
Chapter 4

Major Revisions to the Draft Second Supplemental Environmental Impact Report

The Draft SEIR-2 has been revised to clarify text, provide updated project information, and to correct typographical and grammatical errors. The substantive revisions are noted below and are organized by chapter, section, and page number. Additions are noted in *italics* and deletions are noted in ~~strikeout~~ text. Chapter 2, *Revised Draft Second Supplemental Environmental Impact Report*, includes revisions to the text in the body of the Draft SEIR-2.

Draft SEIR-2

CHAPTER 1, EXECUTIVE SUMMARY

Section 1.5 has been revised as follows:

The approved project with the proposed changes is anticipated to have ~~2,980~~ 2,203 boardings in 2023 and 4,534 boardings in 2043. Travel time for the Light Rail Alternative between Alum Rock Station and Eastridge Transit Center is estimated to be 4.3 minutes. The capital cost of the approved project with the proposed changes is projected to be \$453 million and will be funded by the 2000 Measure A, Regional Measure 3, and the Senate Bill 1 funds. Construction would begin in 2019 with utility relocation and end in 2024 or 2025 (depending on the construction methodology) with the beginning of revenue service.

Section 1.7, first bullet point under subheading *Air Quality and Climate Change (Construction)*, has been revised as follows:

Cumulative air quality impacts during construction. Cumulative PM2.5 concentrations would be elevated at the receptors located near the corners of Ocala Avenue and Capitol Expressway and Cunningham Avenue and Capitol Expressway due to substantial sources of pollutant concentrations that currently exist in the area where the approved project plus the proposed changes to the approved project would occur. Even without the contribution of emissions from construction, existing PM2.5 concentrations near these sensitive receptors are at or exceed the BAAQMD's threshold because Capitol Expressway and its cross streets are heavily traveled roadways, with residences located in close proximity to the roadway edge. The approved project plus the proposed changes to the

approved project would cause further exceedances of existing pollutant concentrations, worsening the cumulative exposure of sensitive receptors to toxic air contaminant concentrations. Although the contribution of the approved project plus the proposed changes to the approved project to existing concentrations would not be substantial (approximately 6% at the locations where concentrations are at or exceed $0.8 \mu\text{g}/\text{m}^3$), there would nevertheless be a worsening of an already cumulatively significant impact. The following mitigation measures identified in the 2005 Final EIR would still apply to the proposed changes to the approved project: AQ (CON)-1 (BAAQMD's BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD's BMPs to reduce GHG emissions from construction equipment). *In addition, Mitigation Measure AQ (CON)-3 would require that Tier 3 or Tier 4 equipment be used to further reduce construction-related emissions where possible.* Even with inclusion of these mitigation measures, this impact would be "Significant and Unavoidable."

Section 1.7, first bullet point under subheading *Noise and Vibration (Operation and Construction)*, has been revised as follows:

- **Nighttime exceedance (10:00 pm to 7:00 am) of the FTA vibration levels from light rail operations at homes within 100 feet of the proposed aerial guideway.** The proposed aerial guideway (direct fixation fasteners) and ballasted track on embankment sections would cause an exceedance of the nighttime impact criteria at ~~73~~ 67 sensitive receiver locations during light rail operations. VTA identified tire derived aggregate (TDA), 5-Hertz floating slab track (FST) or bridge bearing vibration isolation system, and speed reductions from 55 mph to 35 mph as potential mitigation measures. VTA is recommending to include TDA on embankment sections to mitigate one impact. However, VTA is not recommending to include FST, bridge bearing vibration isolation, or implement nighttime speed restrictions to eliminate the other ~~72~~ 66 impacts.

Section 1.7, second bullet point under subheading *Noise and Vibration (Operation and Construction)*, has been revised as follows:

- ~~Daytime exceedance of the Federal Transit Administration (FTA) noise levels from pile driving activity at unobstructed homes and businesses that are within 300 feet of pile driving activity.~~ The noise impacts would have a duration of 8 to 15 days per sensitive receiver. Pile driving would exceed the construction noise impact criteria of 80 Leq at residences and 85 Leq at commercial properties at 156 sensitive receiver locations. With inclusion of impact cushions, pile driving would exceed the construction noise impact criteria at 135 sensitive receiver locations. With inclusion of impact cushions and pre-drilling, pile driving would exceed the construction noise

~~impact criteria at 80 sensitive receiver locations. With inclusion of impact cushions and noise shields around the pile equipment, pile driving would exceed the construction noise impact criteria at 2 sensitive receiver locations. VTA is recommending to mitigate this impact with noise cushions and temporary noise barriers. Thus, even with inclusion of mitigation measures, this impact would be “Significant and Unavoidable” at two sensitive receiver locations.~~

Section 1.7, third bullet point under subheading *Noise and Vibration (Operation and Construction)*, has been revised as follows:

- **Homes within 100 feet of impact piling activity may exceed FTA construction vibration criteria.** There are ~~64~~ 56 predicted unmitigated construction vibration impacts, and 0 impacts with the use of non-impact piling methods. However, VTA is not recommending the use of non-impact piling methods at ~~any~~ most locations for a couple of reasons. Most locations are only slightly above the FTA Damage Criteria, and therefore may not experience any actual impacts ~~due to the +3 VdB safety factor included to estimate construction vibration levels.~~ At the locations with the highest construction vibration levels, structural damage is not anticipated to occur. *However, if any structural and cosmetic damage does occur due to construction vibration, the damage shall be repaired by VTA.* As a result, VTA is not recommending to use non-impact piling methods at ~~any~~ most locations. Thus, this impact would be “Significant and Unavoidable.”

Section 1.8, below the biological mitigation measures, has been revised to include the revised mitigation measures as follows:

The revised mitigation measures for Geology, Soils, and Seismicity can be found in Section 3.8 of the Second Subsequent IS, which is located in Volume III.

Mitigation Measure GEO-4: Incorporate Caltrans Seismic Design Criteria

During the design process, VTA shall design any and all proposed infrastructure in accordance with the appropriate Caltrans Seismic Design Criteria.

Mitigation Measure GEO-6: Minimize Risk of Lateral Spreading, Subsidence, and Collapse

Prior to implementation of the proposed transit improvement activities, the following construction methods shall be employed:

- *construct edge containment structures such as berms, dikes, retaining structures, or compacted soil zones;*

- *remove or treat soils and geologic materials prone to lateral spreading and settling; and*
- *install drainage measures to lower the groundwater table below the level of settleable soils pursuant to the California Division of Mines and Geology's Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A (2008).*

The revised mitigation measure for Hydrology and Water Quality can be found in Section 3.10 of the Second Subsequent IS, which is located in Volume III.

Mitigation Measure HYD-11: Comply with All Applicable Regulations and Subsequent Permit Programs Related to Water Quality Control

In implementing the project, VTA will comply with the Clean Water Act (CWA), including all National Pollution Discharge Elimination System (NPDES) permit requirements. VTA will require the construction contractor to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with State Water Resources Control Board (SWRCB) regulations and the NPDES Construction General Stormwater permit. VTA will obtain coverage under the State's General Construction Stormwater Permit, and will comply with applicable requirements relative to land grading and erosion control. VTA will comply with the Clean Water Act, including all NPDES permit requirements. VTA will obtain coverage under the State Water Resources Control Board's Construction General Permit for Storm Water, Order No. 2009-0009-DWQ (CGP), and contractors must meet the substantive requirements for discharge of storm water runoff associated with construction activity.

The SWPPP will identify the specific BMPs proposed for the project, including but not limited to erosion prevention, sediment control, waste management, spill prevention/housekeeping, good housekeeping, non-storm water management, and run-on/runoff control, inspection, maintenance, and BMP repair procedures; and certain monitoring requirements, as well as permanent water quality post construction BMPs.

For those areas in VTA right-of-way, VTA will implement water quality measures required pursuant to the Phase II General Permit for Stormwater Discharge from Small Municipal Separate Storm Sewer Systems (MS4), Order No. 2013-0001-DWQ, effective July 30, 2013. The stormwater treatment regulations under this MS4 require new projects that create 5,000 square feet or more of newly constructed or replaced and contiguous impervious surface to comply with post-construction stormwater treatment requirements. BMPs may include avoiding impervious surfaces, providing site controls to manage pollutant sources, and Low Impact Development features such as bioretention basins and vegetated swales. Roadway improvements will comply with the EPA's Greenstreets guidelines. In addition, a long-term maintenance plan (minimum of five years) will be developed in accordance with the Phase II MS4 requirements and will

describe the procedures to ensure that the post-construction storm water management measures are adequately maintained.

For those areas in City or County right-of-way, VTA will implement water quality measures required pursuant to provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP) Order No. R2-2015-0049, overseen by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). This permit requires projects that result in the displacement of more than 43,560 square feet (1 acre) of impervious surface to implement treatment BMPs to the maximum extent practicable. BMPs may include detention/retention units, infiltration structures, swales, sand filters, wetlands, or other low impact development measures that improve water quality.

Mitigation Measure HYD-12: Implement Measures to Maintain Operational Water Quality

In accordance with the Phase II MS4 permit, VTA will perform inspections and cleanings such that NPDES permit treatment requirements will be met, and will ensure that outlet structures provide for proper energy dissipation in accordance with standard specifications for storm drainage. VTA will ensure that regular maintenance of parking facilities includes a program to clean curbside pavement areas of litter, fuel, and oils spills. Storm drain inlet traps will be inspected at least annually and cleaned as required.

Pursuant to Provision C.3 of the MRP, those areas in City or County right-of-way that result in the displacement of more than 43,560 square feet (1 acre) of impervious surface must implement treatment BMPs to the maximum extent practicable. Sizing of these BMPs will be in accordance with the most recent guidelines in the MEP and/or issued by the SCVURPPP, and typically relate to volume- or flow-based treatment capacity.

Those BMPs whose primary mode of action to treat stormwater depends on volume capacity, such as detention/retention units or infiltration structures, will typically be designed to treat stormwater runoff equal to either the maximized stormwater quality capture volume for the area, based on historical rainfall records (URQM, 1998); or equal to the volume of annual runoff required to achieve 80% or more capture (CASQA, 1993).

Treatment BMPs such as swales, sand filters, wetlands, and others whose primary mode of action depends on flow capacity will typically be sized to treat 1) 10% of the 50-year peak flow; or 2) the flow of runoff produced by a rain event equal to at least two times the 85th-percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or 3) the flow of runoff resulting from a rain event equal to at least 0.2-inch-per-hour intensity.

The revised mitigation measures for Noise and Vibration can be found in Section 5.3 of the Draft SEIR-2, which is located in Volume I.

Mitigation Measure NV-1a: Construct Soundwalls

VTA shall construct soundwalls that are a minimum of 3 feet above top of rail on the aerial structure or in the median adjacent to the trackway at the following locations:

- *NB/SB: Westboro Drive to Story Road (968+54 to 992+00);*
- *NB: Kollmar Drive to Cunningham Avenue (997+00 to 1051+00); and*
- *SB: Kollmar Drive to Ocala Avenue (997+00 to 1038+00).*

All soundwall locations and heights are preliminary and are subject to change based on additional noise studies during final design.

Mitigation Measure NV-4b: Use Vibration-Dampening Track Construction Materials

VTA shall install a 12-inch layer of tire-derived aggregate beneath a subballast layer of 12 inches and a ballast layer of 12 inches between Wilbur Avenue and Westboro Drive (Sta. 966+50 to 971+50 NB/SB).

Mitigation Measure NV-1b: Noise Insulation

As a result of the aerial grade separation at Ocala Avenue, this mitigation measure is no longer required.

The revised mitigation measure for Visual Quality can be found in Section 3.16 of the Second Subsequent IS, which is located in Volume III.

Mitigation Measure VQ-4: Incorporate Landscaping

VTA will develop and implement a comprehensive landscaping plan to soften the massing, hardscape, and structural elements of the Project. The landscaping shall be designed to be consistent with vegetation types and patterns within the Capitol Expressway Corridor, and shall provide year-round aesthetic enhancement.

As part of this plan, VTA shall review project designs to ensure that the following elements are implemented in the Project landscaping plan to the extent feasible:

- *85 percent of the species composition of open space areas shall reflect species that are native to the Plan Area and California. The species list should include trees, shrubs, and an herbaceous understory of varying heights, as well as evergreen and deciduous types. Plant variety will increase diversity by providing multiple layers, seasonality, more diverse habitat, and reduced susceptibility to disease.*
- *75 percent of the plant composition for landscaping in parks and public/quasi public and commercial areas shall be comprised of species that are native to the Plan Area and California. Use of native species promotes a visual character of California that is being lost through development and reliance on*

non-native ornamental plant species. Native plant species can be used to create attractive spaces, high in aesthetic quality, that are not only drought-tolerant but attract more wildlife than traditional landscape palettes.

- *Under no circumstances will any invasive plant species be used at any location.*
- *Vegetation shall be planted within the first year following project completion.*
- *An irrigation and maintenance program shall be implemented during the plant establishment period and carried on an as needed basis, such as in a drought, as supplemental irrigation.*
- *Irrigation in public and commercial areas shall utilize a smart watering system that evaluates the existing site conditions and plant material against weather conditions to avoid overwatering of such areas. The irrigation system will be managed in such a manner that any broken spray head, pipes, or other components of the system are fixed within 1 to 2 days, or the zone or system will be shut down until it can be fixed to avoid unusually high water flows.*

Section 1.8, list of air quality mitigation measures, has been revised to add a mitigation measure as follows:

Mitigation Measure AQ (CON)-3

Tier 3 or 4 equipment shall be used to further reduce construction-related emissions where possible.

Section 1. 8, list of noise and vibration mitigation measures, has been revised to remove and revise mitigation measures as follows:

Mitigation Measure NV (CON)-2

A combination of the following measures should be considered if reasonable and feasible to reduce noise and vibration impacts from pile driving:

1. **Noise Shield:** A pile driving noise shield could be effective at reducing the pile driving noise by a minimum 5 dBA, depending on the size of the shield and how well it surrounds the pile and hammer. A portable shield/barrier could be implemented to provide a nominal 10 dBA noise reduction.
2. **Pre-Drilling Piles:** Pre-drilling a portion of the hole may provide a means to reduce the duration of impact pile driving, and should be explored. Reducing the total impact time to an aggregate duration of no more than 2 hours per day will reduce the equivalent noise level by 6 dBA to a range of 80 to 90 dBA (L_{eq}) at a distance of 100ft.

Section 1.9, Table 1-1, first row under subheading *Air Quality and Climate Change (SEIR-2)*, has been revised as follows:

Significant Impact ¹	Mitigation Measures	Level of Significance ²			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Impact AQ (CON)-1 (Temporary Increase in Construction-Related Emissions during Grading and Construction Activities)	Mitigation Measures AQ (CON)-1 (BAAQMD’s BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD’s BMPs to reduce GHG emissions from construction equipment) and AQ (CON)-3 to use Tier 3 or Tier 4 equipment where possible.	Less than Significant with Mitigation			

Section 1.9, Table 1-1, first row under subheading *Hydrology and Water Quality (Second Subsequent IS)*, has been revised as follows:

Significant Impact ¹	Mitigation Measures	Level of Significance ²			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Impact HYD-11 (Violation of Water Quality Standards or Waste Discharge Requirements)	Mitigation Measure HYD-11 (Comply with Water Quality Control Regulations and Permit Programs Comply with All Applicable Regulations and Subsequent Permit Programs Related to Water Quality Control)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A

Section 1.9, Table 1-1, second row under subheading *Noise and Vibration (SEIR-2)*, has been revised as follows:

Significant Impact ¹	Mitigation Measures	Level of Significance ²			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Impact NV-4 (Vibration Levels in Buildings from Transit Operations That Exceed Federal Transit Administration Criteria)	<i>Mitigation Measure NV-4b (Use Vibration-Dampening Track Construction Materials).</i> No additional mitigation is recommended	Less than Significant with Mitigation	Significant and Unavoidable	Less than Significant with Mitigation	Significant and Unavoidable

Section 1.9, Table 1-1, third row under subheading *Noise and Vibration (SEIR-2)*, has been revised as follows:

Significant Impact ¹	Mitigation Measures	Level of Significance ²			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Impact NV (CON)-1: (Generation of Noise or Vibration That Substantially Affects Nearby Sensitive Receptors) (Noise)	Mitigation Measures NV (CON)-1a (Notify Residents of Construction Activities), NV (CON)-1b (Construct Temporary Noise Barriers During Construction), NV (CON)-1c (Restrict Pile Driving), NV (CON)-1d (Use Noise Suppression Devices), NV (CON)-1e (Locate Stationary Construction Equipment as Far as Possible from Sensitive Receptors), NV (CON)-1f (Reroute Construction-Related Truck Traffic), and NV (CON)-1g (Develop Construction Noise Mitigation Plan), NV (CON)-2, and NV (CON)-1h (Use Impact Cushions)	Less than Significant with Mitigation	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable Less than Significant with Mitigation

CHAPTER 2, INTRODUCTION

Section 2.1, last paragraph, has been revised as follows:

The approved project with the proposed changes is anticipated to have 2,980,203 boardings in 2023 and 4,534 boardings in 2043. Travel time for the Light Rail Alternative between Alum Rock Station and Eastridge Transit Center is estimated to be 4.3 minutes. The capital cost of the approved project with the proposed changes is projected to be \$453 million and will be funded by the 2000 Measure A, Regional Measure 3, and the Senate Bill 1 funds. Construction would begin in 2019 with utility relocation and end in 2024 or 2025 (depending on the construction methodology) with the beginning of revenue service.

Section 2.5, first paragraph, has been revised as follows:

It is anticipated that this SEIR-2 will be relied upon in issuing the appropriate project-specific discretionary approvals necessary to implement the proposed changes to the approved project. *The following agencies are considered responsible agencies under CEQA, because these agencies possess discretionary authority over the project or a portion of it, as specified. These actions include the following approvals by the agencies indicated.*

Section 2.5, sixth bullet, has been revised as follows:

- **City of San Jose:** Encroachment permit for work within the City right-of-way and discretionary review authority over temporary street closures, utility realignments, pavement repairs, and other related activities within the City right-of-way.

Figure 2-1 has been revised as shown on the following page.

CHAPTER 3, CHANGES TO THE APPROVED PROJECT, CHANGES IN CIRCUMSTANCES, AND INTRODUCTION OF NEW INFORMATION

Section 3.2, first paragraph under subheading *Reduction in Parking Spaces at Eastridge Park-and-Ride Lot* and Table 3-2, have been revised as follows:

The Eastridge Park-and-Ride Lot currently includes approximately 180 parking spaces. The approved project increases the parking to 445 spaces at Eastridge Station to partially address the increased demand of 481 spaces from the project. As part of the proposed changes to the approved project, VTA is proposing to ~~reduce~~ increase the parking to approximately 200-302 spaces *through reconfiguration of the Eastridge Park-and-Ride lot due to the relocation of VTA Paratransit staff and vehicles to a remodeled building at this location in September 2017. The relocation of VTA Paratransit staff and vehicles to this location has reduced the availability of parking at the Eastridge Park and Ride lot.* See Section 2.3, *Changes in Circumstances*, for a discussion of the changes to the existing

VTA Paratransit Offices at the Eastridge Park-and-Ride Lot. As shown in Table 3-2, based on updated VTA forecasts, the proposed changes to the approved project would increase existing (2017) parking demand to 114 parking spaces. In years 2023 and 2043, the proposed changes to the approved project would increase parking demand to 293 vehicles and 374 vehicles, respectively.

Table 4-1 Eastridge Park-and-Ride Lot Anticipated Parking Demand for the Approved Project and the Proposed Changes (Existing [2017] Year, Year 2023, Year 2035, and Year 2043)

	Existing (2009 or 2017) ¹	Year 2023 ²	Year 2035 ³	Year 2043 ²
Approved Project				
Demand	16	--	481	--
Supply	115	--	445	--
Proposed Changes to the Approved Project				
Demand	114	293	--	374
Supply	180	302	--	200 374

Notes:

¹ Existing parking counts provided by VTA Operations on December 20, 2017.

² Future Parking estimates provided by VTA Modelling on May 31, 2018.

³ Only parking forecasts for 2035 were provided in the 2014 Subsequent IS/MND. Updated parking forecasts were not provided for 2035 due to changes in the opening year and future year.

Source: Hexagon 2018.



Figure 2-1
Proposed Changes to Capitol Expressway Light Rail Project

Section 3.3, after the last paragraph, has been added as follows:

VTA C17131F, Pedestrian Connection to Eastridge Transit Center: In March 2018, VTA completed a project to provide pedestrian safety improvements along Capitol Expressway next to Eastridge Mall and improve connections to the Eastridge Transit Center. This project consisted of construction of a new crosswalk, including curb ramps and enhanced traffic signals at the Eastridge Loop and Capitol Expressway intersection; installation of new street lighting along Capitol Expressway; installation of fencing along the Capitol Expressway median; and construction of a new crosswalk and curb ramp at the shopping center to provide access to the Thompson Creek Trail.

VTA C810, Capitol Expressway Pedestrian/Bus Improvements: In 2012, VTA completed a project that included a multi-use path for pedestrians and bicycles along both sides of Capitol Expressway between Capitol Avenue and Quimby Road, as allowed by available space. The project included landscaping and lighting. In addition, the project included new bus rapid transit stations at Story Road and Ocala Avenue.

VTA C811, Capitol Expressway Light-Rail Project/Eastridge Transit Center: In 2015, VTA replaced the Eastridge Transit Center with a new facility with better access to bus services and shopping at Eastridge Mall. The project included upgrades to security, lighting, signs, and other amenities.

Tully Road Vision Zero Safety Improvements: This project will install buffered bike lanes and LED streetlight retrofits between Monterey Road and Capitol Expressway. It will further evaluate safety issues and determine feasible improvements.

Figures 3-1 and 3-4 have been revised as shown on the following pages.



Figure 3-1
Previously Approved Capitol Expressway Light Rail Project



Source: BKF Engineers 2019.

Figure 3-4
Proposed Changes to the Story Station

SECTION 5.1, TRANSPORTATION

Table 5.1-3 has been revised as follows:

Table 5.1-3 Existing Intersection Level of Service

Intersection	Peak Hour	Average Delay (second/vehicle)	Level of Service
Capitol Expressway & Capitol Avenue ¹	AM	41.4 45.5	D
	PM	47.6 48.0	D
Capitol Expressway & Story Road ¹	AM	82.5	F
	PM	111.2 62.5	F E
Capitol Expressway & Ocala Avenue	AM	62.2 61.8	E
	PM	74.0 52.0	E D
Capitol Expressway & Cunningham Avenue	AM	22.6 28.9	C
	PM	12.6 13.9	B

Notes:

N/A = Not Applicable

¹ Denotes CMP intersection.

Bold indicates substandard Level of Service.

Source: Hexagon 2019.

First paragraph under subheading *Existing Automobile Travel Time and Average Speed* has been revised as follows:

EXISTING AUTOMOBILE TRAVEL TIME AND AVERAGE SPEED

Table 5.1-4 shows the average travel time ~~and average speed~~ of automobiles on Capitol Expressway between Interstate 680 and Tully Road *that were computed using a Synchro SimTraffic simulation model supplied by Santa Clara County. The results of the analysis show that, on average, it currently takes between approximately 4 and 7 minutes to travel on Capitol Expressway between Tully Road and Capitol Avenue during commute hours depending on direction and peak hour. On October 25 and 26, 2017, it took between approximately 4.5 minutes and 10 minutes to travel on Capitol Expressway between Interstate 680 and Tully Road during commute hours depending on direction, peak hour, and whether an HOV lane was utilized. Average travel speeds ranged between 23 and 34 miles per hour. Generally, traffic in the HOV lanes experienced a slightly lower average automobile travel time and slightly higher automobile average travel speed.*

Table 5.1-4 has been deleted and replaced with the table as follows:

Table 5.1-4 Existing Travel Time and Average Speed on Capitol Expressway, Interstate 680 to Tully Road

Vehicle Type	Direction	Peak Hour	Travel Time (min:sec)		Speed (miles per hour)	
			Average	Range	Average	Range
Mixed Flow	NB	AM	9:48	3:30-17:28	23	10-39
HOV	NB	AM	9:04	3:43-16:59	24	13-38
Mixed Flow	NB	PM	6:02	4:31-7:44	29	20-35
HOV	NB	PM	6:40	5:31-8:08	27	21-30
Mixed Flow	SB	AM	5:08	3:25-7:04	31	16-43
HOV	SB	AM	4:29	3:08-5:51	34	26-44
Mixed Flow	SB	PM	5:53	4:01-7:24	30	20-38
HOV	SB	PM	5:41	4:15-7:06	30	23-36

Notes:

Travel time data from October 25 and 26, 2017, approximately 16 runs per peak hour.

HOV = high occupancy vehicle; NB = northbound; SB = southbound

Source: Hexagon 2019.

Table 5.1-4 Existing (2017) and Existing Plus Project Travel Time on Capitol Expressway, Tully Road to Capitol Avenue

Direction	Peak Hour	Average Travel Time (min:sec) ¹		Average Speed (mph)	
		Existing	Existing Plus Project	Existing	Existing Plus Project
Northbound	AM	6:01	11:23	19	10
Northbound	PM	5:25	6:41	21	17
Southbound	AM	4:50	5:21	24	22
Southbound	PM	6:39	10:29	17	11

Notes:

LRT Speed and Travel time: Between Alum Rock Station and the Eastridge Station, the average speed of the LRT under the Existing Plus Project Scenario is projected to be 32 mph and the average travel time is 4.5 minutes.

¹ All travel times estimated from Synchro SimTraffic 10 on the Santa Clara County provided network. Reported travel time is average of 10 runs.

NB = northbound; SB = southbound

Source: Hexagon 2019.

Table 5.1-7 has been revised as follows:

Table 5.1-7 Existing (2017) Intersection Level of Service

Intersection	Year 2017					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)

Capitol Expressway & Capitol Avenue	AM	41.4 45.5	D	44.8 46.2	D	-1.0 -5.7
	PM	47.6 48.0	D	47.7 45.7	D	-1.5 -12.4
Capitol Expressway & Story Road	AM ¹	82.5	F	119.2 118.8	F	71.6 77.6
	PM	111.2 62.5	F E	137.2 86.5	F	9.5 32.0
Capitol Expressway & Ocala Avenue	AM	62.2 61.8	E	91.2 88.1	F	24.9 41.9
	PM	74.0 52.0	E D	73.2 56.7	E	10.8 10.4
Capitol Expressway & Cunningham Avenue	AM	22.6 28.9	C	22.4 27.3	C	0.3 -6.2
	PM	12.6 13.9	B	12.4 13.8	B	0.2 0.3

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

¹ Change in demand-to-capacity ratio from no project to project conditions is + 0.375.

Source: Hexagon 2018 2019.

Table 5.1-8 has been revised as follows:¹

Table 5.1-8 Year 2023 Intersection Level of Service

Intersection	Year 2023					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)
Capitol Expressway & Capitol Avenue	AM	42.5 46.1	D	49.6 47.4	D	3.7 -4.7
	PM	48.3 46.5	D	48.9 45.3	D	-1.1 -9.4
Capitol Expressway & Story Road	AM ¹	94.4 94.8	F	128.9 128.7	F	66.5 69.0
	PM ²	123.0 69.3	F	159.0 101.3	F	22.9 38.0
Capitol Expressway & Ocala Avenue	AM	75.6 75.2	E	108.5 104.8	F	28.6 24.1
	PM ³	80.3 58.1	F E	85.2 66.2	F E	-51.2 17.0
Capitol Expressway & Cunningham Avenue	AM	33.0 55.1	C E	29.8 47.0	C D	-3.5 -21.2
	PM	13.3 14.6	B	13.2 14.7	B	0.2 0.5

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

¹ Change in demand-to-capacity ratio from no project to project conditions is + ~~0.279~~ 0.357.

² Change in demand-to-capacity ratio from no project to project conditions is + 0.095.

³ Change in demand-to-capacity ratio from no project to project conditions is +0.158.

Source: Hexagon 2018 2019.

¹ The shading in the PM row for the Capitol Expressway & Ocala Avenue intersection was removed, as there would no longer be a significant project impact during the PM peak hour at this intersection. Due to the nature of the revision, it is not shown in *italics* or ~~strikeout~~ text.

Table 5.1-9 has been revised as follows:

Table 5.1-9 Year 2043 Intersection Level of Service

Intersection	Year 2043					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)
Capitol Expressway & Capitol Avenue	AM	55.9 63.6	E	67.0 67.5	E	6.3 -4.9
	PM	55.5 54.1	E D	69.4 53.8	E D	49.1 -9.3
Capitol Expressway & Story Road	AM ¹	113.9 114.5	F	144.5 144.3	F	60.2 65.3
	PM ²	187.1 122.6	F	251.4 188.6	F	75.2 110.2
Capitol Expressway & Ocala Avenue	AM ³	101.5 100.5	F	132.7 131.8	F	24.5 25.0
	PM ⁴	101.7 67.2	F E	142.8 97.4	F	-35.9 55.1
Capitol Expressway & Cunningham Avenue	AM	41.9	D E	36.5 58.9	D E	-6.5 -12.4
	PM	14.7	B	14.8 16.1	B	0.1 0.3

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

¹ Change in demand-to-capacity ratio from no project to project conditions is ~~+0.318~~ 0.348.

² Change in demand-to-capacity ratio from no project to project conditions is ~~+0.124~~ 0.191.

³ Change in demand-to-capacity ratio from no project to project conditions is +0.041.

⁴ ~~Change in demand-to-capacity ratio from no project to project conditions is +0.198.~~

Source: Hexagon ~~2018~~ 2019.

First paragraph under subheading *Impacts on Parking at Eastridge Park-and-Ride Lot* and Table 5.1-10 have been revised as follows:

The Eastridge Park-and-Ride Lot currently includes 180 parking spaces provided by VTA. The approved project increases the parking to 445 spaces at Eastridge Station to partially address the anticipated increased demand of 481 spaces from the project. As part of the proposed changes to the approved project, VTA is proposing to ~~reduce~~ *increase* the number of parking spots added at the Eastridge Park-and-Ride Lot to approximately ~~200~~ 302 *spaces through reconfiguration of the Eastridge Park-and-Ride lot* ~~due to the relocation of VTA Paratransit staff and vehicles to a remodeled building at this location in September 2017, which has reduced the availability of parking there.~~ See Section 3.3, *Changes in Circumstances*, in Chapter 3 for a discussion of the changes to the existing VTA Paratransit Offices at the Eastridge Park-and-Ride Lot. Table 5.1-10 shows the peak park and ride demand with the proposed changes to the approved project at the Eastridge Park-and-Ride Lot under existing (2017), year 2023, and year 2043 conditions. Based on VTA’s revised forecasts, the proposed changes to the approved project would continue to increase parking demand at the Eastridge Park-and-Ride Lot. VTA recognizes that there may be a shortfall in parking supply as a result of the proposed reduction in the additional parking spaces provided. ~~VTA will monitor the demand and will increase parking as necessary, if~~

possible. If increasing the parking supply is not possible, VTA will evaluate measures to promote non-vehicular access to the station and will coordinate with VTA Paratransit to reduce their demand for parking. As part of project operations, VTA would conduct regular monitoring and parking counts at the Eastridge Park-and-Ride lot to ensure that the parking supply provided would be adequate. Should parking demand exceed supply, the 135 parking stalls currently used for Paratransit would be vacated in any portion as needed in order to accommodate the parking demand. As a result of these measures to increase supply or reduce demand, no indirect traffic or air quality impacts would be caused by cars circling and looking for parking at this station.

Table 5.1-10 Eastridge Park-and-Ride Lot Anticipated Parking Demand and Supply (Existing [2017] Year, Year 2023, and Year 2043)

Existing (2017) ¹		Year 2023 ²		Year 2043 ²	
Scenario	Parked Vehicles	Scenario	Parked Vehicles	Scenario	Parked Vehicles
Demand	114	Demand	293	Demand	374
Supply	180	Supply	200 302	Supply	200 374

Notes:

¹ Existing parking counts provided by VTA Operations on December 20, 2017.

² Future parking estimates provided by VTA Modeling on May 31, 2018.

Source: Hexagon 2019.

Table 5.1-11 has been revised as follows:

Table 5.1-11 Station Boarding Estimates (Year 2023 and Year 2043)

Daily Boardings	Eastridge Station		Story Station		Alum Rock Station		Total	
	No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project
Year 2023								
Light Rail Transit	0	1,224 860	0	777 563	1,745 1,185	979 780	1,745 1,185	2,980 2,203
Bus	896 1,124	918 897	379 330	418 359	862 787	506 578	2,137 2,240	1,842 1,833
Total	896 1,124	2,142 1,757	379 330	1,195 922	2,607 1,972	1,485 1,358	3,882 3,425	4,822 4,036
Year 2043								
Light Rail Transit	0	2,287	0	1,040	2,322	1,207	2,322	4,534
Bus	966	518	472	401	1,036	659	2,474	1,578
Total	966	2,805	472	1,441	3,358	1,866	4,796	6,112

Source: Hexagon 2019.

SECTION 5.2, ENVIRONMENTAL JUSTICE

First paragraph under subheading *Air Quality and Climate Change (Construction)* has been revised as follows:

- **Cumulative air quality impacts during construction.** Cumulative PM_{2.5} concentrations would be elevated at the receptors located near the corners of Ocala Avenue and Capitol Expressway and Cunningham Avenue and Capitol Expressway due to substantial sources of pollutant concentrations that currently exist in the area where the approved project plus the proposed changes to the approved project would occur. Even without the contribution of emissions from construction, existing PM_{2.5} concentrations near these sensitive receptors are at or exceed the BAAQMD’s threshold because Capitol Expressway and its cross streets are heavily traveled roadways, with residences located in close proximity to the roadway edge. The approved project plus the proposed changes to the approved project would cause further exceedances of existing pollutant concentrations, worsening the cumulative exposure of sensitive receptors to toxic air contaminant concentrations. Although the contribution of the approved project plus the proposed changes to the approved project to existing concentrations would not be substantial (approximately 6% at the locations where concentrations are at or exceed 0.8 µg/m³), there would nevertheless be a worsening of an already cumulatively significant impact. The following mitigation measures identified in the 2005 Final EIR would still apply to the proposed changes to the approved project: AQ (CON)-1 (BAAQMD’s BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD’s BMPs to reduce GHG emissions from construction equipment). *In addition, Mitigation Measure AQ (CON)-3 would require that Tier 3 or Tier 4 equipment be used to further reduce construction-related emissions where possible.* Even with inclusion of these mitigation measures, this impact would be “Significant and Unavoidable.”

Second paragraph of the Noise and Vibration mitigation discussion under subheading Environmental Justice has been revised as follows:

~~Regarding daytime exceedance of FTA noise levels from pile driving activity, the following mitigation measures identified in the 2005 Final EIR and the 2007 Final SEIR would still apply to the proposed changes to the approved project: NV (CON) 1a (Notify Residents of Construction Activities), NV (CON) 1b (Construct Temporary Noise Barriers During Construction), NV (CON) 1c (Restrict Pile Driving)², NV (CON) 1d (Use Noise Suppression Devices), NV (CON) 1e (Locate Stationary Construction Equipment as Far as Possible from~~

² In the 2005 Final EIR, this measure restricts pile driving to the hours of 8:00 am to 5:00 pm. To be consistent with the San Jose municipal code, these hours are revised to 7:00 am to 7:00 pm, Monday through Friday.

~~Sensitive Receptors), NV (CON) 1f (Reroute Construction Related Truck Traffic), NV (CON) 1g (Develop Construction Noise Mitigation Plan), NV (CON) 2, which has been modified (see Section 5.3 for a full description), and NV (CON) 1h (Use Impact Cushions). With inclusion of impact cushions, pile driving would exceed the construction noise impact criteria at 135 sensitive receiver locations. With inclusion of impact cushions and pre-drilling, pile driving would exceed the construction noise impact criteria at 80 sensitive receiver locations. With inclusion of impact cushions and noise shields around the pile equipment, pile driving would exceed the construction noise impact criteria at 2 sensitive receiver locations. VTA is recommending to mitigate this impact with noise cushions and temporary noise barriers. Even with inclusion of these mitigation measures, this impact would be “Significant and Unavoidable” and would result in a disproportionate and adverse impact on environmental justice populations.~~

First paragraph of the Air Quality and Climate Change mitigation discussion under subheading *Environmental Justice* has been revised as follows:

Air Quality and Climate Change (Construction). With respect to cumulative air quality impacts during construction, the following mitigation measures identified in the 2005 Final EIR would still apply to the proposed changes to the approved project: AQ (CON)-1 (BAAQMD’s BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD’s BMPs to reduce GHG emissions from construction equipment). *In addition, Mitigation Measure AQ (CON)-3 would require that Tier 3 or Tier 4 equipment be used to further reduce construction-related emissions where possible.* Even with inclusion of these mitigation measures, this impact would be “Significant and Unavoidable”, and would result in a disproportionate and adverse impact on environmental justice populations.

SECTION 5.3, NOISE AND VIBRATION

Introductory paragraph under subheading *Section 5.3 Noise and Vibration* has been revised as follows:³

This section describes the potential noise and vibration impacts associated with the proposed changes to the approved project. This section supplements Section 4.14 of the 2005 Final EIR, Section 5.13 of the 2007 Final SEIR, and Section 3.12 of the 2014 Subsequent IS/MND. This analysis is based on and supported by the ~~September 21, 2018~~ *February 14, 2019 EBRC – CELR Noise and Vibration Assessment* prepared by ATS Consulting (included in Attachment E). Mitigation

³ This revision to the preparation date is not shown for every instance the date occurs in the Draft SEIR-2 to maintain the clarity of this chapter.

measures are identified for impacts that exceed the significance thresholds included in the 2005 Final EIR.

Second paragraph, the impact discussion, and the mitigation discussion under subheading *Noise Levels From Transit Operation* have been revised as follows:

A more detailed list of anticipated ~~pile-driving-vibration~~ *operational noise* impacts can be found in Table 9 of the ~~September 21, 2018~~ *February 14, 2019 EBRC – CELR Noise and Vibration Assessment* (included in Attachment E).

Impact: The ~~September 21, 2018~~ *February 14, 2019 EBRC – CELR Noise and Vibration Assessment* indicates that the proposed changes to the approved project would result in 78 moderate and 23 severe noise impacts in 2017 without the proposed aerial guideway sound walls and without the proposed OGAC. The proposed changes would result in ~~96~~ 93 moderate and 59 severe noise impacts in 2043 without the proposed aerial guideway sound walls and without the proposed OGAC. The location of receivers where ~~pile-driving-vibration~~ *operational noise* impacts are predicted are as follows:

- ~~Twenty-three~~ properties located east and west of the alignment between Wilbur Avenue and Mervyns Way would experience one severe and ~~twenty-two~~ *nineteen* moderate noise impacts.

Mitigation: The following mitigation measures identified in the 2005 Final EIR and the 2007 Final SEIR would still apply to the proposed changes to the approved project: NV-1a (Construct Soundwalls) and NV-1c (Provide Quiet Pavement). *Mitigation Measure NV-1a has been revised.* Mitigation Measure NV-1b is no longer needed as a ~~rest~~ *result* of project changes.

Mitigation Measure NV-1a: Construct Soundwalls

VTA shall construct soundwalls that are a minimum of 3 feet above top of rail on the aerial structure or in the median adjacent to the trackway at the following locations:

- *NB/SB: Westboro Drive to Story Road (968+54 to 992+00);*
- *NB: Kollmar Drive to Cunningham Avenue (997+00 to 1051+00); and*
- *SB: Kollmar Drive to Ocala Avenue (997+00 to 1038+00).*

All soundwall locations and heights are preliminary and are subject to change based on additional noise studies during final design.

Table 5.3-1 has been revised as follows:

Table 5.3-1 Summary of Existing (2017) and Year 2043 Operational Transit Noise Impacts Associated with the Proposed Changes to the Approved Project

Segment of Capitol Expressway	Number – Type of Receivers ¹	Existing (2017) Noise (Ldn) ²	Without Aerial Guideway Sound Wall & OGAC ³ Year 2043 (Year 2017) ⁴		With Aerial Guideway Sound Wall Year 2043 (Year 2017) ⁴		With Aerial Guideway Sound Wall & OGAC ³ Year 2043 (Year 2017) ⁴	
			Moderate	Severe	Moderate	Severe	Moderate	Severe
NB 964+50 to 981+20 Wilbur Ave. to Mervyns Way	22 - SFR	70-78	18 17 (12)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NB 986+70 to 995+50 Mervyns Way to Story Road	5 – INST/COM	72-73	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NB 998+50 to 1035+90 Story Road to Ocala Avenue	41 - SFR	68-75	38 (5)	3 (0)	28 (3)	0 (0)	0 (0)	0 (0)
NB 1037+60 to 1049+50 Ocala Avenue to Cunningham Avenue	27 - SFR	65-67	0 (6)	27 (21)	27 (27)	0 (0)	0 (0)	0 (0)
SB 967+50 to 970+50 S Capitol Avenue	5 - SFR	67-73	4 2 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)
SB 971+30 to 973+00 S Capitol Avenue	2 - COM	71-74	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
SB 978+00 to 992+70 Excalibur Drive to Story Road	25 - SFR	72-75	25 (21)	0 (0)	23 (14)	0 (0)	0 (0)	0 (0)
SB 993+10 to 996+50	3 - COM	73-74	2 (0)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)

Segment of Capitol Expressway	Number – Type of Receivers ¹	Existing (2017) Noise (Ldn) ²	Without Aerial Guideway Sound Wall & OGAC ³ Year 2043 (Year 2017) ⁴		With Aerial Guideway Sound Wall Year 2043 (Year 2017) ⁴		With Aerial Guideway Sound Wall & OGAC ³ Year 2043 (Year 2017) ⁴	
			Moderate	Severe	Moderate	Severe	Moderate	Severe
Story Road								
SB 998+80 to 1007+20 Story Road to Foxdale Loop	17 - SFR	65-73	4 (16)	13 (1)	16 (0)	0 (0)	0 (0)	0 (0)
SB 1009+00 E. Capitol Expressway	1 - COM	74	1 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)
SB 1012+00 to 1018+00 Foxdale Loop	3 - MFR	69	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
SB 1021+00 to 1035+80 Foxdale Drive to Ocala Avenue	19 - SFR	65-67	4 (18)	15 (1)	18 (1)	0 (0)	0 (0)	0 (0)
Number of Impacts:			96 93 (78)	59 (23)	116 (45)	0 (0)	0 (0)	0 (0)

Notes:

¹ Receiver types include: Single-Family Residence (SFR), Multi-Family Residence (MFR), Commercial/Office Space (COM), and Institutional (INST).

² Day-Night Sound Level (Ldn) is the most common measure of total community noise over a 24-hour period and is used by the FTA to evaluate residential noise impacts from proposed transit projects.

³ Open-graded asphalt concrete (OGAC) is a noise-reducing pavement surface.

⁴ Moderate and severe impacts were determined according to FTA *Noise and Vibration Impact Assessment Guidance Manual* (2006).

Source: ATS Consulting, 2018/2019.

Table 5.3-2 has been revised as follows:

Table 5.3-2 Summary of Operational Transit Vibration Impacts Associated with the Proposed Changes to the Approved Project

Direction/Segment of Capitol Expressway	Number – Type of Receivers ¹	Impact Criteria (VdB) ²	Unmitigated ⁴	With TDA ^{4,5}
NB 964+50 to 981+20 Wilbur Avenue to Mervyns Way	22 – SFR	72 - 78	44 10	44 10
NB 986+70 to 995+50 Mervyns Way to Story Road	5 – INST/COM	78-84 ³	0	0
NB 998+50 to 1035+90 Story Road to Ocala Avenue	41 – SFR	72 - 78	4	4
NB 1037+60 to 1049+50 Ocala Avenue to Cunningham Avenue	27 – SFR	72 - 78	21	21
SB 967+50 to 970+50 S. Capitol Avenue	5 – SFR	72 - 78	3 1	2 0
SB 971+30 to 973+00 S. Capitol Avenue	2 – COM	84 ³	0	0
SB 978+00 to 992+70 Excalibur Drive to Story Road	25 – SFR	72 - 78	2	2
SB 993+10 to 996+50 Story Road	3 – COM	84 ³	0	0
SB 998+80 to 1007+20 Story Road to Foxdale Loop	17 – SFR	72 - 78	15	15
SB 1009+00 E. Capitol Expressway	1 – COM	84 ³	0	0
SB 1012+00 to 1018+00 Foxdale Loop	3 – MFR	72 - 78	0	0
SB 1021+00 to 1035+80 Foxdale Drive to Ocala Avenue	19 – SFR	72 - 78	14	14
Number of Impacts:			73 67	72 66

Notes:

¹ Receiver types include: Single-Family Residence (SFR), Multi-Family Residence (MFR), Commercial/Office Space (COM), and Institutional (INST).

² FTA nighttime impact criteria of 72 vibration decibels (VdB) and daytime of 78 VdB.

³ Impact threshold for offices and non-sensitive areas.

⁴ Impacts were determined according to FTA *Noise and Vibration Impact Assessment Guidance Manual* (2006).

⁵ Tire derived aggregate (TDA) is a resilient underlayment for ballasted track that would only be located at the at-grade and embankment sections.

Source: ATS Consulting, ~~2018~~2019.

The impact discussion and the mitigation discussion under subheading *Vibration Levels From Transit Operation* have been revised as follows:

Impact: The ~~February 14, 2019~~ ~~September 21, 2018~~ *EBRC – CELR Noise and Vibration Assessment* indicates that the proposed changes to the approved project would result in exceedances of the Federal Transit Administration (FTA) nighttime (10:00 pm to 7:00 am) vibration impact criteria at sensitive receivers located within 100 feet of the proposed aerial guideway. Most of the impacts are anticipated to occur between 6:00 am and 7:00 am when VTA would be operating at peak service levels. The proposed aerial guideway (direct fixation fasteners) and ballasted track on embankment sections would cause an exceedance of the nighttime impact criteria at ~~73~~ ~~67~~ sensitive receiver locations. The location of receivers where operational vibration impacts are predicted are as follows:

- ~~Seventeen~~ *Eleven* properties located east and west of the alignment, between Wilbur Avenue and Mervyns Way would experience operational vibration impacts. One home is within 33 feet of the closest support column.

Mitigation: The following mitigation measure identified in the 2005 Final EIR and 2007 Final SEIR would still apply to the proposed changes to the approved project: NV-4b (Use Vibration-Dampening Track Construction Materials). *Mitigation Measure NV-4b has been revised.* With inclusion of TDA, vibration would exceed the nighttime impact criteria at ~~72~~ ~~66~~ sensitive receiver locations at the at-grade and embankment sections of the alignment.

By not including FST; a bridge bearing vibration isolation system; or implementing speed reductions as mitigation, and because TDA is the only feasible mitigation option to reduce vibration levels from operation, this impact would be “Significant and Unavoidable.” Based on the analysis above, the proposed changes to the approved project would result in new significant impacts related to vibration levels from transit operation. With inclusion of TDA, vibration impacts are expected to occur at ~~72~~ ~~66~~ sensitive receivers under the proposed changes to the approved project. This is an increase of ~~20~~ *14* sensitive receivers compared to the 2005 Final EIR, which concluded 52 sensitive receivers would be potentially exposed to vibration impacts during operation.

Mitigation Measure NV-4b: Use Vibration-Dampening Track Construction Materials

VTA shall install a 12-inch layer of tire-derived aggregate beneath a subballast layer of 12 inches and a ballast layer of 12 inches

between Wilbur Avenue and Westboro Drive (Sta. 966+50 to 971+50 NB/SB).

Subheading and first paragraph under subheading *Pile Driving Noise Impacts During Construction* has been revised as follows:

PILE DRIVING (AND ALL OTHER VIBRATORY CONSTRUCTION EQUIPMENT) NOISE IMPACTS DURING CONSTRUCTION

During construction, pile driving would be conducted to install foundation piles for the proposed aerial guideway. *Although other vibratory construction equipment would also be used for the project, the anticipated noise levels from this equipment would not exceed the noise levels from pile driving. As a result, Table 5.3-3 summarizes focuses on the anticipated pile-driving noise impacts generated by the proposed changes to the approved project during construction.*

Table 5.3-3 has been revised as follows:

Table 5.3-3 Summary of Construction Pile Driving Noise Impacts Associated with the Proposed Changes to the Approved Project

Direction/Segment of Capitol Expressway	Number – Type of Receivers¹	Federal Transit Administration Impact Criteria Leq (8-hr) dBA²	Unmitigated³	With Impact Cushions³	With Impact Cushions & Pre-Drilling^{3,5}	With Impact Cushions³ & Noise Shields^{3,6}
NB 964+50 to 981+20 Wilbur Avenue to Mervyns Way	22 – SFR	80	15 12	11 9	9	2 0
NB 986+70 to 995+50 Mervyns Way to Story Road	5 – INST/COM	80/85	5	3	2	0
NB 998+50 to 1035+90 Story Road to Ocala Avenue	41 – SFR	80	41	40	25	0
NB 1037+60 to 1049+50 Ocala Avenue to Cunningham Avenue	27 – SFR	80	27	22	9	0
SB 967+50 to 970+50 S. Capitol Avenue	5 – SFR	80	2 0	0	0	0
SB 971+30 to 973+00 S. Capitol Avenue	2 – COM	85	2 0	2 0	1 0	0
SB 978+00 to 992+70 Excalibur Drive to Story Road	25 – SFR	80	21	21	21	0
SB 993+10 to 996+50 Story Road	3 – COM	85	3	1	0	0
SB 998+80 to 1007+20 Story Road to Foxdale Loop	17 – SFR	80	17	12	2	0
SB 1009+00 E. Capitol Expressway	1 – COM	85	1	1	0	0

Direction/Segment of Capitol Expressway	Number – Type of Receivers¹	Federal Transit Administration Impact Criteria Leq (8-hr) dBA²	Unmitigated³	With Impact Cushions³	With Impact Cushions & Pre-Drilling^{3,5}	With Impact Cushions³ & Noise Shields^{3,6}
SB 1012+00 to 1018+00 Foxdale Loop	3 – MFR	80	3	3	0	0
SB 1021+00 to 1035+80 Foxdale Drive to Ocala Avenue	19 – SFR	80	19	19	11	0
Number of Impacts:			156 149	135 131	80 79	2 0

Notes:

¹ Receiver types include: Single-Family Residence (SFR), Multi-Family Residence (MFR), Commercial/Office Space (COM), and Institutional (INST).

² Day-Night Sound Level (Ldn) is the most common measure of total community noise over a 24-hour period and is used by the Federal Transit Administration (FTA) to evaluate residential noise impacts from proposed transit projects.

³ Impacts were determined according to FTA’s *Noise and Vibration Impact Assessment Guidance Manual* (2006).

⁴ An impact cushion is a type of mitigation that involves initially using burlap bags and then adding wood block when pile driving becomes more difficult.

⁵ Pre-drilling is a type of mitigation that consists of pre-drilling 1/3 of a pile to reduce the total duration of impact time.

⁶ A noise shield is a type of mitigation that consists of a frame that secures acoustic blankets or paneling.

Source: ATS Consulting, 2018/2019.

The impact under subheading *Pile Driving Noise Impacts During Construction* has been revised as follows:

Impact: The ~~February 14, 2019~~ ~~September 21, 2018~~ *EBRC – CELR Noise and Vibration Assessment* indicates that the proposed changes to the approved project would result in exceedances of the FTA construction noise impact criteria at unobstructed homes and businesses (i.e., homes and businesses not shielded by other structures or sound walls) within 300 feet of pile driving activity. The noise impacts would have a duration of 8 to 15 days per sensitive receiver. Pile driving would exceed the construction noise impact criteria of 80 Leq (8-hour) *dBA* at residences and 85 Leq (8-hour) *dBA* at commercial properties at ~~156~~ 149 sensitive receiver locations. The location of receivers where pile driving noise impacts are predicted are as follows:

- ~~Fifteen~~ ~~Twelve~~ residential properties located east of the alignment between Wilbur Avenue and Mervyns Way would experience construction noise impacts. One home is within 25 feet of the closest pile.
- Five institutional/commercial properties located east of the alignment between Mervyns Way and Story Road would experience construction noise impacts.
- Forty-one residential properties located east of the alignment between Story Road and Ocala Avenue would experience construction noise impacts.
- Twenty-seven residential properties located east of the alignment between Ocala Avenue and Cunningham Avenue would experience construction noise impacts.
- ~~Two residential properties located west of the alignment along South Capitol Avenue would experience construction noise impacts.~~
- ~~Two commercial properties located west of the alignment along South Capitol Avenue would experience construction noise impacts.~~
- Twenty-one residential properties located west of the alignment between Excalibur Drive and Story Road would experience construction noise impacts.
- Three commercial properties located west of the alignment near the intersection of Capitol Expressway and Story Road would experience construction noise impacts.

- Seventeen residential properties located west of the alignment between Story Road and Foxdale Loop would experience construction noise impacts.
- One commercial property located west of the alignment near the intersection of Capitol Expressway and Foxdale Loop would experience a construction noise impact.
- Three residential properties located west of the alignment along Foxdale Loop would experience construction noise impacts.
- Nineteen residential properties located west of the alignment between Foxdale Drive and Ocala Avenue would experience construction noise impacts.

The first two measures in Mitigation Measure NV (CON)-2 under subheading *Pile Driving Noise Impacts During Construction* have been revised as follows:

Mitigation Measure NV (CON)-2

A combination of the following measures should be considered if reasonable and feasible to reduce noise and vibration impacts from pile driving:

3. Noise Shield: A pile driving noise shield could be effective at reducing the pile driving noise by a minimum 5 dBA, depending on the size of the shield and how well it surrounds the pile and hammer. A portable shield/barrier could be implemented to provide a nominal 10 dBA noise reduction.
4. Pre-Drilling Piles: Pre-drilling a portion of the hole may provide a means to reduce the duration of impact pile driving, and should be explored. Reducing the total impact time to an aggregate duration of no more than 2 hours per day will reduce the equivalent noise level by 6 dBA to a range of 80 to 90 dBA (L_{eq}) at a distance of 100ft.

The last paragraph of the mitigation discussion under subheading *Pile Driving Noise Impacts During Construction* has been revised as follows:

~~With inclusion of impact cushions, pile driving would exceed the construction noise impact criteria at 135 sensitive receiver locations. With inclusion of impact cushions and pre-drilling, pile driving would exceed the construction noise impact criteria at 80 sensitive receiver locations. With inclusion of impact cushions and noise shields around the pile equipment, pile driving would exceed the construction noise impact criteria at 2 sensitive receiver locations. VTA is recommending to mitigate this impact with noise cushions and temporary noise barriers. Even with inclusion of these mitigation measures, this impact would be “Significant and Unavoidable.” Based on the analysis above,~~

~~the proposed changes to the approved project would result in new significant impacts related to pile driving noise impacts during construction.~~

Subheading and first paragraph under subheading *Pile Driving Vibration Impacts During Construction* has been revised as follows:

PILE DRIVING (AND ALL OTHER VIBRATORY CONSTRUCTION EQUIPMENT) VIBRATION IMPACTS DURING CONSTRUCTION

As discussed above, pile driving would be conducted to install foundation piles for the proposed aerial guideway. *Although other vibratory construction equipment would also be used for the project, the anticipated vibration levels from this equipment would not exceed the vibration levels from pile driving. As a result, Table 5.3-3 summarizes focuses on the anticipated pile-driving vibration impacts generated by the proposed changes to the approved project during construction.*

The impact discussion under subheading *Pile Driving Vibration Impacts During Construction* has been revised as follows:

Impact: The September 21, 2018 *EBRC – CELR Noise and Vibration Assessment* indicates that the proposed changes to the approved project would result in exceedances of the FTA nighttime construction vibration of 0.2 PPV impact criteria at homes within 100 feet of pile driving activity. Pile driving would exceed the construction vibration impact criteria at ~~64~~ 56 sensitive receiver locations. The location of receivers where pile driving vibration impacts are predicted are as follows:

- ~~Nine properties~~ *One property* located east of the alignment between Wilbur Avenue and Mervyns Way would experience construction vibration impacts. One home is within 25 feet of the closest pile.
- Five properties located east of the alignment between Story Road and Ocala Avenue would experience construction vibration impacts.
- Twenty-one properties located east of the alignment between Ocala Avenue and Cunningham Avenue would experience construction vibration impacts.
- Fifteen properties located west of the alignment between Story Road and Foxdale Loop would experience construction vibration impacts.

- Fourteen properties located west of alignment between Foxdale Drive and Ocala Avenue would experience construction vibration impacts.

The following impact from the 2005 Final EIR would still apply to the proposed changes to the approved project: NV (CON)-1: (Generation of Noise or Vibration That Substantially Affects Nearby Sensitive Receptors).

The last paragraph of the mitigation discussion under subheading *Pile Driving Vibration Impacts During Construction* has been revised as follows:

VTA is not recommending the use of non-impact piling methods at ~~any~~ most locations for a couple of reasons. Most locations are only slightly above the FTA Damage Criteria, and therefore may not experience any actual impacts due to *predictions that are based on a high reference level for pile drivers, given the uncertainties in the specific equipment that would be used in practice. It is anticipated that the pile drivers that would be used during construction would create lower levels of vibration than estimated in the analysis.* ~~the +3 VdB safety factor included to estimate construction vibration levels.~~ At the locations with the highest construction vibration levels, structural damage is not anticipated to occur. *However, if any structural and cosmetic damage does occur due to construction vibration, the damage shall be repaired by VTA.* As a result, VTA is not recommending to use non-impact piling methods at ~~any~~ most locations. Thus, this impact would be “Significant and Unavoidable.”

SECTION 5.4, AIR QUALITY AND CLIMATE CHANGE

Mitigation discussion under subheading *Impacts on Air Quality Emissions During Construction* has been revised to add a mitigation measure as follows:

Mitigation Measure AQ (CON)-3

Tier 3 or 4 equipment shall be used to further reduce construction-related emissions where possible.

Mitigation discussion under subheading *Cumulative Impacts* has been revised as follows:

The following mitigation measures identified in the 2005 Final EIR would still apply to the proposed changes to the approved project: AQ (CON)-1 (BAAQMD’s BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD’s BMPs to reduce GHG emissions from construction equipment). *In addition, Mitigation Measure AQ (CON)-3 would require that Tier 3 or Tier 4 equipment be used to further reduce construction-related emissions where possible.* Even with inclusion of these mitigation

measures, this impact would be “Significant and Unavoidable.” Based on the analysis above, the proposed changes to the approved project would result in new significant impacts or a substantial increase in the severity of previously identified significant cumulative impacts related to pollutant concentration exposure on sensitive receptors during construction.

SECTION 5.5, CONSTRUCTION

The revisions noted in other sections that would also result in revisions to this section (specifically Section 5.3, *Noise and Vibration*, and Section 5.4, *Air Quality and Climate Change*) are not duplicated here to maintain this chapter’s clarity.

Draft SEIR-2 Attachments

ATTACHMENT B

First paragraph under subheading *Recommended Light Rail Alternative* has been revised as follows:

The Recommended Light Rail Alternative would extend along Capitol Expressway from the existing Alum Rock Light Rail Station to the Eastridge Transit Center a distance of approximately 2.4 miles. Light rail will operate primarily in the median of Capitol Expressway within exclusive and semi-exclusive rights-of-way. Property acquisition for the project would be minimized through the removal of two high-occupancy vehicle (HOV) lanes on Capitol Expressway between Story Road and Tully Road. The project will include new light rail stations at Story Road (aerial) and Eastridge Transit Center (at-grade). The project will also include traction power substations at Ocala Avenue and Eastridge Transit Center. Relocation and replacement of a number of 115-kilovolt steel lattice electrical transmission towers with Tubular Steel Poles (TSPs) *will also be included in the project.*

Second paragraph under subheading *Right-Of-Way Requirements* has been revised as follows:⁴

In addition, 6 steel lattice towers and 2 Tubular Steep Poles [TSPs] carrying the Pacific Gas & Electric Company’s (PG&E) McKee-Piercy and Milpitas-Swift sections of the 115 kilovolt transmission lines would need to be relocated between Ocala Avenue and north of Quimby Road. A total of 10 new TSPs would be installed. It is anticipated that the TSPs would need to be up to 121 feet in height in order to clear the aerial guideway. As a result of the increase in height of the TSPs and the proximity to Reid-Hillview Airport, PG&E may need to install red light-emitting diode (LED) obstruction lighting on some or all of the new or

⁴ The revision to this paragraph is in the last sentence. A space was added between “Figures 6a and 6b” and “show the proposed project work...” Due to the nature of the revision, it is not shown in *italics* or ~~strikeout~~ text.

modified towers or poles in accordance with Federal Aviation Administration (FAA) requirements. These lights would be powered either by solar panels or local distribution electric lines. One of the TSPs (No. 54) may require right-of-way from the Santa Clara Valley Water District for placing the TSP and its foundation. The new TSPs would be mounted on a drilled foundation. Figures 6a and 6b show the proposed project work for the electrical transmission facilities.

Second paragraph under subheading *Park-and-Ride Facilities* has been revised as follows:

To serve the approved project, there would be no increase in parking at Alum Rock Station because of space constraints. The Eastridge Park-and-Ride lot currently includes 180 parking spaces because of relocation of VTA Paratransit personnel and vehicles to a remodeled building at this location in September 2017. VTA is proposing to increase the parking to approximately ~~200~~ 302 spaces *through reconfiguration of the Eastridge park-and-ride lot. As part of project operations, VTA would conduct regular monitoring and parking counts at the Eastridge Park-and-Ride lot to ensure that the parking supply provided would be adequate. Should parking demand exceed supply, the 135 parking spaces currently used for Paratransit would be vacated as needed to accommodate parking demand.*

Table 2 under subheading Right-of-Way Requirements has been revised. The revisions are consistent with the revised Table 3.14-3 at the end of this chapter.

ATTACHMENT C

The revised detailed plans are included in Chapter 2 of this Final SEIR-2.

ATTACHMENT D

The revised *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project Supplemental Transportation Analysis* is included in Volume II.

ATTACHMENT E

The revised *EBRC – CELR Noise and Vibration Assessment* is included in Volume II.

ATTACHMENT G

The revised Second Subsequent IS is included in Volume III.

Section 2.2, first paragraph under subheading *Reduction in Parking Spaces at Eastridge Park-and-Ride Lot* and Table 2-2, have been revised as follows:

The Eastridge Park-and-Ride lot currently includes approximately 180 parking spaces. The approved project increases the parking to 445 spaces at Eastridge

Station to partially address the increased demand of 481 spaces from the project. As part of the proposed changes to the approved project, VTA is proposing to ~~reduce~~ *increase* the parking to approximately ~~200~~ 302 spaces *through reconfiguration of the Eastridge Park-and-Ride lot due to the relocation of VTA Paratransit staff and vehicles to a remodeled building at this location in September 2017. The relocation of VTA Paratransit staff and vehicles to this location has reduced the availability of parking at the Eastridge park and ride lot.* See Section 2.3, *Changes in Circumstances*, for a discussion of the changes to the existing VTA Paratransit offices at the Eastridge Park-and-Ride lot. As shown in Table 2-2, based on updated VTA forecasts, the proposed changes to the approved project would increase existing (2017) parking demand to 114 parking spaces. In 2023 and 2043, the proposed changes to the approved project would increase parking demand to 293 vehicles and 374 vehicles, respectively. *As part of project operations, VTA would conduct regular monitoring and parking counts at the Eastridge Park-and-Ride lot to ensure that the parking supply provided would be adequate. Should parking demand exceed supply, the 135 parking spaces currently used for VTA Paratransit would be vacated as needed to accommodate parking demand.*

Table 2-2 Eastridge Park-and-Ride Lot Anticipated Parking Demand for the Approved Project and the Proposed Changes (Existing [2017] Year, Year 2023, Year 2035, and Year 2043)

	Existing (2009 or 2017) ¹	Year 2023 ²	Year 2035 ³	Year 2043 ²
Approved Project				
Demand	16	--	481	--
Supply	115	--	445	--
Proposed Changes to the Approved Project				
Demand	114	293	--	374
Supply	180	302	--	200 374

Notes:

¹ Existing parking counts provided by VTA Operations on December 20, 2017.

² Future Parking estimates provided by VTA Modelling on May 31, 2018.

³ Only parking forecasts for 2035 were provided in the 2014 Subsequent IS/MND. Updated parking forecasts were not provided for 2035 due to changes in the opening year and future year.

Source: Hexagon 2018.

Section 3.10, third paragraph under subheading *Environmental Impacts and Mitigation*, has been revised as follows:

In addition, construction of the proposed changes to the approved project would in some cases require dewatering and the associated discharge of groundwater or dewatering effluent. This is an impact that was not analyzed in the 2005 Final EIR. Construction of the proposed changes to the approved project would require additional dewatering activities associated with installation of the concrete columns for the proposed aerial guideway. When temporary and limited groundwater dewatering would be required for construction activities, dewatering effluent would be treated and discharged ~~(in accordance with provisions of the Construction General Permit)~~ back to the nearby surface water, if possible, providing an opportunity for groundwater recharge. ~~Thus, the discharged effluent would have the opportunity to recharge the aquifer.~~ *A dewatering plan will be submitted and approved by VTA to determine treatment and disposal options for extracted groundwater prior to any dewatering activities.*

Figures 1-1, 2-1, 2-4, 3.14-1 have been revised as shown on the following pages.

Table 3.14-3 has been revised as shown on the following pages.

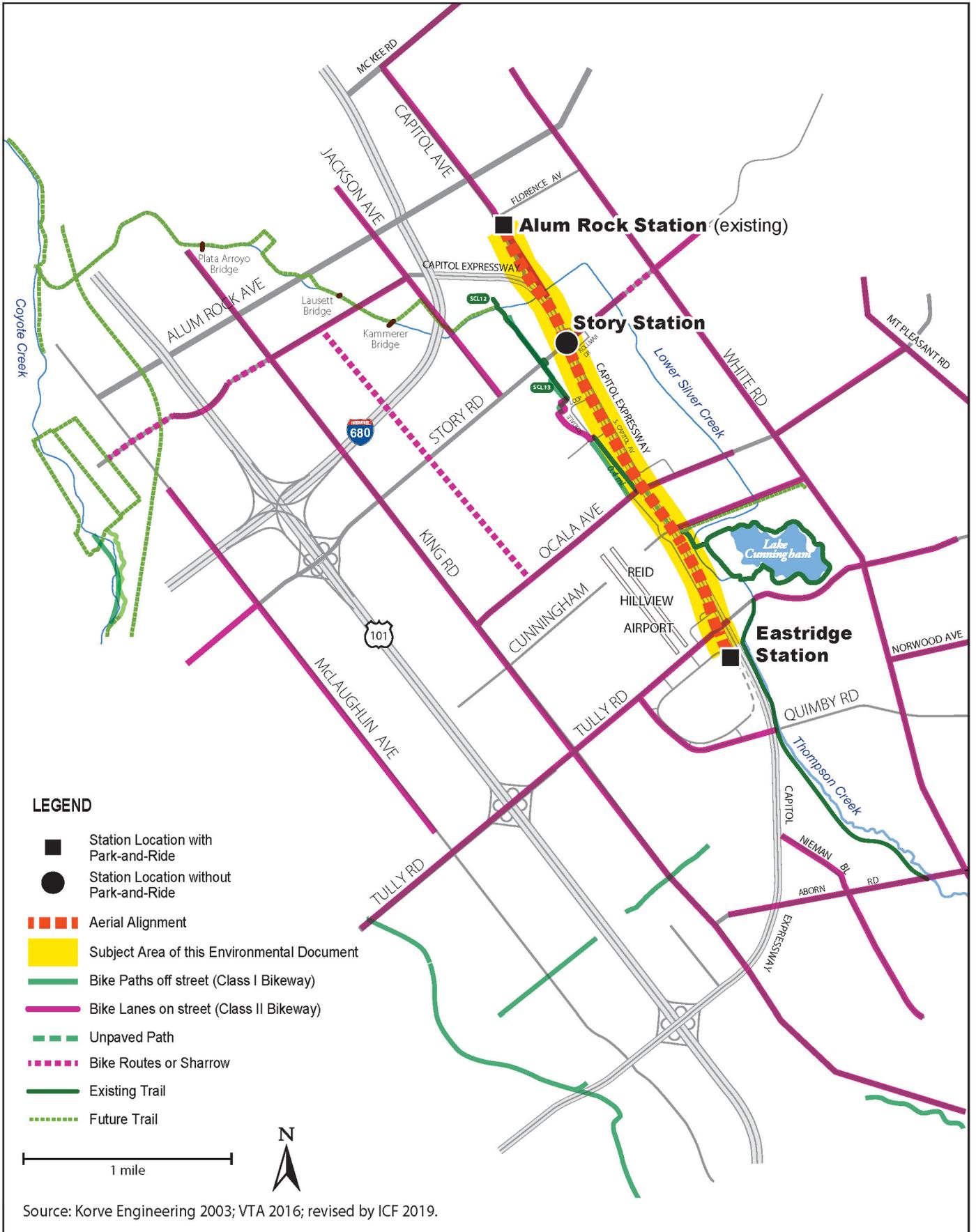


Figure 1-1
Proposed Changes to Capitol Expressway Light Rail Project

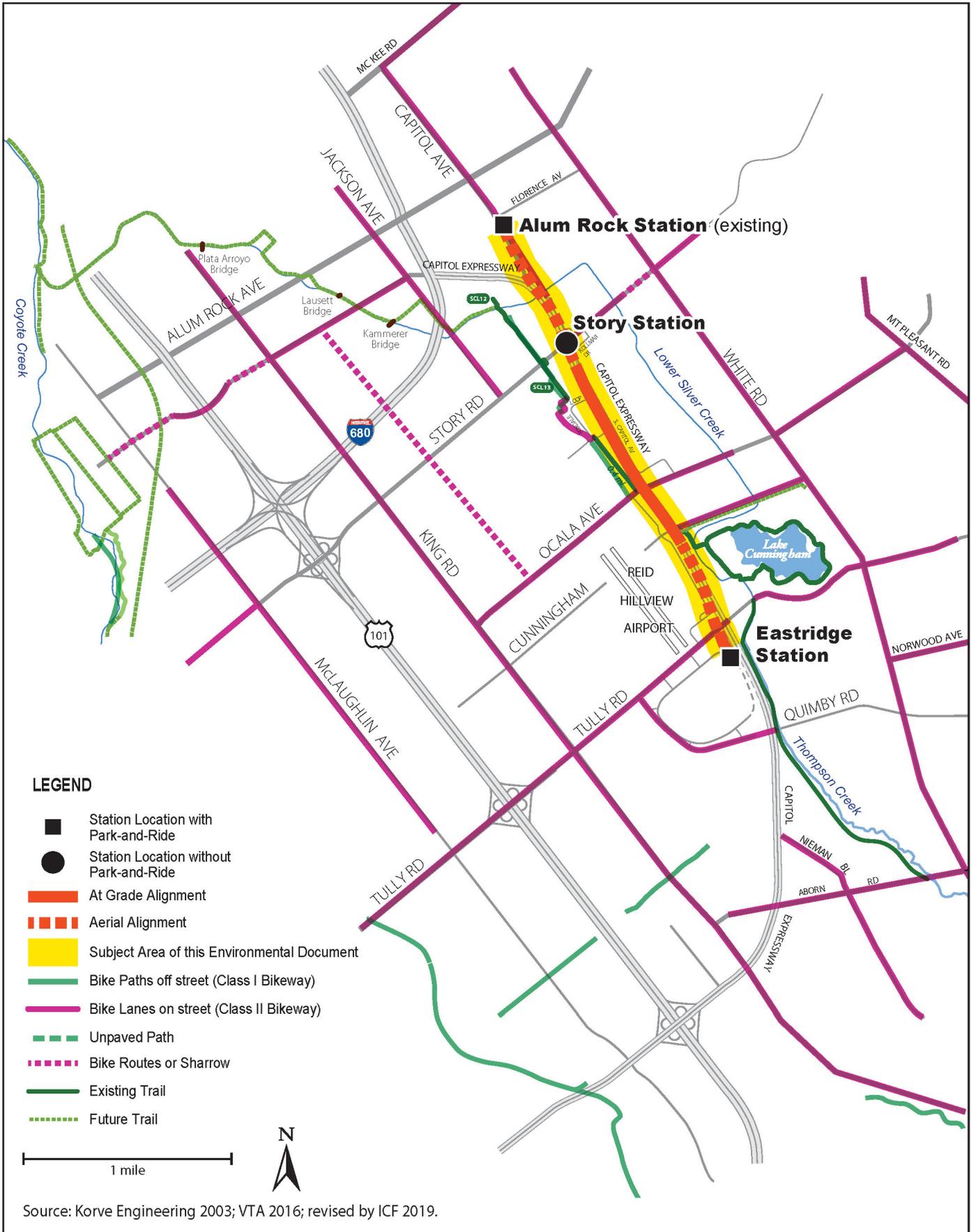
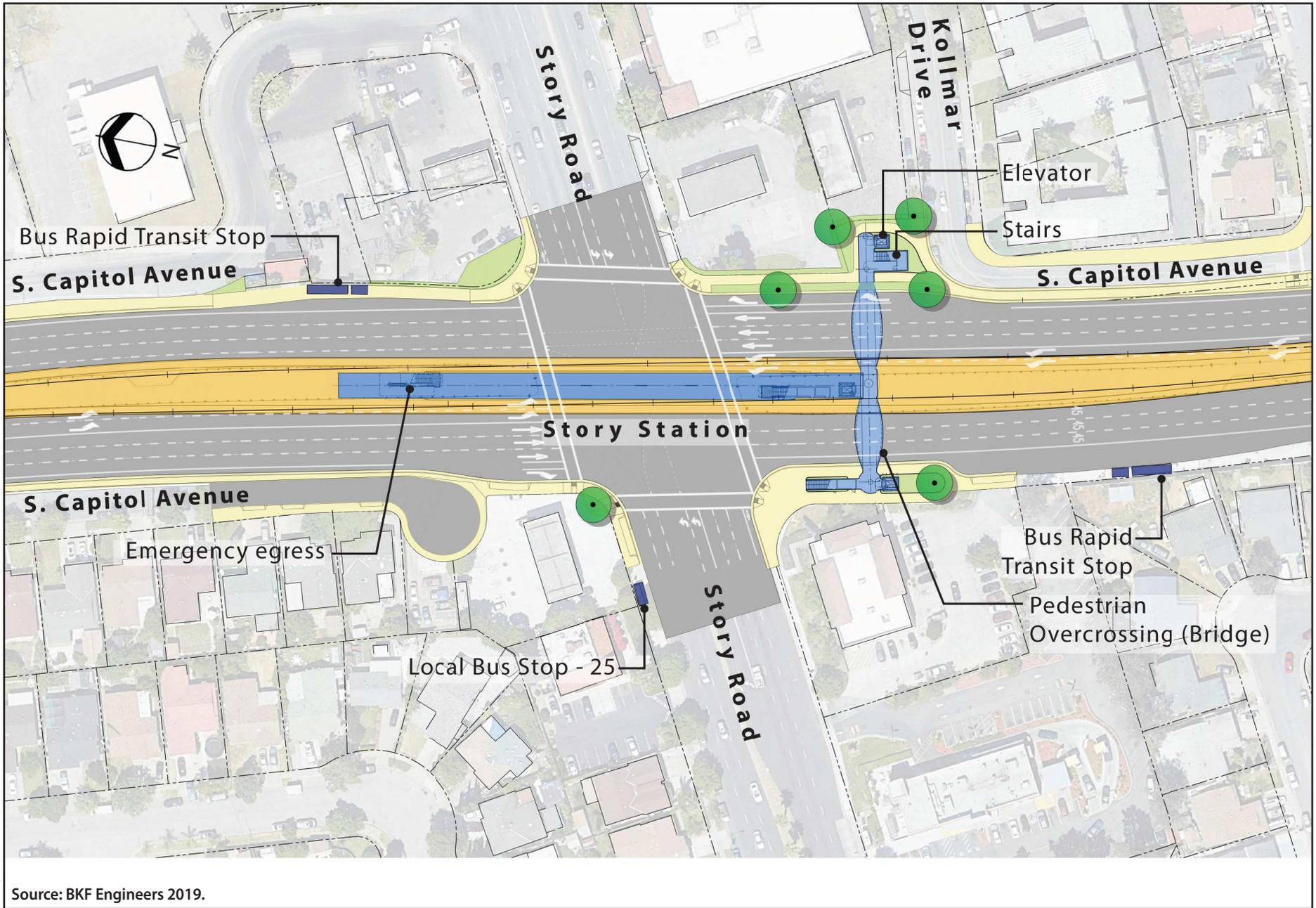


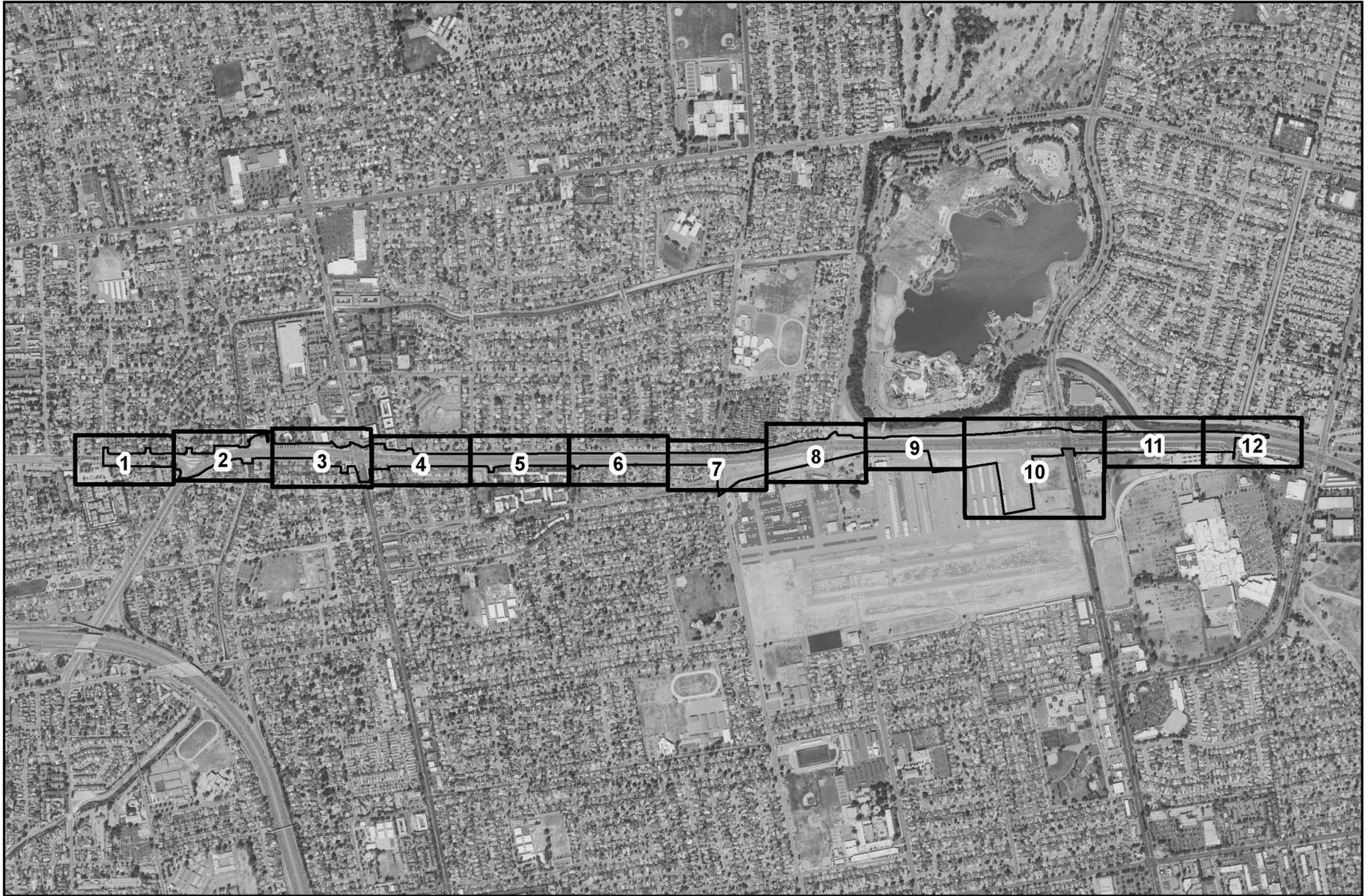
Figure 2-1
Previously Approved Capitol Expressway Light Rail Project



ICF Graphics 00011:18 (4/29/19) AB

Source: BKF Engineers 2019.

Figure 2-4
Proposed Changes to the Story Station



Service Layer Credits: Esri, USDA Farm Service Agency, ICF 2019, BKF 2019

Legend

-  Capitol Expressway Corridor
-  Map Book Sheet

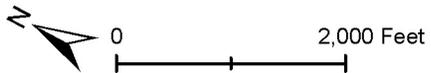
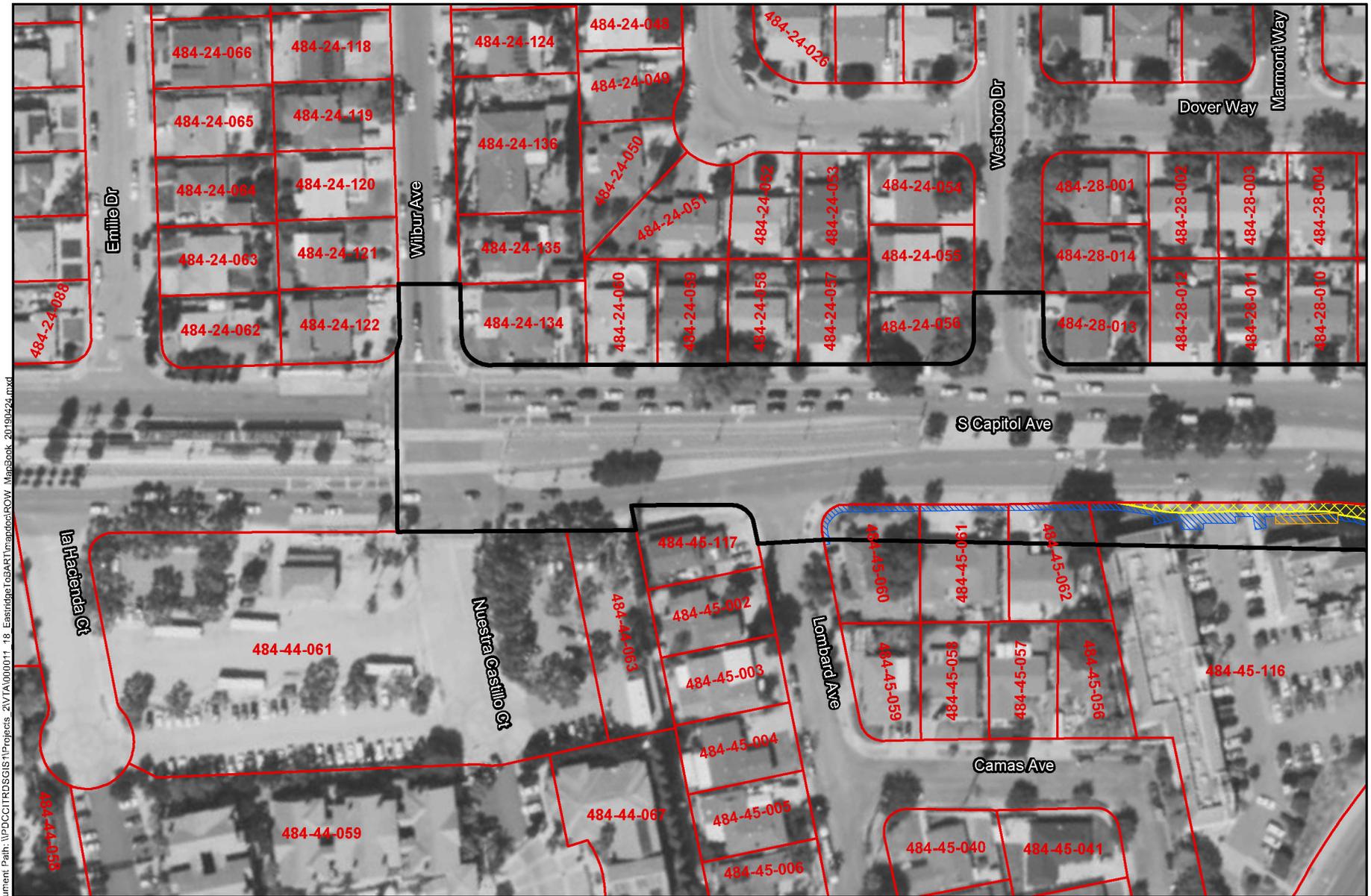
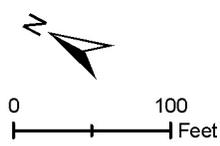


Figure 3.14-1
Right-of-Way Requirements for
the Proposed Changes



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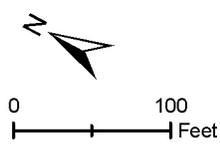


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|---------------|-----------------------------|--------------------------|---|--------------------------|---------------------------------|
| Legend | | Permanent Impacts | | Temporary Impacts | |
| | Capitol Expressway Corridor | | Right-of-Way Take | | Public Service Easement |
| | Parcel Boundary | | Maintenance Easement | | Roadway Easement |
| | Assessor Parcel Numbers | | PG&E Electrical Transmission Easement (Overhead Easement) | | Temporary Construction Easement |
| | 111-11-111 Parcel Numbers | | Private Ingress Egress Easement | | Staging Area |

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 1 of 12)

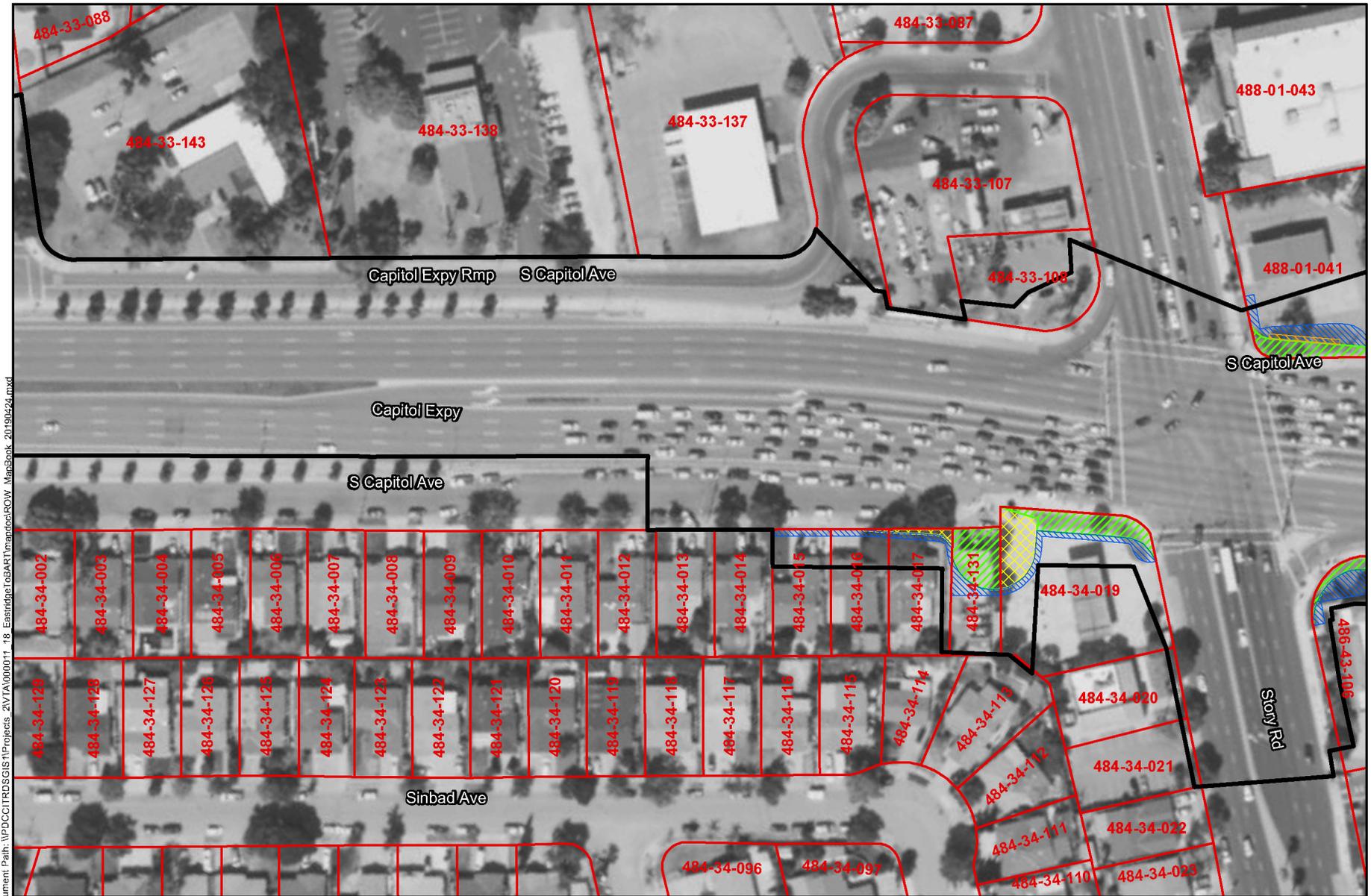


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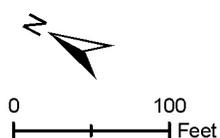


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| Legend | | Permanent Impacts | | Temporary Impacts | |
| | Capitol Expressway Corridor | | Right-of-Way Take | | Public Service Easement |
| | Parcel Boundary | | Maintenance Easement | | Roadway Easement |
| | Assessor Parcel Numbers | | PG&E Electrical Transmission Easement (Overhead Easement) | | Temporary Construction Easement |
| | 111-11-111 | | Private Ingress Egress Easement | | Staging Area |

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 2 of 12)

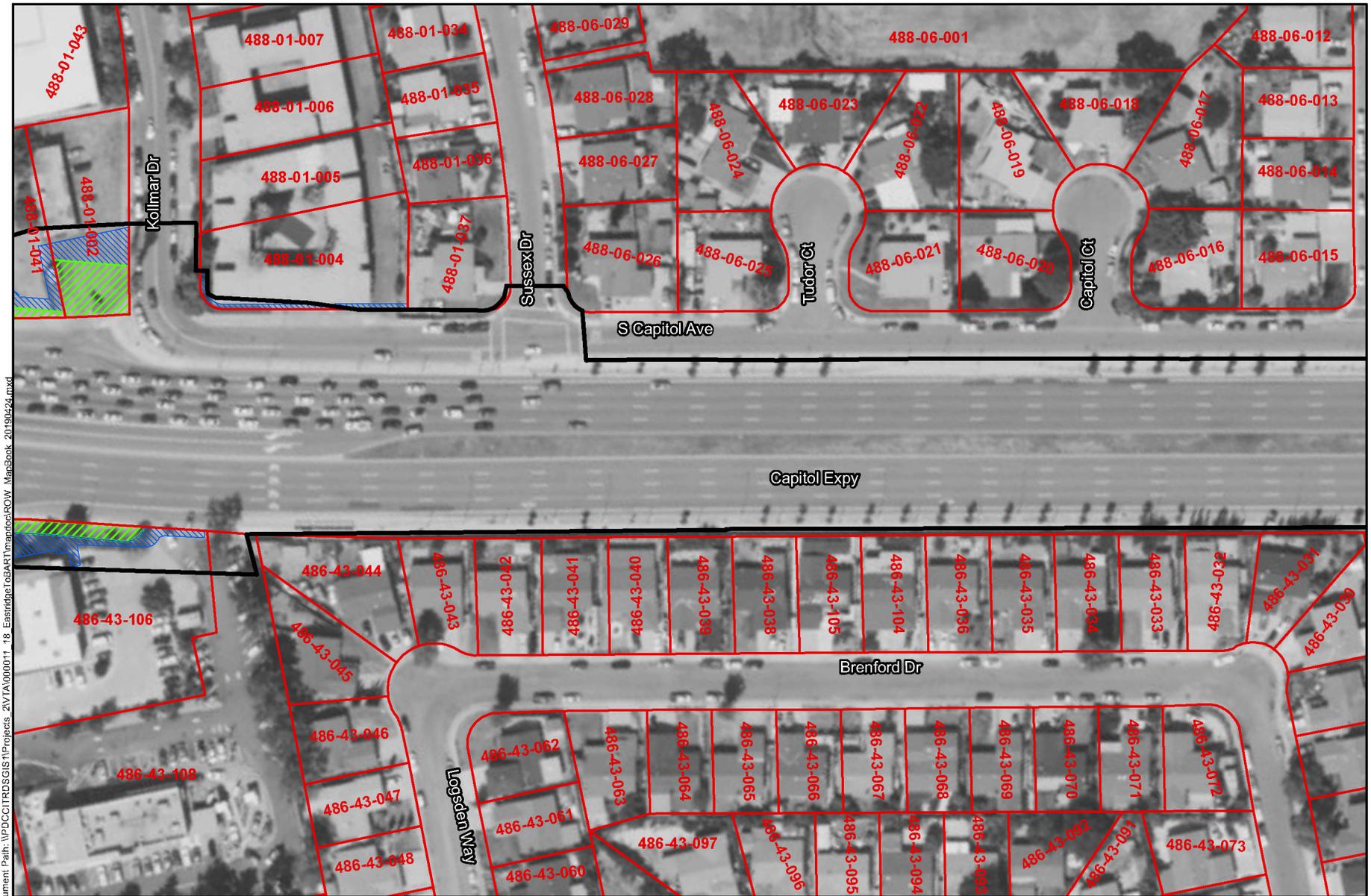


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| Legend | | Permanent Impacts | | Temporary Impacts | |
| | Capitol Expressway Corridor | | Right-of-Way Take | | Public Service Easement |
| | Parcel Boundary | | Maintenance Easement | | Roadway Easement |
| | Assessor Parcel Numbers | | PG&E Electrical Transmission Easement (Overhead Easement) | | Temporary Construction Easement |
| | 111-11-111 | | Private Ingress Egress Easement | | Staging Area |

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 3 of 12)



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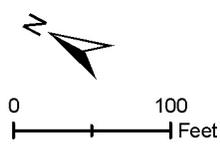
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	Parcel Boundary		Maintenance Easement		Roadway Easement
	Assessor Parcel Numbers		PG&E Electrical Transmission Easement (Overhead Easement)		Temporary Construction Easement
	111-11-111 Parcel Numbers		Private Ingress Egress Easement		Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
(Sheet 4 of 12)



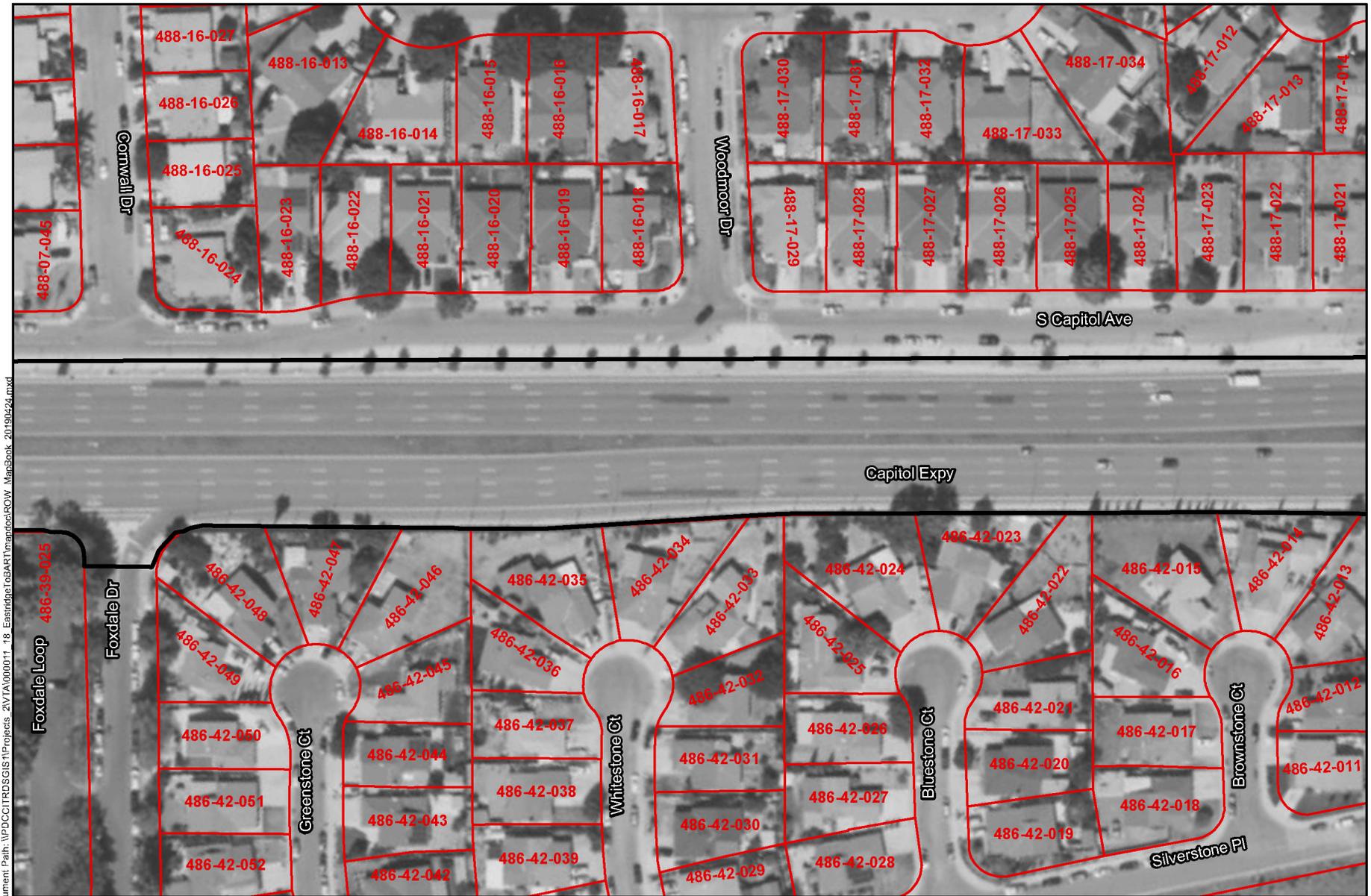
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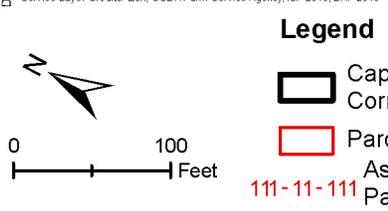


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| Legend | | Permanent Impacts | Public Service Easement |
| Capitol Expressway Corridor | Parcel Boundary | Right-of-Way Take | Roadway Easement |
| Assessor's Parcel Numbers | Parcel Numbers | Maintenance Easement | Temporary Impacts |
| 111-11-111 | | PG&E Electrical Transmission Easement (Overhead Easement) | Temporary Construction Easement |
| | | Private Ingress Egress Easement | Staging Area |

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 5 of 12)



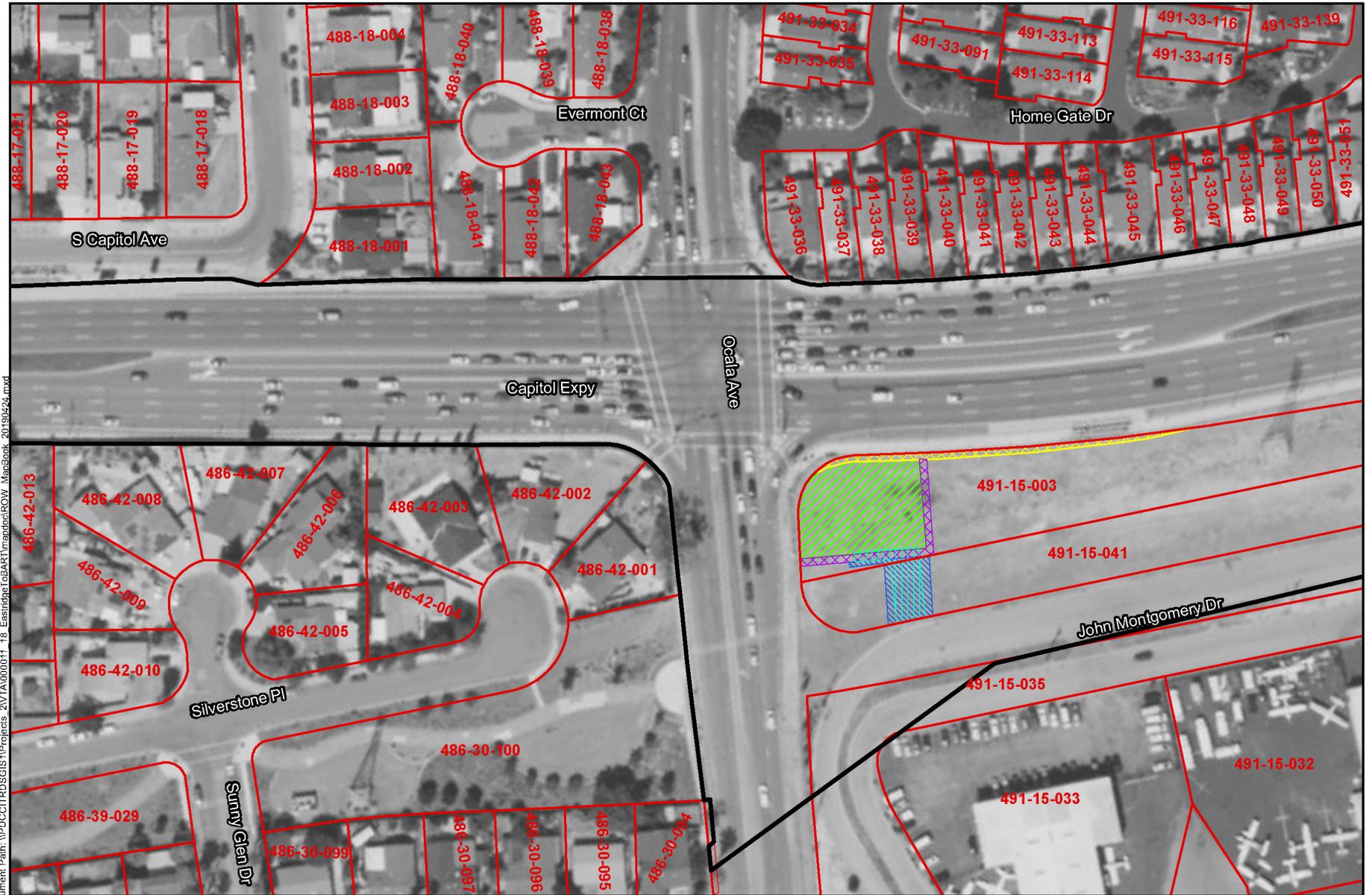
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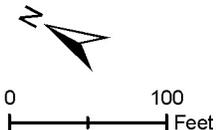
- Legend**
- Capitol Expressway Corridor
 - Parcel Boundary
 - 111-11-111 Assessor Parcel Numbers
 - Permanent Impacts
 - Right-of-Way Take
 - Maintenance Easement
 - PG&E Electrical Transmission Easement (Overhead Easement)
 - Private Ingress Egress Easement

- Public Service Easement
- Roadway Easement
- Temporary Impacts**
 - Temporary Construction Easement
 - Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 6 of 12)



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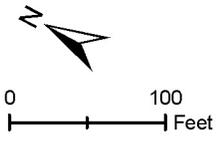


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| Legend | | Permanent Impacts | | Temporary Impacts | |
| | Capitol Expressway Corridor | | Right-of-Way Take | | Public Service Easement |
| | Parcel Boundary | | Maintenance Easement | | Roadway Easement |
| | Assessor Parcel Numbers | | PG&E Electrical Transmission Easement (Overhead Easement) | | Temporary Construction Easement |
| | 111-11-111 Parcel Numbers | | Private Ingress Egress Easement | | Staging Area |

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 7 of 12)

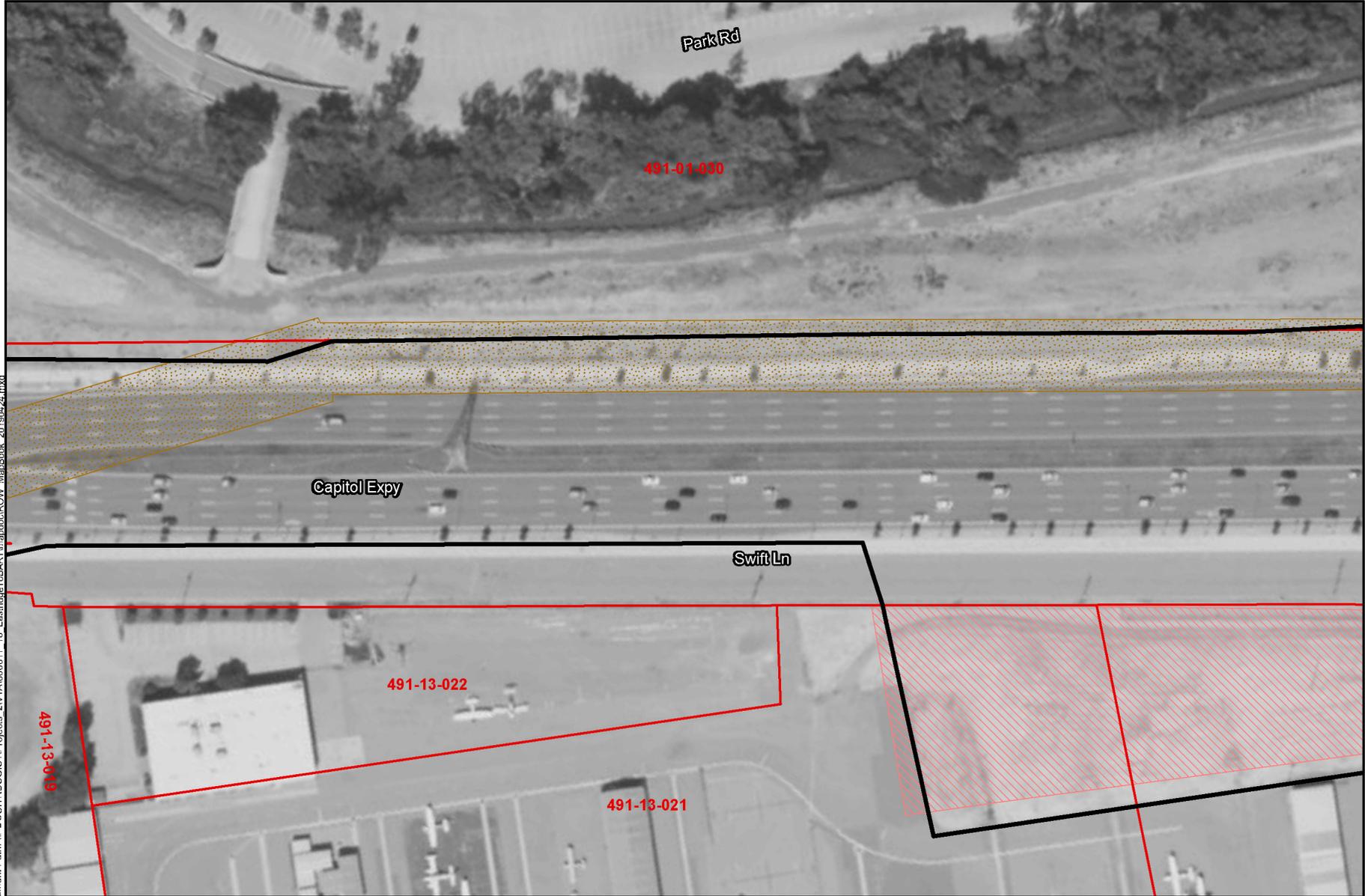


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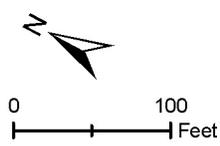
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	Parcel Boundary		Maintenance Easement		Roadway Easement
	Assessor Parcel Numbers		PG&E Electrical Transmission Easement (Overhead Easement)		Temporary Construction Easement
	111-11-111 Parcel Numbers		Private Ingress Egress Easement		Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 8 of 12)



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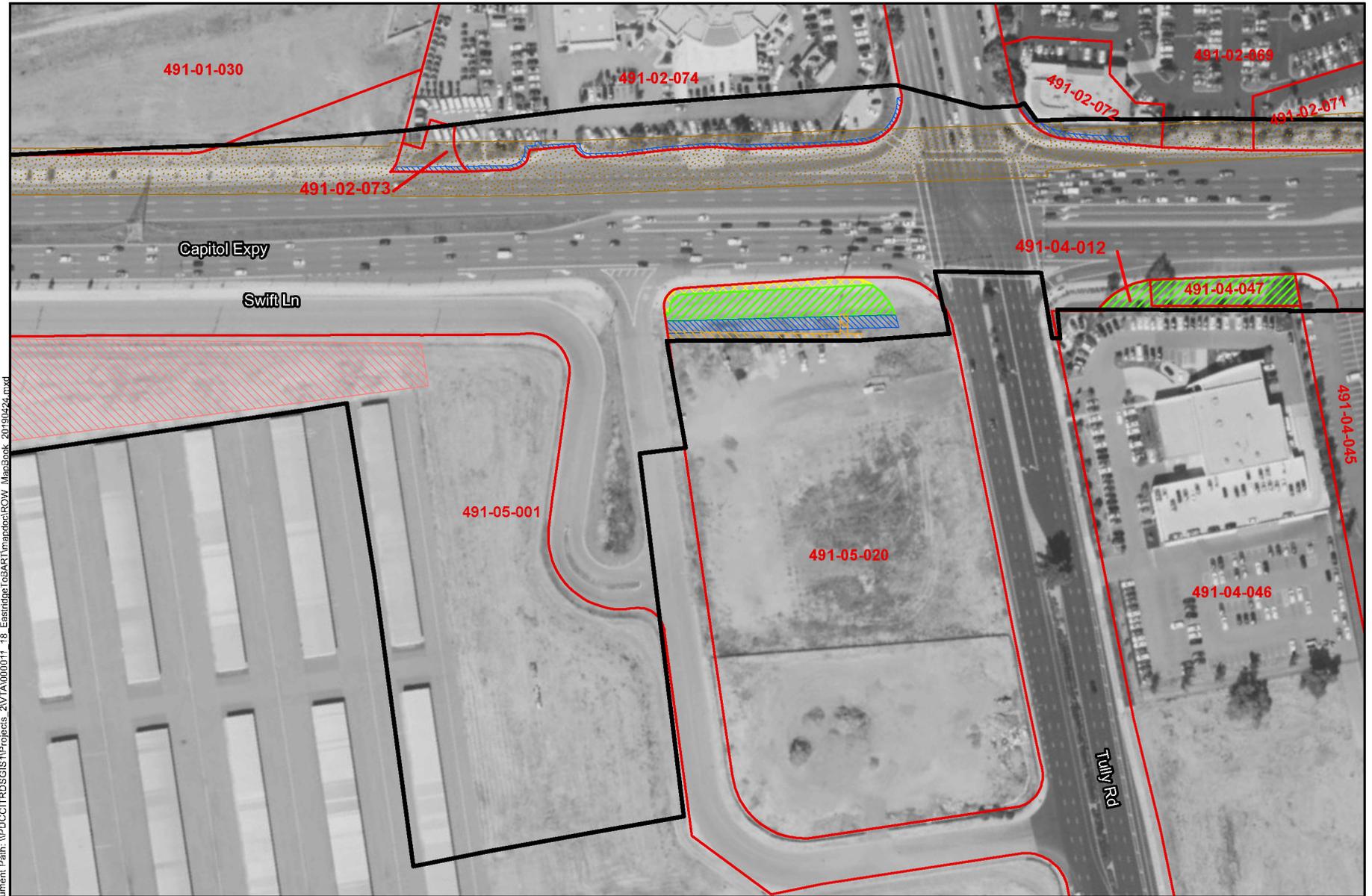


- Legend**
- Capitol Expressway Corridor
 - Parcel Boundary
 - Assessor
 - 111-11-111 Parcel Numbers

- Permanent Impacts**
- Right-of-Way Take
 - Maintenance Easement
 - PG&E Electrical Transmission Easement (Overhead Easement)
 - Private Ingress Egress Easement

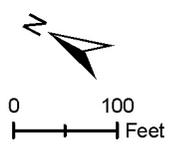
- Public Service Easement
- Roadway Easement
- Temporary Impacts**
- Temporary Construction Easement
- Staging Area

Figure 3.14-1
Right-of-Way Requirements
for the Proposed Changes
 (Sheet 9 of 12)



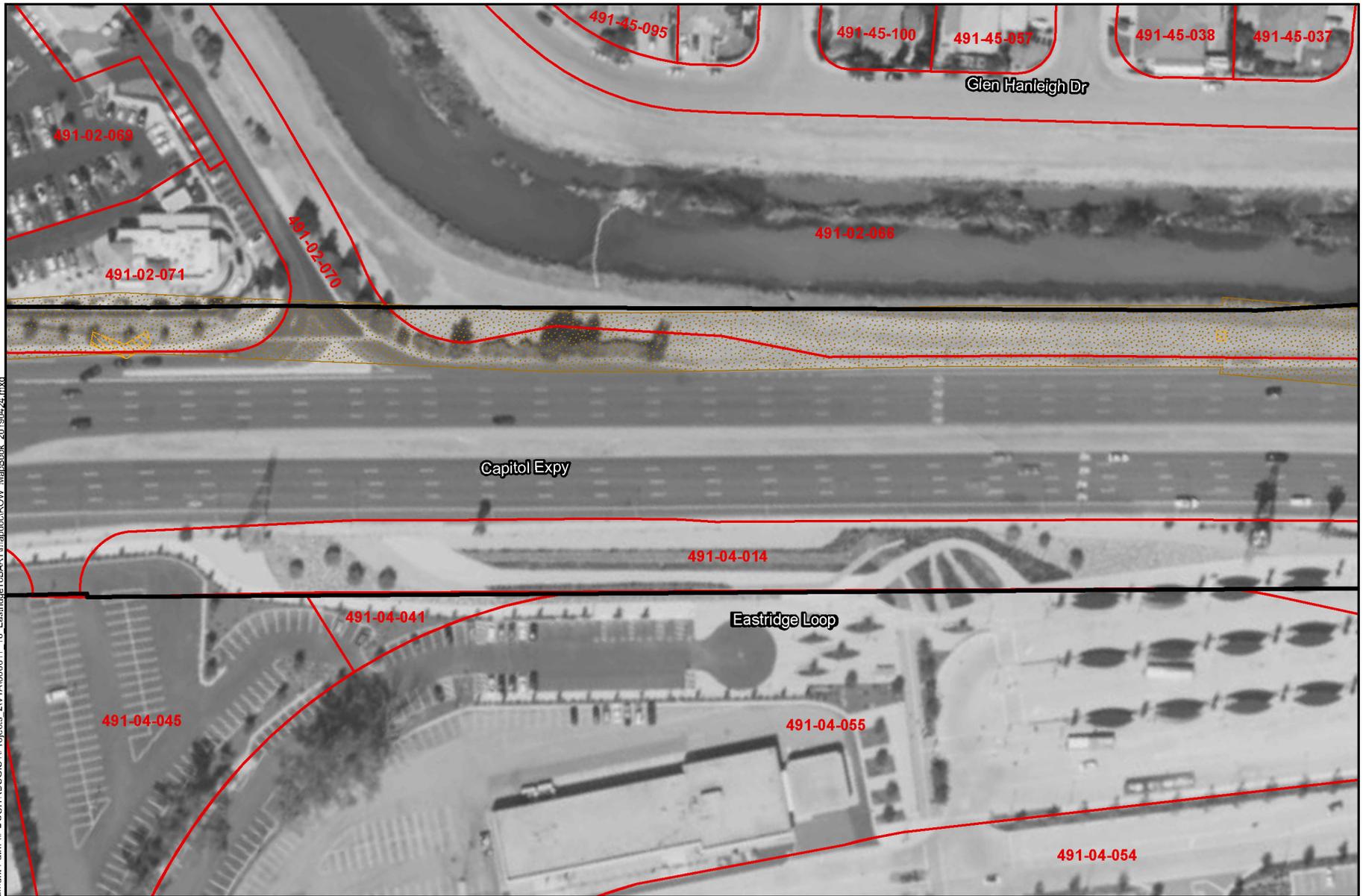
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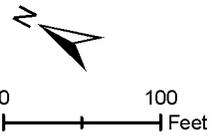


Legend		Permanent Impacts		Temporary Impacts	
	Capitol Expressway Corridor		Right-of-Way Take		Public Service Easement
	Parcel Boundary		Maintenance Easement		Roadway Easement
	Assessor		PG&E Electrical Transmission Easement (Overhead Easement)		Temporary Construction Easement
	111-11-111 Parcel Numbers		Private Ingress Egress Easement		Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 10 of 12)



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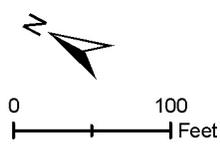
Legend		Permanent Impacts		Temporary Impacts	
	Capitol Expressway Corridor		Right-of-Way Take		Public Service Easement
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	111-11-111 Parcel Numbers		Private Ingress Egress Easement		Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 11 of 12)



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- Legend**
- Capitol Expressway Corridor
 - Parcel Boundary
 - Assessor
 - 111-11-111 Parcel Numbers

- Permanent Impacts**
- Right-of-Way Take
 - Maintenance Easement
 - PG&E Electrical Transmission Easement (Overhead Easement)
 - Private Ingress Egress Easement

- Public Service Easement
- Roadway Easement
- Temporary Impacts**
- Temporary Construction Easement
- Staging Area

Figure 3.14-1
Right-of-Way Requirements for the Proposed Changes
 (Sheet 12 of 12)

Table 3.14-3 Preliminary Property Right-of-Way Requirements for the Proposed Changes

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
1	484-33-108	2701 Story Road	Business	TCE	0	237	Partial
2 1	488-01-041	2710 Story Road	Business	Partial Fee Take, TCE, Permanent Easement, Access Restriction	1,175	1,845 2,405	Partial
3 2	488-01-002	1148 Kollmar Drive	Business	Partial or Full Fee Take, ¹ TCE	2,428	1,523	Partial
4 3	488-01-004	2710 Kollmar Drive	Multi-Family	TCE	0	687 978	Partial
5	488-01-037	2709 Sussex Drive	Single-Family	TCE	0	74	Partial
6 4	491-01-016	SE Corner of Capitol Expressway & Cunningham Avenue	Public	Partial Fee Take, TCE ²	514 761	701 771	Partial
7 5	491-02-073	3000 E. Capitol Expressway	Business	Partial Fee Take, TCE, Permanent Easement	2,246 2,470	1,757 473	Partial
8 6	491-02-074	3001 E. Capitol Expressway	Business	Partial Fee Take, TCE, Permanent Easement	8,496 13,400	10,582 3,122	Partial
9 7	491-02-069	2880 E. Capitol Expressway	Business	Permanent Easement	922 2,260	0	Partial
10 8	491-02-070	2950 E. Capitol Expressway	Business	Permanent Easement	1,582 2,514	0	Partial
11 9	491-02-071	2950 E. Capitol Expressway	Business	Permanent Easement	4,644 9,786	0	Partial
12 10	491-02-072	2990 E. Capitol Expressway	Business	TCE, Permanent Easement	1,194 4,445	1,917	Partial
13 11	491-02-066	Thompson Creek	Public	Permanent Easement	21,770 38,690	0	Partial
14 12	491-48-006	Thompson Creek	Public	Permanent Easement	4,706 43,240	0	Partial

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
15 13	484-45-060	2686 Lombard Avenue	Single-Family	TCE	0	465	Partial
16 14	484-45-061	353 S. Capitol Avenue	Single-Family	TCE	0	337	Partial
17 15	484-45-062	455 S. Capitol Avenue	Single-Family	TCE	0	310	Partial
18 16	484-45-116	461 S. Capitol Avenue	Business	Partial Fee Take, TCE	2,277 2,168	2,223 2,462	Partial
19 17	484-34-015	1017 S. Capitol Avenue	Single-Family	TCE	0	250	Partial
20 18	484-34-016	1033 S. Capitol Avenue	Single-Family	Partial Fee Take, Permanent Easement, TCE	22	250	Partial
21 19	484-34-017	1049 S. Capitol Avenue	Single-Family	Partial or Full Fee Take, ⁺ Permanent Easement, TCE	225	335	Partial
22 20	484-34-131	1091 & 1093 S. Capitol Avenue	Business	Partial or Full Fee Take ¹ , TCE	1,829	277 533	Partial or Full
23 21	484-34-019	2695 Story Road	Business	Partial Fee Take, TCE	3,977 3,979	878 957	Partial
24 22	486-39-025	1330 Foxdale Loop	Multi-Family	TCE	0	4,593 943	Partial
25 23	486-43-106	2690 Story Road	Business	Partial Fee Take, TCE	1,479 1,629	3,343 2,364	Partial
26	486-43-108	2680 Story Road	Business	TCE, Permanent Easement	3	6	Partial
27 24	491-15-003	Reid-Hillview Airport	Public	Partial Fee Take, TCE, Permanent Easement	8,299 10,600	1,084 1,154	Partial

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
28 25	491-15-041	Swift Avenue	Utility	Partial Fee Take, TCE Permanent Easement ²	1,817	816 2,746	Partial
29 26	491-13-009	Reid-Hillview Airport	Public	Permanent Easement	1,401	0	Partial
30	491-05-001	North of Airport Access Road	Public	TCE, Permanent Easement	1,699	106,481	Partial
34 27	491-05-020	Reid-Hillview Airport	Public	Partial Fee Take, Permanent Easement, TCE	16,598 16,598	5,169 5,169	Partial
32 28	491-04-012	290 E. Capitol Expressway	Business	Full Fee Take	3,030 3,019	0	Full
33 29	491-04-047	290 E. Capitol Expressway	Business	Full Fee Take	5,864 5,852	0	Full
34 30	484-33-110	2785 Mervyns Way	Public	Partial Fee Take, TCE	374 841	642 640	Partial
35 31	NA 491-13-021	NA² Laydown Area at Reid-Hillview	Public Right-of-Way	Permanent Easement TCE	32,575 0	0 26,067	Partial
36 32	NA 491-05-001	NA² Laydown Area at Reid-Hillview	Public Right-of-Way	Permanent Easement TCE	4,134 0	0 73,553	Partial
33	491-01-030	City-owned Parcel at Lake Cunningham	Public	Permanent Easement	47	0	Partial
34	491-37-106	2530 Quimby Road	Single-Family	Permanent Easement	823	0	Partial
35	-	Capitol Expressway	Public	Permanent Easement (Sanitary Sewer)	519	0	Partial
Total Right-of-Way Needed:					135,280 172,666	146,782 129,724	NA

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	

Notes:

TCE = Temporary Construction Easement; NA = Not Applicable; IEE = Ingress Egress Easement

Partial Fee Take refers to the partial right-of-way need of a parcel; Full Fee Take refers to the full right-of-way need of a parcel.

¹ These areas are within public right-of-way, and do not have an Assessor's Parcel Number or address associated with them.

Source: BKF ~~2018~~ 2019.