PREPARED FOR:

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE

WARM SPRINGS SUB QUIET ZONE FEASIBILITY STUDY

FINAL REPORT

JULY 15, 2020

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1. Introduction

Home to over 1 million people, the City of San Jose is a major technology hub in the Bay Area and is the tenth most populous city in the United States. The City has several major transit and freight rail lines which form a transportation hub at the downtown Diridon Station. VTA, Caltrain, ACE and Amtrak all provide transit service to this station, with plans for future BART and High-Speed Rail. This hub creates an exciting opportunity for future City growth. The Union Pacific Railroad Warm Springs subdivision freight line also extends east from Diridon Station through downtown, traversing dense residential neighborhoods.

In October of 2018, UPRR adopted a new operating plan called "Unified Plan 2020", which modified its operations on the Warm Spring Subdivision, including an increase in train operations at night. Currently, UPRR operates an average of six trains per day (three trains during the day and three trains during the night). The night trains pass through starting around 8pm and ending in the early hours of the morning. UPRR trains blow their horn as they approach the at-grade crossings as required by federal law, also known as the Train Horn Rule. Downtown residents impacted by night train horns have raised complaints to the City, and thus, prompted the City to evaluate a Quiet Zone on the Warm Springs Subdivision.

The purpose of the San Jose Warm Springs Quiet Zone Study is to determine the feasibility of a Quiet Zone on a portion of the Union Pacific Railroad (UPRR) Warm Springs Subdivision corridor in the City of San Jose (City). This study summarizes the quiet zone establishment process, existing conditions, stakeholder engagement, potential costs of improvements, quiet zone risk index calculations, and next steps for implementing a quiet zone.

A map of the quiet zone study area and existing at-grade crossings is shown in **Figure 1**.

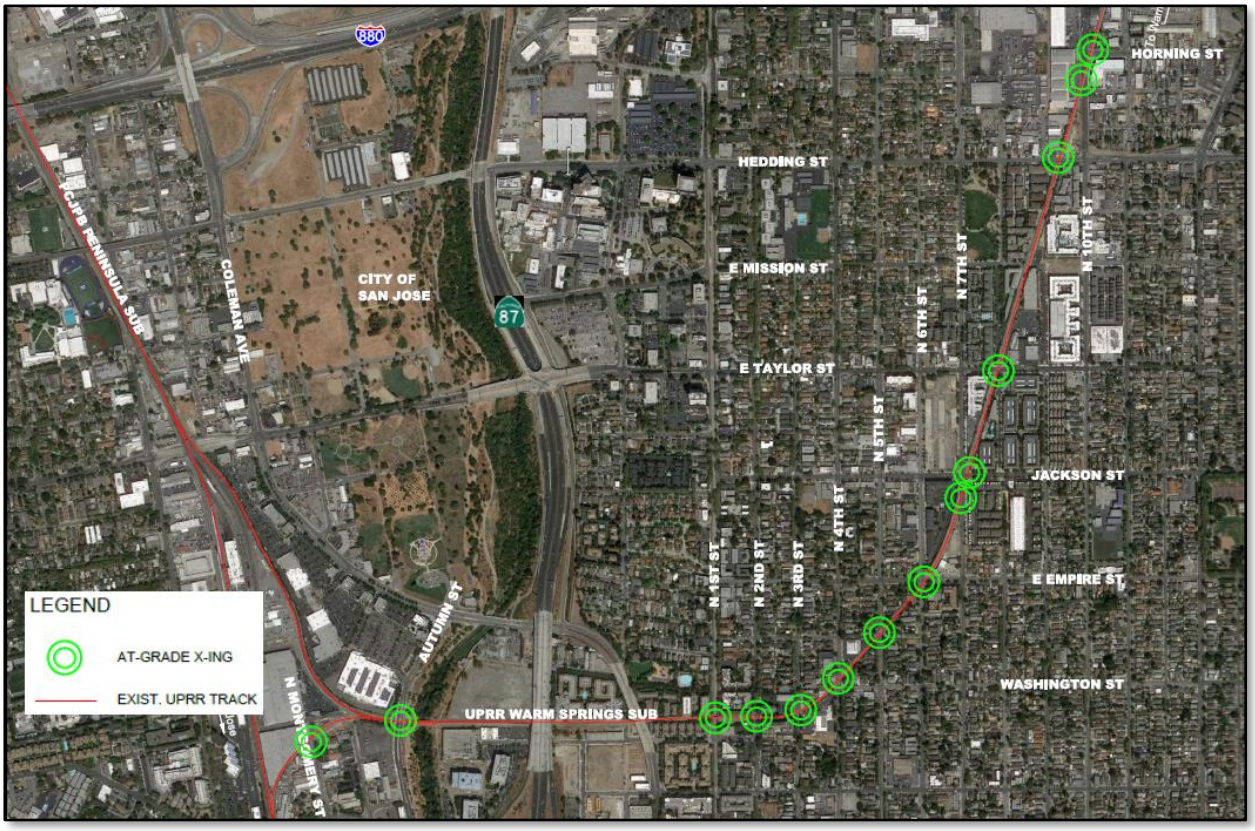


Figure 1 - At-Grade Crossing Location Map

2. Definitions

- Federal Railroad Administration (FRA): The FRA issues, implements, and enforces railroad safety regulations, including the Train Horn Rule.
- Train Horn Rule: regulations laid out in the Code of Federal Regulations (CFR) Title 49 Section 222. These regulations require locomotive horn use at public highway-rail grade crossings except in quiet zones.
- Public Authority: the public agency responsible for traffic control or law enforcement at the public highway-rail grade or pedestrian crossing (in this case the City of San Jose). Only the Public Authority may establish a quiet zone.
- Public highway-rail grade crossing: a location where a public highway, road, or street, including associated sidewalks or pathways, crosses one or more railroad tracks at grade.
- Quiet Zone: A segment of a rail line, within which is situated one or a number of consecutive public highway-rail crossings at which locomotive horns are not routinely sounded.
- Partial Quiet Zone: a section of the rail line where locomotive horns are routinely sounded in the day time hours and the horns sounding is restricted from 10:00 PM to 7:00 AM. The requirements and procedures to establish a Partial Quiet Zone are the same as for a 24-hour Quiet Zone.
- Risk Index With Horns (RIWH): a measure of risk to the motoring public at public highway-rail grade crossings where locomotive horns are routinely sounded.
- Quiet Zone Risk Index (QZRI): a measure of risk to the motoring public at public highway-rail grade crossings in a quiet zone, after adjustment to account for increased risk due to lack of locomotive horn use at the crossings (if horns are presently sounded at the crossings) and reduced risk due to implementation, if any, of SSMs and ASMs with the quiet zone.
- Nationwide Significant Risk Threshold (NSRT): a measure of risk, calculated on a nationwide basis, which reflects the average level of risk to the motoring public at public highway-rail grade crossings equipped with flashing lights and gates and at which locomotive horns are sounded.
- Supplementary Safety Measure (SSM): a safety measure approved by the FRA as an effective substitute for the locomotive horn in the prevention of highway-rail casualties. SSMs can be used to lower the QZRI in a proposed quiet zone. The Train Horn Rule lists the following SSMs:
    i. Temporary Closure of a Public Highway-Rail Grade Crossing [i.e. closure during quiet zone periods]
    ii. Four-Quadrant Gate System
    iii. Gates with Medians or Channelization Devices
    iv. One-Way Street with Gate(s)
    v. Permanent Closure of a Public Highway-Rail Grade Crossing
- Alternative Safety Measure (ASM): a safety system or procedure, other than an SSM, which is provided by the appropriate traffic control authority or law enforcement authority and which, after individual review and analysis by the FRA, is determined to be an effective substitute for the locomotive horn in the prevention of highway-rail casualties at specific highway-rail grade crossings. The Train Horn Rule discusses types of ASMs.
- UPRR: Union Pacific Railroad Company. This is the railroad operating in the proposed quiet zone.

- Stakeholders: the Train Horn Rule requires that the Public Authority send required notices in the quiet zone process to stakeholders, which include the FRA, California Public Utilities Commission (CPUC), California Department of Transportation (Caltrans), railroads operating in the proposed quiet zone, and the traffic law enforcement unit.
- MUTCD: Manual on Uniform Traffic Control Devices.

3. Quiet Zone Establishment Process

The FRA is the federal government agency with jurisdiction over Quiet Zones. Under the Train Horn Rule, locomotive engineers are required to sound train horns for a minimum of 15 seconds, and a maximum of 20 seconds, in advance of all public highway-rail grade crossings.

The rule also provides opportunities for the Public Authority to mitigate the effects of the train horn noise by establishing Quiet Zones.

The Train Horn Rule specifies minimum requirements that must be met before a Quiet Zone can be established, including:

1. The Quiet Zone must be at least one-half mile long.
2. All grade crossings in the Quiet Zone must have crossing gates and flashing lights.
3. All approaches to grade crossings in the Quiet Zone must have MUTCD advance warning signs.
4. Bells at grade crossings with pedestrian traffic in the Quiet Zone must be in working condition.
5. All public grade crossings must be MUTCD compliant.

In addition to the minimum criteria requirements, the Train Horn Rule specifies two primary methods to establish a Quiet Zone:

1. **Public Authority Designation.** The Public Authority may designate a quiet zone without the need for formal application to, and approval by, FRA, if the proposed quiet zone complies with conditions a., b., c., or d. below. The Public Authority would have to issue required notices to the stakeholders before the quiet zone could begin.
   a. Implement SSMs at every public highway-rail grade crossing within the quiet zone.
   b. The Quiet Zone Risk Index (QZRI) is already at, or below, the Nationwide Significant Risk Threshold (NSRT) without being reduced by implementation of SSMs.
   c. Implement enough SSMs to reduce the Quiet Zone Risk Index (QZRI) to a level at, or below, the Nationwide Significant Risk Threshold (NSRT).
   d. Implement enough SSMs to reduce the Quiet Zone Risk Index (QZRI) to a level at, or below, the Risk Index With Horns (RIWH).
2. **Public Authority Application to FRA.** The Public Authority may apply to FRA for approval of a Quiet Zone on the basis of condition a. or b. below. The Public Authority would have to issue required notices and the application to the stakeholders. The FRA would review the application and any comments received from the stakeholders before issuing a decision.
   a. Implement ASMs or a combination of ASMs and SSMs sufficient to reduce the Quiet Zone Risk Index (QZRI) to at or below the Risk Index With Horns (RIWH).
   b. Implement ASMs or a combination of ASMs and SSMs sufficient to reduce the Quiet Zone Risk Index (QZRI) to at or below the Nationwide Significant Risk Threshold (NSRT).

4. Existing Conditions

The proposed Quiet Zone is 1.8 miles long and contains 14 public highway-rail grade crossings. There are no private or pedestrian grade crossings in the proposed corridor. A site visit to the crossings was performed on June 25, 2019 to assess existing conditions. Photos of the crossings from the site visit are included in Appendix A. A summary of the crossings is included in Table 1.

Table 1 - Existing At-Grade Crossing Characteristics

Street Name	FRA Crossing No.	Warm Springs Milepost	Surrounding Land Use	Previous AADT*	Revised AADT**	Roadway Functional Class	Roadway Posted Speed	Traveled Way (Lanes)
Horning St	750117C	15.46	Residential/ Commercial	3,824	n/a	Local	25	2
N. 10th St	750118J	15.50	Industrial/ Commercial	15,317	n/a	Minor Arterial	35	4, w/ Class 2 bike lanes
E. Hedding St	750121S	15.64	Residential/ Commercial	14,958	15,539	Principal Arterial	30	2, w/ Class 2 bike lanes
E. Taylor St	750127H	16.00	Residential/ Commercial	12,312	12,842	Minor Arterial	25	2
Jackson St	750128P	16.17	Residential	2,900	n/a	Major Collector	25	2
N. 7th St	750129W	16.19	Residential/ Commercial	2,130	3,620	Major Collector	25	2, w/ Class 3 sharrows
N. 6th St/ E. Empire St	750131X	16.345	Residential/ Commercial	2,035	3,100	Major Collector	25	2, w/ Class 2 bike lanes
N. 5th St	750132E	16.448	Residential	2,136	2,227	local	25	2
N. 4th St	750133L	16.546	Residential/ Commercial	5,709	n/a	Minor Arterial	25	2, w/ Class 2 bike lanes
N. 3rd St	750134T	16.63	Residential/ Commercial	4,077	3,992	Major Collector	25	2, w/ Class 2 bike lanes
N. 2nd St	750135A	16.702	Residential	2,951	5,974	Major Collector	25	2, w/ Class 2 bike lanes
N. 1st St	750136G	16.777	Residential	7,337	7,836	Principal Arterial	25	2
Autumn Pkwy	924191R	17.315	Open Space/ Commercial/ Recreational	5,000	11,430	Local	30	4, w/ Class 2 bike lanes
N. Montgomery St	750151J	17.464	Industrial/ Commercial	1,792	n/a	Local	25	2

***AADT count based on 2016 data.**

****AADT count based on either 2016, 2017, or 2018 data.**

Comprehensive information about each crossing is recorded in FRA Crossing Inventory Reports, publicly available online. The data in these reports include traffic volumes, train volumes, and other variables that are used by FRA to generate the risk index at each crossing. It is important to have accurate data in the reports to generate accurate risk indices. **Table 1** indicates that AADT for several crossings was recently updated in the Crossing Inventory Reports in January 2020. The updated Crossing Inventory Reports are included in **Appendix B**.

A description of the warning devices at each of the grade crossings is provided in the sections below.

4.1 Horning Street and N. 10th Street

Horning and N. 10th are two separate crossings adjacent to each other. There are two UPRR tracks that cross each road at a skew, a main line and spur track. The spur track discontinues west of the 10th St crossing. Railroad advanced warning signage and pavement delineation are included on all approaches. The crossings are protected by four CPUC No. 9 gates with flashing lights (8”) and bells. A commercial driveway is approximately 45 feet north of N. 10th Street crossing as measured from the crossing arm. There are sidewalks on both sides of Horning Street east of the crossing. There is sidewalk only along the east side of N. 10th Street to the south of the crossing. Bike lanes are present along both sides of N. 10th Street.

4.2 East Hedding Street

The UPRR main line crosses E. Hedding Street at a small skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9A cantilevers with crossing gates, warning bells, and flashing lights (8”). There are driveways near the crossing in all four quadrants. The driveway in the southwest quadrant is for emergency access only. Sidewalks and bike lanes are present on both sides of the road.

4.3 East Taylor Street

The UPRR main line crosses E. Taylor Street at a small skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9A cantilevers with crossing gates, warning bells, and flashing lights (8”). There are existing driveways within 60 feet of the crossing gates in all four quadrants. The driveways in the northwest and southwest quadrants are for emergency access only. There is a bus stop over 150 feet west of the crossing in the eastbound direction. Sidewalks are present on both sides of the road.

4.4 N 7 Street and Jackson Street

Jackson Street and N. 7th Street are two separate crossings adjacent to each other. The UPRR main line crosses both roads at a skew. Railroad advanced warning signage and pavement delineation are included on all approaches. The crossings are protected by four CPUC No. 9 crossing gates with flashing lights (8”) and one CPUC No. 9A with cantilever and flashing lights. There are two residential driveways within 10’ of the crossing arms on Jackson Street. There are sidewalks present along both sides of N. 7th Street and Jackson Street, except for a 60-foot sidewalk gap at the northeast corner of the intersection on N. 7th Street. Bike shared-lane markings (sharrows) are present in both directions of N. 7th Street.

4.5 N. 6th Street and E Empire Street

The UPRR main line crosses the intersection of N. 6th Street and E. Empire Street at a skew. Railroad advanced warning signage and pavement delineation are included on all approaches. The crossing is protected by two CPUC No. 9 crossing gates with flashing lights and two CPUC No. 9A with cantilever,

crossing gate, and flashing lights (12”). There are sidewalks present along both sides of N. 6th Street and E. Empire Street. Bike lanes are present on E. Empire Street.

4.6 N. 5th Street

The UPRR main line crosses N. 5th Street at a skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9A cantilever with crossing gates, warning bells, and flashing lights (12”). There is one residential driveway on the west side of the street and one residential driveway on the east side of the street, each of which are located in between the respective crossing gate and the track. Sidewalks are present on both sides of the road.

4.7 N. 4th Street

The UPRR main line crosses N. 4th Street at a skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9 crossing gates with warning bells and flashing lights (12”) and two CPUC No 8 flashers in the medians. There is one driveway within 10 feet of the crossing gate along southbound N. 4th Street. Sidewalks and bike lanes are present on both sides of the road.

4.8 N. 3rd Street

The UPRR main line crosses N. 3rd Street at a small skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9 crossing gates with warning bells and flashing lights (12”) and two CPUC No 8 flashers in the medians. There are two driveways within 60 feet of the crossing. Sidewalks and bike lanes are present on both sides of the road.

4.9 N. 2nd Street

The UPRR main line crosses N. 2nd Street at 90 degrees. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by one CPUC No. 9 crossing gates with warning bells and flashing lights (12”) in the northbound direction and one CPUC No. 9A Cantilever with crossing gate, warning bells, and flashing lights in the southbound direction. There are two driveways within 60 feet of the crossing. Sidewalks and bike lanes are present on both sides of the road.

4.10 N. 1st Street

The UPRR main line crosses N 1st Street at 90 degrees. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by two CPUC No. 9 crossing gates with warning bells and flashing lights (12”). Concrete barriers exist along the centerline for over 100 feet on each approach. Sidewalks are present on both sides of the road.

4.11 Autumn Parkway

The UPRR main line crosses Autumn Parkway at 90 degrees. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by four CPUC No. 9 crossing gates with warning bells and flashing lights (12”) and two CPUC pedestrian No. 9 crossing gates with warning bells and flashing lights. There is one driveway within 60 feet of the crossing gate. Bike lanes are present on both sides of the road. There is a sidewalk on the west side of the road and a multi-use path on the east side of the road.

4.12 N Montgomery Street

The UPRR main line crosses N. Montgomery Street at a small skew. Railroad advanced warning signage and pavement delineation are included on both approaches. The crossing is protected by one CPUC No. 9 crossing gate with warning bells and flashing lights (12") for southbound traffic and one CPUC No. 9A cantilever with crossing gate and flashing lights (12") for northbound traffic. There are three driveways within 60 feet of the crossing. Sidewalks are present on both sides of the road.

5. Stakeholder Engagement

The Train Horn Rule requires that the Public Authority engage particular stakeholders in the quiet zone establishment process. The City of San José engaged these stakeholders (CPUC, UPRR, and FRA) in order to understand concerns with a potential quiet zone on the corridor, and to anticipate potential safety improvements that may be conditioned on a quiet zone through the Public Authority Application process.

On October 22, 2019, a web meeting was conducted with the stakeholders. In the meeting, conceptual improvement plans for all 14 crossings were reviewed with the stakeholders and their preliminary input was solicited.

On February 25-27, 2020, a site diagnostic meeting was performed with the stakeholders. Conceptual improvement plans incorporating revisions based on comments from the October 2019 meeting were presented to the stakeholders during the site diagnostic meeting and input was solicited from the stakeholders. The conceptual improvement plans are shown in **Appendix C**.

General comments from the meetings that are common to all of the crossings are as follows:

1. Evaluate all CA MUTCD required warning signage and pavement delineation. Refresh faded markings. Replace non-compliant signs. Consider relocating signs and markings for optimal placement while maintaining CA MUTCD compliance.
2. Remove or maintain trees on the approaches to the crossings to ensure visibility of the crossing flashing lights and signs are not obstructed.
3. Channelize pedestrians along the back of sidewalk so that they cross the tracks safely and as close to 90 degrees as possible.
4. Provide R15-8 "Look" signs and tactile warning strips on sidewalk approaches to the crossings.
5. Evaluate closing driveways within 100 feet of the crossing.
6. Evaluate the illumination of each crossing to ensure that the approaches are sufficiently illuminated for visibility.
7. Provide R8-8 "Do Not Stop on Tracks" signs in all locations with observed queuing on the tracks.
8. Perform traffic studies in accordance with MUTCD 4C.01 to determine queueing probability and evaluate preventive measures to eliminate queueing on the tracks.
9. For any projects that modify the electrical components of a crossing, CPUC will require existing 8" incandescent / flashing lights be upgraded to 12" LED lights. UPRR noted that head upgrades cannot be accommodated on existing equipment and will trigger a replacement of the entire equipment.

In addition, the stakeholders recommended major improvements at several crossings. These are summarized in **Table 2** in the next section. All input solicitated by the stakeholders for the crossings are noted in the meeting minutes, included in **Appendix D**.

6. Cost Estimate

An order of magnitude construction cost estimate was developed for each crossing based on improvements recommended by the stakeholders. The recommended improvements and cost estimates are summarized in **Table 2** below. Some locations reflect a higher improvement than was discussed in the field diagnostic; this was done where existing gates need full replacement due to undersized flashing lights and the cost of upgrading to a 4-quadrant vehicle gate system becomes economical.

Table 2 - Order-of-Magnitude Construction Cost Estimate Summary

Location	Stakeholder Recommended Improvements	Order of Magnitude Construction Cost Estimate	
		Low	High
Horning St and N. 10th St	- Cul-de-sac Horning St at 10th St - Cul-de-sac Santa Ana Ave at 10th St - Install sidewalk along east side of 10th St n/o crossing (550') - Install channelizers on north and south legs of 10th St - Remove vehicle gate system on Horning St - Install pedestrian crossing system across tracks on east side of 10th St - Replace vehicle gate system on 10th St (to upgrade flashers and optimize locations) - Upgrade railroad signal house - Install queue cutter signals on 10th to control NB/SB traffic over tracks	$ 2.7M	$4.3M
E. Hedding St	- Replace vehicle gate system with 4-quad vehicle gates - Install full pedestrian treatments on all (4) quadrants - Upgrade railroad signal house - Install advanced preemption for 10th/Hedding traffic signal or install queue cutter signal(s)	$ 1.5M	$2.9M
E. Taylor St	- Bulb out curb lines at the crossing - Replace vehicle gate system with 4-quad vehicle gates - Install full pedestrian treatments on all (4) quadrants - Install advanced preemption for Taylor/7th traffic signal or install queue cutter signal(s) - Upgrade railroad signal house	$1.9M	$3.5M
N. 7th St And Jackson St	- Bulb out curb lines at the intersection - Replace vehicle gate system (to accommodate new curb line, optimize locations, upgrade flashers) - Install traffic signal with pre-signal(s) - Install full pedestrian treatments on all (6) quadrants - Install channelizers on 7th north and south legs - Install channelizers on Jackson east leg - Upgrade railroad signal house	$3.9M	$6.4M

Table 2 - Order-of-Magnitude Construction Cost Estimate Summary

Location	Stakeholder Recommended Improvements	Order of Magnitude Construction Cost Estimate	
		Low	High
N. 6th St/ E. Empire St	- Bulb out curb lines at the intersection - Replace vehicle gate system (to accommodate new curb line, optimize locations) - Install traffic signal - Install full pedestrian treatments on all (4) quadrants - Install channelizers on all (4) legs - Upgrade railroad signal house	$3.2M	$5.1M
N. 5th St	- Extend median on south leg closer to track - Fill median gap on north leg - Cut new median gaps on north and south legs at least 60' away - Install No. 8 flashers in off-quads (2) - Install channelizers on top of median islands on north and south legs	$0.1M	$0.2M
N. 4th St	- Cul-de-sac Washington St at 4th - Extend medians closer to tracks - Install No. 8 flashers in off-quads (2) - Install channelizers on all (2) legs	$0.5M	$0.8M
N. 3rd St	- Install No. 8 flashers in off-quads (2) - Install channelizers on south leg	$0.1M	$0.2M
N. 2nd St	- Bulb out curb lines at the crossing - Replace vehicle gate system with 4-quad vehicle gates (to optimize locations and make space for ped treatments) - Install full pedestrian treatments on all (4) quadrants - Install channelizers on all (2) legs - Upgrade railroad signal house	$1.8M	$3.0M
N. 1st St	- Install full pedestrian treatments on all (4) quadrants - Relocate one streetlight pole at NW quad	$0.4M	$0.6M
Autumn Pkwy	- Replace vehicle gate system with 4-quad vehicle gates (to optimize locations and make space for ped treatments) - Replace and install full pedestrian treatments on all (4) quadrants - Upgrade railroad signal house - Install channelizers on all (2) legs	$1.4M	$2.4M
N. Montgomery St	- Bulb out curb lines at the crossing - Replace vehicle gate system with 4-quad vehicle gates (to optimize locations and make space for ped treatments) - Install full pedestrian treatments on all (4) quadrants - Install channelizers on all (2) legs - Upgrade railroad signal house	$1.8M	$3.0M
Total		**$ 19.3M**	**$32.4M**

7. Quiet Zone Risk Index Calculation

The QZRI is the average risk index for all grade crossings in a proposed Quiet Zone. This index takes into account the increased risk of collision caused by the absence of train horns and the decreased risk with the use of safety measures (SSMs and ASMs). Safety measures are used to decrease the QZRI so that it may qualify for a quiet zone; the QZRI must be equal to or less than the Risk Index With Horns (RIWH) or the Nationwide Significant Risk Threshold (NSRT).

Table 3 summarizes risk indices based on the FRA risk index calculator. The column "Risk Index without Horns" identifies the risk index at each crossing if no locomotive horns were sounded, assuming no safety measures are implemented on the corridor. The bottom of the column is the corridor-average risk if no locomotive horns are sounded, 12,721.41; this would be the QZRI if no additional safety measures are proposed. The last column "Risk Index without Horns, factoring in SSMs & ASMs" indicates the risk index at each crossing if safety measures are implemented and horns are not sounded. The second to last column indicates the amount of risk reduction credit that was used to calculate the last column; the risk reduction credit is based on the recommended improvements (**Table 2**).

Table 3 indicates that the "Risk Index without Horns", i.e. the QZRI if no additional safety measures are proposed, is 12,721.41 which is less than the NSRT of 13,811.

Table 3 - QZRI Result Comparison

At Grade Crossing	Risk Index without Horns	Safety Measures* *SSM supplementary safety measure *ASM alternative safety measure		Proposed Risk Reduction	Risk Index without Horns, factoring in SSMs & ASMs
Horning St [1]	11,231.20	2	SSM: Permanent closure	1.00	0
10th [1]	19,589.95		Candidate ASM location.	TBD	TBD
Hedding St	17,646.57	6	SSM: 4-quad gates, with presence detection	0.77	4,058.71
Taylor St	15,097.25	6	SSM: 4-quad gates, with presence detection	0.77	3,472.37
Jackson St	10,472.88		Candidate ASM location.	TBD	TBD
7th St	11,077.36	12	SSM: Gates with channelizers	0.75	2,769.34
6th St	10,651.69		Candidate ASM location.	TBD	TBD
5th St	9,789.62		Candidate ASM location.	TBD	TBD
4th St	12,410.06		Candidate ASM location.	TBD	TBD
3rd St	11,353.09		Candidate ASM location.	TBD	TBD
2nd St	12,549.65	6	SSM: 4-quad gates, with presence detection	0.77	2,886.42
1st St	13,410.80	13	SSM: Gates with median	0.80	2,682.16
Autumn Pkwy	18,358.90	6	SSM: 4-quad gates, with presence detection	0.77	4,222.55
N. Montgomery St	4,460.67	6	SSM: 4-quad gates, with presence detection	0.77	1,025.95
QZRI with No Improvements	12,721.41				

1. Assumes spur track is removed by UPRR as part of surface crossing maintenance project.

8. Recommendations and Next Steps

The Quiet Zone Risk Index without Horns for the existing corridor was calculated to be less than the NSRT. Based on this information and the FRA Train Horn Rule quiet zone criteria outlined in Section 3, the City can currently establish a quiet zone through the Public Authority Designation process.

The process would include:

1. Immediate Maintenance – The City should review and update signage and pavement markings to ensure CA MUTCD compliance.
2. FRA Crossing Inventory Reports – The City should update traffic counts and other roadway data in the inventory forms and re-run the Quiet Zone risk index calculations to ensure that the Risk Index without Horns still falls below the NSRT.
3. Notice of Intent (NOI) – The City should issue an NOI to the stakeholders informing them of the City's intent to establish a quiet zone; the City should receive and consider comments in the subsequent 60-day comment period.
4. Notice of Establishment (NOE) – Following the 60-day comment period of the NOI, the City should issue a NOE to the stakeholders informing them of the date that the Quiet Zone will begin; the date must be a minimum of 21 days after the mailing of the NOE.

A quiet zone established on this basis might not last very long because the Risk Index Without Horns (12,721.41) is relatively close to the NSRT (13,811), and the difference is likely to narrow in future updates to either of these indices. The FRA recalculates and publishes the new NSRT annually. In the last few updates, the NSRT decreased from 14,723 in 2017 to 13,811 in 2019. The Risk Index Without Horns could increase in the future if traffic volumes increase, or if collisions occur between vehicles and trains at crossings. If the Risk Index Without Horns becomes greater than the NSRT, the FRA would issue a notice terminating the quiet zone within six months of its notice.

The City should plan to reduce its risk index through the implementation of improvements (SSMs and/or ASMs). The City should decide if it will reduce its risk index based on SSMs only, or if it will use ASMs. If the City has an existing quiet zone, and in the future uses only SSMs to decrease its risk index, the process would be relatively simple: The City would file a new Notice of Intent to the stakeholders to change the filing basis. This Notice would document the new SSMs that were implemented and show the calculation of the new Quiet Zone Risk Index.

SSMs are listed in Section 2. The most applicable type of SSM for crossings on the Warm Springs corridor is a 4-quadrant Vehicle Gate system; these are usually the costliest. The SSM: Gates with Medians or Channelization Devices is possible at one location (1st St), but not others since this SSM does not allow driveways and intersections within 60 feet of the crossing gates. The diagnostic team identified one location (Horning St) as a good candidate for the SSM: Permanent Closure of a Public Highway-rail Crossing, although street closure is typically unpopular in urban areas and faces additional municipal regulatory hurdles. The SSM: One-Way Street with Gates may also be unpopular at any location as it would require a two-way street to be converted to one-way.

ASMs can be less costly than SSMs, but they may not yield as much risk reduction credit, and they need approval from FRA. If the City decides to use ASMs to reduce its risk index, it will need to go through the Public Authority Application process in order to establish or re-establish a quiet zone. Crossings that are candidate for ASM risk reduction credit are noted in **Table 3**.

The Public Authority Application process would include:

1. 60% Design Drawings – The City should determine where it will invest in improvements and prepare approximately 60% design plans.
2. Site Diagnostic Meeting – The City should coordinate another site diagnostic at the grade crossings in the proposed quiet zone. The diagnostic team will evaluate the proposed improvements based on the 60% design plans and provide feedback.
3. Notice of Intent (NOI) – The City should issue an NOI to the stakeholders informing them of the City's intent to submit a Public Authority Application; the City should receive and consider comments in the subsequent 60-day comment period.
4. Public Authority Application – The City should submit its application to the stakeholders; the application should show the proposed improvements and address comments received in the site diagnostic and in the NOI comment period. A 60-day comment period on the application would follow.
5. FRA decision – The FRA would review the application and comments received, and then issue a decision. It may condition additional requirements/improvements in its approval.
6. Complete Improvements – If the City's application is approved, the City should complete design and construction of the improvements.
7. Notice of Establishment (NOE) – After the improvements are completed, the City should issue a NOE to the stakeholders informing them of the date that the Quiet Zone will begin; the date must be a minimum of 21 days after the mailing of the NOE.

Recommendation for the Near-Term: For near-term relief from nighttime train horns, it is recommended that the City designate a Partial Quiet Zone. This would silence routine train horns at crossings from 10 PM to 7 AM. Daytime train horns would still provide warning to the majority of crossing traffic. In addition to ensuring crossings comply with CA MUTCD requirements for signage and pavement markings, the City should perform key activities in advance of starting a quiet zone:

- Notification: The City should notify adjacent communities and users that routine train horns will cease and crossing users will need to pay special attention to other warning devices.
- Homeless Outreach: Homeless people camp and travel along the railroad corridor, and do not have the benefit of receiving mail notification about the quiet zone. Special outreach is needed to notify them. This outreach could include rail safety education (e.g. Operation Lifesaver), be paired with outreach on housing and other resources, etc.
- Trespasser Enforcement: The benefits of a quiet zone are negated if train operators have to regularly sound the horn to warn trespassers. Enforcement can help keep trespassers off the corridor. Currently the City and UPRR are developing a Memorandum of Understanding (MOU) that will allow City forces to enter UPRR property to perform enforcement activities. Ideally this MOU would be executed prior to the start of the quiet zone.

Recommendation for the Long-Term: The City should continue to work with FRA, CPUC, and UPRR to enhance safety and reduce the risk index through the implementation of improvements (SSMs and/or ASMs). SSMs may be more costly but are preferred over ASMs because they generally yield greater risk reduction credit. Also, if only SSMs are used to reduce the risk index, then FRA review and approval will not be required. Improvements will require funding, probably in the millions of dollars, and take time to design and construct, at least 1-3 years. Improvements to railroad crossings must go through a CPUC application process which requires UPRR concurrence and CPUC approval. If the City cannot fund

improvements at every crossing, a limited number of locations can be selected for improvement. The decision on which locations to improve should consider the following:

- Risk Reduction Potential: Installing SSMs/ASMs at the locations with the highest risk indices will yield the greatest reduction in the corridor risk index. For example, 10th St, Autumn Pkwy, Hedding St, and Taylor St are the top four locations in terms of risk index. The larger the risk reduction achieved, the longer the quiet zone will last without needing further improvements in the future to reduce the risk index below either the NSRT or the Risk Index With Horns.
- Cost: Improvement costs vary across locations; locations with lower cost improvements may be more attractive, especially if funding is limited.
- Funding Sources: Some locations may have funds available specifically for public improvements at that location (e.g. development fees).
- Co-benefits: Improvements at some locations might not yield the highest risk reduction credit but may have other desirable benefits. For example, improvements discussed at 7th/Jackson included significantly shrinking the intersection using bulbouts; while intersection reconfiguration is not an SSM, it would enhance safety among all users (pedestrians, bicyclists, vehicles, trains).
- Stakeholder and Community Input: The City should share ideas on prioritization of locations for improvement with FRA, CPUC, and UPRR and solicit their feedback, and in parallel work with the neighboring community.

List of Appendices

Appendix A: Photo Contact Sheets

Appendix B: FRA Crossing Inventory Report

Appendix C: Conceptual Improvement Plans

Appendix D: Meeting Minutes

Appendix E: FRA Risk Index Calculator for Existing Crossings

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

APPENDIX A

Photo Contact Sheets

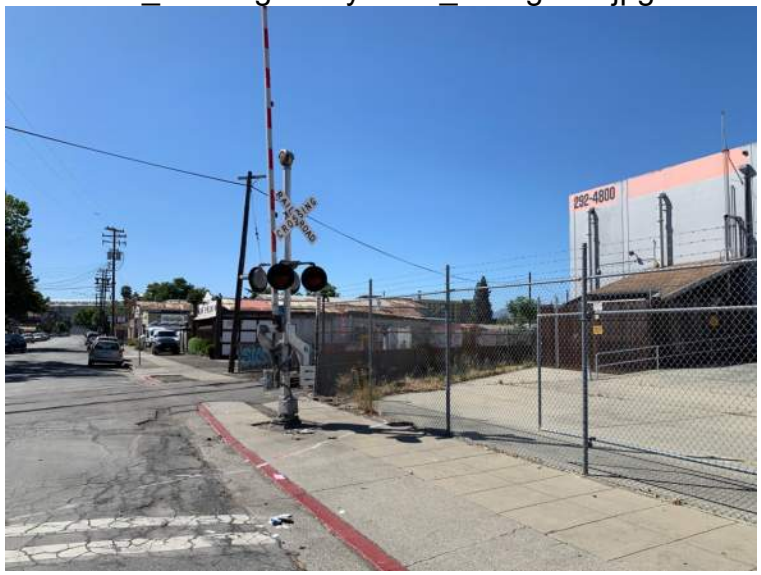
JMA CIVIL

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

01_N Mongomery Gate_facing S.jpg

02_N Mongomery Sidewalk_facing SE.jpg

03_N Mongomery Gate_facing SW.jpg



04_N Mongomery UPRR Signal Department_facing NE.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

05_Autumn Pkwy Gate_facing E.jpg

06_Autumn Pkwy Gate_facing W.jpg

07_Autumn Pkwy Ped Gate_facing N.jpg

08_Autumn Pkwy Commercial Driveway_facing E.jpg

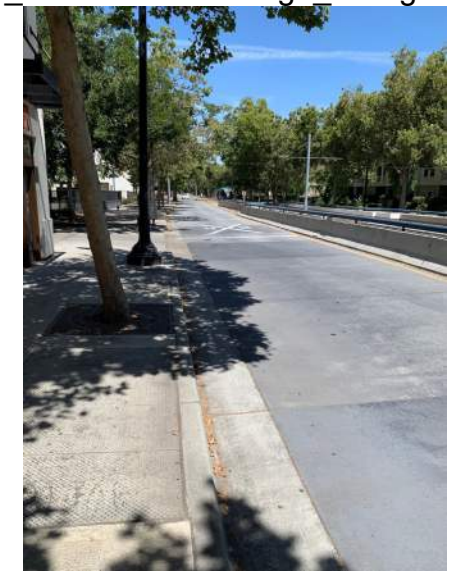
City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

09_N 1 St Northbound Gate _facing N.jpg

10_N 1 St Bridge_facing W.jpg

11_N 1 St Southbound Gate _facing S.jpg

12_N 1 St Railroad Sign_facing N.jpg

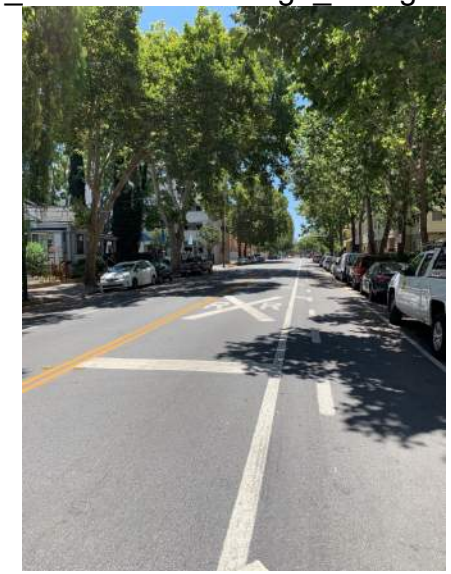


City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

13_N 2 St Gate _facing S.jpg

14_N 2 St Gate 2_facing N.jpg

15_N 2 St Railroad Sign_facing S.jpg



16_N 2 St W10-2Sign_facing S.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

17_N 3 St Gate_facing S.jpg

18_N 3 St Gate_facing N.jpg

19_N 4 St Gate_facing S.jpg

20_N 4 St Railroad sign&W10-2_facing S.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

21_N 5 St Gate_facing NW.jpg

22_N 5 St Gate_facing W.jpg

23_N 5 St Uti-box_facing E.jpg

24_N 5 St Crossing_facing N.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

25_N 6 St Gate_facing N.jpg

26_N 6 St Gate_facing S.jpg

27_Empire St Gate_facing W.jpg

28_N 6 St Signal Pole_facing S.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

29_N 7 St Gate_facing N.jpg

30_N 7 St Gate_facing W.jpg

31_N 7 St Light Pole_facing N.jpg

32_N 7 St Sidewalk_facing N.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

33_E Taylor St Gate_facing NE.jpg

34_E Taylor St Gate2_facing SW.jpg

35_E Taylor St XING_facing W.jpg

36_E Taylor St Pole&Track_facing NE.jpg

City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

37_Hedding St Gate_facing S.jpg

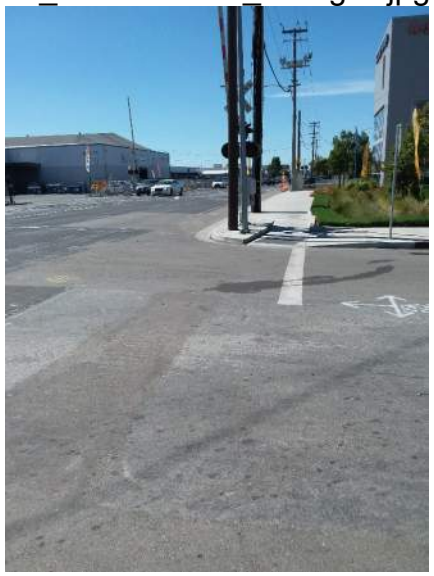
38_Hedding St Rsign&W10-2_facing NW.jpg

39_Hedding St XING_facing N.jpg

40_Hedding St_facing NE.jpg

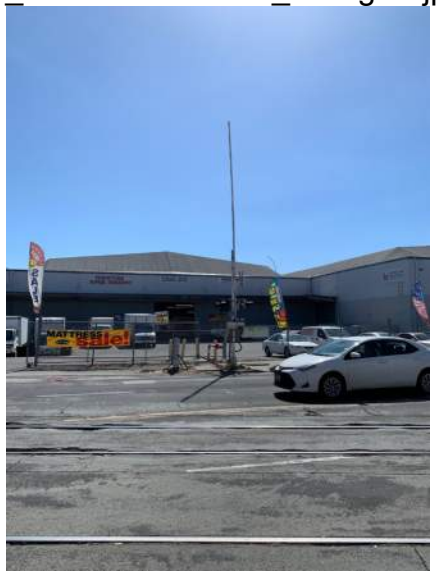
City of San Jose Quiet Zone
Site Visit - June 25, 2019
Photo Contact Sheets

41_N 10 St Gate_facing N.jpg



42_N 10 St Gate_facing S.jpg

43_N 10 St 2nd Gate_facing W.jpg



44_Horning StGate_facing W.jpg

APPENDIX B

At-grade Crossing Inventory Report

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 25 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750151J

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	North Montgomery Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs Sub	☒ None	(prefix) | 0017.464 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☐ Commercial ☒ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3368910	(WGS84 std: -nnn.nnnnnnn) -121.9050470	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-17.40
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/25/2020		750151J

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ Median Gates ☐ 4 Quad	Over Traffic Lane 1 ☐ Incandescent ☒ LED Not Over Traffic Lane 0	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	6

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * 40 Length * 70

☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 95	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	25 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 1792	20 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date *(MM/DD/YYYY)*	B. Reporting Agency	C. Reason for Update *(Select only one)*	D. DOT Crossing Inventory Number
02 / 25 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	924191R

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	Autumn Parkway *(Street/Road Name)* | * *(Block Number)*	LS

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs	☒ None	| 0017.315 | *(prefix) | (nnnn.nnn) | (suffix)*

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR *(if applicable)*	16. Crossing Owner *(if applicable)*
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access *(if Private Crossing)*	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone *(FRA provided)*
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	*(WGS84 std: nn.nnnnnnn)* 37.3382410	*(WGS84 std: -nnn.nnnnnnn)* -121.9029980	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use *
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative *(Railroad Use)* *	32.B. Narrative *(State Use)* *

33. Emergency Notification Telephone No. *(posted)*	34. Railroad Contact *(Telephone No.)*	35. State Contact *(Telephone No.)*
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains *(6 AM to 6 PM)*	1.B. Total Night Thru Trains *(6 PM to 6 AM)*	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data *(YYYY)*	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed *(mph)* 10 3.B. Typical Speed Range Over Crossing *(mph)* From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection *(Main Track only)*
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/25/2020		924191R

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☒ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type R8-8 Count 2 Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 6	3.E. Total Count of Flashing Light Pairs
Roadway 4 Pedestrian 2	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☒ Median Gates ☐ 4 Quad	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	12

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	4

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☐ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 4	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 90

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 40	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	30 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2017 AADT 11430	00 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750136G

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	North 1st Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.777 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3420610	(WGS84 std: -nnn.nnnnnnn) -121.8949510	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.80
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750136G

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☒ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	4

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None

3.K. Other Flashing Lights or Warning Devices
Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 100
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 125	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☒ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2017 AADT 7836	15 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750135A

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	NORTH 2ND STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs	☒ None	(prefix) | 0016.702 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3425670	(WGS84 std: -nnn.nnnnnnn) -121.8938970	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.70
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750135A

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ Median Gates ☐ 4 Quad	Over Traffic Lane 1 ☒ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	6

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 80

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 147	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2017 AADT 5974	10 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750134T

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	North 3rd Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.630 | (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3431668	(WGS84 std: -nnn.nnnnnnn) -121.8929796	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.60
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750134T

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☒ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 4	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	8

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 90

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 54	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	30 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2017 AADT 3992	10 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
03 / 05 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750133L

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	North 4th Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.546 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3443190	(WGS84 std: -nnn.nnnnnnn) -121.8923610	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.40
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
03/05/2020		750133L

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1) (count)*	2.C. YIELD Signs *(R1-2) (count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☒ All Approaches ☒ Median ☐ One Approach ☐ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 4	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	8

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 120

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 10	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☒ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	30 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 5709	05 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750132E

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	NORTH 5TH STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.448 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3457750	(WGS84 std: -nnn.nnnnnnn) -121.8919900	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.30
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750132E

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☒ All Approaches ☐ Median ☐ One Approach ☐ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type W10-12 Count 2 Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 4	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 2 ☐ Incandescent Not Over Traffic Lane 0 ☒ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☒ Side Lights Included	10

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 147

☐ 1 Timber ☐ 2 Asphalt ☐ 3 Asphalt and Timber ☒ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 375	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 2227	05 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750131X

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	North 6th Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs	☒ None	(prefix) | 0016.345 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3473550	(WGS84 std: -nnn.nnnnnnn) -121.8916280	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.20
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750131X

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 4 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 5	3.E. Total Count of Flashing Light Pairs
Roadway 4 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ Median Gates ☐ 4 Quad	Over Traffic Lane 2 ☒ Incandescent Not Over Traffic Lane 0 ☒ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	13

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	5

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 1 Specify type CPUC#10

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 157
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 1	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	25 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2018 AADT 3100	10 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750129W

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	NORTH 7TH STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs	☒ None	(prefix) | 0016.190 | (suffix) (nnnn.nnn)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.349678	(WGS84 std: -nnn.nnnnnnn) -121.892007	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.15
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750129W

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1) (count)*	2.C. YIELD Signs *(R1-2) (count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 1 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No
Specify Type _____ Count _____
Specify Type _____ Count _____
Specify Type _____ Count _____

2.K. Private Crossing Signs *(if private)* ☐ Yes ☐ No

2.L. LED Enhanced Signs *(List types)* 1

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 3	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ 3 Quad ☐ 4 Quad ☐ Full *(Barrier)* Resistance ☐ Median Gates	Over Traffic Lane 1 ☒ Incandescent Not Over Traffic Lane 0 ☐ LED	☒ Incandescent ☐ LED ☒ Back Lights Included ☐ Side Lights Included	8

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	3

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None

3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic Number of Lanes 2 ☐ Divided Traffic	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 221
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 20	☒ 0° – 29° ☐ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2018 AADT 3620	18 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750128P

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	Jackson Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None Northern California	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.172 | (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3499930	(WGS84 std: -nnn.nnnnnnn) -121.8921300	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-16.10
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750128P

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 3 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	4

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 1 Specify type No left turn blankout

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 86

☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 5	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☒ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 2900	18 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750127H

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	East Taylor Street (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs Sub	☒ None	(prefix) | 0016.000 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3525440	(WGS84 std: -nnn.nnnnnnn) -121.8929860	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-15.90
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750127H

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ Median Gates ☐ 4 Quad	Over Traffic Lane 2 ☒ Incandescent Not Over Traffic Lane 0 ☐ LED	☒ Incandescent ☐ LED ☒ Back Lights Included ☒ Side Lights Included	9

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☒ Yes ☐ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 88

☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 280	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☒ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	25 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 12842	15 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750121S

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	HEDDING STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs Sub	☒ None	(prefix) | 0015.640 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3576200	(WGS84 std: -nnn.nnnnnnn) -121.8945190	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-15.60
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) *	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750121S

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1) (count)*	2.C. YIELD Signs *(R1-2) (count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 2 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 2 ☐ Incandescent ☒ LED Not Over Traffic Lane 0	☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included	8

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☒ Yes ☐ No	☐ Not Interconnected ☒ For Traffic Signals ☐ For Warning Signs	☒ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 3	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 85

☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 125	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☒ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	30 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2018 AADT 15539	15 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750118J

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	NORTH 10TH STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs Sub	☒ None	(prefix) | 0015.500 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☐ Commercial ☒ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3595610	(WGS84 std: -nnn.nnnnnnn) -121.8951970	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-15.50
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) * Ind track is Out of Service	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 1

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750118J

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 4 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☒ Yes ☐ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type W10-12 Count 2 Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☒ Side Lights Included	5

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None

3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 4	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 225
☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 35	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☒ (03) Federal AID, Not NHS ☐ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☒ (4) Minor Arterial ☐ (7) Local	☐ Yes ☒ No	35 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 15317	15 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☒ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
02 / 24 / 2020	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	750117C

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Union Pacific Railroad Company [UP]	CALIFORNIA	SANTA CLARA

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☒ In ☐ Near SAN JOSE	HORNING STREET (Street/Road Name) | * (Block Number)	Is

7. Do Other Railroads Operate a Separate Track at Crossing?	8. Do Other Railroads Operate Over Your Track at Crossing?
☐ Yes ☒ No If Yes, Specify RR	☐ Yes ☒ No If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None NORTHERN CALIFORN	☐ None Warm Springs Sub	☒ None	(prefix) | 0015.460 (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
		☒ N/A	☐ N/A UP

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train	22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☐ Farm ☐ Residential ☐ Commercial ☒ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 37.3601050	(WGS84 std: -nnn.nnnnnnn) -121.8953040	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use * CPUC 001DA-15.40
30.B. Railroad Use *	31.B. State Use *
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) * Ind track is Out of Service	32.B. Narrative (State Use) *

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-848-8715	402-544-3721	415-703-3722

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
4	3	0	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 10 3.B. Typical Speed Range Over Crossing (mph) From 5 to 10

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 1

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
02/24/2020		750117C

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☐ None
0	0	0	☒ W10-1 1 ☐ W10-3 ☐ W10-11 ☐ W10-2 ☐ W10-4 ☐ W10-12

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☒ Stop Lines ☐ Dynamic Envelope ☒ RR Xing Symbols ☐ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☒ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	0

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 2 Pedestrian 0	☒ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☐ Incandescent ☒ LED ☒ Back Lights Included ☒ Side Lights Included	5

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☒ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	2

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type _____

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☐ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * _____ Stop Line Distance * _____	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☐ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☒ Yes ☐ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * 80

☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* 25	☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	25 MPH ☐ Posted ☒ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2016 AADT 3824	10 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

APPENDIX C

Conceptual Improvement Plans

JMA CIVIL

CITY OF SAN JOSE
WARM SPRINGS SUBDIVISION QUIET ZONE EVALUATION

VICINITY MAP
SCALE: N.T.S.

LOCATION MAP
SCALE: N.T.S.

INDEX OF DRAWINGS

SUBCONSULTANT:

SUBCONSULTANT:

PRIME CONSULTANT:
JMA CIVIL
3930 Pacheco Blvd
Martinez, CA 94553
T: 925.400.4356
www.jmacivil.com

PROFESSIONAL SEAL:

ISSUE:
CONCEPT
-
NOT FOR CONSTRUCTION
04/09/2020

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
TITLE SHEET AND DRAWING INDEX

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
G-001
SHEET 1 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

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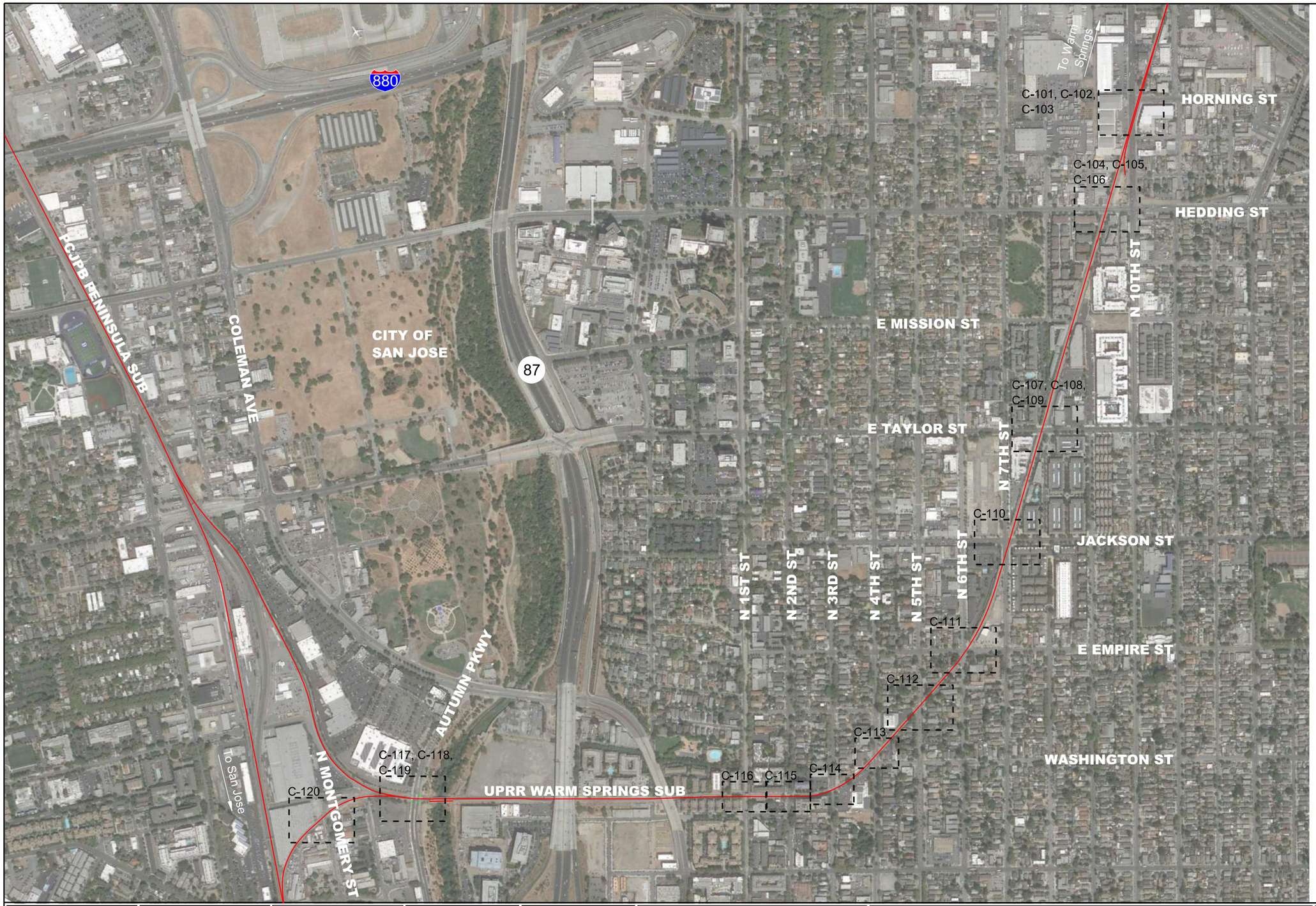

SHEET NOTES:

SEE SHEET C-101 FOR GENERAL NOTES

0 400 800 1200
SCALE FEET
1" = 400'

SUBCONSULTANT:

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1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
OVERALL MAP

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-100
SHEET 2 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

whong
4/9/2020 - 3:33:19 PM - P:\19154-SJQuickZone\Site\Sheets\Preliminary Design\C-100 Overall Map.dgn

GENERAL NOTES:

1. EXISTING FEATURES SHOWN WERE DEVELOPED FROM AERIAL PHOTO DATA AND SUPPLEMENT FIELD MEASUREMENTS. TOPOGRAPHIC SURVEY WAS NOT PREFORMED.
2. PAINT OR EXTEND RED CURB LIMITS ON THE APPROACH AND EXIT OF EACH CROSSING TO PREVENT PARKED VEHICLES FROM OBSTRUCTING VISIBILITY OF THE WARNING DEVICES
3. TRIM OR REMOVE EXISTING TREES ON THE APPROACHES TO RAIL CROSSINGS. ENSURE NO NEW TREES ARE PLANTED ON APPROACHES AS PART OF ANY NEW DEVELOPMENTS
4. PROVIDE EDGE OF TRAVEL LANE STRIPING AND MEDIAN STRIPING UP TO THE EDGE OF THE CROSSING PANELS.

SHEET NOTES:

EXISTING INFRASTRUCTURE

[1] EXISTING RAILROAD XING SYMBOLS

[2] EXISTING DRIVEWAY

CIVIL IMPROVEMENTS

(1) INSTALL W10-9P (NO TRAIN HORN)

(2) INSTALL W10-1 (RAIL CROSSING WARNING)

N

0 40 80 120
SCALE FEET
1" = 40'

SUBCONSULTANT:	SUBCONSULTANT:	PRIME CONSULTANT:

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REVISIONS:		
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW
MARK	DATE	DESCRIPTION

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 15.50
N 10TH ST AT GRADE CROSSING
OVERALL PLAN

PROJ NO: 19154	SHEET NO. C-101
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 3 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

wlhong
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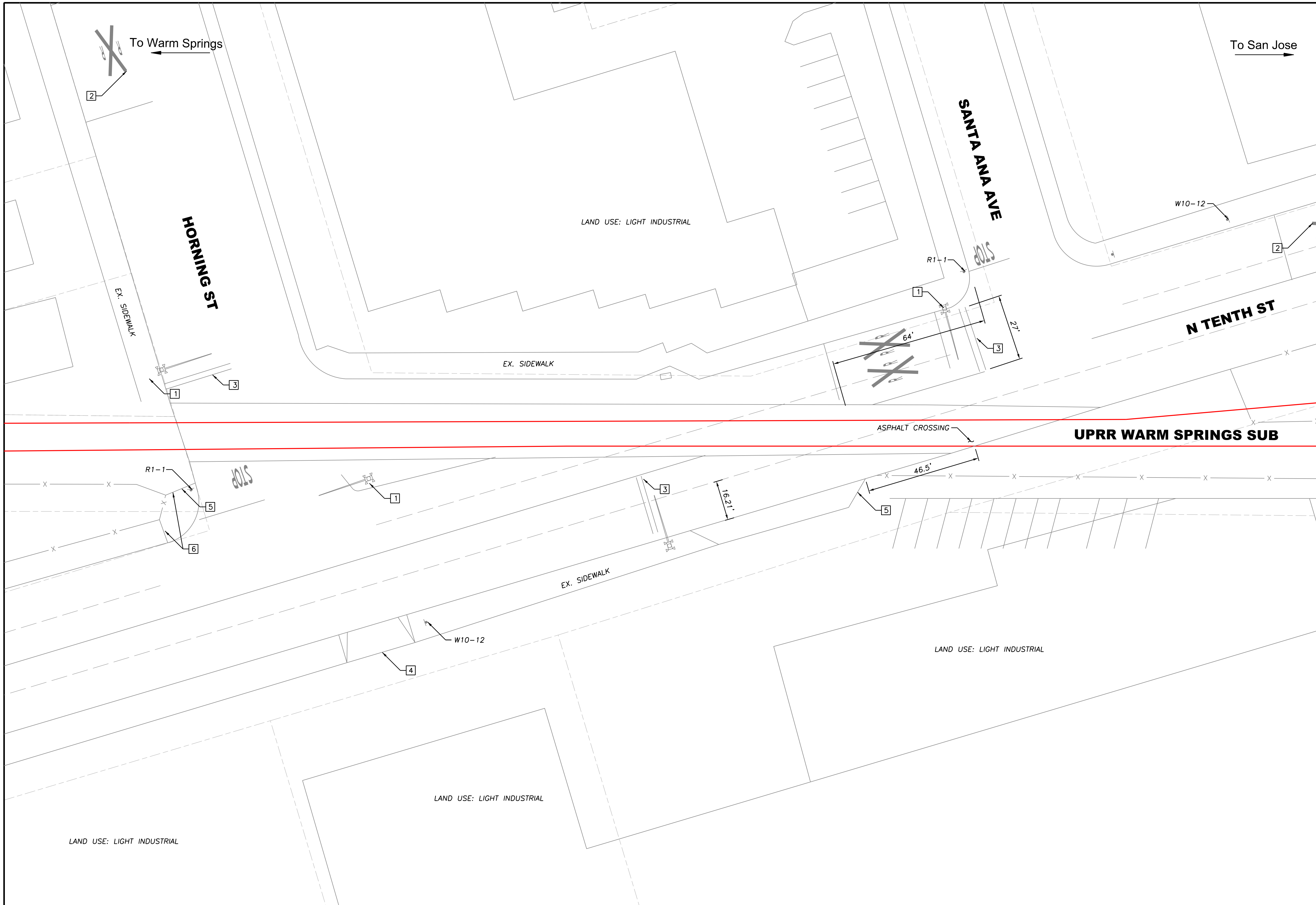

GENERAL NOTES

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOLS
3. EXISTING STOP BARS
4. EXISTING DRIVEWAY
5. END OF EXISTING SIDEWALK
6. EXISTING PEDESTRIAN BARRIER

SCALE 0 20 40 60 FEET
1" = 20'

whong
4/9/2020 • 3:33:30 PM • P:\19154-SJQuietZone\Site\Sheets\Preliminary Design\C-102 N 10th St_Existing.dgn

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PROFESSIONAL SEAL:

CONCEPT
-
NOT FOR CONSTRUCTION
04/09/2020

ISSUE:

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

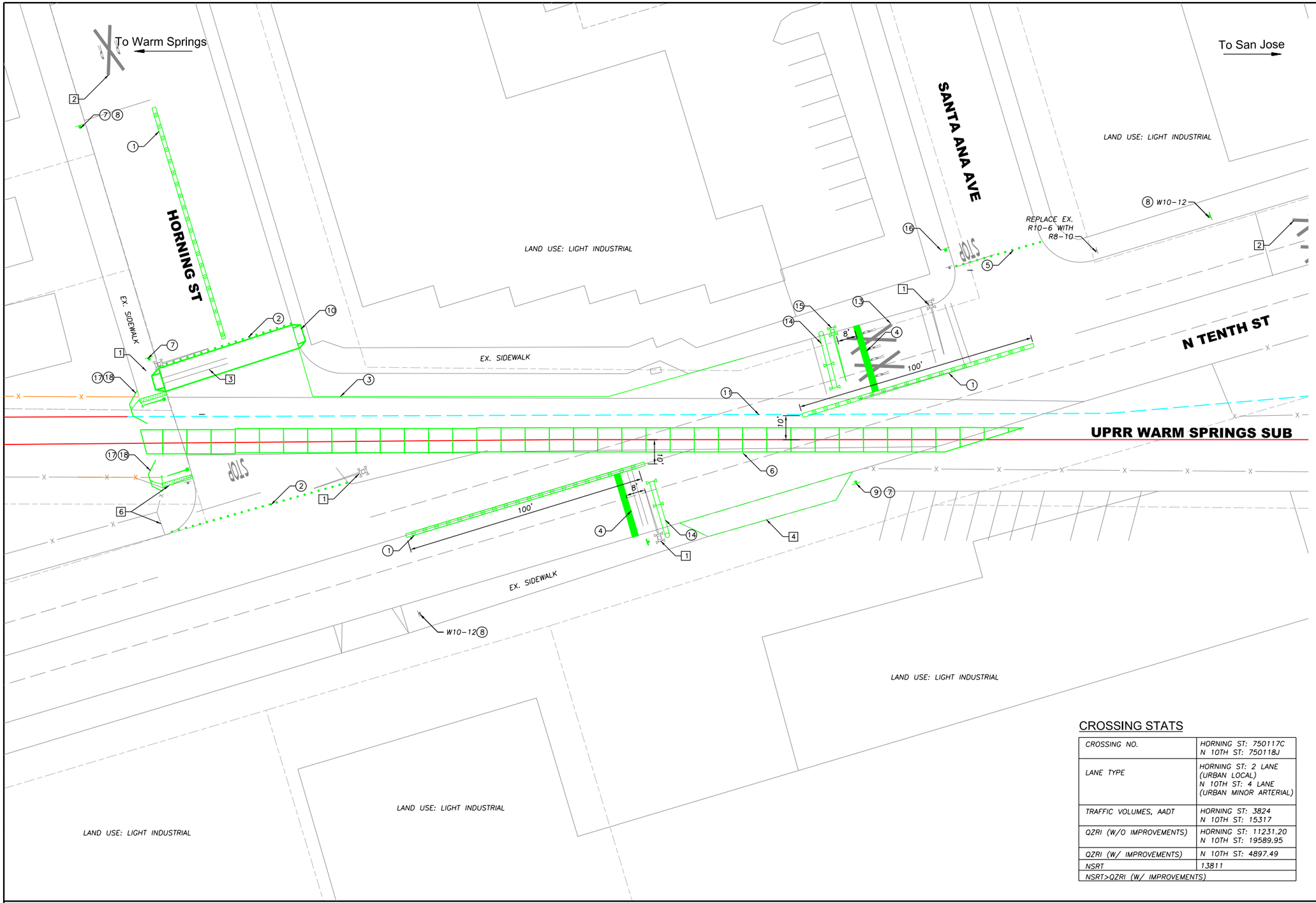
CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 15.50
N 10TH ST AT GRADE CROSSING
EXISTING SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-102
SHEET 4 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING



GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY, WITHIN 60' DISTANCE FROM RAILROAD CROSSING. CITY SHALL COORDINATE WITH PROPERTY OWNER FOR DRIVEWAY RELOCATION
5. END OF EXISTING SIDEWALK
6. EXISTING PEDESTRIAN BARRIER

CIVIL IMPROVEMENTS

1. PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES
2. ALTERNATIVE 1: PROPOSED BOLLARDS FOR HORNING ST FULL CLOSURE
3. PROPOSED CURB EXTENSION
4. PROPOSED 24" STOP BAR PER 2014 MUTCD STANDARDS
5. ALTERNATIVE 2: PROPOSED BOLLARDS FOR SANTA ANA AVENUE FULL CLOSURE
6. PROPOSED CONCRETE CROSSING PAD, APPROX. 340 LF BY UPRR.
7. INSTALL W10-9P (NO TRAIN HORN) AND REPLACE R10-6 (STOP HERE ON RED) WITH R8-10 (STOP HERE WHEN FLASHING)
8. INSTALL W10-1 (RAIL CROSSING WARNING)
9. INSTALL R3-5R (RIGHT TURN ONLY)
10. PROPOSED PEDESTRIAN CROSSWALK WITH ADA RAMP
11. REMOVE EXISTING SPUR TRACK FOR SURFACE IMPROVEMENT WORK BY UPRR.
12. PROPOSED PEDESTRIAN DETECTABLE WARNING STRIP
13. REMOVE EXISTING RAILROAD CROSSING MARKING
14. PROVIDE RAILROAD CANTILEVER FLASHER WITH A SET OF FLASHER FOR EACH TRAVEL LANE.
15. RELOCATE EXISTING GATE CLOSER TO THE TRACKS
16. INSTALL W10-4 (GRADE CROSSING ADVANCE WARNING)
17. ALTERNATIVE 2: PROPOSED FULL PEDESTRIAN TREATMENT INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION
18. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	HORNING ST: 750117C N 10TH ST: 750118J
LANE TYPE	HORNING ST: 2 LANE (URBAN LOCAL) N 10TH ST: 4 LANE (URBAN MINOR ARTERIAL)
TRAFFIC VOLUMES, AADT	HORNING ST: 3824 N 10TH ST: 15317
QZRI (W/O IMPROVEMENTS)	HORNING ST: 11231.20 N 10TH ST: 19589.95
QZRI (W/ IMPROVEMENTS)	N 10TH ST: 4897.49
NSRT	13811
NSRT>QZRI (W/ IMPROVEMENTS)	

SCALE 1" = 20'
0 20 40 60 FEET

SUBCONSULTANT:

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NOT FOR CONSTRUCTION
04/09/2020

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 15.50
N 10TH ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154	SHEET NO. C-103
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 5 OF 22

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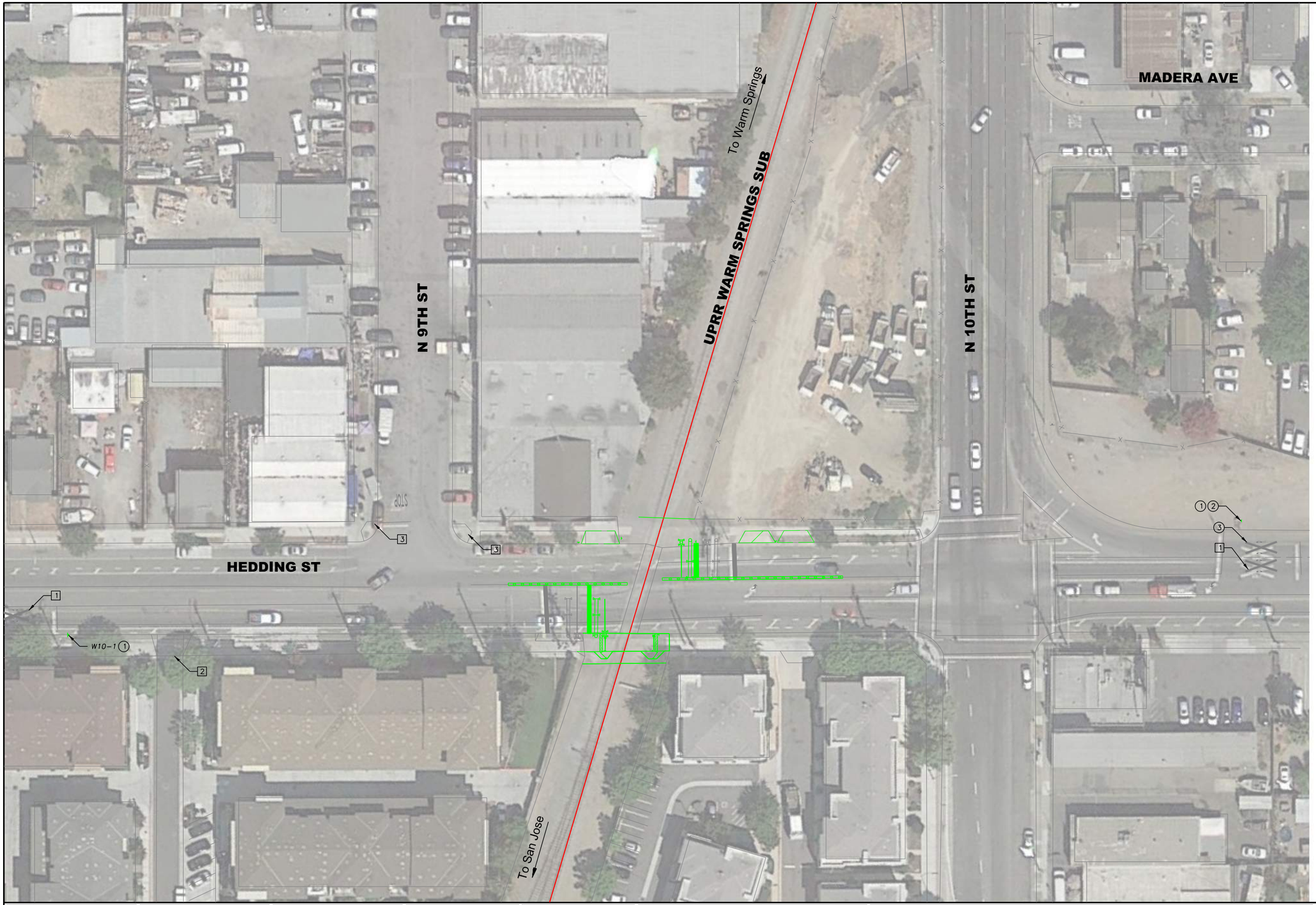

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

[1] EXISTING RAILROAD XING SYMBOLS

[2] EXISTING DRIVEWAY

[3] EXISTING ADA RAMP

CIVIL IMPROVEMENTS

(1) INSTALL W10-9P (NO TRAIN HORN)

(2) INSTALL W10-1 (RAIL CROSSING WARNING)

(3) REMOVE EXISTING RAILROAD CROSSING MARKING IN THE WESTBOUND RIGHT TURN LANE

0 30 60 90
SCALE FEET
1" = 30'

SUBCONSULTANT:

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PRIME CONSULTANT:

PROFESSIONAL SEAL:

ISSUE:
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04/09/2020

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 15.64
HEDDING ST AT GRADE CROSSING
OVERALL PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-104
SHEET 6 OF 22

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N 9TH ST

LAND USE: LIGHT INDUSTRIAL

EX. SIDEWALK

UPRR WARM SPRINGS SUB

To Warm Springs

LAND USE: LIGHT INDUSTRIAL

EX. SIDEWALK

51.68'

HEDDING ST

30'

21'

ASPHALT CROSSING

EX. SIDEWALK

EX. SIDEWALK

LAND USE: URBAN RESIDENTIAL

To San Jose

LAND USE: URBAN RESIDENTIAL

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOLS
3. EXISTING STOP BARS
4. EXISTING DRIVEWAY
5. END OF EXISTING SIDEWALK
6. EXISTING PEDESTRIAN BARRIER
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING BIKE PATH
9. EXISTING ADA RAMP

SCALE 1" = 10'

0 10 20 30 FEET

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REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
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CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:

WARM SPRINGS SUB, MP 15.64
HEDDING ST AT GRADE CROSSING
EXISTING SITE PLAN

PROJ NO: 19154	SHEET NO. C-105
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 7 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

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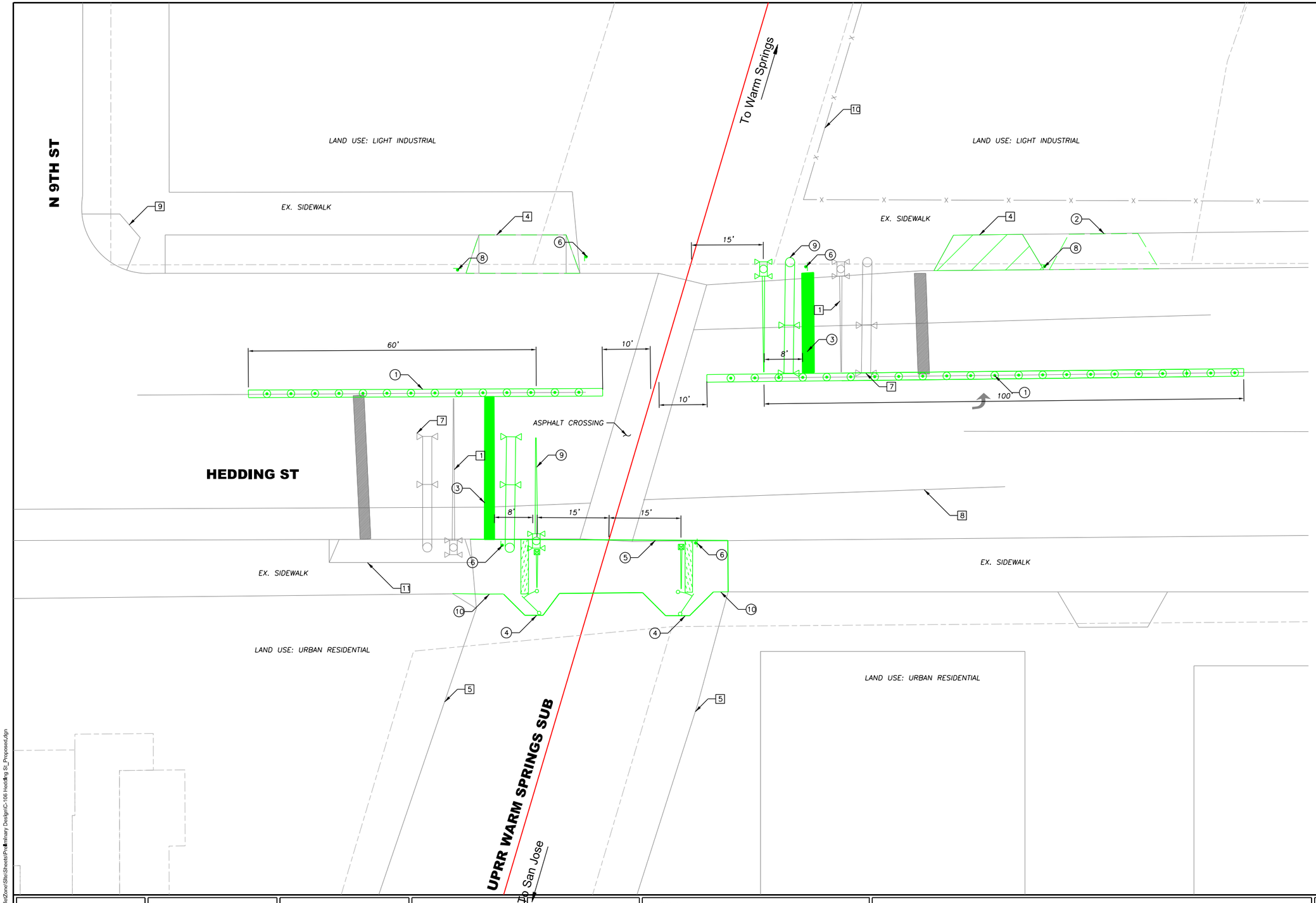

GENERAL NOTES

SEE SHEET C-101 FOR GENERAL NOTES

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
5. EXISTING WALL
6. EXISTING PEDESTRIAN BARRIER
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING BIKE PATH
9. EXISTING ADA RAMP
10. EXISTING RIGHT OF WAY FENCE
11. EXISTING EMERGENCY ONLY DRIVEWAY

CIVIL IMPROVEMENTS

1. PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES
2. RELOCATE EXISTING DRIVEWAY TO PROVIDE 60' DISTANCE FROM GATE
3. PROPOSED 24" STOP BAR PER MUTCD STANDARDS
4. PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION
5. PROPOSED SIDEWALK IMPROVEMENT
6. INSTALL W10-9P (NO TRAIN HORN) AND R8-8 (DO NOT STOP ON TRACKS)
7. INSTALL W10-1 (RAIL CROSSING WARNING)
8. INSTALL R3-5R (RIGHT TURN ONLY)
9. RELOCATE EXISTING QUADRANT GATE AND CANTILEVER CLOSER TO THE TRACK.
10. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750121S
LANE TYPE	3 LANE (URBAN OTHER PRINCIPAL ARTERIAL)
TRAFFIC VOLUMES, AADT	15539
QZRI (W/O IMPROVEMENTS)	17646.57
QZRI (W/ IMPROVEMENTS)	4411.64
NSRT	13811
NSRT>QZRI (W/ IMPROVEMENTS)	

SCALE 1" = 10'
0 10 20 30
FEET

SUBCONSULTANT:

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MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 15.64
HEDDING ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-106
SHEET 8 OF 22

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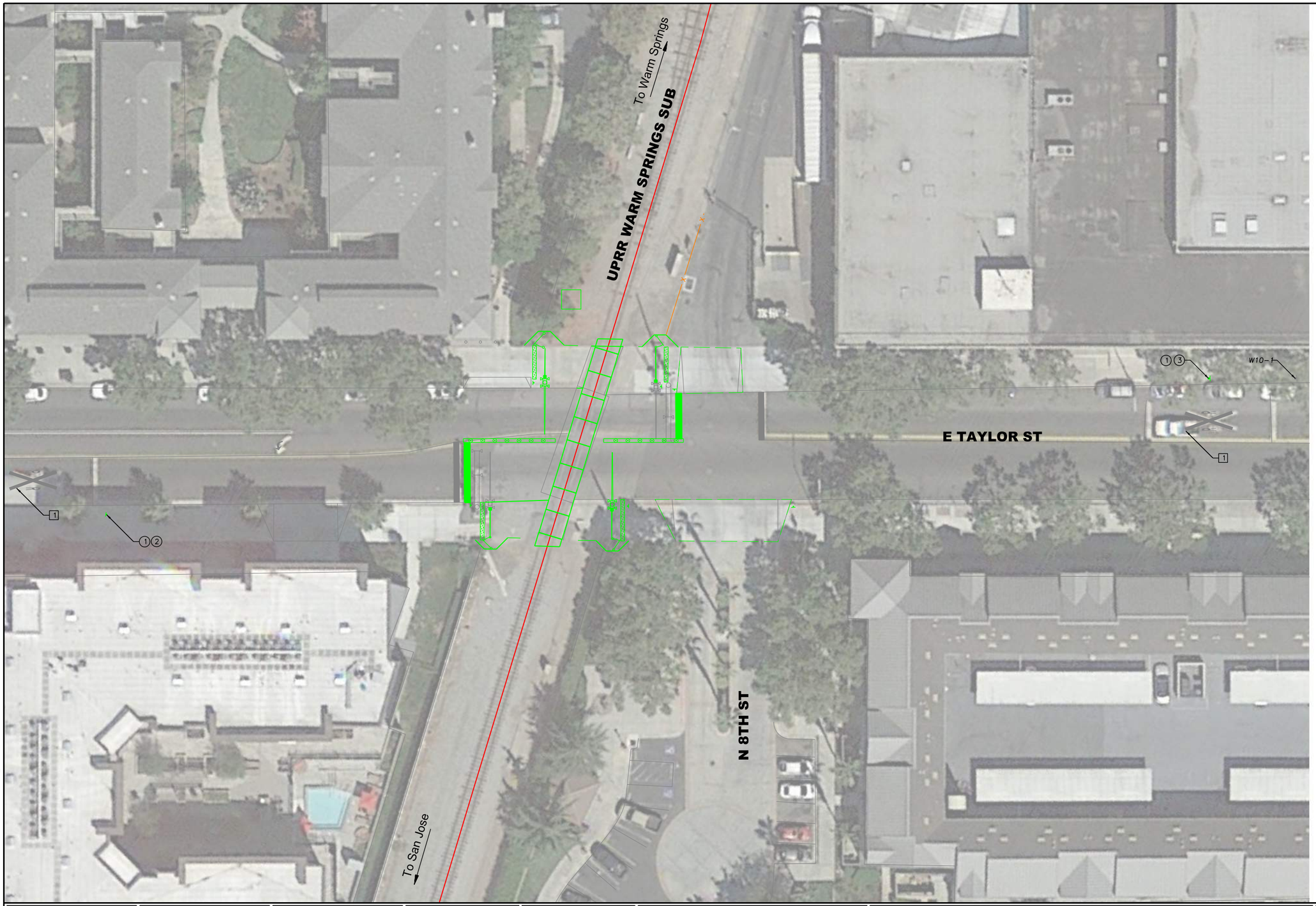

GENERAL NTOES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING RAILROAD XING SYMBOLS
2. EXISTING ADA RAMP

CIVIL IMPROVEMENTS

1. INSTALL W10-9P (NO TRAIN HORN)
2. INSTALL W10-1 (RAIL CROSSING WARNING)
3. RELOCATE EX. W10-1 CLOSE TO RAILROAD CROSSING MARKING

0 20 40 60
SCALE FEET
1" = 20'

SUBCONSULTANT:

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MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
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1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.00
E TAYLOR ST AT GRADE CROSSING
OVERALL PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-107
SHEET 9 OF 22

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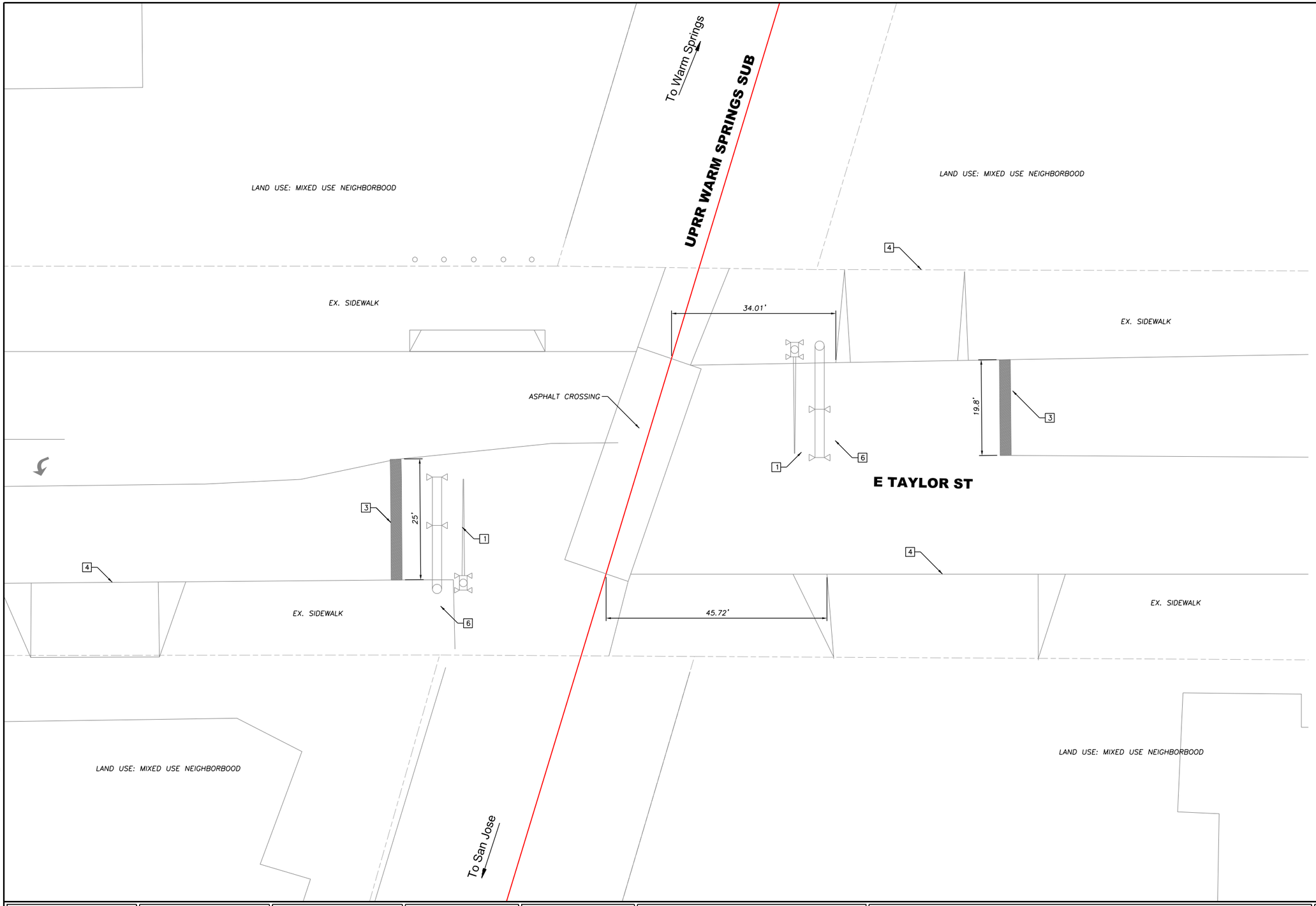

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOLS
3. EXISTING STOP BARS
4. EXISTING DRIVEWAY
5. END OF EXISTING SIDEWALK
6. EXISTING SIGNAL CANTILEVER WITH R15-1

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MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:

WARM SPRINGS SUB, MP 16.00
E TAYLOR ST AT GRADE CROSSING
EXISTING PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-108

SHEET 10 OF 22

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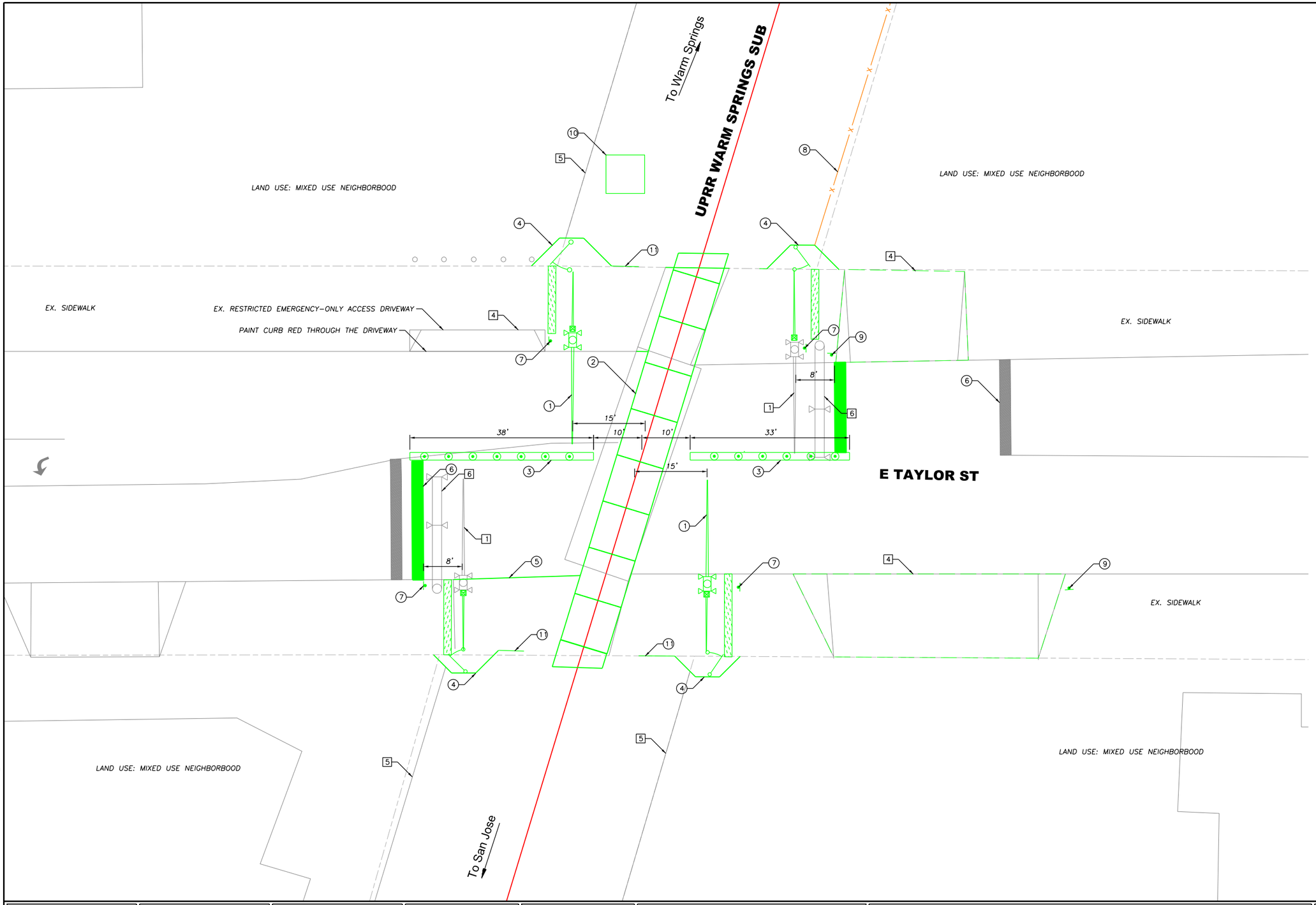

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES

SHEET NOTES:

EXISTING INFRASTRUCTURE

[1] EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN

[2] EXISTING RAILROAD XING SYMBOL

[3] EXISTING STOP BAR

[4] EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING

[5] EXISTING WALL

[6] EXISTING SIGNAL CANTILEVER WITH R15-1

[7] EXISTING RIGHT OF WAY FENCE

CIVIL IMPROVEMENTS

(1) PROPOSED NO. 9 QUADRANT GATE

(2) PROPOSED CONCRETE CROSSING PANEL, APPROX. 80 LF BY UPRR.

(3) PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES

(4) PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION

(5) PROPOSED PEDESTRIAN SIDEWALK IMPROVEMENT

(6) PROPOSED 24" STOP BAR PER MUTCD STANDARDS

(7) INSTALL W10-9P (NO TRAIN HORN)

(8) EXTEND EXISTING FENCE TO THE BACK OF WALK

(9) INSTALL R3-5R (RIGHT TURN ONLY)

(10) PROPOSED UPRR SIGNAL BOX

(11) PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750127H
LANE TYPE	2 LANE (URBAN MINOR ARTERIAL)
TRAFFIC VOLUMES, AADT	12312
QZRI (W/O IMPROVEMENTS)	15097.25
QZRI (W/ IMPROVEMENTS)	2717.51
NSRT	13811
NSRT>QZRI (W/ IMPROVEMENTS)	

0 10 20 30
SCALE FEET
1" = 10'

SUBCONSULTANT:

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REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.00
E TAYLOR ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154	SHEET NO. C-109
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 11 OF 22

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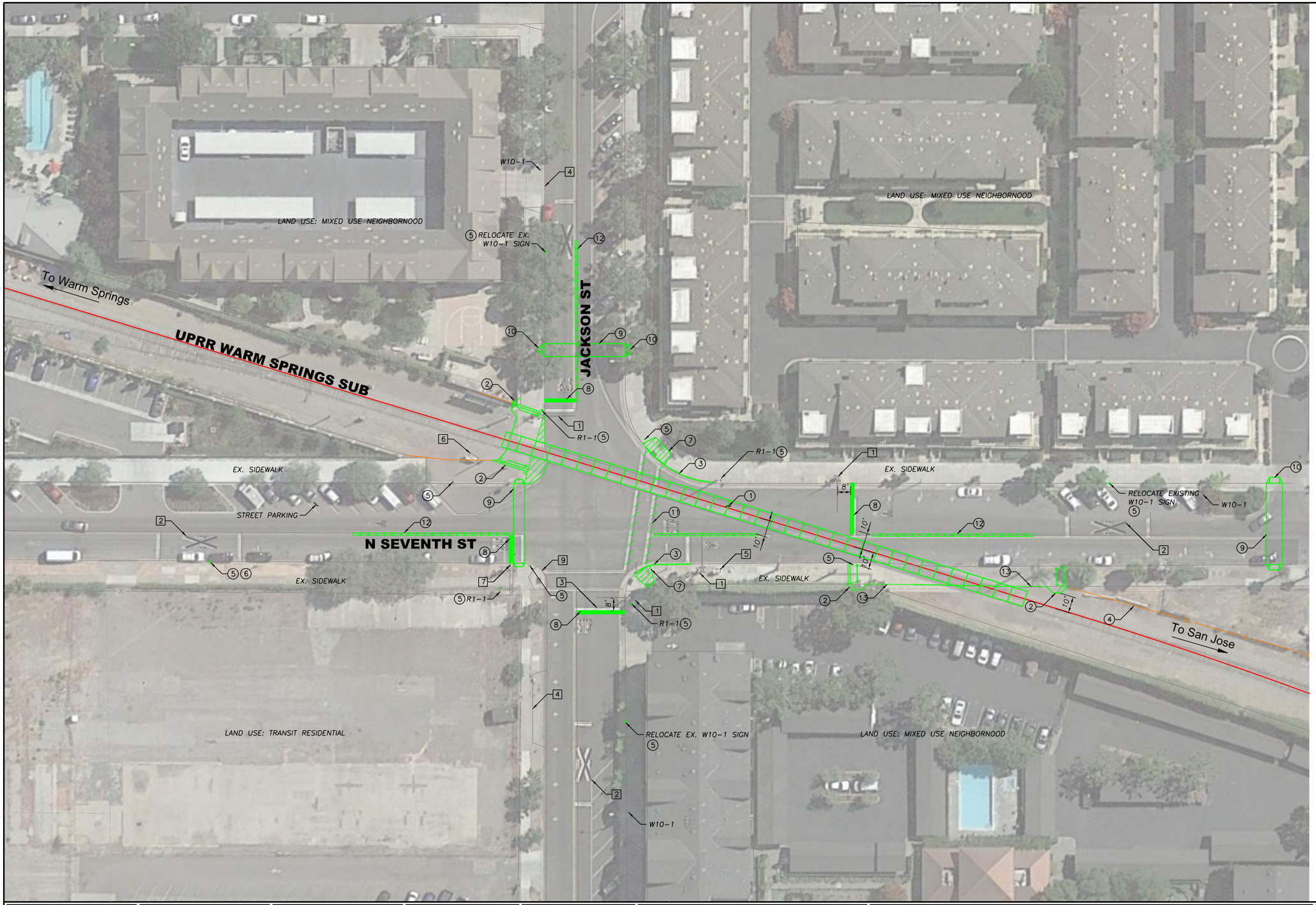

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY
5. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
6. UPRR SIGNAL HOUSE
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING LIGHT SIGNAL
9. EXISTING ADA RAMP
10. ASPHALT CROSSING

CIVIL IMPROVEMENTS

1. PROPOSED CONCRETE CROSSING PANEL, APPROX. 280 LF BY UPRR.
2. PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION
3. INSTALL R9-3 (NO PEDESTRIAN CROSSING) AND R9-3bP (USE CROSSWALK) ON PROPOSED BARRICADE
4. PROPOSED 8' HIGH RIGHT OF WAY FENCE BY DEVELOPER
5. INSTALL W10-9 (NO TRAIN HORN)
6. INSTALL W10-1 (RAIL CROSSING WARNING)
7. REMOVE ADA RAMP
8. PROPOSED STOP BAR PER 2014 MUTCD STANDARDS
9. PROPOSED CROSSWALK STRIPING
10. PROPOSED ADA RAMP
11. REMOVE EXISTING CROSSWALK STRIPING
12. PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES
13. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	JACKSON ST: 750128P N 7TH ST: 750129W
LANE TYPE	2 LANE (URBAN MAJOR COLLECTOR)
TRAFFIC VOLUMES, AADT	JACKSON ST: 2900 N 7TH ST: 3620
QZRI (W/O IMPROVEMENTS)	JACKSON ST: 10472.88 N 7T ST: 11077.36
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

0 30 60 90
SCALE FEET
1" = 30'

SUBCONSULTANT:

SUBCONSULTANT:

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REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.18
N 7TH ST &JACKSON ST
AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-110
SHEET 12 OF 22

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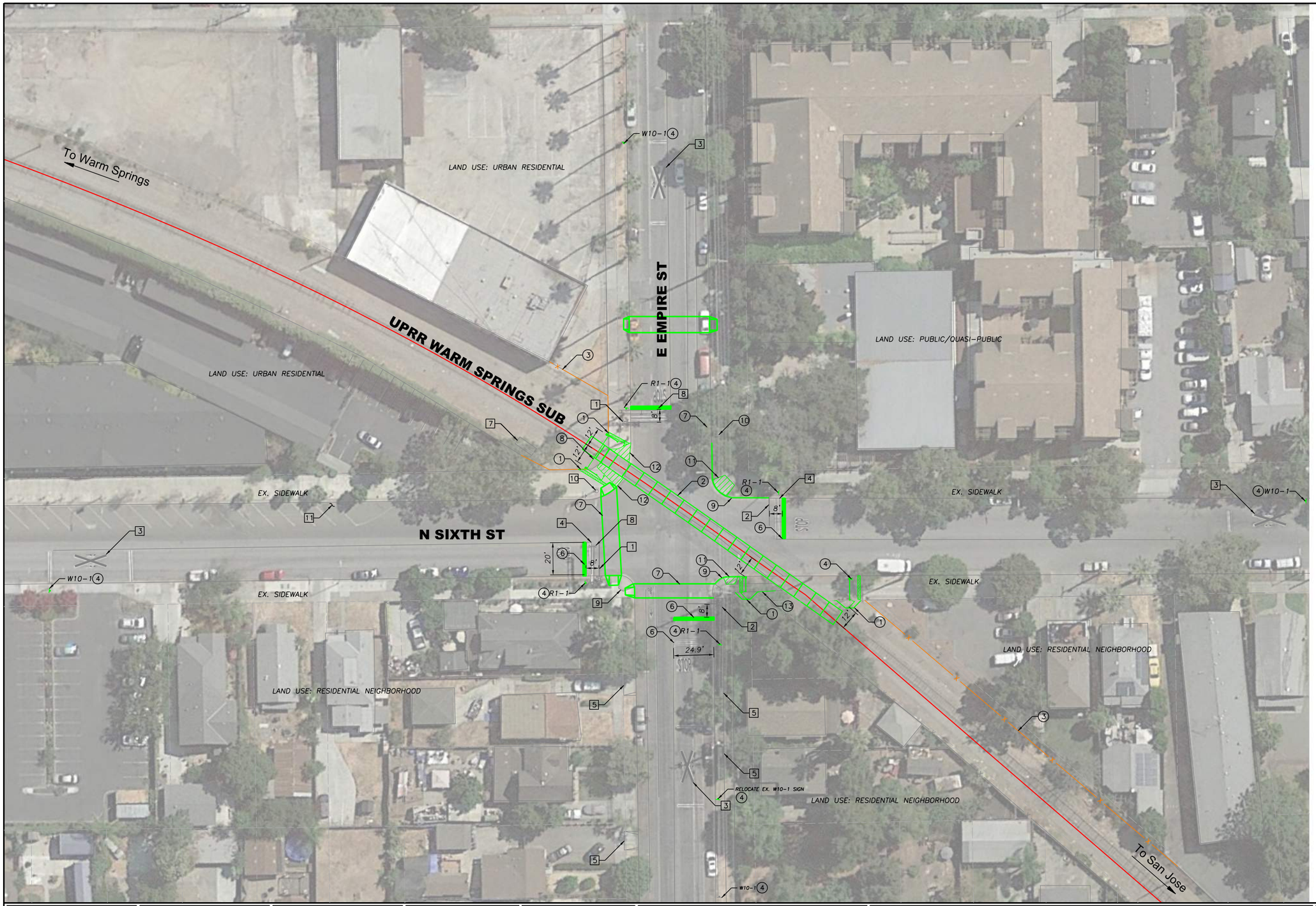

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
3. EXISTING RAILROAD XING SYMBOL
4. EXISTING STOP BAR
5. EXISTING DRIVEWAY
6. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
7. UPRR CONTROL HOUSE
8. EXISTING SIGNAL CANTILEVER WITH R15-1
9. EXISTING ADA RAMP
10. EXISTING POLE
11. EXISTING STREET PARKING

CIVIL IMPROVEMENTS

1. PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE DETECTABLE WARNING STRIP AND CHANNELIZATION
2. PROPOSED CONCRETE CROSSING PANNEL, APPROX. 150 LF BY UPRR
3. PROPOSED 8' HIGH RIGHT OF WAY FENCE BY DEVELOPER
4. INSTALL W10-9P (NO TRAIN HORN)
5. INSTALL W10-1 (RAIL CROSSING WARNING)
6. PROPOSED 24" STOP BAR PER MUTCD STANDARDS
7. PROPOSED CROSSWALK STRIPING
8. PROPOSED PEDESTRIAN SIDEWALK
9. INSTALL R9-3 (NO PEDESTRIAN CROSSING) AND R9-3bP (USE CROSSWALK) ON PROPOSED BARRICADE
10. PROPOSED ADA RAMP
11. REMOVE EXISTING ADA RAMP
12. REMOVE EXISTING SIDEWALK
13. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750131X
LANE TYPE	2 LANE (URBAN LOCAL)
TRAFFIC VOLUMES, AADT	3100
QZRI (W/O IMPROVEMENTS)	10651.69
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

SCALE 1" = 30'
0 30 60 90 FEET

SUBCONSULTANT:

SUBCONSULTANT:

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PRIME CONSULTANT:

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04/09/2020

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.35
N 6TH ST AND EMPIRE ST
AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-111
SHEET 13 OF 22

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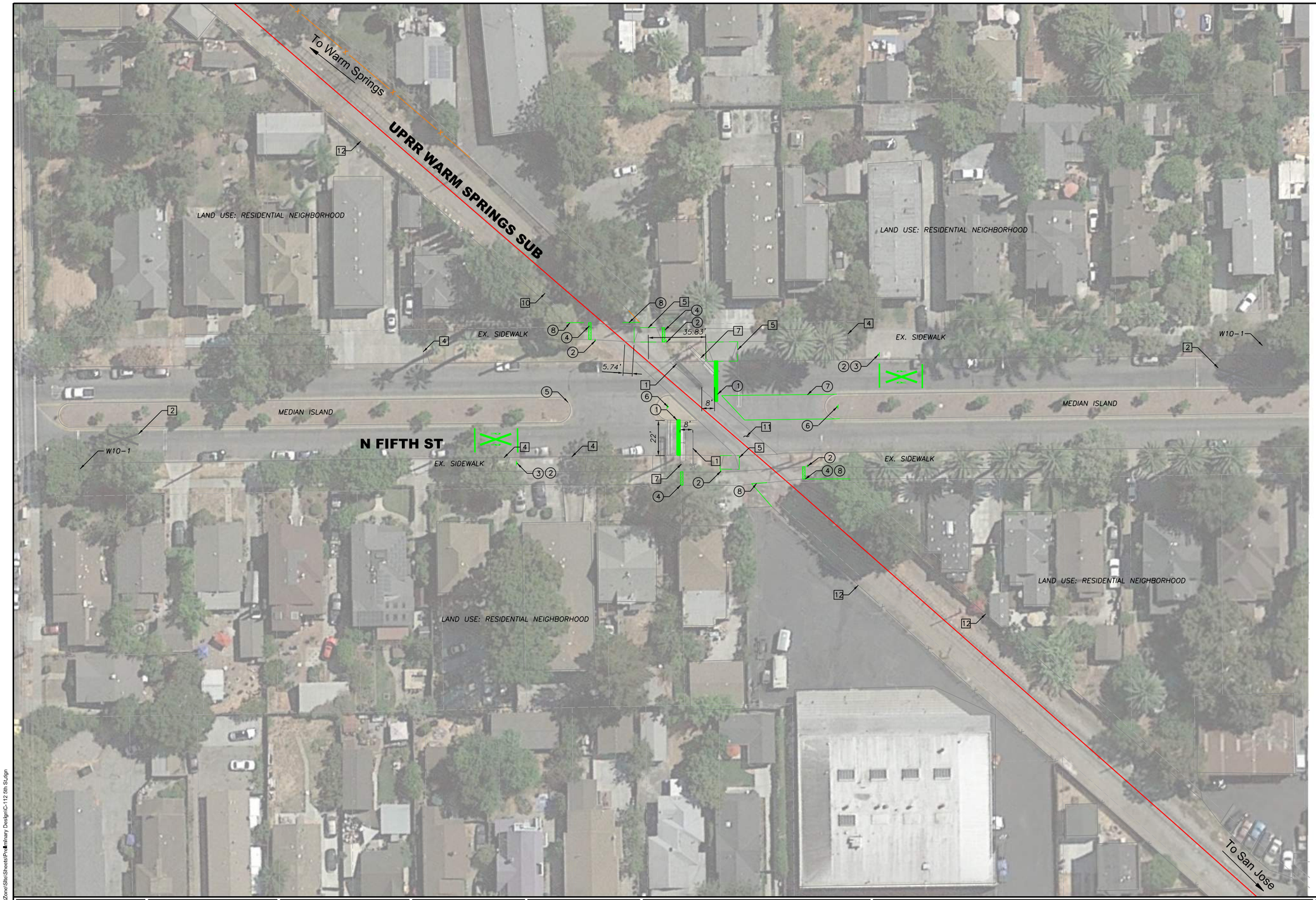

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9A QUADRANT GATE WITH R15-1
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY
5. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
6. EXISTING PEDESTRIAN BARRIER
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING BIKE PATH
9. EXISTING ADA RAMP
10. UPRR CONTROL HOUSE
11. EXISTING ASPHALT CROSSING
12. EXISTING FENCE

CIVIL IMPROVEMENTS

1. PROPOSED STOP BAR PER MUTCD STANDARDS
2. INSTALL W10-9P (NO TRAIN HORN) AND R15-8 (LOOK) FOR PEDESTRIAN
3. RELOCATE EXISTING RAILROAD CROSSING SIGNS WITH 100' DISTANCE TO THE STOP BAR
4. PROPOSED PEDESTRIAN DETECTABLE WARNING STRIPS
5. RELOCATE MEDIAN GAP FURTHER AWAY FROM THE RAILROAD CROSSING
6. INSTALL R8-8 (DO NOT STOP ON TRACKS)
7. PROPOSED MEDIAN ISLAND TO ASSIST CROSSING GATE COVER 90% OF TRAVEL APPROACH WIDTH.
8. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750132E
LANE TYPE	2 LANE (URBAN LOCAL)
TRAFFIC VOLUMES, AADT	2227
QZRI (W/O IMPROVEMENTS)	9789.62
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

0 30 60 90
SCALE FEET
1" = 30'

SUBCONSULTANT:	SUBCONSULTANT:	PRIME CONSULTANT: JMA CIVIL, 3930 Pacheco Blvd, Martinez, CA 94553, T: 925.400.4356, www.jmacivil.com	PROFESSIONAL SEAL:	ISSUE: CONCEPT - NOT FOR CONSTRUCTION 04/09/2020		

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.45
N 5TH ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154	SHEET NO. C-112
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 14 OF 22

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GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY
5. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
6. EXISTING PEDESTRIAN BARRIER
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING BIKE PATH
9. EXISTING ADA RAMP
10. UPRR CONTROL HOUSE
11. EXISTING SIGNAL LIGHT
12. EXISTING MEDIAN ISLAND
13. PCC PAD AT GRADE CROSSING
14. EXISTING FENCE

CIVIL IMPROVEMENTS

1. PROPOSED 24" STOP BAR PER MUTCD STANDARDS
2. INSTALL W10-9P (NO TRAIN HORN) AND R15-8 (LOOK)
3. INSTALL R3-5R (RIGHT TURN ONLY)
4. PROPOSED BOLLARDS FOR WASHINGTON ST FULL CLOSURE
5. INSTALL R3-1 (NO RIGHT TURN)
6. PROPOSED PEDESTRIAN DETECTABLE WARNING STRIPS
7. STRIPING UP MEDIAN TO THE EDGE OF CONCRETE PANEL WITH REFLECTIVE MARKERS
8. INSTALL W10-4 (GRADE CROSSING ADVANCE WARNING)
9. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750133L
LANE TYPE	2 LANE (URBAN MINOR ARTERIAL)
TRAFFIC VOLUMES, AADT	5709
QZRI (W/O IMPROVEMENTS)	12410.06
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

SCALE 1" = 30'
0 30 60 90 FEET

SUBCONSULTANT:

SUBCONSULTANT:

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PRIME CONSULTANT:

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3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.55
N 4TH ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO. C-113
SHEET 15 OF 22

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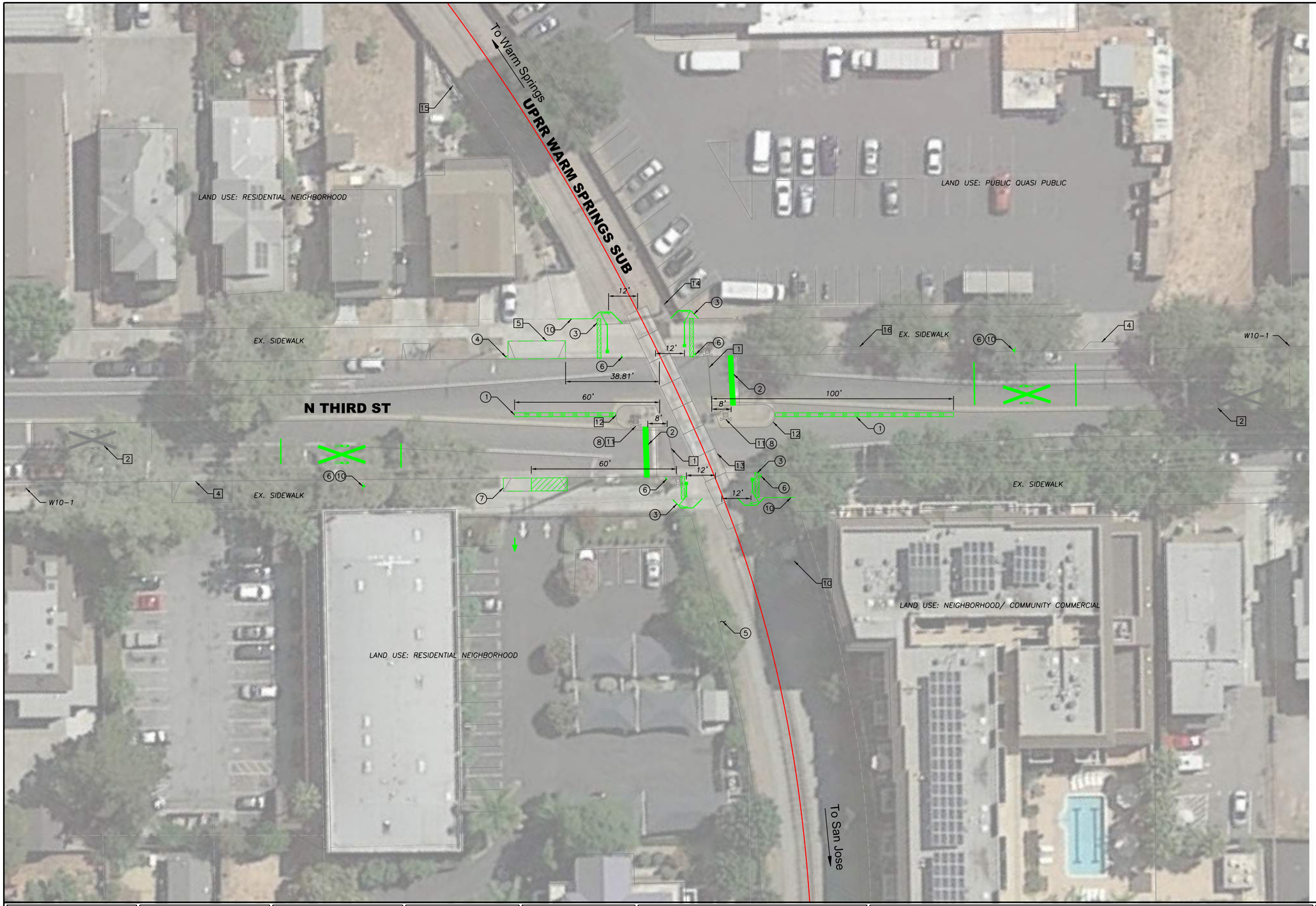

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING RAILROAD XING SYMBOL
3. EXISTING STOP BAR
4. EXISTING DRIVEWAY
5. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
6. EXISTING PEDESTRIAN BARRIER
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING BIKE PATH
9. EXISTING ADA RAMP
10. UPRR CONTROL HOUSE
11. EXISTING SIGNAL LIGHT
12. EXISTING MEDIAN ISLAND
13. EXISTING PCC PAD AT GRADE CROSSING
14. EXISTING UTILITY POLE
15. EXISTING FENCE
16. EXISTING CLOSED DRIVEWAY

CIVIL IMPROVEMENTS

(1) PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES

(2) PROPOSED 24" STOP BAR PER MUTCD STANDARDS

(3) PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION

(4) INSTALL R3-5R (RIGHT TURN ONLY)

(5) PROPERTY OWNERS TO REMOVE VEGETATION WITHIN UPRR RIGHT OF WAY

(6) INSTALL W10-9P (NO TRAIN HORN)

(7) REDUCE THE WIDTH OF RESIDENTIAL DRIVEWAY FOR ONE WAY ENTER ONLY

(8) ADD BELL ON EXISTING NO. 8 FLASHER

(9) PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

(10) RELOCATE EXISTING RAILROAD CROSSING MARKING AND W10-1 SIGN WITH 100' DISTANCE FROM STOP BAR

CROSSING STATS

CROSSING NO.	750134T
LANE TYPE	2 LANE (URBAN MAJOR COLLECTOR)
TRAFFIC VOLUMES, AADT	3992
QZRI (W/O IMPROVEMENTS) QZRI (W/ IMPROVEMENTS)	11353.09 2838.27
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

SCALE 1" = 20'
0 20 40 60
FEET

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3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
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1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.63
N 3RD ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-114
SHEET 16 OF 22

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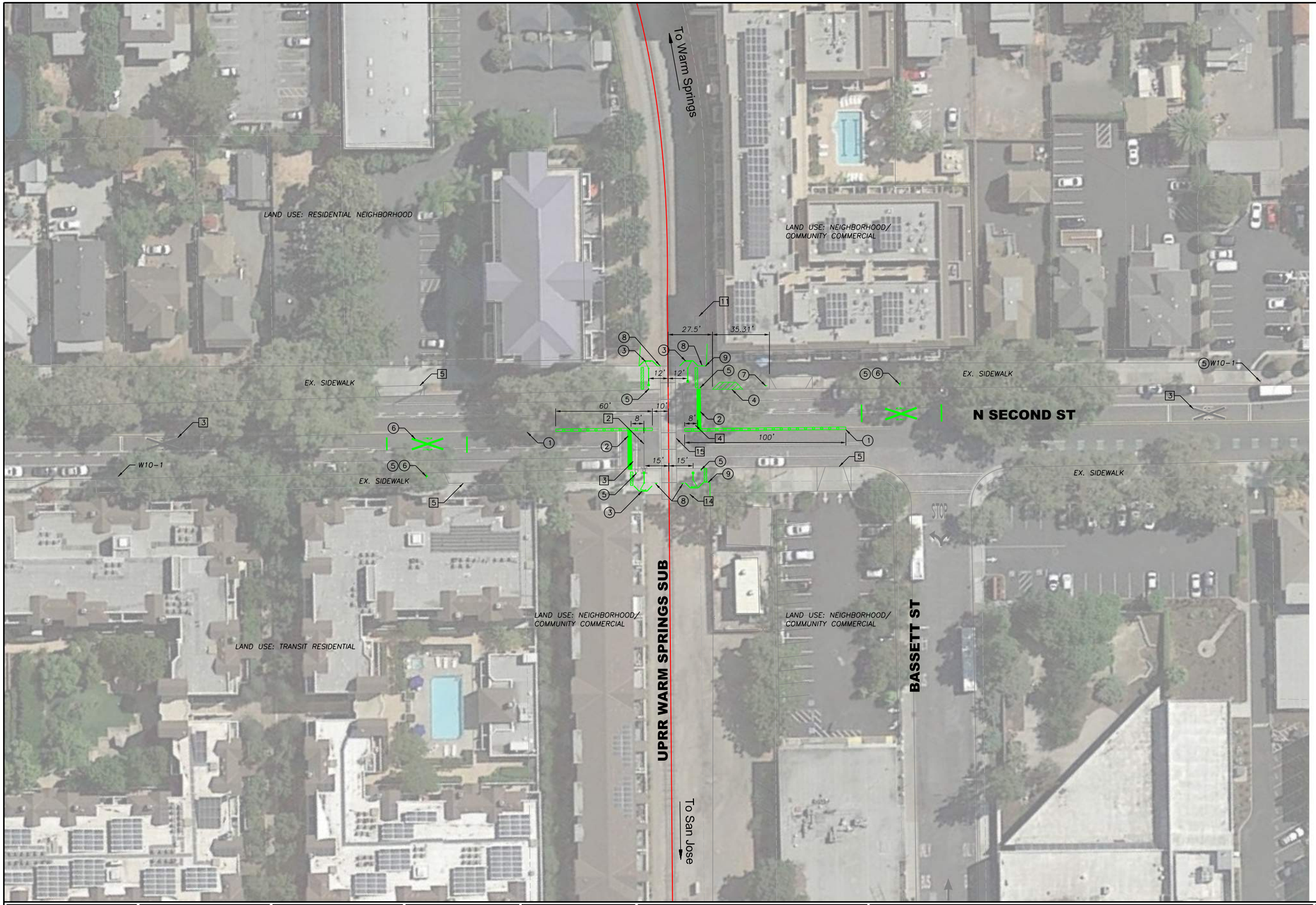

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
3. EXISTING RAILROAD XING SYMBOL
4. EXISTING STOP BAR
5. EXISTING DRIVEWAY
6. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
7. EXISTING PEDESTRIAN BARRIER
8. EXISTING SIGNAL CANTILEVER WITH R15-1
9. EXISTING BIKE PATH
10. EXISTING ADA RAMP
11. UPRR CONTROL HOUSE
12. EXISTING SIGNAL LIGHT
13. EXISTING MEDIAN ISLAND
14. EXISTING BARRIER
15. PCC PAD AT GRADE CROSSING

CIVIL IMPROVEMENTS

1. PROPOSED MOUNTABLE MEDIAN WITH REFLECTIVE TRAFFIC CHANNELIZATION DEVICES
2. PROPOSED 24" STOP BAR PER MUTCD STANDARDS
3. PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION
4. CITY WILL COORDINATE WITH PROPERTY OWNER TO RELOCATE TRASH PICKUP LOCATION TO SOUTH SIDE OF DRIVEWAY
5. INSTALL W10-9P (NO TRAIN HORN)
6. RELOCATE EXISTING RAILROAD CROSSING MARKING AND W10-1 SIGN WITH 100' DISTANCE TO STOP BAR
7. INSTALL R3-5R (RIGHT TURN ONLY)
8. INSTALL R4-1 (DO NOT PASS)
9. PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750135A
LANE TYPE	2 LANE (URBAN MAJOR COLLECTOR)
TRAFFIC VOLUMES, AADT	5974
QZRI (W/O IMPROVEMENTS) QZRI (W/ IMPROVEMENTS)	12549.65 3137.41
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

SCALE 1" = 30'
0 30 60 90
FEET

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3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.70
N 2ND ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
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SHEET NO.
C-115
SHEET 17 OF 22

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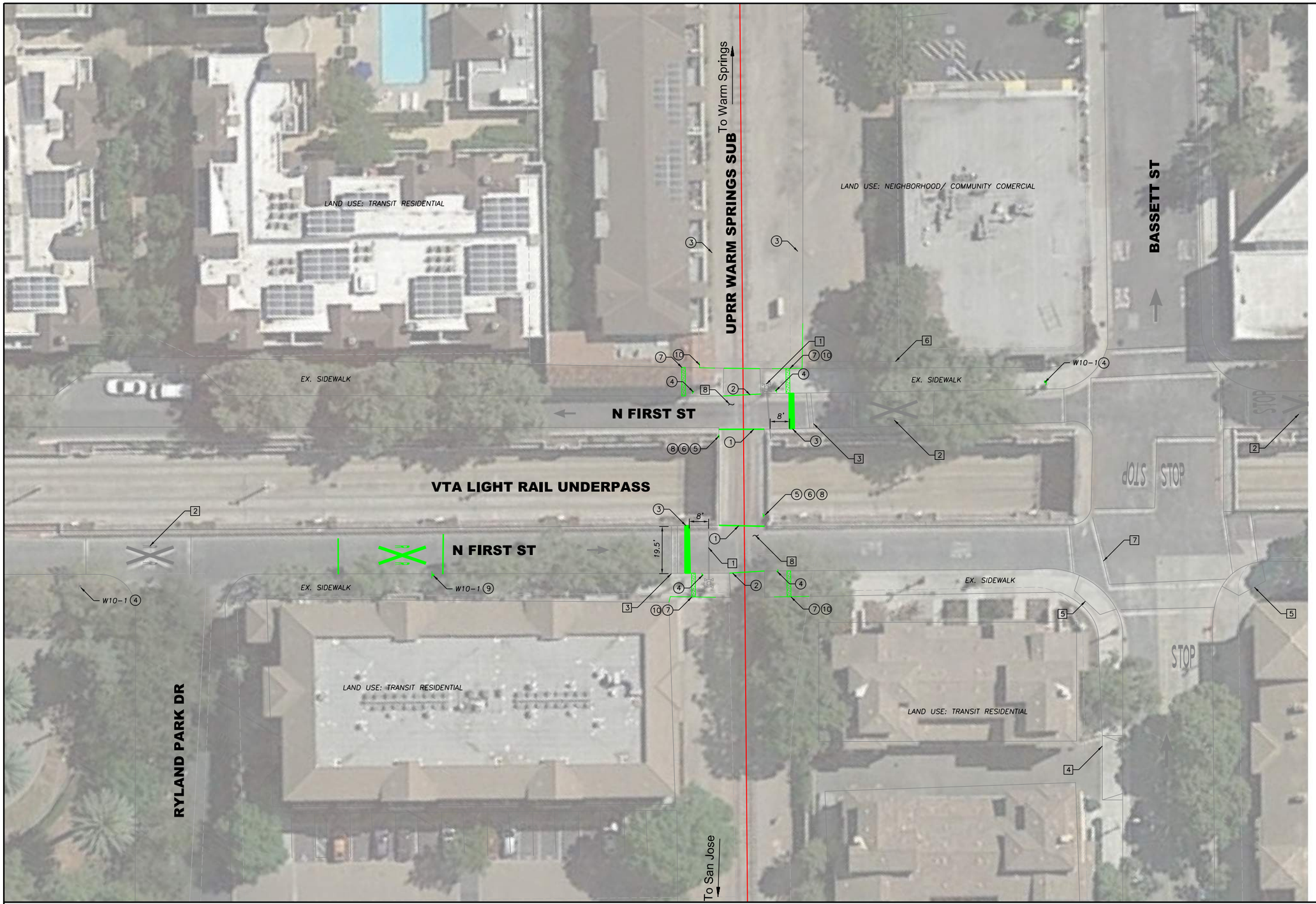

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

[1] EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN

[2] EXISTING RAILROAD XING SYMBOL

[3] EXISTING STOP BAR

[4] EXISTING DRIVEWAY

[5] EXISTING ADA RAMP

[6] EXISTING BARRIER

[7] EXISTING CROSSWALK

[8] EXISTING ASPHALT CROSSING

CIVIL IMPROVEMENTS

(1) PROPOSED DOUBLE YELLOW LINE ROAD STRIPING TO THE EDGE OF CONCRETE PANEL

(2) POTENTIAL CROSSING IMPROVEMENT BY UPRR

(3) PROPOSED 24" STOP BAR PER MUTCD STANDARDS

(4) INSTALL W10-9P (NO TRAIN HORN) AND R15-8 (LOOK)

(5) INSTALL R5-1 (DO NOT ENTER) SIGN PERPENDICULAR TO THE ROADWAY

(6) INSTALL R3-2 (NO LEFT TURN)

(7) PROPOSED PEDESTRIAN DETECTABLE WARNING STRIPS

(8) INSTALL R15-1 (GRADE CROSSING) AND R9-3 (NO PEDESTRIAN CROSSING)

(9) RELOCATE EXISTING RAILROAD CROSSING MARKING AND W10-1 SIGN WITH DISTANCE 100' TO STOP BAR

(10) PROPOSED FENCE AND FENCE GATE ALONG BACK OF SIDEWALK

CROSSING STATS

CROSSING NO.	750136G
LANE TYPE	2 LANE (URBAN OTHER PRINCIPAL ARTERIAL)
TRAFFIC VOLUMES, AADT	7836
QZRI (W/O IMPROVEMENTS)	13410.8
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

SCALE 1" = 20'
0 20 40 60 FEET

SUBCONSULTANT:

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3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
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1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 16.78
N 1ST ST AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154	SHEET NO. C-116
SCALE: AS NOTED	
DATE: 04/09/2020	
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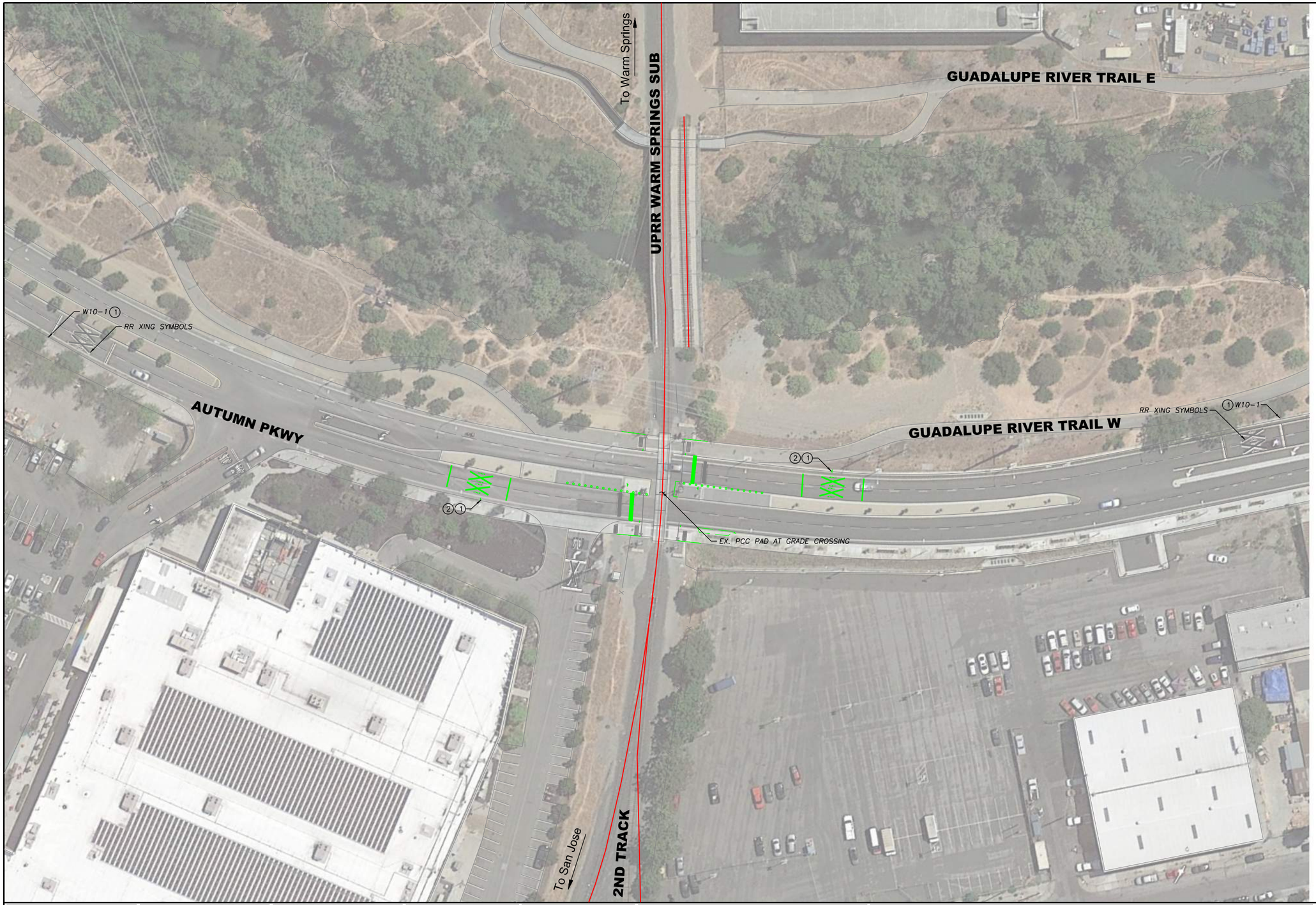

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

1. INSTALL W10-9P (NO TRAIN HORN)
2. RELOCATE EXISTING RAILROAD CROSSING MARKING AND W10-1 SIGN WITH 100' DISTANCE TO STOP BAR

0 40 80 120
SCALE FEET
1" = 40'

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2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 17.32
AUTUMN PKWY AT GRADE CROSSING
OVERALL PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-117
SHEET 19 OF 22

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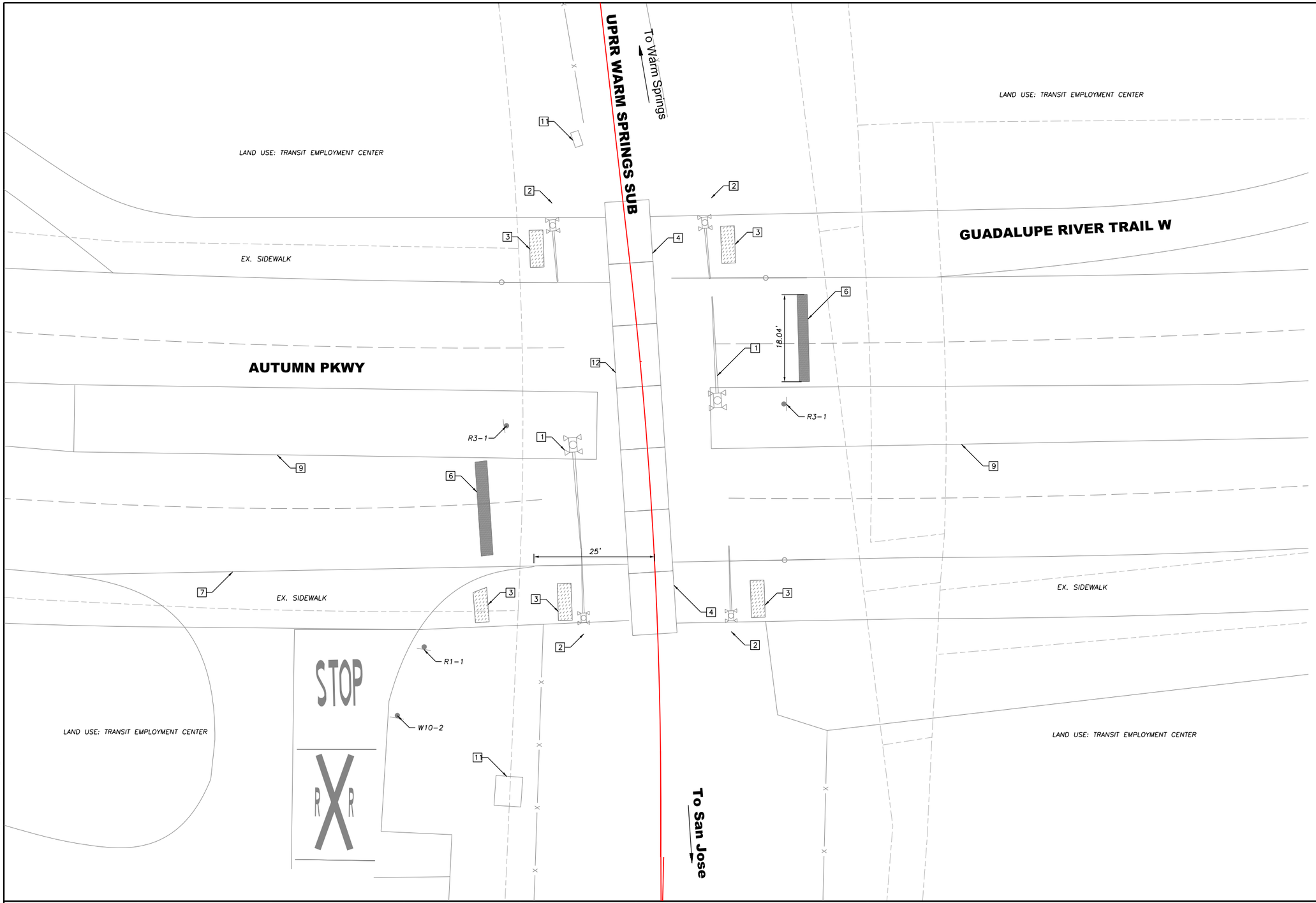

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING NO. 9 PEDESTRIAN GATE TO REMAIN
3. EXISTING DETECTABLE WARNING STRIP TO REMAIN
4. EXISTING PEDESTRIAN CROSSING TO REMAIN
5. EXISTING RAILROAD XING SYMBOLS
6. EXISTING STOP BARS
7. EXISTING DRIVEWAY
8. END OF EXISTING SIDEWALK
9. EXISTING MEDIAN ISLAND
10. EXISTING SIGNAL CANTILEVER WITH R15-1
11. UPRR CONTROL HOUSE
12. EXISTING PCC PAD AT GRADE CROSSING

N

0 10 20 30
SCALE FEET
1" = 10'

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3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

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200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 17.32
AUTUMN PKWY AT GRADE CROSSING
EXISTING SITE PLAN

PROJ NO: 19154	SHEET NO. C-118
SCALE: AS NOTED	
DATE: 04/09/2020	
DESIGNED BY: MA/WH	SHEET 20 OF 22

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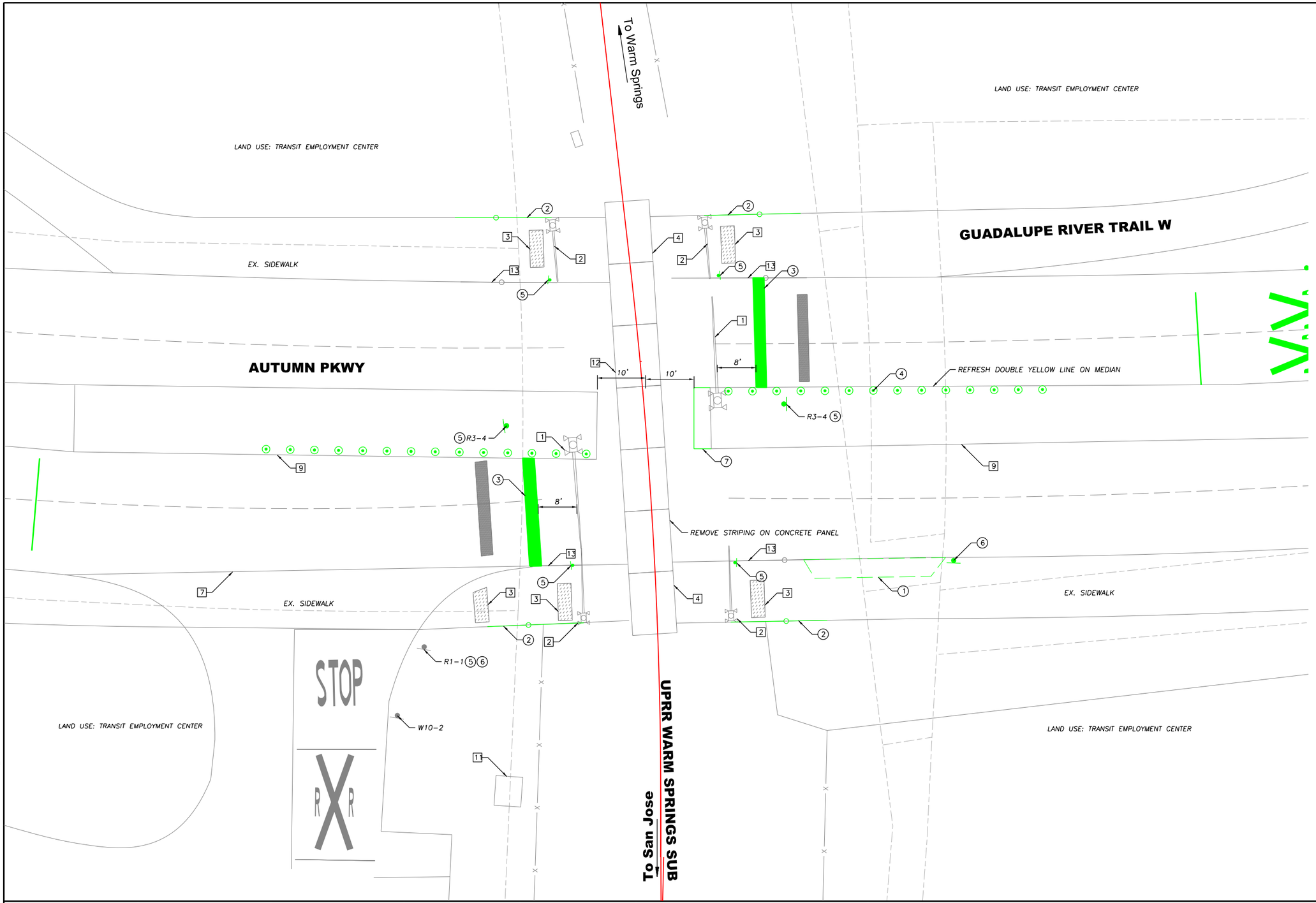

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING NO. 9 PEDESTRIAN GATE TO REMAIN
3. EXISTING DETECTABLE WARNING STRIP TO REMAIN
4. EXISTING PEDESTRIAN CROSSING TO REMAIN
5. EXISTING RAILROAD XING SYMBOL
6. EXISTING STOP BAR
7. EXISTING DRIVEWAY
8. END OF EXISTING SIDEWALK
9. EXISTING MEDIAN ISLAND
10. EXISTING SIGNAL CANTILEVER WITH R15-1
11. EXISTING UPRR CONTROL HOUSE
12. EXISTING PCC PAD AT GRADE CROSSING
13. EXISTING TUBULAR RAILING

CIVIL IMPROVEMENTS

1. PROPOSED DRIVEWAY CONSTRUCTED BY DEVELOPER, NEW PG&E ACCESS EASEMENT, PRIVATE USE AND GATED. WORK IN PROGRESS
2. PROPOSED PEDESTRIAN CHANNELIZATION WITH 20' TUBULAR RAILING AT BACK OF WALK
3. PROPOSED 24" STOP BAR PER MUTCD STANDARDS
4. PROPOSED REFLECTIVE TRAFFIC CHANNELIZATION DEVICES ON TOP OF EXISTING MEDIAN
5. INSTALL W10-9P (NO TRAIN HORN) AND R8-8 (DO NOT STOP ON TRACK)
6. INSTALL R3-5R (RIGHT TURN ONLY)
7. EXTEND EXISTING MEDIAN TO 10' FROM TRACK CENTERLINE
8. RELOCATE EXISTING BUS STOP FURTHER AWAY FROM THE CROSSING

CROSSING STATS

CROSSING NO.	924191R
LANE TYPE	4 LANE (URBAN LOCAL)
TRAFFIC VOLUMES, AADT	11430
QZRI (W/O IMPROVEMENTS)	18358.90
QZRI (W/ IMPROVEMENTS)	3671.78
NSRT	13811
NSRT>QZRI (W/ IMPROVEMENTS)	

SCALE 1" = 10'
0 10 20 30 FEET

SUBCONSULTANT:

SUBCONSULTANT:

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SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 17.32
AUTUMN PKWY AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO. C-119
SHEET 21 OF 22

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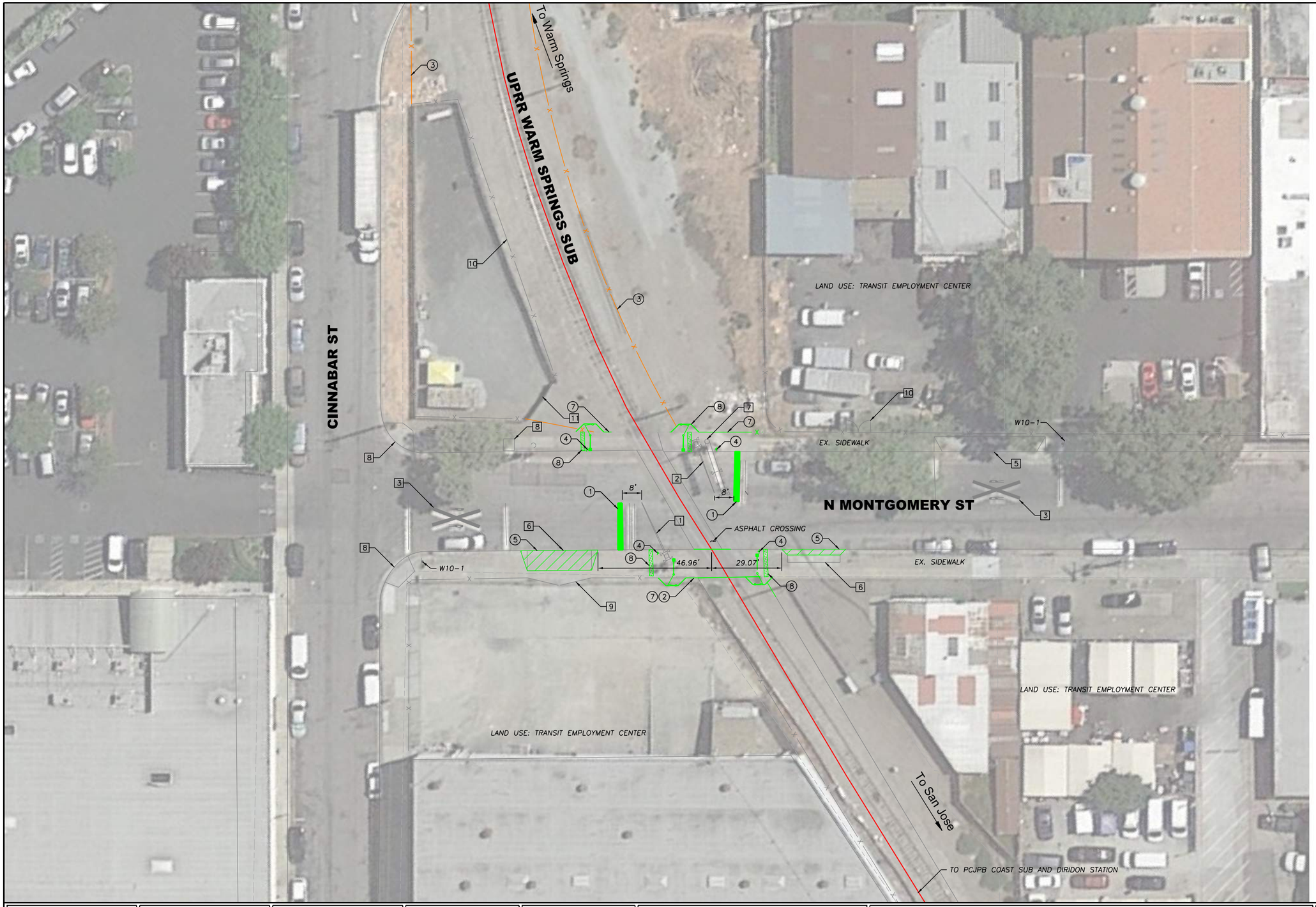

GENERAL NOTES:

SEE SHEET C-101 FOR GENERAL NOTES.

SHEET NOTES:

EXISTING INFRASTRUCTURE

1. EXISTING NO. 9 QUADRANT GATE WITH R15-1 TO REMAIN
2. EXISTING NO. 9A QUADRANT GATE WITH R15-1 TO REMAIN
3. EXISTING RAILROAD XING SYMBOL
4. EXISTING STOP BAR
5. EXISTING DRIVEWAY
6. EXISTING DRIVEWAY WITHIN 60' DISTANCE FROM RAILROAD CROSSING
7. EXISTING SIGNAL CANTILEVER WITH R15-1
8. EXISTING ADA RAMP
9. UPRR CONTROL HOUSE
10. EXISTING FENCE & FENCE GATE
11. UPRR SIGNAL YARD GATE

CIVIL IMPROVEMENT

(1) PROPOSED STOP BAR PER 2014 MUTCD STANDARDS

(2) PROPOSED PEDESTRIAN SIDEWALK IMPROVEMENT

(3) POTENTIAL PROPOSED 8' HIGH RIGHT OF WAY FENCE VERIFY DURING SITE DIAGNOSTIC MEETING

(4) INSTALL W10-9P (NO TRAIN HORN) AND R15-8 (LOOK)

(5) RELOCATE EXISTING DRIVEWAY BY DEVELOPER, EXTEND RED CURB LIMIT THROUGH DRIVEWAYS

(6) THE PARCEL WEST OF THIS CROSSING WILL BE DEMOLISHED AND REDEVELOPED BY DEVELOPER

(7) PROPOSED PEDESTRIAN CHANNELIZATION FENCE AND FENCE GATE AT BACK OF WALK

(8) PROPOSED FULL PEDESTRIAN TREATMENTS INCLUDE AUTOMATIC PEDESTRIAN GATE, EXIT SWING GATE, DETECTABLE WARNING STRIP AND CHANNELIZATION.

CROSSING STATS

CROSSING NO.	750151J
LANE TYPE	2 LANE (URBAN LOCAL)
TRAFFIC VOLUMES, AADT	1792
QZRI (W/O IMPROVEMENTS)	4460.67
NSRT	13811
NSRT>QZRI (W/O IMPROVEMENTS)	

0 20 40 60
SCALE FEET
1" = 20'

SUBCONSULTANT:

SUBCONSULTANT:

JMA CIVIL
3930 Pacheco Blvd
Martinez, CA 94553
T: 925.400.4356
www.jmacivil.com

PRIME CONSULTANT:

PROFESSIONAL SEAL:

ISSUE:
CONCEPT
-
NOT FOR CONSTRUCTION
04/09/2020

REVISIONS:

MARK	DATE	DESCRIPTION
3	04/09/20	QUIET ZONE FEASIBILITY STUDY DRAWING
2	02/25/20	ISSUED FOR SITE DIAGNOSTIC MEETING
1	10/18/19	ISSUED FOR STAKEHOLDER REVIEW

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

CITY OF SAN JOSE
UPRR WARM SPRINGS SUBDIVISION
QUIET ZONE
CITY OF SAN JOSE TRANSPORTATION DEPARTMENT
200 EAST SANTA CLARA STREET
SAN JOSE, CA 95113

SHEET TITLE:
WARM SPRINGS SUB, MP 17.46
N MONTGOMERY ST
AT GRADE CROSSING
PROPOSED SITE PLAN

PROJ NO: 19154
SCALE: AS NOTED
DATE: 04/09/2020
DESIGNED BY: MA/WH

SHEET NO.
C-120
SHEET 22 OF 22

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

wlhong 4/8/2020 - 3:24:15 PM - P:\19154-SJQuietZone\Site\Sheets\Preliminary Design\C-120 N Montgomery St.dgn

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

APPENDIX D

Meeting Minutes

JMA CIVIL

APPENDIX D.1

Stakeholders Design Review Minutes

3930 Pacheco Blvd.
Martinez, CA 94553
T: 925.400.4356
www.jmacivil.com

San Jose Quiet Zone Study
200 East Santa Clara St
San Jose, CA 95113

Tuesday October 22, 2019
Part 1: 9:00 a.m. – 2:30 p.m. PDT

Railroad Stakeholder Feasibility Review Meeting
Dial-in: (669) 224-3412
Access Code: 232-139-341
Weblink: https://global.gotomeeting.com/join/232139341

If attending in person:
City of San Jose
200 East Santa Clara St
San Jose, CA 95113
8th Floor, Room 847

Meeting Objective: Review the project work to-date with UPRR, FRA and CPUC and solicit preliminary input.

Agenda

1. **Introductions**
2. **Project Overview**
    a. City Objectives
    b. Scope of Work and Limits of Study Area
3. **Crossing Analysis**
    a. Site Visit & Inventory Update
    b. Comparative Risk Evaluation
        i) SSMs
        ii) ASMs
    c. Preliminary Design
4. **Crossing Improvements Walk-Through**
    a. North Crossings with SSMs
    b. South Crossings
5. **Project Phasing**
    a. Site Visit & Inventory Update
    b. Comparative Risk Evaluation
        iii) SSMs
        iv) ASMs
    c. Preliminary (30%) Design
6. **Next Steps**
    a. Quiet Zone Study Report

Minutes

Item No.	Description	Action
1. Overview		
a.	City Noted that the consideration of City future development is a focus for this project	
2. General Comments		
a.	FRA noted that the AADT data needs to be updated in the FRA database based on the latest numbers. This will affect the NSRT. • JMA will coordinate with DOT and CPUC to update traffic information in FRA Inventory Forms for each crossing.	**JMA**
b.	FRA and City DOT Director received multiple complaints from residents weekly • FRA very familiar with the Subdivision	
c.	FRA noted: • Application A3 should be filed. It's a risk to the City if SSM will not be installed at all crossings because risk indices change over time. • City can lose the Quiet Zone designation if improvements are not made at all crossings in the corridor • In A1 filing – SSMs at all crossings is preferred • Trespassing and homelessness are an issue. Need to be addressed. One encampment can compromise the QZ. • Locomotive engineer has full control over blowing horn if unsafe condition is noted. • Significant developments from Planning in the QZ can put the QZ at risk.	
d.	Eliminate driveways within 60' distance from gate is required for the SSM: Gates with Medians or Channelization Devices.	
e.	Anti-trespassing panels violate CPUC GO-118A for walkways and will be removed from the plans. Per FRA, studies show that anti-trespassing panels are not very effective. We can table this for future discussion.	
f.	UPRR noted all crossings are Tier 3. The tier level is determined by UPRR based on a system-wide crossing assessment process and regression model • Statistically significant crossings have certain characteristics. Tier 1 has the most significant characteristics associated with incidents; Tier 3 has the least number of these characteristics	
g.	Even if a quiet zone becomes cost-prohibitive and the City doesn't pursue it, safety recommendations made here are still worthwhile to implement as much as possible	

h.	UPRR asked if a closure study was done. • City doesn't want to close streets or convert 2-way to one-way.	
i.	City will discuss internally and review possible closure options	**CSJ**
j.	City to evaluate operation life-saver outreach.	
k.	FRA recommended that the City look at high-risk areas and do outreach and education. Perform a proximity analysis.	**CSJ**
l.	Look at stop bar placement. FRA recommended that the City refresh these before the QZ work. • Single stop bar is the new standard • 8' placement in advance of closest equipment	
m.	Posted speeds need to be added in proximity to all crossings.	
n.	Peggy referenced MUTCD 8A.01 for the crossing modification process.	
o.	Peggy encouraged City to look at pedestrian grade separation options. Pedestrians will always take the path of least resistance and will not walk out of their way.	
p.	FRA said that field diagnostic by end of the year is ambitious. Recommend Jan 2020 timeframe	
q.	FRA looking at tightening up Rule Section 222 requirements.	
3. City Trespass		
a. .	FRA wants to know what the City is doing for trespassing.	**CSJ**
b.	City is working with UPRR on an MOU for removal of the homelessness • Agreement in process.	**CSJ**
c.	Mindy said that the agreement with UPRR will be executed by Dec 2019	
d.	FRA wants to know what prevention measures are in place. For example: • Enforcement of Law • Engineering, Education and Enforcement	**CSJ**
e.	Joe offered to send supporting documents and grant program information	**FRA**
f.	Per FRA, the Counties are organizing a summit to work together as a community to address trespassing and homelessness. FRA will send City information on the summit.	**FRA**
4. City Incident Data		
a.	City has incident data for the crossings. No RR incident data within 10 years.	
b.	UPRR (Peggy) asked that the City look again and specifically look for non-railroad incidents.	**CSJ**

c.	UPRR (Peggy) also asked the City to investigate incidents at adjacent intersections. Peggy noted that not all rail incidents specifically mention rail.	**CSJ**
5. N. Tenth St		
a.	UPRR confirmed the spur track will be removed as part of the crossing surface improvement work. JMA will note on plans.	**JMA**
b.	Stop bars need to be reinstalled for all crossings to match MUTCD (2014 versus and 2009 requirement)	
c.	UPRR: A new cantilever over the road will be required for N 10th St. UPRR (Peggy) noted UPRR pole placement might cause site distance issues. CPUC: consider median mounted gate because electrical poles on sidewalk may prevent installation of cantilever	
d.	Santa Ana Ave – since the Santa Ana Ave intersects 10th St. close to the crossing and is adjacent to the gate, FRA suggested considering allowing northbound right-turn into Santa Ana Ave only and eliminating westbound out of Santa Ana Ave.	
e.	CPUC noted that they receive complaints from bicyclists about the pavement condition across the tracks here. UPRR noted that they would like to complete the panel replacement project.	
f.	UPRR noted one flasher for each lane of travel is required per AREMA. CPUC noted that multiple travel lanes require flashers cantilevered over the road, or in the median. Asked if City plans to reduce lanes and add bike lanes.	
g.	UPRR noted that location of existing gate on the east sidewalk is questionable and it probably should be relocated.	
h.	JMA will revise preliminary design to bring median island to within 10' from remaining track and will square up median nose.	
i.	UPRR requested information on school bus and passenger bus routes	**CSJ**
j.	UPRR: ensure striping conforms to latest MUTCD, e.g. 24" stop bar	
6. Hedding St.		
a.	2013 – Review of interconnected crossings study for pre-emption. • UPRR asked City to provide comments on the recommendations that were presented for consideration. Peggy will provide the study. • Peggy asked if City implemented the track clearance green time that was recommended in report?	**UPRR & CSJ**
b.	FRA noted that this is the worst crossing in terms of trespassing and witnessed a near-miss. City needs to be proactive. Engineering, enforcement, and education are the three pillars to address the issue.	

	California has 6 of the top 10 counties with highest railroad fatalities. FRA is putting together safety summit and wants San Jose there. There is also a new federal grant for funding enforcement efforts on railroad corridors.	
c.	CPUC and UPRR asked if lane configuration was changed. Cantilevers are usually for 2 lanes each way, but this is only 1 lane each direction. • City noted 4-lane to 3-lane conversion and bike lanes installed in 2013. • CPUC has no record of approval to reduce lanes and add bike lanes. GO-88B CPUC application was not filed by the City.	
d.	CPUC ask the City to confirm if the asphalt from the sidewalk being replaced.	**CSJ**
e.	FRA noted setbacks from gates look too far. JMA to evaluate.	**JMA**
f.	FRA recommended full pedestrian treatment (pedestrian gate, swing gate, detectable warning strips. • CPUC (Felix) described full pedestrian treatment includes automatic ped gate, with exit swing gate and channelization. • Detectable warning strips will be required for all sidewalks. • Sidewalk should meet all ADA requirements.	**JMA**
g.	UPRR noted City should consider rerouting school bus path near this new quiet zone.	**CSJ**
h.	UPRR suggested City study incidents at adjacent signalized intersection; some accidents don't involve a train but happen because of driver behavior near the crossing, queueing affected by the crossing, etc.	
i.	FRA recommended full pedestrian treatment (pedestrian gate, swing gate, detectable warning strips. • CPUC (Felix) described full pedestrian treatment includes automatic ped gate, with exit swing gate and channelization. • Detectable warning strips will be required for all sidewalks. Sidewalk should meet ADA requirements.	**JMA**
7. E. Taylor		
a.	FRA noted that SSM: medians with gates does not allow for driveways within 60' from gate arm (not crossing). Quad gates are the only SSM when existing driveways cannot be moved. This location is a good example of the City allowing driveways too close to crossings.	
b.	FRA recommended using quad gates and install full pedestrian treatments for this crossing.	
c.	UPRR noted road work happened at this crossing in 2015 per Google Street view. Reminder that Right-of-Entry and a UPRR flagger is required for work that could cause queuing or work within 25' from railroad. Also, traffic detours and lane shifts need to conform to MUTCD standards.	

d.	FRA noted Taylor St & Hedding St crossings were evaluated as high-risk crossing. There is an existing siding with switch moves that needs to be considered	
e.	2016 Site Diagnostic Meeting. CPUC (Felix) noted there was $150k conditioned for railroad improvements. Where did that money go? • CPUC (Felix) has minutes and can share the minutes for diagnostic meeting. • City: the money is allocated towards the panel replacement work planned with UP	**CPUC**
8. Jackson/7th		
a.	City noted $400k City has been earmarked for crossing improvement.	
b.	FRA suggested eliminating ped crossing within the limits of the warning devices. Add pedestrian fencing or channelization devices to direct access path. Control pedestrian crossing to the southwest.	**JMA**
c.	At northwest corner of intersection, UPRR noted railroad warning devices cannot be inside the construction fencing; City to inform developer. Also noted cantilever device does not have a gate.	**CSJ**
d.	City noted new 600 residential unit development is being constructed in the northwest corner of intersection. UPRR recommended that for developments of this nature that a site diagnostic meeting should have been performed with the developer as part of the EIR process. • Traffic impact study was prepared for the development. UPRR requested a copy of the EIR. City will provide.	**CSJ**
e.	FRA: having the tracks cross in the middle of the crosswalk is a problem because pedestrians could be in the crosswalk with no direction as to where to go when the warning devices are activated and a train is approaching CPUC: signalizing the intersection would allow for preemption which would protect pedestrian (and vehicular) movements from entering the intersection when a train is approaching	
f.	FRA: need channelization (fencing) along sidewalk on south leg around the crossing	
g.	FRA: at northeast corner of intersection, extend UP fence to edge of sidewalk; swing gate might be required for UP access to railroad.	
h.	FRA: what is the circulation in this area? Suggest shifting south leg crosswalk to north leg to avoid pedestrian crossing the tracks outside of the controls of the warning devices. City should evaluate proper placement of crosswalk to maximize pedestrian access while minimizing uncontrolled pedestrian exposure to the crossing.	**JMA**

9. N 6th and Empire		
a.	UPRR observed motorist confusion with vehicles stopping on the tracks at this crossing.	
b.	This crossing is included on the planned UPRR/City cost-share for crossing improvement with new concrete crossing panel.	
c.	FRA noted there is no pedestrian visibility in the southwest of 6th St. Pedestrian treatment needed here	
d.	CPUC does not recommend mid-block crossings near the tracks. Cars can queue on track.	
e.	CPUC: the problem with trying to prevent pedestrians from crossing on east leg is that you can't fully prevent pedestrians from going where they want to go; you could potentially install pedestrian treatments at the northeast corner to facilitate pedestrian east-west travel; the pedestrian path could be oriented to be perpendicular to the tracks; may need UPRR ROW UPRR: as long as it conforms with diagnostic recommendations, UP is amenable to entering into an agreement with the City for sidewalk easement in order to fit in safety improvements	
f.	UPRR (Peggy) wants to observe behavior during train movement.	**UPRR**
g.	Mid high-rise residential development under construction. UPRR requested copy of EIR.	**CSJ**
h.	UPRR: stop signs are awkwardly placed and don't control vehicles after they enter the intersection; consider a traffic signal	
i.	Development should fence along railroad ROW	
j.	Curb ramps on the south corners of the intersection facilitate pedestrian crossing across the south leg which is not ideal because the tracks cross the middle of the path. FRA recommended to eliminate these ramps and City evaluate proper placement of crosswalks at other legs	
10. N 5th		
a.	City needs to investigate driveways and close unpermitted driveways.	**CSJ**
b.	Necessity and legality of business driveway on the west side of 5th questioned seeing that the business has access on 4th.	
c.	There is a gap in the median on the north leg; provides access for residential driveways; consider whether this gap makes the crossing overall safer, or if closing the gap would be safer	**JMA, CSJ**
d.	Where do residents place trash bins? In limits of track area – problem; evaluate this for 451 and 452 N 5th St	
e.	UPRR: check need for tree trimming, especially southbound	

f.	UPRR noted W10-1 placement may be too far away; consider adding supplemental W10-1, maybe in median	
g.	FRA requested the City also review pavement marking distance, and fix signs and striping	
h.	JMA will investigate the cantilever installation requirement per MUTCD.	**JMA**
11. N 4th		
a.	UPRR recommended possibly closing Washington St at N 5th St • Make 4th NB and 5th SB. • Alternative, make Washington St. one-way NB City: our practice is to keep 2-way streets; we have been converting one-way streets to 2-way. FRA: Quiet Zones are unique enough to consider exceptions to this policy.	**CSJ**
b.	Investigate SE section next to track, Google Earth showed a parked car next to track. Who installed bollards?	**CSJ**
c.	FRA: what is the use of the building on the northwest quadrant? If it is for homeless resources, we suggest City do ongoing outreach here, e.g. Operation Lifesaver. In general, City can look at a radius around the crossing (e.g. 1 mile), and target critical populations including transit users, PD, homeless centers, etc. throughout life of quiet zone	
12. N 3rd		
a.	FRA noted this crossing may need pedestrian treatments due to visibility on curves • May require property acquisition for pedestrian bump outs.	
b.	Residential driveway on northeast corner does not invalidate SSM Gates with medians if there are 4 units or less	
c.	FRA recommended extend medians to 100' per SSM standard, by that way the driveway in the northbound side do not need to remove.	
d.	FRA asked that vegetation be removed within UPRR right-of-way that is blocking site distance.	
e.	FRA noted pedestrian visibility will be impact by existing tree.	
f.	UPRR suggested adding bells to the median mounted flashers	
g.	Salmon colored building residences have contacted FRA (Joe) to discuss homelessness	
h.	FRA suggested to change the residential driveway to entrance only in southbound direction and reduce the width of driveway to have 60' clearance from gate.	
i.	FRA: trim trees on sidewalk	

13. N 2nd		
a.	FRA: trash containers cause backup in the street. Cars circumvent trash trucks and can pull into crossing with limited visibility. Consider 4-quadrant gate system for this reason	
b.	FRA: consider full ped treatments on north quadrants due to reduced visibility for pedestrian.	
c.	FRA: short blocks between 1st, 2nd, 3rd; people walk the rail corridor as an east-west short cut; even if you have a quiet zone, the train operators will sound the horns due to these pedestrians	
14. N 1st		
a.	CPUC: does the barriers along the street count towards the SSM gates with medians since they are non-traversable? FRA: not sure if this crossing should be considered 2 crossings; need to confirm If it is considered as 2 crossings, each crossing could potentially be considered as one-way street with gates. If two crossings, all data need to be considered separately.	**FRA**
b.	FRA recommended enlarging the existing "do not enter" sign on the bridge.	
c.	FRA: check stop bar distance; should be 8' from downed gate or cantilever	
d.	UPRR: we have had some vehicles stopped on the tracks here; suggest checking lighting across the crossing. FRA: maybe drivers get confused and turn left onto tracks; consider adding no turn signs, extend edge of road striping across tracks; consider thermoplastic, retroreflective	
15. Autumn Parkway		
a.	CPUC: the existing pedestrian treatments reflect old design and do not meet current CPUC practice. For example, at the southeast quadrant the vehicular gate is located behind the sidewalk to serve both vehicles and pedestrians; however today CPUC would require the vehicle gate to be placed closer to the curb and a pedestrian treatment (automated gate and swing gate) to be placed to the right of it. At the northeast quadrant there is an automated pedestrian gate; today, CPUC would require this to be accompanied by an exit swing gate so that e.g. a wheelchair user could exit the crossing. The reason this crossing has an outdated design even though it was constructed relatively recently is because it was delayed in construction by 15 years due to an adjacent Army Corps rail bridge replacement project. The City had no control over that, so CPUC granted the City the extensions on its design approval. FRA: also the ped path is lacking channelization. It's easy for pedestrians to walk behind the gates.	

b.	Medians look short. Minimum of 6" height is required for a median to be considered non-traversable. FRA recommends new construction be min 8" to account for overlays.	
c.	UPRR: the pedestrian path on the east side of this crossing is one side of the Guadalupe River Trail. The other side of the trail is on the east side of the River, and that goes under the rail in a pedestrian tunnel. Trails imply a higher pedestrian volume which is of concern to UPRR.	
d.	Ped underpass east of Autumn Parkway: • FRA noted that the trail undercrossing washed away; UPRR forces came to abate and were attacked • No FRA DOT number per UPRR. • UPRR assigned a DOT number. • CPUC confirmed that this crossing was approved in 2006. • UPRR is interested in the City's trail maintenance plans for the underpass and if MOU includes this bridge • SCVWD was the lead agency. • UPRR asked if City can provide underpass maintenance information.	**CSJ**
e.	CPUC confirmed that Autumn Parkway was a City project.	
f.	CPUC said that the pedestrian underpass was processed as a separate application from Autumn Parkway.	
g.	UPRR: check the W10-1 sign placement on the south side – looks far. The warning devices need to be visible.	**JMA**
h.	FRA: what is the speed limit? Need to post speed limits at approaches to quiet zone crossings.	**CSJ**
i.	UPRR: the driveway in the northwest corner used to have northbound access through the median, but now the median gap is closed; wonder when this change happened. CPUC: it may have been closed due to left-turn pocket length issue; but continuous median now is better	**CSJ**
j.	FRA: City can't claim SSM: gates with medians due to the driveway at the northwest quadrant unless the driveway is relocated.	**JMA**
k.	City: PG&E requested easement along rail corridor between Autumn St. and Autumn Pkwy including a new driveway on the SW quadrant as part of a new proposed development. FRA: what does PG&E want to use the access for? If they have access to Autumn St, why do they need a driveway here on Autumn Pkwy? City: we can check on their access need and if one driveway on Autumn St would be adequate	**CSJ**

16. Montgomery		
a.	City: this area surrounding Montgomery St. is proposed for high density office and mixed use development. Early stages only. UPRR: reminder to see CA MUTCD requirements for modifying a crossing. CPUC: we need local agency help to engage us early on, way in advance of CEQA comment period UPRR: pedestrians will desire to cross between the new high density development and the restaurants and shopping plaza on the north side of the tracks; need to provide a pedestrian undercrossing, otherwise pedestrians will cut through the fence	
b.	FRA: need fencing along the rail corridor from Autumn Pkwy to here	
c.	City noted N Montgomery St. can't be closed since it's the only entrance to the land uses just north of the crossing.	
17. Site Diagnostic Meeting		
a.	UPRR: suggest a pre-review meeting in office before we go out to the field	
b.	UPRR: suggest 3 days to cover the 14 crossings	
c.	UPRR: encourage City staff to drive all the crossings during peak am, pm and nighttime to experience conditions first-hand and see how they change across different times of day.	
d.	FRA: please include an SJPD rep in the field diagnostic	
18. Next Steps		
a.	Submit updated Inventory Form to CPUC. Need to consider future traffic volumes for construction underway.	**JMA**
b.	Schedule 3-day field diagnostic, FRA is available in Jan 2020.	**JMA**

SIGN-IN SHEET

City of San Jose Quiet Zone Project
City of San Jose

Tuesday October 22, 2019

San Jose Quiet Zone Feasibility Study
Web Meeting
200 East Santa Clara Street
San Jose, CA 95113
8th Floor, Conference Room 847

Name	Title	Agency/ Company	Address	Telephone	Email	Initial
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Alisar Aoun	Sr. Eng	City of San Jose / DOT			alisar.aoun@sanjoseca.gov	AA
John Ristow		City of San Jose / DOT			john.ristow@sanjoseca.gov	✓
Jessica Zenk		City of San Jose /DOT			jessica.zenk@sanjoseca.gov	
Peggy Ygbuhay		UPRR			pygbuhay@up.com	BY PHONE
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SIGN-IN SHEET

City of San Jose Quiet Zone Project
City of San Jose

Tuesday October 22, 2019

San Jose Quiet Zone Feasibility Study
Web Meeting
200 East Santa Clara Street
San Jose, CA 95113
8th Floor, Conference Room 847

Name	Title	Agency/ Company	Address	Telephone	Email	Initial
Anthony Mata		City of San Jose			anthony.mata@sanjoseca.gov	PMOTB
Renee Zhou		City of San Jose			renee.zhou@sanjoseca.gov	✓
Vu Dao		City of San Jose			vu.dao@sanjoseca.gov	✓
Jesse Mintz-roth		City of San Jose			jesse.mintz-roth@sanjoseca.gov	
Mindy Nguyen		City of San Jose			mindy.nguyen@sanjoseca.gov	✓
Shu Su		City of San Jose			shu.su@sanjoseca.gov	✓
David Tran		City of San Jose			david.tran@sanjoseca.gov	✓
Lam Cruz		City of San Jose			lam.cruz@sanjoseca.gov	
Jon Marshall, PE	Principal Engineer	JMA Civil, Inc.	3930 Pacheco Blvd. Martinez, CA 94553	925.400.4356 xt. 101	jmarshall@jmacivil.com	

SIGN-IN SHEET

City of San Jose Quiet Zone Project
City of San Jose

Tuesday October 22, 2019

San Jose Quiet Zone Feasibility Study
Web Meeting
200 East Santa Clara Street
San Jose, CA 95113
8th Floor, Conference Room 847

Name	Title	Agency/ Company	Address	Telephone	Email	Initial
Mohammed Abushaban	Civil Engineer	JMA Civil, Inc.	3930 Pacheco Blvd. Martinez, CA 94553	925.400.4356 xt. 103	mabushaban@jmacivil.com	
Weisheng Hong	Senior Project Engineer	JMA Civil, Inc.	383 4th St, Suite 201. Oakland, CA 94607	925.400.4356 xt. 109	whong@jmacivil.com	BY PHONE
TIM OSTGL	CTC	CONSULTANT				BY PHONE

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

APPENDIX D.2

Site Diagnostic Meeting Minutes

JMA CIVIL

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Martinez, CA 94553
T: 925.400.4356
www.jmacivil.com

/San Jose Warm Springs Quiet Zone Study
200 East Santa Clara St
San Jose, CA 95113

Tuesday-Thursday February 25-27, 2020

Warm Springs Quiet Zone Site Diagnostic Meeting

Meeting Objective: Review the project work to-date with UPRR, FRA and CPUC and solicit preliminary input.

Minutes

Item No.	Description	Action
1. General Comments: Overview		
a.	The diagnostic team have included the FRA-Region 7 "Diagnostic Meeting Opening Statement" and CAMUTCD 8A.01.05a as attachments to these minutes.	
b.	Site diagnostic meetings and CPUC applications are required for any railroad crossing improvements. Any developments or roadway improvements in the vicinity of the railroad crossings should be evaluated for their impacts to the railroad crossings.	
c.	The goal of this quiet zone study is to define the scope and programmatic cost to implement the quiet zone so the City of San Jose (City) can determine the feasibility of the project. City is mainly concerned with nighttime train horns. FRA noted that the City may apply for a partial quiet zone that limits that train horns to just the day times. The process and application requirements for a partial quiet zone is the same as for a full quiet zone.	
d.	Proposed quiet zone is 1.8 miles long and spans 14 at-grade crossings. This corridor has an average of 4 train movements per day (2 in the daytime, 2 in the night hours). Train speed is 10 mph. Train speed limit on this corridor is 20 mph.	
e.	Existing corridor quiet zone risk index is below the National Risk Index Threshold. Per the Train Horn Rule, the City could designate a quiet zone on this basis. FRA noted that the current crossing standards were written in 1999 and are outdated. The National Risk Index is a minimum threshold and we should strive for safety improvements that exceed far above the minimum. FRA noted that safety improvements for the existing crossings may be required regardless of the disposition of the Quiet Zone project.	

f.	FRA re-evaluates quiet zones that are established through the Public Authority Application Process every 3 years. Quiet zones may be terminated if a City's quite zone treatments are modified or fall into a state of disrepair of otherwise fails to meet the requirements stipulated by the Quiet Zone application.	
g.	The diagnostic team noted that safety improvements for the existing crossings may be required regardless of the disposition of the Quiet Zone project.	
h.	The FRA noted that the current Quiet Zone standards were written in 1999. The National Risk Index is a minimum threshold and we should strive for safety improvements that exceed far above the minimum.	
i.	The diagnostic team is a strong endorser for eliminating or consolidating at-grade crossing, as well as constructing grade separations. The diagnostic team acknowledges Federal regulation (23 CFR 646.214(c)) that specifies that "all crossings of railroads and highways at grade shall be eliminated where there is full control of access on the highway (a freeway) regardless of the volume of railroad or highway traffic". In addition, the team acknowledges MUTCD, Section 8A.05 Grade Crossing Elimination Guidance: 01 Because grade crossings are a potential source of crashes and congestion, agencies should conduct engineering studies to determine the cost and benefits of eliminating these crossings.	
j.	School buses were observed travelling through all crossings except for Montgomery. FRA Inventory Forms shall be updated with this data.	**City/CPUC/ JMA**
k.	City reported there are 19 school districts in San Jose who determine their own school bus routes with no coordination or approval required from the City. City will reach out to the relevant school districts to: (1) Outreach for feedback on study as they are a Stakeholder; (2) Determine Educational or additional educational needs as it pertains to the Quiet Zone; and (3) Work with the school districts to determine if re-routing to i avoid railroad at-grade crossings is possible	**City**
l.	Pursuant to CA MUTCD 8A.01.05a Site diagnostic meetings and CPUC authorizations are required for any railroad crossing improvements. Any developments or roadway improvements in the vicinity of the railroad crossings or improvements that have the potential to effect adjacent railroad crossings should be evaluated for their impacts to the railroad crossings under CA MUTCD 8A.01.05a and CPUC General Order 88B. City acknowledges new developments should be carefully evaluated to determine impacts under CA MUTCD 8A.01.05a and CPUC General Order 88B.	**City**

m.	The diagnostic team recommends the City's law enforcement to improve safety of the crossings by performing enforcement activities, including providing warnings to trespassers inappropriately using the UPRR ROW and monitor UPRR ROW to help keep trespassers off the UPRR ROW. The diagnostic team recognizes homelessness is a national issue. The issue is very evident in San Jose, not only on the rail corridor, but in creeks, highway ramps, overpasses, etc. City of San Jose is directing significant resources at housing and homelessness to address the issue. City and UPRR are in the midst of executing a Memorandum of Understanding (MOU) to allow City law enforcement to enter UPRR ROW. FRA noted that there has been significant clean-up of the corridor by UPRR forces. Currently, City law enforcement prioritizes traffic enforcement at locations with reported injuries and fatalities. City DOT can work with PD to target enforcement at rail crossings as well.	**City**
n.	FRA requested City personnel, including law enforcement to join the FRA Rail Crossing Safety Summit planned this summer for additional information and education about railroad crossing safety and trespass mitigation strategies	**City**
o.	From 2015 to 2020, UPRR documented the following incidents reported to its Response Management Communication Center: There have been 363 events through this proposed quiet zone, but the events have mainly been trespassing or illegal dumping. The peak period of reports are from 11 AM to 5 PM; there are not a lot of reports from 9 PM to 11 AM. Site specific information provided in further detail below.	**UPRR**
p.	UPRR doesn't have any plans to increase speed above 20 mph at this time.	
q.	UPRR doesn't have any plans to increase train volumes at this time, but shippers drive this aspect and conditions could always change in the future.	
r.	UPRR informed the diagnostic team that locomotive horns must be sounded when: -Employees are working on or near the track -Meeting or passing the head end or rear end of a train in the vicinity of a grade crossing -Notified that automatic warning devices are malfunctioning -Horn may be sounded to provide a warning to animals, vehicle operators, peds, trespassers or crews on other trains	
s.	Diagnostic team recommended everyone drive and walk all approaches to all crossings in the corridor.	

Definitions		
Full Pedestrian Treatments: Pedestrian gate with flashing lights (CPUC Standard No.8), emergency exit swing gate, detectable warning strip, and channelization RRTCD: Railroad traffic control devices. Diagnostic Team: Pursuant to CAMUTCD 8A.01.05a, the diagnostic team needs to include at a minimum, representatives of the highway agency or authority with jurisdiction over the roadway, the railroad with responsibility of the track and signals, and the California Public Utilities Commission with statutory authority over grade crossings.		
CPUC Standard Warning Devices: Per GO-75D • CPUC Standard No. 8: An automatic flashing light signal assembly which, by alternately flashing red lights facing each approach, provides a warning of an approaching train. A Crossbuck sign shall be installed on the mast. • CPUC Standard No. 8-A: A Standard 8 with additional flashing signals over the roadway on a cantilever arm. • Standard No. 9: An automatic gate arm used in combination with a Standard 8. The gate mechanism may be mounted on the Standard 8 mast or separately on an adjacent pedestal. The automatic gate shall be designed to fail in the down position. A Crossbuck sign shall be installed on the mast • Standard No. 9-A: A Standard 9 with additional flashing light signals over the roadway on a cantilever arm. • Standard No. 9-E: A Standard 9 installed on the departure side of the at-grade crossing (also known as an exit gate) in addition to the typical approach side of the at-grade crossing (also known as an entrance gate.		
2. General Comments: Standards		
	a. For the purposes of SSM credit, medians and median separators are measured from the gate arm locations.	
	b. Driveways and intersections within 100’ of crossings are encouraged to be closed because of the risk that queues and vehicle conflicts on the tracks could coincide with a train approaching.	
	c. 12” LED lights are the current MUTCD standard for railroad traffic control device flashing lights; many crossings still have 8” incandescent / flashing lights. For any crossings modified as part of the Quiet Zone, CPUC will require 8” heads be upgraded to 12” LED’s UPRR noted that head upgrades cannot be accommodated on existing equipment and will trigger a replacement of the entire equipment.	**UPRR**
	d. Any new exit gates will require back flashers per CPUC requirements.	
	e. Channelize pedestrian to cross track at or as close to 90 degrees as possible	
	f. Detectable warning strips should be no closer than 12’ from nearest rail And/or 2’ in front of the RRTCD. The detectable warning should be placed across the entire width of the sidewalk. See CAMUTCD 8D.04.	

g.	UPRR is now requiring minimum 5'3" clearance from center of mast to face of curb in new designs	**UPRR**
h.	Provide double sided R15-8 signs upstream and downstream of the crossing along with detectable warning strips on sidewalk approaches to crossings. The R15-8 Look sign is the appropriate supplemental sign on sidewalk approaches. The W82-1(CA) sign is not appropriate since that is for LRT and has a picture of a trolley. Signs with images are beneficial for people who don't read or speak English. Members on the National Committee of Uniform Traffic Control Devices to address at next committee meeting.	
i.	Evaluate placement of all crossing stop bars, RXR markings, and W10 series signs to meet CAMUTCD standards, taking into consideration optimization for visibility and user legibility. Don't locate signs where they will block RRTCD . Likewise, for all other markings and signs including the addition of R8-8 (do not stop on tracks) and R8-10 sign (stop here when flashing). Current CAMUTCD standard for W10-1 signs is 36" diameter pursuant to CAMUTCD 2A.11/Table TC-4 Per CAMUTCD 8B.28, stop bars should be placed 8 feet in advance of the gate but no closer than 15 feet in advance of the nearest rail.	
j.	Per MUTCD 8B.28, stop bars should be placed 8ft in advance of the gate but no closer than 15ft in advance of the nearest rail.	
k.	Current MUTCD standard for W10-1 signs is 36" diameter.	
3. General Comments: All Crossings		
a.	FRA inventory report should reflect existing ADT. The City and JMA will collect new ADT plus add in projected development trips for all crossings, rerun the quiet zone calculator, and report back to the diagnostic team	**JMA/City**
b.	Paint or extend red curb limits on the approach and exit of each crossing to prevent parked vehicles from obstructing visibility of the warning devices.	**City**
c.	Ideally there wouldn't be any trees on the approaches to rail crossings because they can obstruct visibility of warning devices. Ensure that no new trees are planted on approaches for example as part of new developments. Also consider removal of existing trees on approaches where it would improve visibility and eliminate maintenance burden. Any trees that remain should be monitored and trimmed regularly to ensure that visibility of the warning devices is never compromised. FRA can require removal of trees where they feel they jeopardize safety and/or terminate a quiet zone for that reason.	**City**
d.	Due to maintenance needs, RRTCD shall be placed in a dirt/gravel patch rather than concrete.	**City**
e.	UPRR to share right-of way maps for all crossings. Right of way will be updated in the next rendition of the drawings.	**UPRR**

f.	Channelization elements along the back of side walksidewalks, such as fencing or vegetation, help channelize pedestrians towards pedestrian treatments; they can also help deter pedestrians from turning into the railroad corridor because of the limited space to enter. Note that tactile detectable warning strips should be minimum no closer than 12' from nearest rail track center line. And/or 2' in front of the RRTCD. The detectable warning should be placed across the entire width of the sidewalk. See CAMUTCD 8D.04.	
g.	UPRR prefers to eliminate cantilevers at locations not needed; not typical to have cantilever over 1 lane.	
h.	Traffic, queuing, closure, pedestrian, truck turning radius and other studies regarding traffic, pedestrian, multi-modal needs provide necessary information to the design of railroad intersections	**City**
i.	Provide edge of travel lane striping and centerline striping up to the edge of the crossing panels.	**City**
j.	Provide a signage and striping schedule sheet that all drawings may reference.	**City**
k.	Use of detectable warning surfaces/truncated domes should be place close enough to railroad bell so that a visibly-impaired user can hear the bell when they are standing at the dome.	
l.	UPRR proposes a maintenance project programmed at all 20 Warm Springs crossings in San Jose, in addition to crossings in Milipitas. At locations with existing asphalt crossing surfaces around the tracks, the asphalt will be replaced with concrete panels if all necessary permits are obtained in cooperation with the City. At locations with existing concrete panels, UPRR will shuffle the concrete panels within the crossing. UPRR's project would repave the asphalt 2 feet wide along the outside of the panels, but that will not resolve large grade changes in the roadway/sidewalk profile. Concrete panels will extend a minimum of 3 feet behind the back of sidewalk. City and UPRR are coordinating location of the back of walk. City to advise of any City plans to extend the back of walk into the railroad corridor, e.g. to accommodate pedestrian treatments, so that UPRR can put in the appropriate length of crossing surface with their project. UPRR advises that track resurfacing could raise tracks up to 2" higher than what it is today. The work is planned to be done this year. These improvements should be shown on the drawings. A GO88-B application is not required for the UPRR maintenance project.	**UPRR/City**
m.	Providing sight triangles at the crossings will help to determine visibility between pedestrians and trains in the rail corridor and RRTCD.	**City**
n.	Where pedestrian travel is allowed but there are no existing sidewalks, an ADA path should be provided. City policy to be updated to be in accordance with CA MUTCD 8A.01.05a. Currently City requires new development to install and upgrade sidewalks.	

o.	The diagnostic team acknowledges benefits to the addition of traffic control devices in addition to RRTCD at certain intersections.	
p.	Diagnostic team acknowledges new RRTCD have a longer gate keeper with a dimension of 3'3" from CL of gate mast to nearest obstruction. CAMUTCD Figure 8C-6. As such, there is now a minimum of 5'3" clearance from center of gate mast to face of curb.	
q.	Illumination should be evaluated all crossings to make sure that approaches and crossing itself are all sufficiently illuminated for visibility per CAMUTCD 8A.05.	
r.	Diagnostic team to determine design of any new exit gates and what would be required for pedestrian treatments	
s.	Show all proposed developments on next rendition of the drawings with description of development and occupancy.	
t.	There is a balance between planning improvements for future traffic and future train volumes versus the significant investment that improvements cost and the potential that future development may never come, or may not come for decades, and that those costs can be leveraged on those future developments rather than on public dollars that are spread thin across many city needs including homelessness. Everyone agrees that in an ideal world, the best safety improvements should be implemented at all crossings. However, with limited City resources and the relatively lower risk that this corridor poses with its low train volume and low train speed, the cost of improvements needs to be balanced with the incident risks.	
4. Horning St.		
a.	General Comments:	
	i. **UPRR's Reported Incidents**: • 1 Unsafe Motorist • 4 Vehicle on Track • 4 Broken Gate	
	ii. City's Reported Accidents - Cited Violations: • 1 Improper turn • 2 Speeding • 1 Unsafe turn movement • 2 Failure to yield	

iii.	UPRR Pre-diagnostic Meeting Observations: • Vehicles turning onto Tenth Street from Horning St stop on the tracks before making the turn movement. • Observed several pedestrians using the area between the tracks to move from Tenth Street to Horning St • Cars parked in close proximity the railroad crossing	
iv.	City is open to considering vehicular closure of either Horning St. at 10th St or Santa Ana Ave at 10th St. Either option would need to be fully vetted with City staff and go through City Council process.	
v.	Suggest closing Santa Ana Ave and converting Horning Street into a one-way road. City staff generally prefer full closures over partial closures because partial closures do not fully prevent vehicles from illegally using the opening in both directions. One way westbound option: Right-Out-only out of Horning does not solve the problem of vehicles queueing over the tracks when they stop at the stop sign. May also result in motorists using Santa Ana Ave to travel eastbound over the tracks which will cause queuing onto the 10th St crossing. One Way eastbound option: May result in increased northbound traffic traveling over the 10th St crossing.	
vi.	If Horning St is closed without closing Santa Ana, more vehicles will use Santa Ana. Southbound vehicles waiting to turn left onto Santa Ana will likely cause queues over the tracks. Traffic study will address traffic flow and additional modifications to include median to channelize motorists.	
vii.	If Horning St remain open, evaluate reducing the width of Horning St at the crossing and its implications to trucks turning through the crossing.	
viii.	Road closures on the drawings are shown as bollards, but the City is open to other closure details. Diagnostic team agreed that road closure should be performed using a cul de sac or an impenetrable barrier.	
ix.	Train movement observed.	

	x. UPRR will find out if its surface replacement project plans to eliminate the second track at this crossing if program proceeds as planned If UPRR removes the second track, design can incorporate additional modifications and can include extending the curb line on the east side of 10th St towards the remaining track to tighten up the railroad corridor. It also brings the sidewalk in closer and could facilitate a perpendicular pedestrian crossing across the tracks near the south side of Horning St with good visibility sight lines.	**UPRR**
	xi. This crossing's flashers have 8" incandescent lights.	
a.	NE Quad Comments:	
	i. Diagnostic team recommends a pedestrian sidewalk barricade on the east side of the tracks to deter pedestrians from crossing the tracks on the north side of Horning St.	**City**
a.	NW Quad Comments:	
	i. Stopping at the existing stop sign on Horning Stat 10th Street puts vehicles in conflict with the Uniform Vehicle Code which prohibits vehicles from stopping on tracks. Closing the road would be an improvement for the crossing and in compliance with federal regulation (23 CFR 646.214(c)	
	ii. The recycling center on east side of 10th Street north of this crossing generates pedestrian traffic. This was especially observed on Monday. There is no sidewalk on the east side of 10th St to the north of the crossing, so pedestrians use the bike lane. Some of the pedestrian traffic turns down Horning St, possibly to encampments down this street. City should investigate potential to reduce pedestrian traffic across the tracks.	
	iii. Full sidewalk should be provided along the east side of N Tenth Street if pedestrians are allowed to cross the tracks at this quad CPUC Standard No. 8in the off quadrant will be required.	
	iv. Existing sidewalk barrier is inadequate. As barriers shall be placed on each approach to a closed sidewalk.	
b.	SW and SE Quad Comments:	
	i. The vehicle gate arm might not meet the required length over the roadway. Consider a striped or vertical median on Horning Street in order to bridge the gap between the gate ends and meet compliance. Lowered horizontal gate is required to be within one foot of the median striping to comply with CPUC General Order 75-D. **This is an immediate action.**	**City**

ii.	A northbound vehicle turning right onto Horning could cause a queue over the tracks at the 10th St crossing if the crossings are activated, the motorist stops fora lowered vehicle gate arm at Horning and other vehicles queue up behind it back to the 10th St crossing.	
5. N. 10th St		
a.	General Comments:	
i.	UPRR Reported Incidents: • 1 Unsafe Pedestrian • 5 Vehicle on Track • 18 Broken Gates	
ii.	City Accident Report - Cited Violations: • 1 Improper turn • 11 Speeding • 2 Unsafe turn movement • 4 Failure to yield • 1 Unsafe Lane Change • 2 Vehicles going wrong way	
iii.	UPRR Pre-diagnostic Meeting Observations: • SB queueing onto the Tenth St railroad crossing from the intersection of Tenth St and Hedding St • Observed SB vehicles stopping on the tracks to make a left turn onto Santa Ana Ave • Observed NB vehicles stop on tracks to make a left turn into commercial driveway on the west side of the street.	
iv.	Median separators are proposed on both sides of the crossing.	
v.	Recommended practice per AREMA Part 3.1.1 / D.2.vi is to provide one set of flashers for each lane of vehicle travel to provide visibility for each approaching lane under all traffic conditions.	
vi.	10th St crossing railroad signals and Horning St crossing railroad signals are controlled by the Horning St crossing signal bungalow. Circuitry changes will be required if Horning is closed.	
vii.	This crossing's flashers have 8" incandescent lights	
viii.	Diagnostic team discussed observed queuing. UPRR to provide video of observed queuing to the diagnostic team. See general observations above.	**UPRR**
b.	SE Quad Comments:	

i.	Replace R10-6 sign (stop here on red) with R8-10 sign (stop here when flashing) in line with railroad traffic control device – i.e. flashing lights. **This is an immediate action.**	**City**
ii.	Eliminate southbound left turn access into Santa Ana e.g. with closure or median separators. Diagnostic team to review alternative designs if closure or median separators are not implemented.	**City**
iii.	Replace W10-12 sign (skewed tracks crossing road), should be yellow, not orange. Refer to CAMUTCD TC-4 for placement.	**City**
iv.	Diagnostic team to consider traffic study for installation of traffic signal and other design elements to address traffic flow, queuing and other vehicle code violations by motoring public.	**City**
v.	Visibility of the existing flashers facing northbound 10th St is obstructed by the PG&E pole. Replacing the Standard 9 with a cantilever (No. 9A) would address this. Alternatively, a queue cutter signal instead of a cantilever might be preferable; it would provide visibility and prevent northbound queues over the tracks. Diagnostic team to incorporate traffic study for final crossing configuration.	
vi.	Remove RXR marking downstream of the crossing gate on northbound N Tenth Street.	**City**
vii.	Add W10-4R sign on Santa Ana Ave. **This is an immediate action**.	**City**
viii.	Consider a CPUC Standard No. 8 on this since the track skew makes this a long crossing to cross, especially for a pedestrian or bicyclist; the CPUC Standard No. 8, downstream of proposed CPUC Standard No. 9awould provide additional warning to a pedestrian or bicyclist that has already passed the first railroad traffic control device prior to crossing activation	
c.	SW Quad	
i.	Diagnostic team recommended a dedicated southbound left turn lane at 10th/Hedding signal if it would alleviate queuing back to tracks. Traffic study to provide additional information regarding ultimate design and configuration of crossing to address queues over the tracks.	
d.	NE Quad Comments:	
i.	A northbound vehicle turning right onto Horning from 10th Street could cause a queue over the tracks at 10th Street upon crossing activation.	
e.	NW Quad Comments:	

	i. Diagnostic team observed unsafe truck maneuver turning left out of the commercial driveway on the NW quadrant onto northbound 10th. City can install a "Right Turn only" sign for the driveway exit, outreach to the property so that they are aware, and coordinate with SJPD for enforcement as needed. Driveway should not be located downstream of RRTCD.	
	ii. Diagnostic team recommended relocating the commercial driveway to the north side of the vehicle gate (upstream of RRTCD). Driveway is currently located in the center of the crossing and does not have any automatic warning devices.	**City**
	iii. If commercial driveway at northwest quad cannot be located upstream of the vehicle gate, consider a CPUC No. 8 downstream of the driveway to serve the driveway	**UPRR/City**
	iv. Relocate railroad traffic control device closer to the tracks and ensure there is sufficient clearance between counterweight and private fencing.	**City**
6. Hedding St.		
a. General Comments:		
	i. UPRR Reported Incidents:: • 2 unsafe motorists • 2 unsafe pedestrians • 3 cars on tracks • 3 broken crossing gates. ii. UP observation: iii. Eastbound Queuing PM iv. Westbound Queuing AM	
	v. City Accident Report - Cited Violations: • 9 Speeding • 3 Run red light • 1 Unsafe lane change • 1 Failure to yield • 1 Unsafe turn movement	

vi.	UPRR Pre-diagnostic Meeting Observations: • Eastbound Queuing PM • Westbound Queuing AM • Pedestrians observed using the sidewalks on both sides of the railroad crossing. • Road lanes at this intersection were reduced to one through lane and the addition of a bike lane without CPUC approval or UPRR coordination. • Vehicles observed prematurely using the center lane prior to the start of the dedicated left turn lane at Tenth St and Hedding St	
vii.	Diagnostic team recommended evaluation of traffic signal operation with railroad activation including evaluation of preemption timing, new configuration and design vehicle elements	**City**
viii.	RRTCD should be moved closer to the tracks to provide more vehicle storage space outside of the track area and reduce preemption timing which will reduce the potential for queuing on the tracks.	**City**
ix.	The adjacent traffic signal has simultaneous preemption. Advanced preemption would help address queuing issues over tracks and reduce the potential for gate breaks. Advanced preemption would require a new bungalow and other improvements. Preemption calculation should be re-run to determine whether advance preemption would benefit crossing.	
x.	Hedding street was previously a two-lane road in each direction but a few years ago one vehicle lane in each direction was converted into a bicycle lane. This was done without going through the GO-88B process and not approved by the CPUC nor coordinated with UPRR.	
xi.	Consider converting Hedding back to 2-vehicle lanes in each direction in order to alleviate queuing over the tracks.	
xii.	Diagnostic team discussed the possibility of treating pedestrian sidewalk on the south side and not treating the pedestrian on the north side. Pedestrian treatments should be placed and operated in a uniform and consistent manner.	
xiii.	Consider a sidewalk closure on the north side of Hedding including R8-8 sign. If the City doesn't plan to close the sidewalk on the north side of Hedding, then at a minimum, an ADA path should be provided across the tracks, detectable warning strips, and R15-8 signs. Sidewalk width may need to be expanded at the back of the counterweight for the vehicle crossing gate for ADA clearance.	

xiv.	UPRR sent the interconnect assessment report prepared by CTC in January 2013 to the diagnostic team prior to the on-site meeting. The Diagnostic Team discussed that there are outstanding recommendations including increasing track clearance green time from 8 seconds to 28 seconds. When assessed by CTC in 2013, the road configuration was not modified as is shown today. City Traffic Engineer and UP Consultant to review the CTC report, current configuration, track clearance green time and preemption calculations. **This is an immediate action item.**	
b.	NW Quad Comments:	
i.	Pedestrians were observed walking on both sides of Hedding by Diagnostic Team.	
c.	NE Quad Comments:	
i.	Diagnostic team recommended adding a R8-8 sign (Do Not Stop On Tracks).	**City**
ii.	RXR marking in the westbound right turning lane for 10th St. on Hedding east of the traffic signalized intersection should be removed.	**City**
iii.	Relocate the driveway away from the crossing if possible.	**City**
d.	SE Quad Comments:	
i.	Drivers observed driving down the bike lane on the right side of the through/right turn lane.	
e.	SW Quad Comments:	
i.	Motorist were observed by the diagnostic team driving in the center lane across the tracks. TWLTL are not allowed on crossing approaches per CAMUTCD.	
i.	Add R8-8 (Do Not Stop On Tracks) sign. to be placed in a location where it is not blocking the flashing lights and is most visible to the motorist stopped at the stop bar.	
ii.	Remove crossing stop bar from center lane and apply hatched median area. **This is an immediate action item.**	**City**
iii.	Evaluate length of left turn queueing onto N 10th Street.	**City**
iv.	Look into an alternative where the RRTCD remain in place and the corners of the intersection are bulbed out.	**City**
7. E. Taylor		
a.	General Comments:	

i.	UPRR Incident Report: • 4 Vehicle on track • 1 Broken Gate	
ii.	City Accident Report - Cited Violations: • 2 Failure to Yield • 3 Speeding	
iii.	UPRR Pre-diagnostic Meeting Observations: • Queueing observed in AM and PM from 7th Street intersection	
iv.	The driveways on the west side of the crossing are emergency only access. The driveways on the east side of the crossing probably cannot be relocated from the City's perspective.	
v.	Full pedestrian treatment and CPUC Standard No. 9E are proposed at this crossing.	
vi.	During the field meeting, the south leg of 7th/Taylor was closed. The westbound left turn pocket at the signal was closed. AM and PM Peak hour queuing over the tracks was observed. Evaluate queuing over tracks. Consider traffic signal preemption to reduce queueing over the tracks, see CAMUTCD 8C.09.05. **This is an immediate action item.**	**City**
vii.	Consider bulbing out the curb line on both sides of the street and moving the RRTCD closer to the roadway to improve visibility. Would allow additional space to install complete pedestrian treatments.	
viii.	New equipment should include provisions for existing driveways, e.g. flashers facing those driveways	
ix.	This crossing's flashers have 8" incandescent lights	
b.	NW Quad Comments:	
i.	Paint curb red through the driveway.	**City**
ii.	Current RRTCD have 8" flashers and must be replaced with 12" LED as part of any upgrades at this crossing. New CPUC Standard No. 9-E may be placed parallel to the track. Diagnostic team to evaluate.	
c.	SW Quad Comments:	
i.	W10-1 sign should be relocated adjacent to the RXR marking.	**City**
ii.	Trim or remove trees along Taylor Street to make RRTCD visible. Evaluate full bloom condition.	**City**

	iii. If design iteration provides a plan where this quadrant is bulbed out the CPUC Standard No. 9-A may become a CPUC Standard No. 9 and be placed parallel to the tracks to mirror device in NW quadrant. Diagnostic Team to evaluate.	
d.	SE Quad Comments:	
	i. Proposed CPUC Standard No. 9-E may be placed parallel to the track Gate arms are required to be within 2 feet of each other when lowered. Gates parallel to the tracks allows warning devices to be placed closer to the tracks as well.	
	ii. Bushes should be trimmed in this quadrant to increase visibility of the RRTCD.	**City**
	iii. Railroad signal box, where replaced, will be larger than the existing. Approximate dimension is 8'x8'. The new signal box for this crossing would probably be installed in the NW quad and fenced off.	**UPRR**
	iv. Consider limiting driveway exit to right turn out only.	
e.	NE Quad Comments:	
	i. If the sidewalk is bulbed out, evaluate vehicular turning radius from adjacent driveway to ensure equipment is not hit by vehicles.	**City**
	ii. City to determine if driveway is entrance only, the diagnostic team observed vehicles using it as an exit. The diagnostic team recommended this driveway be used as entrance only.	
	iii. If design iteration provides a plan where this quadrant is bulbed out the CPUC Standard No. 9-A may become a CPUC Standard No. 9 and be placed parallel to the tracks to mirror device in SE quadrant. Diagnostic team to evaluate.	
	iv. Railroad stop bar for the RRTCD is in an incorrect location. The diagnostic team recommended that it be moved in accordance with CAMUTCD, 8ft from nearest railroad traffic control device.	**City**
8. Jackson/7th		
a.	General Comments:	
	i. UPRR Incident Report: • 1 Unsafe motorist maneuver • 1 Vehicle on track • 1 Broken gate	
	ii. City Accident Report - Cited Violations: • 2 Failure to yield • 1 Unsafe turn movement	

iii.	UPRR Pre-diagnostic Meeting Observations • Heavy pedestrian traffic through this intersection headed NB • Vehicles stop twice while traveling NB on 7th St, first at the stop bar near the railroad traffic control device and second at the stop sign while they are on the tracks.	
iv.	Approved development under construction at NE quadrant. Show development on the next rendition of the drawings.	
v.	The diagnostic team agreed that the sidewalk bulb out geometric layout option is appealing because it separates 7th St and Jackson St into two distinct railroad crossings and avoids pedestrians crossing the tracks within the intersection.	
vi.	Diagnostic Team agrees that the bulb out design needs to include sufficient space for RRTCD and pedestrian treatments. Placement to be determined in subsequent design iterations.	
vii.	For the bulb out design, the pedestrian crossing may become its own crossing depending on its location relative to the other two crossings. While it may have it's own railroad warning devices, the CPUC would consider the crossing as a sidewalk of 1 of the existing crossings and not a new crossing.	
viii.	With the new bulb out design, consider eliminating the southbound CPUC Standard No. 8a on 7th St and relocating the eastbound gate on Jackson St downstream closer to the tracks. Crossing layout to be determined in subsequent design iterations.	
ix.	Pedestrian moves through these two crossings must be analyzed thoroughly to determine best method for channelizing pedestrian across the tracks.	
x.	Diagnostic Team recommend the intersection of Jackson and N. Seventh Street be signalized and interconnected with RRTCD and circuitry. Also consider a pre-signal on northbound 7th with a clearance green to keep vehicles off track and allow them to clear the intersection. Crossing layout to be determined in subsequent design iterations.	
xi.	Consider a pedestrian scramble at the intersection. Alternatively, the bulb out design does not require pedestrians to cross any tracks within the intersection. This design iteration would require a fully signalized intersection interconnected with RRTCD and circuitry.	
xii.	A midblock pedestrian crossing should include pedestrian devices and be interconnected with railroad signals. Crossing layout to be determined in subsequent design iterations.	
xiii.	This crossing's flashers are 8" incandescent.	
b.	Jackson NE and NW Quad Comments:	

	i. Show existing driveway in this quadrant on the plans. Find out what this driveway is used for and determine if it can be closed.	**City**
	ii. Trees don't pose visibility issues currently since there are no leaves; however, in full bloom, they may obstruct visibility of the crossing warning devices and must be maintained.	
	iii. City can lower signs and trim bottom of trees to provide better visibility of the signs and RRTCD.	
	iv. W10-1 sign should be relocated next to or closer to the RXR marking in a location where it will be visible.	**City**
	v. Flashers located on the CPUC Standard No. 9 are offset into the sidewalk, probably to avoid being blocked by the adjacent stop sign. Stop sign location should be evaluated and flashers should be positioned closer to the roadway for better visibility. Crossing layout to be determined in subsequent design iterations.	
	vi. Westbound vehicles roll over the stop bar or stop over the tracks in order to see cross traffic on N. 7th Street.	
c.	Jackson SW Quad Comments:	
	i. Consider limiting the driveway servicing the apartment community in this corner be a right in and left out only.	**City**
	ii. Crossing gate must be relocated if the sidewalk is bulbed out.	
	iii. Proposed median separators in this quadrant should be removed in order to allow driveway vehicles to turn left out (away from the crossing) instead of forcing them to turn right (into the crossing)	**City**
	iv. Consider supplementary devices for the driveway.	**City**
d.	Jackson SE Quad Comments:	
	i. With the new bulb out design, there is potential for a northbound vehicle turning right onto Jackson to be stopped at a down gate arm (if it's relocated to this location) and cause following vehicles to queue on the tracks at 7th St. A traffic signal with a pre-signal on 7th would help address this issue. Crossing layout to be determined in subsequent design iterations.	**City**
	ii. Diagnostic Team needs to see proposed pedestrian treatments on top of the geometric layout with the bulb outs in order to provide better feedback. Crossing layout to be determined in subsequent design iterations.	**City**
e.	7th SE Quad Comments:	
	i. Crossing stop bar should be 8 feet upstream of the gate arm. Check distance.	

ii.	Relocate W10-1 sign closer to RXR marking. Reference Sec. 2. General Comments for all Crossings. **Immediate Action.**	**City**
iii.	Extend red striping on curb in this quadrant.	**City**
iv.	Pre-signal may be placed downstream of tracks or upstream of tracks but will require a stop bar at least 40' upstream of the pre-signal indications. Crossing layout to be determined in subsequent design iterations.	
v.	Consider "Keep Clear" markings to help keep vehicles from queueing over tracks.	**City**
f.	7th NW Quad Comments:	
i.	If this crossing is modified and a larger signal house becomes required, it may be relocated to this quadrant.	**UPRR**
ii.	Evaluate truck turns with the proposed bulb out design.	
iii.	Evaluate eliminating the sidewalk along southbound N. 7th Street to limit number of locations that pedestrians cross the tracks within vicinity of this crossing.	**City**
iv.	Remove Antique "no left turn" blank out sign.	
g.	7th SW Quad Comments:	
i.	Full pedestrian channelization should start right at the end of the development fencing.	**City**
ii.	Provide full pedestrian treatment on both sides of the track.	**City**
9. N 6th and Empire		
a.	General Comments:	
i.	UPRR Incident Report includes: • 1 unsafe motorist maneuver • 1 illegal u-turn • 2 unsafe motorists • 3 Broken gates	
ii.	City Accident Report - Cited Violations: • 2 Failure to yield • 1 Failure to stop • 2 Unsafe turn movement	
iii.	UPRR Pre-Diagnostic Meeting Observations: • Several vehicles failed to stop • Several vehicles made U-turns in this intersection • Pedestrians including Parents and children headed northbound	

iv.	Stop bars on all legs are set back far from the intersection due to the locations of the vehicle gates. Vehicles creep over the tracks and into the intersection to see cross traffic. A traffic signal would address this issue. The diagnostic team recommends a fully signalized intersection interconnected with RRTCD and circuitry.	
v.	The diagnostic team agreed that it would be beneficial to see a geometric layout prepared for this intersection with a bulb out design like that prepared for 7th/Jackson. City staff are working on this. Crossing layout to be determined in subsequent design iterations.	
vi.	Evaluate channelizing the pedestrian so they are more inclined to follow safe paths for crossing the roadway and tracks.	
vii.	The tracks run through the middle of the south leg crosswalk. The problem with this is that there are no pedestrian treatments or warning devices such as gates or signage close to the tracks to guide the pedestrian to a place of safety when the railroad crossing is activated. Consider signalizing this intersection and crossing. Signalization would be coordinated with the railroad so that pedestrians are not given the walk signal when a train is approaching.	
viii.	Existing RRTCD have 12” incandescent flashers.	
ix.	There is a community center on the southeast corner of the intersection. Diagnostic team observed that this center generates pedestrians from the surrounding neighborhood.	
b.	NE Quad Comments:	
i.	Bulbouts would help provide more space for pedestrian treatments; otherwise expanding sidewalk into railroad corridor may be needed to fit in pedestrian treatments. Crossing layout to be determined in subsequent design iterations.	**City**
ii.	If the curb line is bulbed out into the roadway, railroad traffic control device can be located closer to the roadway for better visibility. Crossing layout to be determined in subsequent design iterations.	**City**
c.	NW Quad Comments:	
i.	For the proposed design, the crosswalk on the north leg of 6th St needs to be shifted further north in order to provide enough space for a pedestrian landing in between the ADA ramp and the pedestrian crossing gates. Crossing layout to be determined in subsequent design iterations.	**City**
ii.	Full pedestrian treatment proposed on both sides of the tracks.	
iii.	Additional ROW may be required for the proposed pedestrian treatments to cross pedestrians at a 90-degree angle.	

	iv. Look into increasing visibility of approaching trains for southbound N. 6th Street.	**City**
d.	SW Quad Comments:	
	i. The stop sign for EB traffic on Empire St is obscuring the flashers located on the railroad traffic control device and needs to be relocated. **This is an immediate action.**	
	ii. On the west leg of Empire St, relocate W10-1 closer to RXR marking.	
	iii. If proposed crosswalk removal south of Empire is implemented it may be an issue. A pedestrian study should be prepared.	
	iv. If the crosswalk remains, then the intersection should be signalized. The diagnostic team recommends a fully signalized intersection interconnected with RRTCD and circuitry so that pedestrians are not given the walk signal when a train is approaching.	
	v. Full pedestrian treatment proposed on both sides of the tracks. It was noted to try and channelize pedestrians to cross tracks close to 90 degrees	
	vi. Visibility concern from corner house landscaping (236 Empire St), need to maintain vegetation.	**City**
e.	SE Quad Comments:	
	i. Evaluate truck turns for this crossing if the sidewalk is bulbed out. The diagnostic team recommends a fully signalized intersection interconnected with RRTCD and circuitry so that pedestrians are not given the walk signal when a train is approaching.	**City**
	ii. There is a handicap parking space on the east side of 6th Street where a VTA paratransit shuttle was observed doing drop off or pick up in front of the community center. Check on the types of vehicles that use this curb space and consider relocation if e.g. tall buses obstruct visibility of the downstream warning devices.	
10. N 5th		
a.	General Comments:	
	i. UPRR Incident Report includes: 1 Vehicle on tracks	
	ii. City accidents report includes no accidents for this crossing.	
	iii. UPRR Pre-Diagnostic Meeting Observations: U-turns observed on the south side of the tracks; potentially fouling the track area.	
	iv. UPRR incident report reflects that a train had to stop to prevent striking a parked car at this crossing.	

v.	There is one residential unit on the east side of 5th Street and one residential unit on the west side of 5th Street, each of which crosses through the crossing (downstream of the vehicle gate) in order to access their respective driveways. To date, City has not been able to identify any records for these properties that would indicate whether these driveway locations were legally permitted by the City. There are no other feasible driveway locations for these properties. There is a pair of flashers aimed at each of these driveways.	
vi.	UPRR will research respective ROW maps to determine if any of the properties that are using the crossing for driveway access are encroaching on to UPRR private ROW versus the public right of way that UPRR shares with the City (roadway, sidewalk).	
vii.	The City to investigate whether these properties' driveways can be closed to vehicle access to eliminate the risk of a vehicle driving onto the tracks when a train is crossing. The City to also find out where the residents place trash bins and ensure that it is as far away from the crossing as possible to reduce the risk that a garbage pick-up vehicle is on the crossing or is blocking visibility of warning devices when a train is approaching.	
viii.	Existing flashers are all 12" LEDs.	
ix.	On the north leg of 5th St, there is a short section of median island on the north side of the tracks followed by a 50-foot long gap before the median starts again. On the south side of the crossing, there is approximately 75 feet between the rail and the median island nose. The gaps may be provided to allow drivers from nearby residences to U-turn., Allowing drivers to U-turn ahead of the crossing could be beneficial in that it doesn't force more vehicles to cross the tracks unnecessarily. Although it increases the risk of a vehicle-vehicle conflict, e.g. a u-turning vehicle could crash with a through vehicle in the opposite lane. Extending the medians to eliminate the gaps would reduce the risk of these incidents but would force more vehicles in the direction across the tracks. Closing the median gap may also unintentionally result in more vehicles using the gap in the median at the track crossing to illegally u-turn over the tracks, which does not eliminate risk of vehicle-vehicle incident and increases the risk of vehicle-train incident. The Diagnostic team recommends providing new gaps in the medians farther away from the crossing could provide a safe alternative location for drivers to u-turn rather than at the tracks. Two uber pick-ups were observed parking in this median area to pick up scheduled passengers.	
x.	This crossing would not qualify as an SSM in its existing condition due to the gaps in the median islands, the median islands not meeting the minimum 6" height requirement, and commercial driveways within 60' of vehicle crossing gate.	

xi.	Add R8-8 "Do Not Stop On Tracks" sign in median together with UPRR crossing surface improvement work	**UPRR/City**
b.	NW Quad Comments (southbound approach on west side of 5th St):	
i.	Relocate RXR marking and W10-1 sign closer to the crossing.	**City**
ii.	Detectable warning strip should be close enough to railroad bell so that a visibly-impaired user can hear the bell when they are standing at the dome. Add R15-8 "Look" sign in with truncated domes.	**City**
iii.	The back of a commercial property also fronts the crossing here. The back of the property is fenced and gated off. While the property has a main access driveway on a parallel street (4th St), it is suspected that the property sometimes uses the railroad crossing here for access. UPRR will verify the right of way and reach out to the property about their illegal use of the tracks. UPRR may consider extending their fence line to the back of walk to prevent this vehicular movement.	**UPRR/ City**
c.	SW Quad Comments:	
i.	Recommend double-sided R15-8 "Look" sign upstream and downstream of the crossing with CPUC Standard No. 8 flasher in addition to detectable warning strip to provide warning to pedestrians. This would benefit a pedestrian traveling southbound in the sidewalk that already passed the vehicle gate and flashers before the crossing is activated in addition to mitigating impaired sightlines for northbound pedestrians.	**City**
d.	SE Quad Comments:	
i.	Relocate W10-1 and RXR marking closer to the crossing.	**City**
ii.	Add R8-8 "Do Not Stop On Tracks" sign in median.	**City**
iii.	Detectable warning strip should be place close enough to railroad bell so that a visibly impaired user can hear the bell when they are standing at the dome. Add R15-8 "Look" sign with truncated domes.	**City**
iv.	UPRR will evaluate if driveway access of 452 5th Street is within the UPRR ROW.	**UPRR**
v.	The vehicle gate arm may not meet the required length over the roadway. Consider a striped or vertical median on Horning Street in order to bridge the gap between the gate ends and meet compliance. **This is an immediate action item.**	
e.	NE Quad Comments:	

	i. Recommend double-sided R15-8 "Look" sign upstream and downstream of the crossing with CPUC Standard No. 8 in addition to detectable warning strip to provide warning to pedestrians. This would benefit a pedestrian traveling northbound in the sidewalk that passes the vehicle gate and flashers before the crossing is activated.	
11. N 4th		
a.	General Comments:	
	i. UPRR Incident Report: • 3vehicle collisions non-train related • 2 gate breaks	
	ii. City Accident Report - Cited Violations: • 1 Driving on sidewalk • 1 Unsafe lane change • 2 Speeding	
	iii. UPRR Pre-diagnostic Meeting Observations • Observed vehicle northbound on 4th street turn in between the medians and across the tracks to get into the Emmanuel House driveway. • High levels of pedestrian movement through this crossing to get to the Emmanuel House	
	iv. Add R8-8 "Do Not Stop On Tracks" sign in median. City can coordinate with UPRR to have them install this in their ROW while they perform the crossing surface improvement work	**UPRR/City**
	v. It was measured that the existing median is father than 10' from CL of track. Diagnostic team recommend additional median separators.	
b.	NW Quad Comments:	
	i. W10-1 sign is not per standard. It should be 36" in diameter.	**City**
	ii. City to reach out to the Emmanuel House on legal and safe turning movements out of their driveway. In the field visit, a driver was observed to drive from their driveway, along the sidewalk, and from the tracks into the roadway. This is illegal and unsafe. They should have exited from the driveway cut upstream of the vehicle gate. Adding pedestrian channelization at the back of walk will also help restrict vehicles from driving along the sidewalk into the rail crossing. Diagnostic Team determined this driveway should operate as a right in and right out.	**City**

iii.	Diagnostic team recommends median striping up to the edge of the concrete panels in order to discourage vehicles from turning through the median gap at the rail crossing. Consider reflective markers on top of the striping as well.	**City**
iv.	Diagnostic team recommend adding bells on top of the CPUC Standard No. 8's in the medians for additional audible warnings, e.g. to school bus drivers.	
v.	Diagnostic team recommends double sided R15-8 "Look" sign upstream and downstream of the crossing with CPUC Standard No. 8 in the off quadrant.	**City**
vi.	Diagnostic team recommends R8-8 "Do not stop on tracks" signs in medians.	
c.	SE Quad Comments:	
i.	City is open to consider a vehicular closure on the east leg at Washington and 4th but would maintain the pedestrian crosswalks.	
ii.	Recommend tree trimming in front of railroad signal.	**City**
iii.	W10-4R required on W. Washington Street. **This is an Immediate action item.**	**City**
iv.	City to investigate queueing potential due to pedestrian crosswalk.	
v.	UPRR will investigate car parking adjacent to the track in this quadrant. Parking area appears to encroach on UPRR's ROW and is not a safe place to park because the vehicle must enter and exit the roadway using the tracks (downstream of the vehicle gate).	**UPRR**
d.	NE Quad Comments:	
i.	Diagnostic team recommends double sided R15-8 "Look" sign upstream and downstream of the crossing and detectable warning strip.	**City**
ii.	Diagnostic team recommend CPUC Standard No. 8 flasher in the off quadrant.	**City**
iii.	Suggest considering "Keep Clear" markings upstream and downstream of the crossing.	**City**
12. N 3rd		
a.	General comments:	
i.	UPRR Incident Report includes no incident reports for this crossing.	
ii.	City accidents report includes no accidents for this crossing.	
iii.	UPRR Pre-Diagnostic Meeting Observations: High pedestrian traffic to Emmanuel House and to nearby apartment complex	

	iv. Add bells to CPUC Standard No. 8's in the medians.	**City**
	v. Full pedestrian treatment will not fit in the right of way. Consider CPUC No. 8 flasher, R15-8 "look" sign and truncated domes at all quadrants.	
b.	SE Quad Comments:	
	i. Full pedestrian treatment will likely not fit in the ROW. Diagnostic team recommends a CPUC Standard No. 8 double sided R15-8 upstream and downstream of the crossing and detectable warning strip.	
c.	NE Quad Comments:	
	i. Increase length of median past driveways adjacent to the crossing in order to force right in and right out.	**City**
d.	NW Quad Comments:	
	i. City is working with parcel management company to: - consider converting the existing driveway to right-in only or adding sign for no left turn out of the driveway. - trim or remove the vegetation for the purpose of improving line of sight between pedestrians and the rail corridor.	**City**
	ii. Full pedestrian treatment will likely not fit in the ROW. Diagnostic team recommends a CPUC Standard No. 8 double sided R15-8 upstream and downstream of the crossing and detectable warning strip.	
e.	SW Quad Comments:	
	i. Diagnostic team recommends adding pipe gate per UP Standard Drawing number 0076B along back of walk to channelize pedestrians towards the sidewalk and discourage trespassing onto the rail corridor.	**City**
13. N 2nd		
a.	General Comments:	
	i. UPRR Incident Report include no incidents for this crossing.	
	ii. City accidents report includes no accidents for this crossing.	
	iii. UPRR Pre-Diagnostic Meeting Observations: • Pedestrian traffic to nearby apartment complexes and across ROW to 1st and 3rd St. • Parking observed in close proximity to crossing	
	iv. Existing flashers are 12" LED	

v.	Due to the density of the crossings, the distance between 2nd St and 3rd St, and between 2nd St and 1st St is relatively short and line of sight between adjacent streets is fairly clear along the railroad corridor. The diagnostic team observed at least two individuals trespassing along this corridor to get to an adjacent street. At least two pedestrians were observed to do this while the team was at this crossing. Pedestrian treatments such as channelization at the back of walk influences correct pedestrian behavior and reduces trespassing. Public agencies have purchased right of way, obtained easements and/or licenses for trails parallel to the track for pedestrians in California (e.g., Los Gatos, SMART). It was acknowledged that UPRR does not allow trails parallel to the track on Railroad right of way.	
vi.	Median separators and full pedestrian treatment are proposed at this crossing.	
b.	SE Quad Comments:	
i.	Relocate RXR marking and W10-1 closer to the crossing, just north of Bassett St; otherwise Bassett St will need its own signage (W10-4L). W10-1 sign is too small and should be replaced with a 36" sign per CAMUTCD.	**City**
ii.	The City to also find out where the residents place trash bins and ensure that it is as far away from the crossing as possible to reduce the risk that a garbage pick-up vehicle is on the crossing or is blocking visibility of warning devices when a train is approaching. **This is an immediate action item.**	**City**
iii.	Extend the median separators past the driveway and show driveway in this quadrant to force a right in and right out. Work with property management to consider converting the driveway in this quadrant as right in and right out.	**City**
iv.	Add no trespassing signs on proposed fencing along back of sidewalk.	**UPRR**
v.	Proposed Full pedestrian treatment would be difficult to fit in the existing ROW unless the curb line is bulbed out. Crossing layout to be determined in subsequent design iterations.	
vi.	Evidence of a sag in the track alignment observed.	
c.	NE Quad Comments:	
i.	Extend red curb at this quadrant.	**City**
ii.	Full pedestrian treatment proposed at this crossing.	
d.	NW Quad Comments:	
i.	Relocate RXR marking and W10-1 sign closer to the crossing.	**City**

ii.	Proposed Full pedestrian treatment would be difficult to fit in the existing ROW unless the sidewalk is bulbed out and cantilever is replaced with a vehicle gate closer to the roadway. Crossing layout to be determined in subsequent design iterations.	**City**
e.	SW Quad Comments:	
i.	Full ped treatment could potentially fit in existing sidewalk. Crossing layout to be determined in subsequent design iterations.	
14. N 1st		
a.	General Comments	
i.	UPRR Incident Report include: • 1 Vehicle on track	
ii.	City accidents report includes no accidents for this crossing.	
iii.	UPRR Pre-Diagnostic Meeting Observations: • Limited visibility for drivers • "No Pedestrian Crosswalk" sign on east side of crossing needs to be replaced. **This is an immediate action item.**	
iv.	Add single yellow median lines up to edge of concrete panels along both road lanes to discourage drivers from left-turning into the rail corridor.	
v.	City could potentially provide roadway signs (R5-1) to UPRR to install during track resurfacing project with instructions on where to install signs. This would avoid City having to go through UPRR right of entry process at this crossing.	
vi.	Truncated domes proposed at this crossing. Add R15-8 "Look "signs with the truncated domes for pedestrian treatment.	
b.	SE Quad Comments:	
i.	Concrete barriers along centerline would qualify as SSM "gates with medians".	
ii.	Add R5-1 "Do not enter" sign facing perpendicular to the road and fix R9-3 and R9-3bP sign (No Ped Crossing, Use Crosswalk).	**City**
iii.	Add detectable warning strip and double sided R15-8 sign placed upstream and downstream of the crossing for pedestrian treatment.	
iv.	Consider bulbing out back of walk into rail corridor to provide more space for pedestrian sidewalk across the track. Crossing layout to be determined in subsequent design iterations.	**UPRR/City**
v.	Add supplemental R15-1 signs along left hand side of the roadway.	
c.	NE Quad Comments:	

	i. Install detectable warning strip and double sided R15-8 on light pole.	**City**
d.	NW Quad Comments:	
	i. Relocate light pole obstructing visibility to railroad signal or replace vehicle gate with cantilever.	**City**
	ii. Supplement crossing with R15-1 on the left side of the road.	
	iii. Relocate W10-1 sign and RXR marking closer to the crossing.	**City**
	iv. Evaluate trees and visibility. Also consider potential for tree growth to extend into the catenary system in the VTA tunnel below this crossing; Concern with leaning tree.	**City**
	v. Consider bulbing out back of walk into rail corridor to provide more space for pedestrian sidewalk across the track. Crossing layout to be determined in subsequent design iterations.	**City**
	vi. Add "Do not enter" (R5-1) sign facing perpendicular to the road and supplemental Crossbuck R15-1 "Railroad Crossing". Add R49 (No Ped Crossing, Use Crosswalk) sign along lefthand side of the roadway.	**City**
	vii. Evaluate traffic queue due to pedestrian crossing downstream of the rail crossing	
	viii. Evaluate adjacent building emergency egress path and need for channelization to prevent people from spilling directly into the railroad corridor.	**City**
e.	SW Quad Comments:	
	i. UPRR will only install concrete panels along the roadway limits. No concrete panels on the bridge over VTA would be installed as a continuous surface would potentially promote use of the bridge as a u-turn area.	
	ii. Move existing R5-1 sign further to the left along the UPRR track.	**City**
15. Autumn Parkway		
a.	General Comments:	
	i. UPRR Incident Report include: • 1 Unsafe motorist • 1 Vehicle on track	
	ii. City accidents report includes no accidents for this crossing.	

iii.	UPRR Pre-Diagnostic Meeting Observations: • Two U-turns made over the tracks and through the median. One by a FedEx truck and one by a regular vehicle. • Pedestrians, and observed crossing from the west side of the crossing over to the east side through the median area of the railroad crossing to get to the San Jose Market center. • Pedestrians are using UPRR ROW to access the East Guadalupe River Trail	
iv.	City has performed a traffic study for Autumn with new development and will provide the report to the diagnostic team for review.	**City**
v.	City will provide new development plans for K&W to the diagnostic team for review.	**City**
vi.	Proposed development will be overlaid on improvement drawings with description of the development and occupancy levels.	
vii.	Diagnostic team recommends full pedestrian treatment.	
viii.	No SSM credits can be obtained at this crossing because of the driveway within 60’ of the crossing gates.	
b.	NW Quad Comments:	
i.	Relocate RXR marking closer to the tracks.	**City**
ii.	Remove bush blocking RRTCD.	**City**
iii.	Replace W10-1 sign with a 36” diameter sign.	**City**
iv.	There are no dedicated crosswalks for pedestrians to cross between the east side of the street and the west side (Target, etc.). Some pedestrians were observed jaywalking at or near the crossing. Consider new pedestrian crosswalk to provide access to Target.	
v.	Replace R8-8 sign with a new one downstream of the crossing and two located in the median facing approaching traffic.	**City**
vi.	Existing configuration of vehicle gates over sidewalk is no longer design practice except for extenuating circumstances, in which case an exit pedestrian route is provided behind the vehicle gate.	
vii.	Recommend channelizing pedestrians behind crossing gate.	**City**
viii.	City to work with Law enforcement to enforce no U-turn over the tracks.	**City**
ix.	Refresh single yellow along both sides of median.	**City**
x.	Extend median to 10’ from track center line.	**City**
c.	SW Quad Comments:	

i.	Show development on next plan set including - new traffic signal 400 feet south of the crossing - new driveway	**JMA**
ii.	What is the proposed use of the new adjacent driveway? Driveways near crossings are considered modifications to the crossing and are required to be approved by CPUC through a GO88b application. The new driveway was thought to be a PG&E easement access driveway. Now, we are hearing it may serve shuttle access as well. While a PG&E easement access driveway may be acceptable, a driveway for shuttle buses needs to be evaluated for safety impacts. If the driveway is approved, it should be exit-only to minimize risk of conflicts with the tracks.	
iii.	Tripping hazard from bioretention was brought to the public works department attention.	
d.	NE and SE Quad Comments:	
i.	City will provide new development plans for to the diagnostic team for review.	**City**
ii.	Existing trees may block visibility of railroad signals and should be evaluated.	**City**
iii.	Concern with queueing over tracks for people turning left towards Target. Queue analysis should be performed.	**City**
iv.	Move crossing gates closer to the road and channelize pedestrians behind the crossing equipment.	**City**
v.	Add “Keep Clear” marking and split them across the railroad crossing	**City**
vi.	Relocate RXR marking and W10-1 closer to the crossing.	**City**
vii.	Remove striping on concrete panels. UP’s maintenance work will move the panels in different locations and will cause discontinuity the striping.	
viii.	Follow up with the Water District on whether they required access to their facility by means of the mountable curb, else, replace the mountable with a standard curb.	**City**

16. Guadalupe River Pedestrian Undercrossing		
a.	City will provide UPRR with the crossing agreement for the pedestrian trail crossing underneath the UPRR bridge. This has been completed.	**CPUC**
b.	City to provide copy of Maintenance Agreement for the pedestrian undercrossing	**City**
c.	Existing fence along UPRR's ROW was vandalized. Opening in fence is allowing people access to trespass onto UPRR's ROW. Requested the City to mitigate the trespassing issue. Consider removing existing pathway leading up to the UPRR ROW and channelize pedestrian to use the trail.	**City**
d.	Homeless encampment was observed along the pedestrian trail.	**City**
e.	UPRR does not have any plans at this time to expand a second track on the existing bridge.	**UPRR**
17. Montgomery		
a.	General Comments:	
i.	UPRR Incident Report: • 1 vehicle on track	
ii.	City Accident Report - Cited Violations: • 1 Failure to yield from driveways • 1 Unsafe backing • 1Unsafe turning maneuvers.	
iii.	UPRR Pre-Diagnostic Meeting Observations: • High levels of pedestrians in PM. Traffic generated by Pitco Foods • High levels of semi-trucks using this crossing • Crossing is not illuminated	
iv.	City explained that there is a proposed high density development on the triangular parcels inside the wye (Pitco Foods and Storage Solutions). However, the development timeline is uncertain; it may not come for a decade or more, and it may just choose not to develop here. Because of this uncertainty, the City suggested that the diagnostic team provide comments separately (1) assuming today's existing land uses and crossing, and (2) assuming a high density development on the north side of the crossing. That way, City can scope improvements for today's condition, and require additional improvements on the developer.	

v.	It's important to note that Montgomery St is the only existing public access into the proposed development area. High density development presumably will generate increased traffic across the tracks and should be studied for queuing potential on the tracks. If no other accesses are introduced, a grade separation at this crossing and/or at other new access points to the site should be seriously considered. Trains can block an at-grade crossing for hours, days… and government cannot force them to move. People in the site could be trapped and/or unable to have emergency personnel access them. This happened in Richmond and the City ended up having to build a grade separation Currently there is not enough information on the proposed development, including site layout, land use, occupancy, points of access, and projected volumes using the crossing. A Draft EIR is expected to be published in April 2020. When more specific information is provided, the diagnostic team can provide more specific recommended treatments to accommodate the new development.	
vi.	City, VTA, HSR and Caltrain formed a public agency partnership to develop a vision for a new and expanded Diridon Station call Diridon Integrated Station Concept (DISC) Plan. The City recently approved the elevated station platforms concept layout that would raise the tracks at Diridon station approximately 25' and elevate tracks on the station approaches. This would result in a grade separation at this crossing. Since it is only a concept plan at this point and there is no identified funding yet, expect project construction to be more than a decade out. Project website: https://www.diridonsj.org/disc	

vii.	Diagnostic team recommended evaluation for grade separating this crossing due to the proposed Google improvements. Development inside a wye track area is discouraged given the extreme limitation to access. Rail operations through wye tracks occupy significant amounts of time given the speed and switching operations. Team is concerned with future ADT count. Any increase in traffic expected at this crossing presents considerable public safety, traffic functionality and circulation concerns, particularly as presented, is the only public access. Limited access is also an issue for emergency situations, i.e. emergency vehicles or in an event of a necessary evacuation. In addition, the United States Department of Transportation has a goal of reducing the number of at-grade crossings through consolidation, **grade separation**, elimination, and restriction on the number of new crossings constructed. In line with this goal, UP, other railroads, the Federal Railroad Administration and most states encourage communities to carefully consider all alternatives, including grade separations, as opposed to simply adding additional vehicles through existing at-grade rail crossings that were not designed for that type of volume.	
viii.	Consider bulb outs, with railroad gate moved closer to the roadway, and roadway width is reduced. Bulb-out will also provide clear visibility of the gate arms, provide more space on the sidewalk for pedestrian access and treatments and provide traffic calming. Bulb out does not receive SSM credit. City noted that Fire trucks require minimum 20' clear roadway width to operate in an emergency.	
ix.	Existing RRTCD are 12" LEDs.	
x.	City noted that Montgomery may include a shared bike lane in the future. Design iterations to be evaluated by diagnostic team.	
xi.	There are no planned signalization of Cinnabar and Montgomery.	
xii.	City to evaluate Pitco permit and entitlement regarding their main access for their facility	
xiii.	City to count pedestrian traffic across the crossing to determine best treatments for pedestrians and median.	
xiv.	City would like to prioritize costs for crossings needing pedestrian improvements.	
b.	NW Quad Comments:	
i.	Diagnostic team recommended this quadrant is bulbed out, railroad gate is moved in, and crossing width is reduced.	**City**
ii.	Existing intersection will become 4 legs instead of 3 legs as it exists.	

	iii. Evaluate placing railroad signals either parallel to track or perpendicular to road. Perpendicular to roadway is preferred for this intersection.	
	iv. Replace W10-1 sign with larger sign.	
c.	SW Quad Comments:	
	i. Provide full pedestrian treatment along the sidewalk in this quadrant.	**City**
d.	SE Quad Comments:	
	i. Pavement marking and signage are placed correctly in this quadrant.	
	ii. Existing tree should be trimmed to not obscure the RRTCD.	**City**
	iii. Bulb out sidewalk and move RRTCDcloser to the road.	**City**
	iv. There is a driveway cut with a concrete barrier at the back of walk. Even if the driveway is not being used, it's better to replace driveway cuts with sidewalk when possible to eliminate possibility of the driveway becoming an access point. Extend red curb limits through the existing driveway.	**City**
e.	NE Quad Comments:	
	i. Add detectable warning strip with R15-8 (Look) sign if pedestrian supports the design. Sight visibility is good in this quadrant.	**City**
	ii. UPRR vehicles jump the curb to access their maintenance facilities. Sidewalk appears deteriorated. By City ordinance, property owners are responsible for sidewalk maintenance in front of their property. Recommend UPRR vehicles access the site from Cinnabar where there is no existing sidewalk so that they don't deteriorate the sidewalk on Montgomery.	**UPRR**

PART 8
TRAFFIC CONTROL FOR RAILROAD AND LIGHT RAIL TRANSIT GRADE CROSSINGS

CHAPTER 8A. GENERAL

Section 8A.01 Introduction

Support:

01 Whenever the acronym "LRT" is used in Part 8, it refers to "light rail transit."

02 Part 8 describes the traffic control devices that are used at highway-rail and highway-LRT grade crossings. Unless otherwise provided in the text or on a figure or table, the provisions of Part 8 are applicable to both highway-rail and highway-LRT grade crossings. When the phrase "grade crossing" is used by itself without the prefix "highway-rail" or "highway-LRT," it refers to both highway-rail and highway-LRT grade crossings.

03 Traffic control for grade crossings includes all signs, signals, markings, other warning devices, and their supports along highways approaching and at grade crossings. The function of this traffic control is to promote safety and provide effective operation of rail and/or LRT and highway traffic at grade crossings.

04 For purposes of design, installation, operation, and maintenance of traffic control devices at grade crossings, it is recognized that the crossing of the highway and rail tracks is situated on a right-of-way available for the joint use of both highway traffic and railroad or LRT traffic.

05 ~~The highway agency or authority with jurisdiction and the regulatory agency with statutory authority, if applicable, jointly determine the need and selection of devices at a grade crossing.~~

05a A diagnostic team, consisting of knowledgeable representatives of parties of interest in a highway-rail or highway-LRT grade crossing, using crossing safety management principles, evaluates conditions at a grade crossing to make determinations or recommendations concerning safety needs at the grade crossing. The diagnostic team needs to, at a minimum, include representatives of the highway agency or authority with jurisdiction over the roadway, the railroad or LRT agency with responsibility for the track and signals, and the California Public Utilities Commission (CPUC), which is the state regulatory agency with statutory authority over grade crossings. The removal, reduction, addition, or change in the type of warning devices at each public grade crossing, or publicly-used private grade crossing (as determined by CPUC or a court competent jurisdiction), must be authorized by CPUC. This includes any changes that can affect interconnections with adjacent traffic signals, or any other modification that may impact the safety of the grade crossing. Refer to Public Utilities Code Sections 1201 through 1205, 7537, 99152 and CPUC General Orders 75 and 88, as amended.

06 In Part 8, the combination of devices selected or installed at a specific grade crossing is referred to as a "traffic control system."

Standard:

07 **The traffic control devices, systems, and practices described in this Manual shall be used at all grade crossings open to public travel** (see definition in Section 1A.13)**, consistent with Federal, State, and local laws and regulations.**

Support:

08 Part 8 also describes the traffic control devices that are used in locations where light rail LRT vehicles are operating along streets and highways in mixed traffic with automotive vehicles.

09 LRT is a mode of metropolitan transportation that employs LRT vehicles (commonly known as light rail vehicles, streetcars, or trolleys) that operate on rails in streets in mixed traffic, and LRT traffic that operates in semi-exclusive rights-of-way, or in exclusive rights-of-way. Grade crossings with LRT can occur at intersections or at midblock locations, including public and private driveways.

10 An initial educational campaign along with an ongoing program to continue to educate new drivers is beneficial when introducing LRT operations to an area and, hence, new traffic control devices.

11 LRT alignments can be grouped into one of the following three types:

A. Exclusive: An LRT right-of-way that is grade-separated or protected by a fence or traffic barrier. Motor vehicles, pedestrians, and bicycles are prohibited within the right-of-way. Subways and aerial structures are

U.S. Department
of Transportation

**Federal Railroad
Administration**

Region VII

801 I Street, Suite 466
Sacramento, California 95814-255

FRA – Region 7
Diagnostic Meeting Opening Statement

(to be included in meeting minutes.)

The FRA Region 7 opinion, in general, provides a **strong** endorsement of the practice of crossing closures and consolidations where feasible, while maintaining essential, alternate and safe access for local communities. The optimal safety improvement for an at-grade highway-rail crossing is the complete separation of the railroad tracks from the roadway through construction of a grade-separation structure or closure. We encourage ALL local Authorities, Railroads and Stakeholders work together to provide good planning to achieve this goal.

Exceptions to the proposed federal rule mandating whistle sounding at all highway rail-grade crossings can only be made by showing that appropriate safety measures have been taken to mitigate the additional risk otherwise presented by trains not sounding their horns.

FRA Region 7 strongly recommends that any public authority desiring to establish quiet zones take the opportunity to review all aspects of safety along its rail corridor. Particular attention should be given to measures that prevent trespassing on railroad Right-of-way since investments made to establish a quiet zone may be negated if the horn has to be routinely sounded to warn trespassers.

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City of San Jose Warm Spring Quiet Zone Project
City of San Jose

Tuesday February 25, 2020

Warm Springs Quiet Zone Site Diagnostic Meeting

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City of San Jose

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Ronnie C Vernoens	FRA	SRTC, SMC.	209-471-3183			

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TIM BARR						[signature]

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Mark Forsells						MF
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Ade Sogbesan	Engr	CPUC	505 Van Ness			Ade
TIFFANY PONG						TP
TISON TANO						
MARLA WEINSTEIN						MW
Florin Lapusteа						FL

APPENDIX E

FRA Risk Index Calculator for Existing Crossings

Print This Page

Risk Calculation Without SSM Improvements

Cancel | Change Scenario: SanJose_WA_60516 ▼ | Continue

Create New Zone

Manage Existing Zones

Log Off

Step by Step Instructions:

Step 1: To specify New Warning Device (For Pre-Rule Quiet Zone Only) and/or SSM, click the MODIFY Button

Step 2: Select proposed warning device or SSM. Then click the UPDATE button.To generate a spreadsheet of the values on this page, click on ASM button—This spreadsheet can then be used for ASM calculations.

Step 3: Repeat Step (2) until the SELECT button is shown at the bottom right side of this page. Note that the SELECT button is shown ONLY when the Quiet Zone Risk Index falls below the NSRT or the Risk Index with Horn.

Step 4: To save the scenario and continue, click the SELECT button

Crossing	Street	Traffic	Warning Device	Pre-SSM	SSM	Risk	
750117C	**HORNING STREET**	**3824**	**Gates**	0	0	11,231.20	MODIFY
750118J	**NORTH 10TH STREET**	**15317**	**Gates**	0	0	19,589.95	MODIFY
750121S	**HEDDING STREET**	**15539**	**Gates**	0	0	17,646.57	MODIFY
750127H	**East Taylor Street**	**12842**	**Gates**	0	0	15,097.25	MODIFY
750128P	**Jackson Street**	**2900**	**Gates**	0	0	10,472.88	MODIFY
750129W	**NORTH 7TH STREET**	**3620**	**Gates**	0	0	11,077.36	MODIFY
750131X	**North 6th Street**	**3100**	**Gates**	0	0	10,651.69	MODIFY
750132E	**NORTH 5TH STREET**	**2227**	**Gates**	0	0	9,789.62	MODIFY
750133L	**North 4th Street**	**5709**	**Gates**	0	0	12,410.06	MODIFY
750134T	**North 3rd Street**	**3992**	**Gates**	0	0	11,353.09	MODIFY
750135A	**NORTH 2ND STREET**	**5974**	**Gates**	0	0	12,549.65	MODIFY
750136G	**North 1st Street**	**7836**	**Gates**	0	0	13,410.80	MODIFY
750151J	**North Montgomery Street**	**1792**	**Gates**	0	0	4,460.67	MODIFY
924191R	**Autumn Parkway**	**11430**	**Gates**	0	0	18,358.90	MODIFY

* Only Public At Grade Crossings are listed.

Click for Supplementary Safety Measures [SSM]

Click for ASM spreadsheet: **ASM** * Note:The use of ASMs requires an application to and approval from the FRA.

Summary	
Proposed Quiet Zone:	SanJose_WA
Type:	New 24-hour QZ
Scenario:	SanJose_WA_60516
Estimated Total Cost:	$0.00
Nationwide Significant Risk Threshold:	13811 .00
Risk Index with Horns:	7626.74
Quiet Zone Risk Index:	**12721.41**

Select

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