SAN ANSELMO FLOOD RISK REDUCTION PROJECT

Second Addendum to the 2018 San Anselmo Flood Risk Reduction Project Final Environmental Impact Report (SCH # 2017042041)

Prepared for Marin County Flood Control and Water Conservation District November 2023





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TABLE OF CONTENTS

San Anselmo Flood Risk Reduction Project Second Addendum to the 2018 San Anselmo Flood Risk Reduction Project Final Environmental Impact Report

				<u>Page</u>
Chap	oter 1	Introd	uction and Summary	1
	1.1	Projec	t Background	1
	1.2		ary of the Project	
	1.3	Supple	emental Environmental Review of the Modified Project	4
	1.4		v and Comment	
Cha	oter 2	Projec	ct Description	7
•	2.1	Introdu	uction and Background	7
	2.2		t Components	
		2.2.1	Retaining Wall	
		2.2.2	Pedestrian Bridge Abutments	
		2.2.3	Storm Drain Outfalls	
		2.2.4	Additional Bioengineered Creek Bank and Channel Protection	
		2.2.5		
	2.3	_	t Variant: Baffle and Channel Bed Scour Protection	
	2.4		ruction	
		2.4.1		
		2.4.2		
		2.4.3	Construction Access, Staging, Equipment, and Workforce	
	2.5	_	tions and Maintenance	
	2.6		ed Approvals	
	2.7		of the Environmental Review	
Chai	nter 3	Fnvir	onmental Checklist for Supplemental Environmental Review	23
Onaj	3.1		nation of Checklist Evaluation Categories	
	0.1	3.1.1	Where Impact was Analyzed	
		3.1.2	Do Proposed Changes Involve New or Substantially More Severe	20
		0.1.2	Significant Impacts?	23
		3.1.3	Do Any New Circumstances Involve New or Substantially More	20
		0.1.0	Severe Impacts?	24
		3.1.4	Any New Information of Substantial Importance Requiring New	27
		5.1.4	Analysis or Verification?	24
		3.1.5	Do Existing FEIR Mitigation Measures Reduce Impacts to a Less-	· · · · · · ·
			Than-Significant Level?	25
	3.2	Explan	nation of Discussion and Mitigation Sections	
		3.2.1		

		<u>Page</u>
	3.2.2 Mitigation Measures	25
	3.2.3 Conclusions	
3.3	Environmental Checklist	
	3.3.1 Aesthetics	
	3.3.3 Air Quality	
	3.3.4 Biological Resources	
	3.3.5 Cultural Resources and Tribal Cultural Resources	
	3.3.6 Energy	
	3.3.7 Geology and Soils	
	3.3.9 Hazards and Hazardous Materials	_
	3.3.10 Hydrology and Water Quality	
	3.3.11 Land Use and Planning	74
	3.3.12 Mineral Resources	
	3.3.13 Noise	
	3.3.14 Population and Housing	
	3.3.16 Recreation	
	3.3.17 Transportation/Traffic	87
	3.3.18 Utilities and Service Systems	
	3.3.19 Wildfire	
	3.3.20 Mandatory Findings of Significance	
-	, Summary and Conclusion	
4.1		
4.2 4.3	Revisions to Mitigation Measures	
List of Fig	gures	
Figure 1	Project Location	3
Figure 2	Updated Downtown San Anselmo Site Plan (Modified Project)	
Figure 3	Downtown San Anselmo Site Plan from FEIR (Approved Project, for	
 4	Comparison)	
Figure 4 Figure 5	Pedestrian Bridge Abutments Project Variant: Proposed Baffle, Looking Upstream	
Figure 6	Project Variant (with Baffle) Site Plan	
Figure 7	100-Year Flood Water Surface Elevation Profiles in Channel – 2018 and	
J	2023 Model Comparison	67
Figure 8	Existing 100-Year Flood Water Surface Elevation Profiles along Overland	
	Flow Path – 2018 and 2023 Model Comparison	69
List of Tak	bles	
Table 1	Comparison of Approved Project and Modified Project at Downtown San	
I able I	Anselmo Site	8
Table 2	Construction Activities	
Table 3	Cumulative Projects	21
Table 4	Estimated Mitigated Construction Annual Average PM _{2.5} Exhaust Concentrations	36
		_

		<u>Page</u>
Table 5	Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo Compared to Existing Conditions	70
Table 6	Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo – Cumulative	72
Table 7	Conclusions Regarding New or Substantially More Severe Significant Effects	97
Appendic	es	
Appendix A	Supplemental Hydraulic Modeling for the SAFRR Project to Support the Amendment to the 2018 FEIR	•

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CHAPTER 1

Introduction and Summary

The Marin County Flood Control and Water Conservation District (District) is the Lead Agency, pursuant to the State Guidelines for the California Environmental Quality Act (CEQA), for the preparation of this Addendum to the 2018 San Anselmo Flood Risk Reduction Project Final Environmental Impact Report (FEIR; State Clearinghouse No. 2017042041; documents available at https://marinflooddistrict.org/san-anselmo-flood-risk-reduction-project-documents/). This Addendum reviews project modifications, changed circumstances, and new information pertaining to the San Anselmo Flood Risk Reduction Project. The District approved the San Anselmo Flood Risk Reduction Project, with conditions and after adopting CEQA Findings, in September 2018.¹

A first addendum to the FEIR was prepared in May 2023 and adopted in August 2023. The first FEIR addendum focused on the location for the mitigation planting that was required by the FEIR, the regional board, and CDFW to compensate for riparian vegetation removal impacts of the flood diversion and storage (FDS) basin. The location of the proposed mitigation planting site was not within areas previously evaluated in the FEIR and was within a separate watershed from the approved project components discussed in the FEIR. The first FEIR addendum concluded that the mitigation planting required to compensate for riparian vegetation removal impacts of the FDS basin did not trigger the conditions described in State CEQA Guidelines Section 15162 or 15163 calling for preparation of a subsequent or supplemental EIR.

This Second Addendum has been prepared by the Marin County Flood Control and Water Conservation District in accordance with CEQA, the State CEQA Guidelines, and the Marin County Environmental Impact Review Guidelines (Marin County, 1994).

1.1 Project Background

The approved project included activities in two locations (refer to FEIR Chapter 3, Project Description). The first was at the former site of the Sunnyside Nursery in unincorporated Marin County, at 3000 Sir Francis Drake Boulevard, where a flood diversion and storage (FDS) basin was proposed at the former Nursery site along Fairfax Creek. At the second location, 634-636 San Anselmo Avenue in downtown San Anselmo along San Anselmo Creek, the approved project would increase creek capacity by removing the "building bridge" that spans San Anselmo Creek and has its foundations in the channel and then regrading and improving the creek channel. Components of the approved project evaluated in the FEIR are located in unincorporated Marin

¹ The final approved project – as described in the FEIR – is called the "approved project" in this addendum.

County along Fairfax Creek, and in downtown San Anselmo, shown on **Figure 1**. The downtown San Anselmo site is shown on Figure 1 in Inset 2.

The FEIR identified several potentially significant impacts (summarized in FEIR Chapter 2, Executive Summary, Table 2-1) that could be reduced to less-than-significant with implementation of mitigation measures. Mitigation was adopted as part of the CEQA Findings for impacts related to air quality and greenhouse gas emissions, biological resources, hazards and hazardous materials, hydrology and water quality, parks and recreation, and transportation and circulation.

The District also applied for and received the following permits and authorizations from other regulatory agencies, which contain conditions of approval applicable to the approved project:

- U.S. Army Corps of Engineers authorization under Clean Water Action Section 404 Nationwide Permit, File Number SPN-2018-00240
- San Francisco Bay Regional Water Quality Control Board Clean Water Action Section 401
 Water Quality Certification and Order RM 438256, Place ID 866970, WDID# 2 CW438256
- California Department of Fish and Wildlife Lake and Streambed Alteration Agreement No. 1600-2020-0146-R3

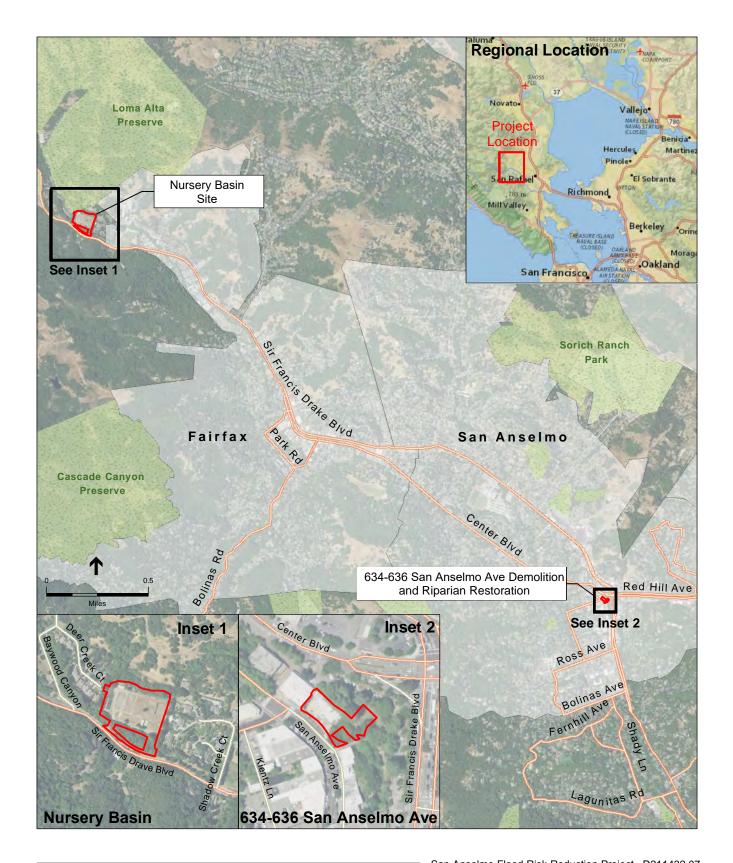
Since approval of the project in September 2018, the District proceeded with construction of the following, which are components of the approved project that were evaluated in the FEIR:

- a passive basin at the former Nursery (FDS) site, completed in 2022. The passive basin included completing excavation for the storage basin and perimeter embankments in the upland, the side diversion weir, the outfall pipe into Fairfax Creek and plantings at the site. Phase 1 included work within waters of the U.S./State in Fairfax Creek and removal of select trees within the riparian corridor.
- Removal of the structures on top of the building bridge foundation at 634-636 San Anselmo Avenue, completed in 2021.

1.2 Summary of the Project

Since approval of the approved project, the District completed construction of the passive FDS basin at the Nursery site and has proceeded with design of project components at the downtown San Anselmo site.

The 2018 FEIR evaluated replacing the BB2 retaining wall (that also supports the existing deck slab) on the right creek bank with a slope from the creek bed to the back of sidewalk on San Anselmo Avenue. A steep slope at this location was not deemed practical due to the proximity of the sidewalk and roadway and existing utilities in this location. In addition, this area was identified by the Town of San Anselmo as a potential recreational amenity for their proposed Re-Imagine Creek Park improvements. The existing retaining wall could not be retrofitted in-place due to its poor structural condition. For these reasons, complete replacement of the existing retaining wall at the same location is proposed. Additional creek bank and channel protection would also be needed to avoid scour and protect the grading near the retaining wall and bridge abutments.



Consequently, the District is proposing modifications to the approved project at the downtown San Anselmo site to include a retaining wall instead of sloped bank along San Anselmo Avenue, pedestrian bridge abutments at the upstream end of the site, additional storm drain replacement, and additional bioengineered creek bank and channel protection. This addendum evaluates the potential environmental effects of the proposed modifications, herein referred to as the "modified project," relative to the impacts of the "approved project" as disclosed in the FEIR. The modified project consists of the following:

- Removal of Concrete Foundation of 634-636 San Anselmo Avenue
- Replace existing concrete foundation wall under Building Bridge 2 with retaining wall along San Anselmo Avenue
- Flood Wall along San Anselmo Avenue
- Bioengineered Slope and Slope Protection along Creek Park Bank, with riprap at toe of bank
- Remove and replace wooden observation structure in Creek Park
- Reconstruct storm drain outfalls and place new rock slope protection
- Remove one tree
- Pedestrian bridge abutments
- Additional bioengineered creek bank downstream of retaining wall
- Baffle and Channel Bed Scour Protection (Optional)

1.3 Supplemental Environmental Review of the Modified Project

Pursuant to Section 15164 of the State CEQA *Guidelines*, the lead agency shall prepare an addendum to a previously certified EIR if some changes or additions to the environmental evaluation are necessary but if none of the conditions described in Section 15162 or 15163 calling for preparation of a subsequent or supplemental EIR have occurred. State CEQA *Guidelines* Section 15162 lists the following conditions, which require preparation of a subsequent or supplemental EIR:

- 1) Substantial changes are proposed for the project which will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the EIR;
 - (B) Significant effects previously examined will be substantially more severe than shown;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The District has conducted a CEQA review of the modified project in the form of a Supplemental Environmental Review Checklist (Chapter 3), and has found that the modified project would not meet any of the conditions in State CEQA Guidelines Section 15162 (Chapter 4): the modified project, in combination with new information and changed conditions, would not result in substantial changes that would require major revisions to the certified FEIR, nor would new or substantially more severe significant environmental effects occur requiring changes to the impact conclusions in the FEIR. Therefore, an addendum is warranted, and neither a subsequent EIR, nor a supplemental EIR (pursuant to State CEQA *Guidelines* Section 15163), is required.

1.4 Review and Comment

CEQA does not require a formal public review and comment period on an EIR Addendum. However, the FEIR and this EIR Addendum are available for review during the hours of 8:00 am to 4:00 pm, Monday through Thursday and 8:00 am to noon on Friday at the Marin County Community Development Agency at 3501 Civic Center Drive, Room 308, San Rafael, CA 94903, and on the Community Development Agency's website at https://marinflooddistrict.org/san-anselmo-flood-risk-reduction-project-documents/. Those wishing to submit comments on this Addendum may do so in writing. Please address your comments to:

Ms. Rachel Reid
Environmental Planning Manager
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903
Envplanning@marincounty.org

1. Introduction and Summary

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CHAPTER 2

Project Description

2.1 Introduction and Background

The approved project included activities in two locations (refer to FEIR Chapter 3, Project Description). The first was at the former site of the Sunnyside Nursery in unincorporated Marin County, adjacent to the western border of the Town of Fairfax, where a flood diversion and storage (FDS) basin was proposed at the former Nursery site along Fairfax Creek. At the second location, 634-636 San Anselmo Avenue in downtown San Anselmo along San Anselmo Creek, the approved project would increase creek capacity by removing the "building bridge" that spans San Anselmo Creek and has its foundations in the channel and then regrading and improving the creek channel.

The FEIR identified several potentially significant impacts of the approved project (summarized in FEIR Chapter 2, Executive Summary, Table 2-1) that could be reduced to less-than-significant with implementation of mitigation measures. Mitigation was adopted as part of the CEQA Findings for impacts related to air quality and greenhouse gas emissions, biological resources, hazards and hazardous materials, hydrology and water quality, parks and recreation, and transportation and circulation.

Since approval of the project in September 2018, the District secured permits from other agencies, including the San Francisco Bay Regional Water Quality Control Board and California Department of Fish and Wildlife, and proceeded with construction of the following, which are components of the approved project that were evaluated in the FEIR:

- a passive basin at the former Nursery (FDS) site, completed in 2022. The passive basin included completing excavation for the storage basin and perimeter embankments in the upland, the side diversion weir, the outfall pipe into Fairfax Creek and plantings at the site. The passive basin has a storage capacity of 13.5 acre-feet, which is smaller than the "active" FDS basin evaluated in the 2018 FEIR capacity of 33 acre-feet.
- Removal of the structures on top of the building bridge foundation at 634-636 San Anselmo Avenue, completed in 2021.

Since approval of the project, the District also proceeded with further design of the downtown San Anselmo site components of the project, which is located at 634-636 San Anselmo Avenue in San Anselmo along San Anselmo Creek. Most project components are the same, as shown in **Table 1**. This chapter describes modified project components at the downtown San Anselmo site.

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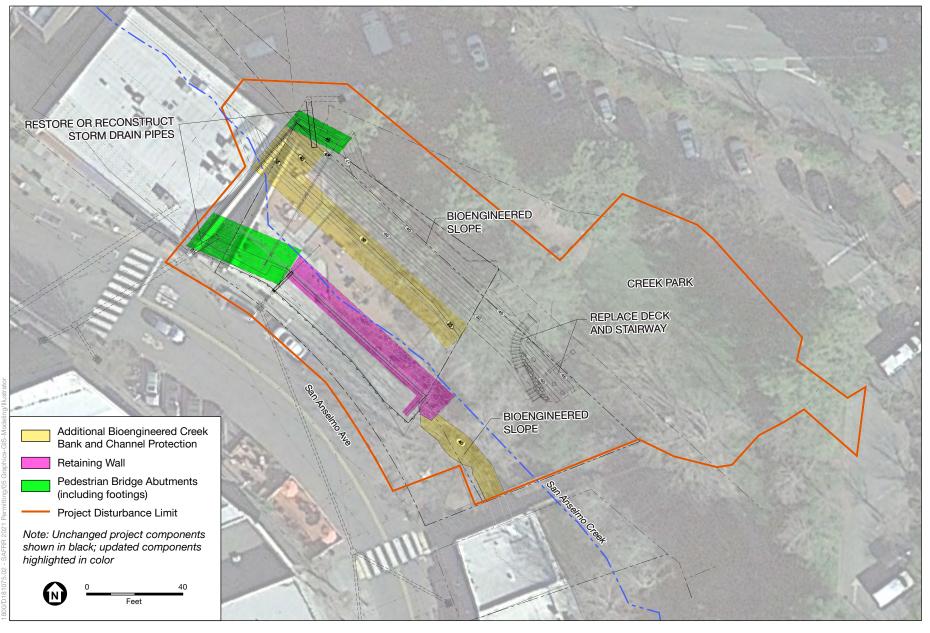
Figure 2 illustrates the modified project components at the downtown San Anselmo site.

Figure 3 is the FEIR approved project site plan, provided for comparison purposes.

TABLE 1

COMPARISON OF APPROVED PROJECT AND MODIFIED PROJECT AT DOWNTOWN SAN ANSELMO SITE

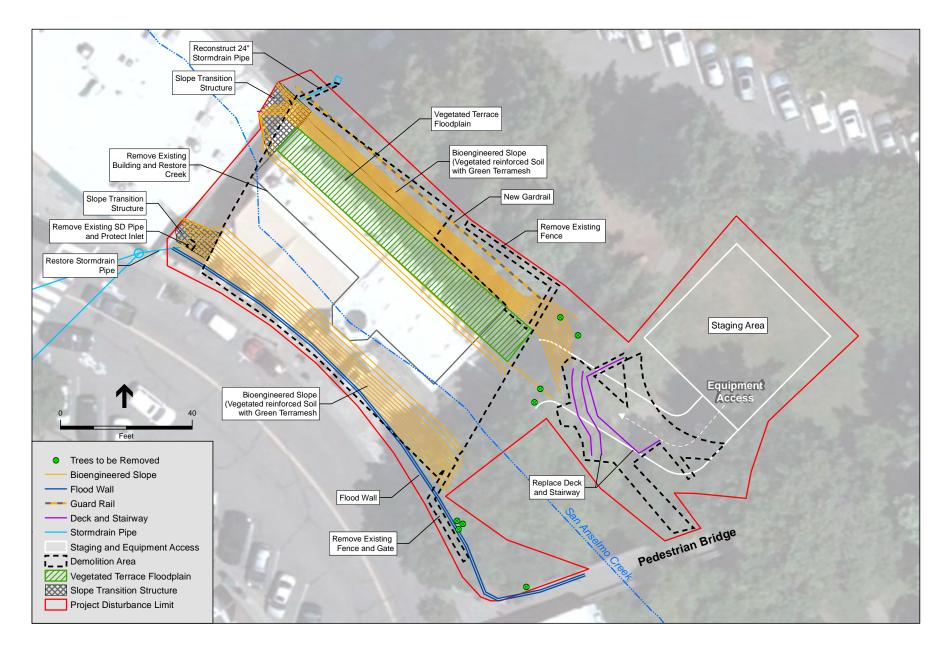
Downtown San Anselmo Components Evaluated in the FEIR (Approved Project)	Proposed Facilities (Modified Project)	Proposed Quantities
Removal of Building at 634-636 San Anselmo Avenue	Completed	N/A
Removal of Concrete Foundation of 634-636 San Anselmo Avenue	Same	7,000 square foot concrete deck 100 linear feet
Replace existing concrete foundation wall under Building Bridge 2 with Bioengineered Slope and Slope Protection along San Anselmo Avenue Bank	Replace existing concrete foundation wall under Building Bridge 2 with retaining wall along San Anselmo Avenue	75 foot long retaining wall 11-foot-wide concrete footing 57 cubic yards of riprap
Flood Wall along San Anselmo Avenue	Same	N/A – outside of creek top of bank
Bioengineered Slope and Slope Protection along Creek Park Bank	Same, with riprap at toe of bank	170 linear feet 2,095 square feet (0.05 acre) of vegetated soil lifts 179 cubic yards of riprap
Remove and replace wooden observation structure in Creek Park	Same	Removal and replacement of 14 square feet of riprap
Reconstruct storm drain outfalls and place new rock slope protection	Four total replacements or removals, rock slope protection (riprap) described for other components	Total of 44 linear feet replaced 12 feet of pipeline removed
Remove eight trees	Remove one tree	N/A
New Components not included in FEIR:	Pedestrian bridge abutments	45 linear feet along San Anselmo Avenue 25 linear feet along Creek Park 23 cubic yards of riprap below channel bed
	Additional bioengineered creek bank downstream of retaining wall	10 linear feet/13 cubic yards of riprap 40 linear feet of vegetated soil lifts
	Baffle and Channel Bed Scour Protection (Optional)	160 cubic yards of riprap 55 linear feet



SOURCE: ESA, 2022 SAFRR Designs and Environmental Permitting

Figure 2
Updated Downtown San Anselmo Site Plan (Modified Project)





SOURCE: Marin County, 2018

SAFRR Designs and Environmental Permitting
Figure 3

Downtown San Anselmo Site Plan from FEIR (Approved Project, For Comparison)

2.2 Project Components

The modified project components at the downtown San Anselmo site are described in detail below.

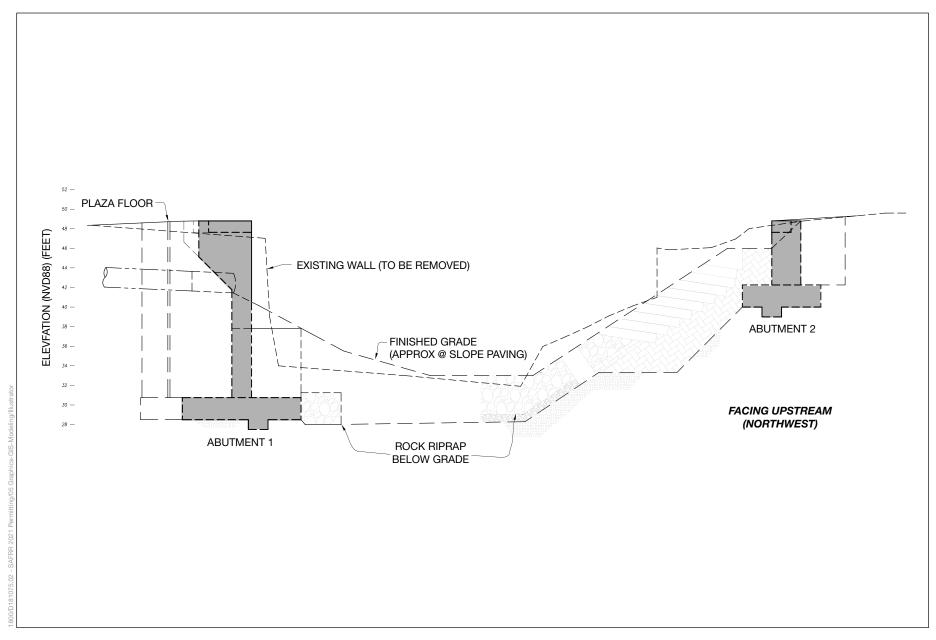
2.2.1 Retaining Wall

The 2018 FEIR evaluated replacing the BB2 retaining wall (that also supports the existing deck slab) on the right creek bank with a slope from the creek bed to the back of sidewalk on San Anselmo Avenue. As discussed in Section 1.2, a steep slope at this location was reconsidered during design due to the proximity of existing utilities and potential recreational use of the area above the existing retaining wall. Instead of sloping back the creek bank along San Anselmo Avenue after removal of the structures associated with 634-636 San Anselmo Avenue, the District would remove the structure and build a new 75-foot-long, 18-foot-tall retaining wall in the same location as the existing wall created by the concrete footing of the building. The top of the retaining wall would be elevation 48.7 feet, which is approximately 1.7 feet higher than the top of the existing concrete structure. The retaining wall would be designed to incorporate an extension of an existing stormwater drain at the north end of the wall. The retaining wall would also include a subdrain behind the wall and below grade rip rap scour protection at the toe of the wall in San Anselmo Creek. The District would grade the area between the top of the retaining wall and the sidewalk along San Anselmo Avenue into a gradual slope.

The concrete retaining wall would be covered by a 6-inch-thick stone façade. The wall would be supported by wall footing that would extend to approximately 6.5 feet below the adjacent grade of the San Anselmo Creek channel and would be approximately 11 feet wide. The District would also protect the edge of the wall footing in San Anselmo Creek by placing approximately 57 cubic yards of 1-ton rip rap (rock) extending into the channel to approximately 4 feet from the footing edge. The top of the rip rap would be approximately 2 feet below the grade of the overlying creek channel.

2.2.2 Pedestrian Bridge Abutments

The 2018 FEIR evaluated full removal of the building, called Building Bridge 2 (BB2), at 636 San Anselmo Avenue, and did not include additional recreational improvements. During subsequent design the District and the Town of San Anselmo identified an opportunity to include recreational amenities in addition to BB2 removal at the downtown San Anselmo site. Consequently, the modified project includes abutments to support a new 60-foot-long, above-deck steel truss pedestrian bridge would be erected in the creek at the upstream end of the Building Bridge 2 (BB2) site at 636 San Anselmo Avenue (**Figure 4**). The north edge of the bridge would be adjacent to the existing building at 638 San Anselmo Avenue, (Building Bridge 3 or BB3). The abutments would be designed to support a trapezoidal bridge superstructure width of approximately 15 feet wide on the left bank (looking downstream), gradually widening to 25 feet on the right bank.



SOURCE: MGE Engineering, July 2023

SAFRR Designs and Environmental Permitting





Abutment 1, near and in front of the toe of the steep west (right) creek bank, would be a cast-inplace (CIP), cantilevered, seat-type concrete wall, having an approximate height of 18 feet, five
feet of which would be under the creek bed. The main stem of the abutment would be 2.25 feet
thick, with a variable-width seat at the top that juts back toward the bank. The abutment wall's
face would meet flush with the new retaining wall in the creek downstream of BB3, extend
approximately 37.5 feet upstream to near the edge of BB3, then turn back to the existing sidewalk
with an approximately eight-foot long angled concrete wingwall. Approximately 23 cubic yards
of riprap placed at the toe of Abutment 1 would be wrapped with filter fabric. The abutment
footing and riprap would be buried under between 2.5 and 4.75 feet of natural creek material.

Abutment 2 is shorter in height than Abutment 1 since it is perched high on the east (left) creek bank. This CIP abutment would be approximately 23 feet long and mostly six feet in height, with a segment that is nearly eight feet tall. The abutment stem would be three feet wide, with a two-foot-wide seat carved into its topside. The abutment's face would be flush with BB3's end support wall, together confining the left creek bank. With a wingwall on the downstream abutment end, the fill and top surface behind this geometry of walls would be fully confined at the current Creek Park grades. Due to the high placement of the toe, scour protection would not be placed at Abutment 2.

2.2.3 Storm Drain Outfalls

The 2018 FEIR evaluated modifications to three existing storm drain pipes at the downtown San Anselmo site. With implementation of the proposed retaining wall, one additional storm drain pipe extension would be needed. Therefore, the modified project alters four existing storm drain pipes discharging into the creek channel. The storm drain pipe modifications consist of:

- The approximately 13-foot-long, 24-inch reinforced concrete pipe (RCP) on the left bank near the upstream end of 636 San Anselmo Avenue would be removed back to the catch basin and replaced with a new 24-inch RCP drain pipe with a slightly different alignment. The new storm drain pipe would penetrate/pass through the new pedestrian bridge abutment and discharge approximately 5 feet downstream from the existing pipe. This storm drain outlet would discharge onto existing concrete or new rock slope protection (RSP) beneath the bridge.
- A 10-foot segment of an existing 12-inch-diameter plastic pipeline on the right bank of San Anselmo Creek would be replaced where it extends through the replacement retaining wall. The storm drain will discharge on the buried footing and buried riprap in the channel.
- A 12-foot segment of and existing 24-inch RCP on the right bank near the upstream end of 636 San Anselmo Avenue would be extended approximately 10 feet to penetrate/pass through the new pedestrian bridge abutment. This storm drain outlet would discharge directly into the channel underlain by the retaining wall footing and associated scour protection.
- The approximately 12-foot-long, 12-inch plastic pipeline on the left bank beneath the existing stage and catch basin would be removed.

Additionally, an existing storm drain inlet would be replaced with a new storm drain manhole and another new storm drain would be installed, but none of this work would occur in or immediately adjacent to the creek.

2.2.4 Additional Bioengineered Creek Bank and Channel Protection

The 2018 FEIR evaluated bioengineered creek bank protection along the alignment of the existing retaining wall. With implementation of the proposed retaining wall, additional bioengineered creek bank protection would be needed to tie the retaining wall into the downstream creek bank. The creek bank between the retaining wall and the existing pedestrian bridge (downstream) would be sloped back, regraded or terraced and bioengineered using biostabilization slope protection methods to restore the creek banks. Bank stabilization treatments would include coir log and vegetated soil lifts.

Approximately 13 cubic yards of 1-ton rock riprap will be installed along approximately 10 linear feet of the right bank to a depth of approximately 3 feet and extend up to the top of the bank. Vegetated soil lifts will be installed along the remaining 40 linear feet of the bank. The exposed bank rock riprap and vegetated soil lifts will be planted with native riparian plants, including willows, alders, and dogwood.

2.2.5 Other Modified Project Components

All other components of the modified project would be the same as described in the FEIR.

2.3 Project Variant: Baffle and Channel Bed Scour Protection

As discussed in the FEIR, removal of the foundation of 634-636 San Anselmo Avenue would reduce flooding in surrounding areas by allowing more flood water to remain in San Anselmo Creek channel. However, after removal of the foundation, the depth of flooding would increase downstream in areas of the 25-year and 100-year floodplain. The FEIR disclosed that, depending on the timing of implementation of cumulative projects, approved project elements may need to include and implement mitigation measures to reduce or avoid the possibility of increasing downstream flooding. These measures could include baffles, inflatable dams, or temporary floodwalls placed in the downtown San Anselmo area to keep the channel in its current, constrained condition and thus retain flows until additional projects (which may include FDS basins and/or additional downstream creek improvements) could be implemented to reduce that downstream flood risk (FEIR p. 3-41). Additional measures to reduce or avoid impacts caused by changes in the downstream floodplain were also identified in FEIR Mitigation Measure 4.9-4.

As a variant of the modified project at downtown San Anselmo, in addition to the other components above, the District would incorporate a *baffle*² into pedestrian bridge abutments and place channel bed scour protection downstream of the baffle in San Anselmo Creek. The baffle would be designed to avoid changing water surface elevation during the 25-year and 100-year

A baffle is a barrier used to obstruct or restrain flow, in this case the flow of water.

flood events.³ The baffle would obstruct an area of the creek flow proportional to the obstruction currently created by the foundation of 634-636 San Anselmo Avenue, thereby recreating the existing 25-year and 100-year floodplain downstream of the downtown San Anselmo site.

The baffle, which would remain in place until its removal would not change the downstream 25-year and 100-year floodplains, would consist of precast concrete panels added to the northwestern (upstream) side of the pedestrian bridge abutments. The baffle would be secured by an approximately 65-foot-long truss extending across the creek and additional concrete foundations set in the bank along Creek Park. The truss would extend vertically approximately four feet above the top of the baffle. An opening approximately 35 feet wide would separate the concrete panels of the baffle and allow the low flow creek to pass through the opening. The top of the opening (the base of the truss) would be at elevation 47.7 feet. A conceptual graphic of the baffle is shown in **Figure 5**. **Figure 6** shows the site plan with baffle and associated channel bed scour protection. Approximately 160 cubic yards of additional channel bed scour protection would be needed to replace the existing bed protection provided by the foundation of 634-636 San Anselmo Avenue.

All other modified project components described above would remain the same with the project variant.

2.4 Construction

2.4.1 Construction Activities

FEIR Table 3-4 lists modified project construction activities and sequencing. The construction activities would remain the same as described for the approved project with the exceptions shown in **Table 2**. New construction activities associated with the modified project are also described in Table 2.

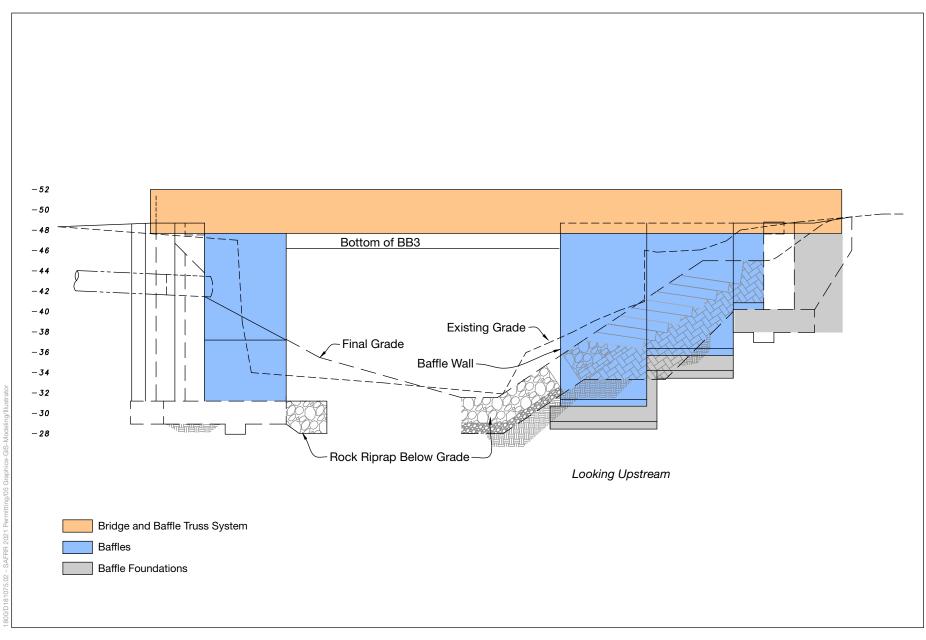
2.4.2 Construction Schedule

Construction would occur for up to five months, from June through October 2024. As described in the FEIR, construction activities at the Downtown San Anselmo site would occur on weekdays between the hours of 7:00 a.m. and 7:00 p.m., Saturdays between 9:00 a.m. and 5:00 p.m., and Sundays 12:00 p.m. to 5:00 p.m. No nighttime construction would occur.

Project Variant

Including construction of the baffle would add approximately two weeks to construction duration. Construction access, equipment, staging, and workforce would remain the same as described for the modified project.

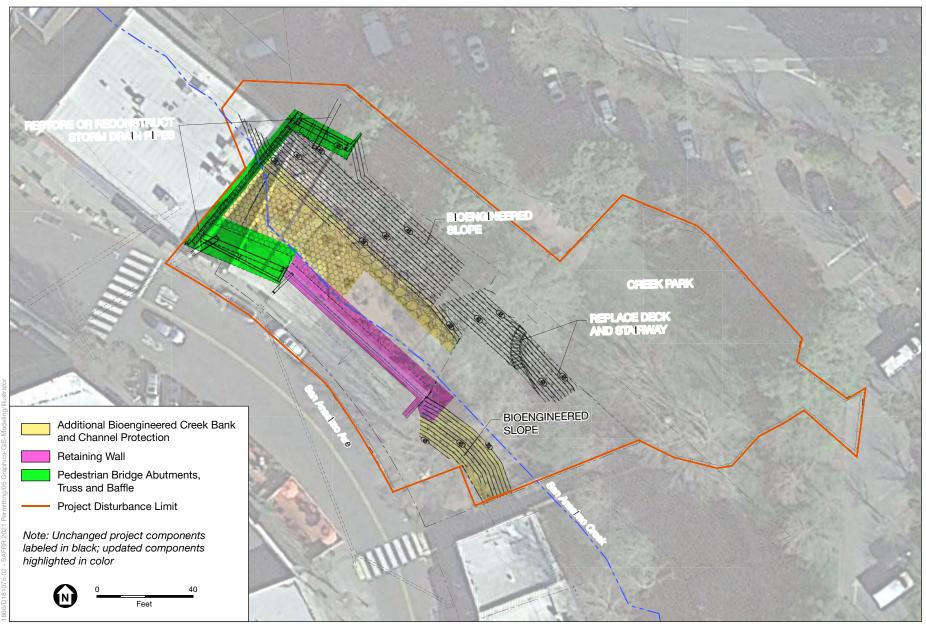
The removal of Building Bridge 2 was not anticipated to increase downstream flooding during the 10-year event and therefore a baffle would not be needed to maintain existing downstream water surface elevations during a 10-year flood.



SOURCE: MGE Engineering, June 10, 2023

SAFRR Designs and Environmental Permitting





SOURCE: ESA, 2022

SAFRR Designs and Environmental Permitting





TABLE 2 CONSTRUCTION ACTIVITIES

Construction Activity	Downtown San Anselmo Building Removal and Site Restoration
Mobilization	Same. Contractor gathers and transports equipment and personnel to the site; a construction office and staging area is established. Contractor installs construction area signs on San Anselmo Avenue, restripes San Anselmo Avenue, narrow lanes (shift traffic to north-bound side of San Anselmo Avenue), closes sidewalk and installs a temporary safety barrier (often called a Jersey barrier or a k-rail) along north-bound side. Contractor installs construction fencing/access gates as required; Contractor sets up staging area.
Erosion Control Measures	Same . Contractor installs orange plastic fencing and temporary fencing erosion control measures around the site to protect adjacent properties, existing trees to remain and creek habitat and for site security and public safety. Contractor installs temporary erosion control best management practice elements to prevent stormwater erosion until vegetation and/or permanent slope protection is installed.
Temporary Shoring	New. Shoring would be needed to provide a temporary support of the excavation for the retaining wall and abutments adjacent to San Anselmo Avenue. The Contractor would install the temporary shoring wall and conduct excavations behind the existing concrete wall along the right bank. This may be constructed using a soldier pile and lagging system. The soldier piles are vertical structural members (likely steel H-piles) that will be drilled or driven into place along the line of excavation and lagging are horizontal slats (wooden or other) that span between the soldier piles and that will be installed as the excavation extends below grade to retain the soil.
Stream Diversion	Same. Contractor diverts stream flows into a culvert or side of the channel to facilitate construction activities; cofferdams and temporary pumps may be employed.
Clearing and Grubbing	Same. Contractor removes trees, shrubs and grass/topsoil as necessary, within construction footprint. This material is loaded into trucks and hauled offsite to a dump or recycling/compost center. Topsoil would be stockpiled in the construction staging area for replacement after grading is complete.
Demolition	Same, without wood frame demolition (completed). Contractor demolishes the existing wood frame building and underlying concrete bridge structures on site and hauls them off site to a dump or recycling center.
Construct Retaining Wall and Bridge Abutments	New. Conduct excavations for new retaining wall and bridge abutment foundations, including installation of temporary shoring if needed. Dewatering of the excavated areas may be required. Construct new concrete retaining wall and bridge abutments using concrete forms. Place rock riprap in front of concrete footings. Backfill around retaining wall and bridge abutments riprap with excavated material.
Baffle (Variant)	New. If included, the baffle would be constructed at the same time as the bridge abutments. The same construction equipment would be used
Storm Drain Piping	Same with one additional storm drain extension. Install three new storm drain extensions at upstream end of site through retaining wall and bridge abutments.
Rock Slope Construction	Same with additional locations. Contractor installs new ½- or 1-ton rock slope protection along toe of retaining wall, bridge abutments, and along toe of Creek Park bank (storm drain outfalls discharge over these locations).
Channel Scour Protection (Variant)	New. If included, additional channel scour protection would be placed during rock slope construction.
Creek Earthwork	Similar for Creek Park Bank and downstream of retaining wall. Contractor excavates, grades, and compacts the existing creek bank material to create stable soil subgrade for the bioengineered slope stabilization system. Slope transition structure installed at upstream end of site. Grade Creek Park bank to install constant 1.5:1 slope with vegetated soil lifts and planted rock toe.
Floodwall	Same. Contractor constructs the reinforced concrete floodwall along southern creek bank
Topsoil Placement and Planting	Same. Contractor places topsoil and installs willow plantings on vegetated terrace and hydro-seeds banks.
Miscellaneous Work	Contractor constructs new sidewalk, walkway and guardrails along San Anselmo Avenue. Deck and stairway in Creek Park are replaced.
Demobilization/ Cleanup	Same. Contractor removes construction trailer, creek bypass, and all equipment and supplies from site; Creek Park staging area restored to original grade and appearance; final cleanup completed.

NOTE: Construction activities that would be the same as described in FEIR highlighted in grey.

2.4.3 Construction Access, Staging, Equipment, and Workforce

At the downtown San Anselmo site, construction staging would occur on the northern side of the creek within Creek Park, between the existing pedestrian bridge and the parking area and the northwest corner of the parking area. Creek access would be afforded from the staging area. Construction equipment would be delivered to the staging area via the Creekside Park parking area. Staging and site access would also occur in the parking lane and along the sidewalk adjacent to 634-636 San Anselmo Avenue.

The same equipment described in the FEIR would be used to complete the modified project at downtown San Anselmo, listed below:4

1	1	D			
	١.	Pav	'em	ıenı	saw

2. Jackhammer

3. Grader

4. Excavator

5. Compactor

6. Bulldozer/backhoe/loader

7. Flatbed trucks

8. Drill rig

9. Cyclone filter

10. Pump rig

11. Welding rig

12. Forklift

13. Manlift

14. Jumping jacks

15. Scraper

16. Concrete pumper

17. Water pump and treatment skid

18. Vacuum truck

19. Sand shaker

20. Crane

21. Boom truck

22. Water truck

23. Generators and air compressors

24. Concrete trucks

25. Baker tanks

26. Dump trucks

27. Bottom dump truck/trailer

28. Pickup truck

29. Hydroseeder

The FEIR estimated 460 haul trips would be needed for construction at the downtown San Anselmo site (a maximum of 8 truckloads per day for 9 days during demolition); including delivering rip rap and bioengineering materials to site, and service trucks. With the modifications described above, a similar number of haul trips would be needed for construction.

2.5 Operations and Maintenance

As described in the FEIR, the operation and maintenance of the downtown San Anselmo portion of the modified project, with or without the baffle, would be similar to what the Flood Control District, Marin County Department of Public Works, and the Town of San Anselmo already do for the stream channels and banks, buildings, bridges, culverts, and other aspects of their management responsibilities. Typical activities include management of invasive vegetation that may have adverse flooding impacts, catch floating debris, or increase erosion; removal of litter or

In the FEIR, item 9, cyclone filter, was inadvertently included on the same line as the drill rig. The numbering of the current list has been updated to reflect that the cyclone filter is a separate item.

debris; regular inspection and as-needed repair of flood walls, retaining walls, or other structures; and replanting, tree-trimming, or other vegetation management actions, as described in the Flood Control District's Stream Maintenance Program. The access openings in the new reinforced concrete floodwall would be constructed as floodgates, so these openings could be closed during periods of high-flow in the creek.

2.6 Required Approvals

The following is a preliminary list of potential approvals needed for modified project construction and operation at the downtown San Anselmo site:

- Modified Project or Variant: Town of San Anselmo Grading permit, Encroachment permit, Building permit
- Variant Only: U.S. Army Corps of Engineers amendment to authorization under Clean Water Action Section 404 Nationwide Permit, File Number SPN-2018-00240 for addition of baffle and channel bed scour protection
- Variant Only: San Francisco Bay Regional Water Quality Control Board amendment to Clean Water Action Section 401 Water Quality Certification and Order RM 438256, Place ID 866970, WDID# 2 CW438256 for addition of baffle and channel bed scour protection
- Variant Only: California Department of Fish and Wildlife amendment to Lake and Streambed Alteration Agreement No. 1600-2020-0146-R3 for addition of baffle and channel bed scour protection

2.7 Scope of the Environmental Review

The supplemental environmental review compares the modified project to the baseline to determine whether the modified project would result in new or substantially more severe significant impacts than identified in the FEIR.

The supplemental environmental review includes the full range of environmental topics required under CEQA. This includes consideration of whether the modified project would make a considerable contribution to any identified cumulative impacts. Per State CEQA Guidelines §15355, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant project impacts taking place over a period of time.

The supplemental environmental review will determine whether any incremental impacts from the modified project "when added to other closely related past, present and reasonably foreseeable probable future projects" are cumulatively considerable. **Table 3** presents an updated list of current or future projects considered in the analysis of cumulative impacts for the modified project.

TABLE 3 CUMULATIVE PROJECTS

Project Name	Description	Estimated Construction	Location
Relmagine Creek Park (San Anselmo)	The project would place a prefabricated pedestrian bridge superstructure over abutments built by the District in San Anselmo Creek, and tables in the plaza area remaining between the District's proposed retaining wall and San Anselmo Avenue. The superstructure soffit would be 1 foot higher than the soffit of Building Bridge 3. The project also includes adding wood decking, tables, kids play area, and pollinator gardens to existing areas of Creek Park.	2024-2025	Adjacent to the modified project site
754 Sir Francis Drake Boulevard (San Anselmo)	The project proposes the demolition of existing commercial and office buildings, and construction of 12 units over 17 parking spaces on approximately a one-half acre site.	Uncertain	450 feet north
600 Red Hill Avenue (San Anselmo)	The project adds 6 new duplexes and 6 single unit buildings uphill from the 10-unit apartment building. A total of 28 units are proposed. Forty three total parking spaces are proposed. The new units would be accessed from a driveway off of Spaulding Street. Modifications to Spaulding Street are proposed for emergency access, including elimination of certain existing parking spaces to widen the roadway for emergency vehicle access and creation of new parking spaces. The project includes a grading permit to excavate more than 100 cubic yards for the driveway, foundations and landscape walls.	Uncertain	600 feet northeast
Azalea Bridge Replacement (Fairfax)	Replace Azalea Bridge in such a way as to move the foundations out of the creek channel. Same design was used in hydraulic modeling.	Uncertain	1.9 miles northwest (upstream)
Nokomis Bridge Replacement (Town of San Anselmo)	Replace Nokomis Bridge in such a way as to move the foundations out of the creek channel. Updated (2018) design was used in hydraulic modeling.	Uncertain	0.3 mile northwest (upstream)
Madrone Bridge Replacement (Town of San Anselmo)	Replace Madrone Bridge in such a way as to move the foundations out of the creek channel. Updated (2018) design was used in hydraulic modeling.	Uncertain	0.25 mile northwest (upstream)
Center Avenue/ Sycamore Avenue Bridge Replacement (Town of San Anselmo)	Replace Center/Sycamore Bridge in such a way as to move the foundations out of the creek channel. Updated (2018) design was used in hydraulic modeling, which includes replacement of bridge instead of removal assumed in FEIR modeling.	Uncertain	0.1 mile northwest (upstream)
Bridge Avenue Bridge Replacement (Town of San Anselmo)	Replace Bridge Avenue Bridge in such a way as to move the foundations out of the creek channel. Updated (2018) design was used in hydraulic modeling, which includes replacement of bridge instead of removal assumed in FEIR modeling.	Uncertain	300 feet northwest (upstream)
Winship Bridge Replacement (Town of Ross)	The Town of Ross Public Works Department proposes to replace the existing Winship Avenue Bridge over San Anselmo Creek. As part of the project, the Ross Valley Sanitary District will relocate and update the existing 6-inch gravity sewer line that is currently within the existing bridge deck. Replacement of the existing bridge structure would occur with a single span, cast-in-place or precast concrete slab type bridge with a curb-to-curb width of 20 feet and a 4.5-foot-wide walkway on the north side. The roadway profile would be raised up to 4 feet to meet flood control requirements. Updated (2022) grading was used in hydraulic modeling.	2024	0.5 mile south (downstream)

Project Name	Description	Estimated Construction	Location
Corte Madera Creek Flood Risk Management Project (U.S. Army Corps of Engineers; USACE) (Also known as the Corte Madera Creek Flood Control Project, Units 2, 3, and 4)	The goal of this project would be to enhance and improve Corte Madera Creek to reduce the risk of flooding in the communities of Ross and Kentfield. The project includes: removal of a fish ladder and lowering of channel in Unit 4; install taller and/or new floodwalls in Units 2 and 3; install a stormwater pump station to control flooding in the Granton Park neighborhood; create larger fish resting pools within the concrete channel in Unit 3; and remove the concrete channel from Stadium Way downstream to the natural earthen channel.	2024 to 2025	1.1 miles south (downstream)

CHAPTER 3

Environmental Checklist for Supplemental Environmental Review

The purpose of this checklist is to evaluate the modified project in order to determine, for each environmental resource area, whether any "changed condition" (i.e., changed circumstances, project changes, or new information of substantial importance) may result in a new or substantially more severe environmental impact. A "no" answer does not necessarily mean that there are no potential impacts relative to that environmental topic, but that there is no change in the condition or status of the impact since it was analyzed and addressed (with or without mitigation) in the prior FEIR. Accordingly, the answer in the checklist may be "no" if the modified project does not involve changes that would result in a modification to the conclusion of the prior environmental documents with regard to that particular impact.

3.1 Explanation of Checklist Evaluation Categories

3.1.1 Where Impact was Analyzed

The first column in the checklist, "where impact was analyzed," provides a cross-reference to the particular FEIR document and impact number, section, or pages in which information and analysis that pertain to the environmental issue listed under each topic may be found. The FEIR consists of the following documents:

- San Anselmo Flood Risk Reduction Project Final Environmental Impact Report Volume 1: Revisions to the Draft Environmental Impact Report, August 2018
- San Anselmo Flood Risk Reduction Project Final Environmental Impact Report Volume 2: Response to Comments, August 2018
- San Anselmo Flood Risk Reduction Project Errata to the Final EIR, September 2018
- San Anselmo Flood Risk Reduction Project Mitigation Planting Addendum to the 2018 Final Environmental Impact Report, May 2023

3.1.2 Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?

Pursuant to Section 15162(a)(1) of the State CEQA Guidelines, this checklist column indicates whether substantial changes are proposed in the Project which will require major revisions of the 2018 FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

State CEQA Guidelines Section 15064(d) provides guidance on determining the significance of environmental effects:

- (d) In evaluating the significance of the environmental effect of a project, the Lead Agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project.
 - (1) A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project. Examples of direct physical changes in the environment are the dust, noise, and traffic of heavy equipment that would result from construction of a sewage treatment plant and possible odors from operation of the plant.
 - (2) An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment. For example, the construction of a new sewage treatment plant may facilitate population growth in the service area due to the increase in sewage treatment capacity and may lead to an increase in air pollution.
 - (3) An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

3.1.3 Do Any New Circumstances Involve New or Substantially More Severe Impacts?

Pursuant to Section 15162(a)(2) of the State CEQA Guidelines, this checklist column indicates whether there have been circumstances under which the modified is undertaken (e.g., changes to the modified project site or the vicinity) that have occurred subsequent to the prior FEIR, which would result in the modified project having new significant environmental impacts that were not considered in the FEIR or which would substantially increase the severity of a previously identified significant impact. New circumstances may include, for example, changes to the regulatory or environmental setting, that is, the legal or physical context for the modified project, that may lead to a conclusion that a new or substantially more severe significant impact would now occur, compared to the FEIR.

3.1.4 Any New Information of Substantial Importance Requiring New Analysis or Verification?

Pursuant to Section 15162(a)(3)(A-D) of the State CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous FEIR was certified as complete is available requiring an update to the analysis of the previous FEIR to verify that the environmental conclusions remain valid.

If the additional analysis in this supplemental environmental review shows any of the following, then this question is answered "Yes:" (A) the modified project would have one or more significant effects not discussed in the FEIR; or (B) significant effects previously examined would be substantially more severe than shown in the FEIR; or (C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects or the modified project, but the modified project proponents decline to adopt the mitigation measure or alternative; or (D) mitigation measures or alternatives which are considerably different from those analyzed in the FEIR would substantially reduce one or more significant effects on the environment, but the modified project proponents decline to adopt the mitigation measure or alternative.

3.1.5 Do Existing FEIR Mitigation Measures Reduce Impacts to a Less-Than-Significant Level?

This question applies if answering any of the three previous questions indicates that the proposed modified project could result in a new or substantially more severe significant impact. Pursuant to Section 15162(a)(3) of the State CEQA Guidelines, this column indicates whether the prior FEIR identifies feasible mitigation measures to avoid or minimize the significant impacts of the proposed modified project. In most cases, the mitigation measures that were identified in the FEIR were adopted, made conditions of project approval, and have already been implemented. A "yes" response is provided if previously adopted mitigation measures would effectively reduce new or more severe impacts of the current modified project. A "no" response would indicate that previously adopted measures are insufficient to reduce new or more severe impacts. If "NA" is indicated, this Supplemental Environmental Review concludes that the impact does not occur with this modified project and therefore no mitigation is needed.

3.2 Explanation of Discussion and Mitigation Sections

3.2.1 Discussion

A discussion of the elements of the checklist is provided under each environmental category in order to clarify the answers. This includes a discussion of any changes to the environmental and regulatory setting for the modified project, and a discussion of modified project impacts. The discussion provides information about the particular environmental issue, how the modified project relates to the issue, and the status of any mitigation that may be required or that has already been implemented.

3.2.2 Mitigation Measures

Applicable mitigation measures from the prior environmental review that are required to reduce or avoid impacts of the current modified project are listed under each environmental category. Revised mitigation measures are included, if needed. In one instance, revisions to previously adopted mitigation measures are provided. Revisions are for clarity, for consistency with current regulations, or to make them applicable to the current modified project. All revisions to mitigation measures are also compiled in Chapter 4. Revisions are indicated by strikethrough and underline text.

3.2.3 Conclusions

A discussion of the conclusion relating to the analysis contained in each section.

3.3 Environmental Checklist

3.3.1 Aesthetics

Environmental Issue Area	Where Impact Was Analyzed in FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
1. Aesthetics. Would the Proj	ect:				
a. Have a substantial adverse effect on a scenic vista?	p. 4.2-10	No	No	No	N/A
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	p. 4.2-15	No	No	No	N/A
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	p. 4.2-17	No	No	No	N/A
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	p. 4.2-19	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would not result in substantial impacts to aesthetics and visual resources because (a) construction and operation and maintenance activities would be limited in physical scale, when observed within the context of the broader, distant scenic vistas, (b) the constructed approved project would be similar to its present conditions and appearance of the landscape would not be substantially altered, and (c) the approved project would not adversely affect day or nighttime views in the area. Therefore, the FEIR determined that implementation of the approved project would result in less than significant impacts to aesthetics and visual resources.

Discussion

Setting

Since approval of the project in 2018, the District removed the building on top of the foundation at 634-636 San Anselmo Avenue. Wood fencing was placed around the remaining foundation for safety. While the building at the downtown San Anselmo site has been removed, foreground views from streets (including from Sir Francis Drake Boulevard, Red Hill Avenue, and Center Boulevard, which are Town-designated scenic roadways) and viewpoints around the downtown San Anselmo site remain dominated by commercial and residential development, interspersed with trees. Trees lining the streets and creeks further limit views to approximately 0 to 0.5 mile beyond the foreground. Views from most publicly accessible viewpoints are limited to the

foreground for these reasons. Bald Hill Preserve also provides opportunities for more distant scenic vistas that include downtown San Anselmo.

Impact Discussion

There are no Caltrans-designated scenic highways in Marin County. Likewise, the County has not designated any roadways in the modified project area as scenic. There are no designated state scenic highways within view of the modified project. The modified project therefore would not alter scenic resources within view of a designated scenic highway.

When viewed from distant publicly accessible viewpoints, downtown San Anselmo construction work would not be visually obvious due to the surrounding commercial land uses and the intervening trees. Furthermore, construction would be limited to an approximately 4.5-month period, and temporary visual or aesthetic changes due solely to active construction activities and/or equipment or materials are not considered significant. Construction activities at the downtown San Anselmo site would have a less-than-significant impact on publicly accessibly scenic vistas.

As discussed in Chapter 2, Project Description, the modified project would include the reconstruction of the existing maintenance access path along the left bank near the staging area and would be configured similarly to the existing path. After construction activities are completed, operation and maintenance activities would be temporary, limited in physical scale, concealed in the visual blend of development and street trees, and would not be visually obvious from distant viewpoints. Therefore, the lasting impact of the modified project on publicly accessible scenic vistas would be less than significant.

From distant viewpoints, the downtown San Anselmo site would appear similar to existing conditions due to the remaining trees and the lack of tall built features. The restored creek area would visually extend the undeveloped portion of Creek Park. The creek restoration and pedestrian bridge abutments would be consistent with adjacent zoning for public facilities. Therefore, the modified project would not adversely alter the area's visual character or quality.

No night-time work is anticipated; thus, no receptors would be exposed to nighttime lighting. The modified project would comply with Marin County Code for construction hours (see FEIR Section 4.11 Noise for the specific codes). The modified project would not include structures that would cast shadow in areas where none currently exists. Based on this analysis, construction and operation of the modified project would not result in a new or substantially more severe significant impact related to light, glare, or shadow.

Cumulative Impacts

The geographic scope of cumulative aesthetic impacts is the downtown San Anselmo site and adjacent areas. The ReImagine Creek Park project is within the geographic scope for aesthetic impacts. The ReImagine Creek Park project would enhance existing recreational resources surrounding the downtown San Anselmo site, and would not be constructed until the modified project is complete. Therefore, the modified project along with the ReImagine Creek Park project would not result in cumulative aesthetic impacts.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and construction would occur over approximately two weeks in addition to the modified project timeline. The Project variant would include installation of the concrete baffle on the pedestrian bridge abutments and placement of additional channel protection at and downstream of the baffle, but otherwise would be the same as the modified project.

The baffle and channel protection would not be clearly visible from surrounding scenic areas, and where visible would have similar character to the adjacent foundation of Building Bridge 3 and channel/slope protection placed in other areas of the downtown San Anselmo site. The Project variant would not include new sources of light. Therefore, the Project variant would have less-than-significant impacts related to aesthetics.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The changed circumstance of the demolition of the building at 634-636 San Anselmo Avenue has been considered; the modified project would not result in a new significant impact related to aesthetics due to the changed circumstances. There is no new information of substantial importance regarding aesthetics. As discussed above, the modified project would not result in new significant impacts related to aesthetics and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on aesthetics.

3.3.2 Agriculture

Environmental Issue Area 2. Agriculture. Would the Proj	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	p. 4.4-9	No	No	No	N/A
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	p. 4.4-9	No	No	No	N/A
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	p. 4.4-10	No	No	No	N/A

Findings of FEIR

The FEIR found that the approved project would have no agriculture impacts due to the nature of the project and the zoning or land use of the FDS Basin and Downtown San Anselmo sites.

Discussion

As stated in the FEIR, the modified project site does not contain any farmland or agricultural land. The downtown San Anselmo site is not an area mapped as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance.

The modified project would not result in any other changes in the existing environment that could result in the conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use because the site is not on Farmland or forest land. The modified project would not result in a new or substantially more severe significant impact related to agriculture.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project; therefore, for the reasons discussed above the Project variant would have no agriculture impacts.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding agriculture. As discussed above, the modified project would not result in new significant impacts related to agriculture and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on agriculture.

3.3.3 Air Quality

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
3. Air Quality. Would the Pro	ject:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	p. 4.3-37	No	No	No	N/A
b. Violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	p. 4.3-33	No	No	No	N/A
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	p. 4.3-38	No	No	No	N/A
d. Expose sensitive receptors to substantial pollutant concentrations?	p. 4.3-40	No	No	No	N/A
e. Create objectionable odors affecting a substantial number of people?	p. 4.3-46	No	No	No	N/A

Findings of FEIR

The FEIR determined that approved project construction would not generate significant criteria pollutant emissions with implementation of FEIR Mitigation Measure 4.3-1, BAAQMD Basic Control Measures. The approved project was determined to have a less than significant impact with respect to consistency with the Clean Air Plan. With respect to exposure of sensitive receptors to toxic air contaminants (TACs), the FEIR found that the approved project would have a less than significant impact after implementation of Mitigation Measure 4.3-4, Tier 4 Engines for Construction Equipment. It was determined that the approved project would not result in objectionable odors, as construction activity would be intermittent and temporary.

Discussion

Setting

This section updates the FEIR's physical and regulatory setting for the analysis of Air Quality impacts.

The air quality setting, including applicable regulations and air quality conditions, is not appreciably different from that discussed in the FEIR. The Bay Area Air Quality Management

District (BAAQMD) continues to be the regional authority for air quality management in the entire San Francisco Bay Area Air Basin (Bay Area).

The Federal Clean Air Act and the California Clean Air Act both require the establishment of standards for ambient concentrations for criteria air pollutants, and the designation of areas as "attainment" or "nonattainment" based on whether standards have been met in those areas. The state and federal non-attainment status of the Bay Area has not changed since adoption of the FEIR. The Bay Area continues to experience occasional violations of ozone and particulate matter (PM₁₀ and PM_{2.5}) standards. Therefore, the Project site is currently designated as a non-attainment area for violation of the state 1-hour and 8-hour ozone standards, the federal ozone 8-hour standard, the state respirable particulate matter (PM₁₀) 24-hour and annual average standards, the state fine particulate matter (PM_{2.5}) annual average standard, and the federal PM_{2.5} 24-hour standard.

The most recently adopted air quality plan to address nonattainment issues for the Bay Area remains the 2017 Bay Area Clean Air Plan (2017 Clean Air Plan), which is discussed in FEIR Section 4.3, Air Quality and Greenhouse Gas Emissions. The significance thresholds used in the FEIR were based on the 2017 BAAQMD CEQA Air Quality Guidelines. The BAAQMD issued updated guidelines in 2022. The 2022 air quality thresholds of significance (project-level) are the same as those used in the FEIR. The 2022 BAAQMD CEQA Air Quality Guidelines include the statement that quantification of construction-related dust in addition to exhaust emissions to evaluate the project's local risks and hazards impact is at the discretion of the lead agency. The FEIR estimates of PM_{2.5} emissions did not include construction-phase fugitive dust. For this addendum, the District incorporated fugitive dust into the modified project's impact assessment. The approach implemented in the FEIR for all other air quality impacts remains the latest guidance and no changes to the approach used in the FEIR are warranted at this time.

Areas zoned as residential surrounding the downtown San Anselmo site have not changed since adoption of the FEIR (MarinMap, 2023). The nearest sensitive receptors to the downtown San Anselmo site are residences approximately 100 feet to the construction boundary, same as identified in the FEIR.

Impact Discussion

Since FEIR publication, the FDS Basin has been constructed. Construction at the downtown San Anselmo site would occur over approximately five months.

To evaluate air quality impacts due to construction activities, the FEIR calculated the average daily emissions from construction activities at the FDS Basin and in Downtown San Anselmo, assuming construction activities proceeded concurrently at both locations and lasted approximately seven months. As detailed on FEIR pages 4.3-33 through 4.3-35, the FEIR evaluated 1,933 haul truck trips, 811 heavy-duty truck roundtrips, 735 pickup truck roundtrips, and an average of 30 roundtrip worker trips per day associated with the FDS Basin construction alone.

Bay Area Air Quality Management District, 2022 CEQA Guidelines.

The Project would use the same equipment listed in the FEIR and would construct in the same location for an additional four weeks. The Project modifications do not necessitate more construction crews; the same daily maximum number of workers described in the FEIR are anticipated at the downtown San Anselmo site.

As shown in FEIR Table 4.3-6, the grand total emissions of the combined construction activities (at the FDS Basin and Downtown San Anselmo) would not exceed BAAQMD significance thresholds. In the FEIR, to calculate average daily emissions for each approved project element individually, total emissions for each approved project element were divided by the total number of construction workdays for each element (147 workdays for the Nursery Basin and 75 workdays for Downtown San Anselmo). While the modified project would extend total construction duration by up to four weeks at downtown San Anselmo, the same equipment as identified in the FEIR would operate at the downtown San Anselmo site over the additional workdays. The average daily emissions (pounds/day) of the same equipment operating for additional workdays would therefore remain the same. BAAQMD significance thresholds have not changed since certification of the FEIR. Therefore, emissions from modified project construction would not exceed BAAQMD significance thresholds for criteria air pollutants and would not conflict with or obstruct implementation of the applicable air quality plan. The modified project would not result in a new or substantially more severe significant impact related to conflicts with or obstruction of an applicable air quality plan.

In the FEIR, air quality impacts during operations were calculated assuming maintenance activities would require operating an excavator 10 hours per days for six days each year and offhaul of up to 290 cubic yards of sediment per day for six days each year. The modified project would not alter proposed maintenance activities. As shown in FEIR Table 4.3-7, the grand total emissions of the combined operations activities would not exceed BAAQMD significance thresholds. The modified project would not result in a new or substantially more severe significant impact related to exceeding criteria air pollutant thresholds.

The nearest sensitive receptors to the downtown San Anselmo site are the same as evaluated in the FEIR. The modified project would be constructed over a five-month period instead of a fourmonth period. The 2019 fleet mix was assumed for the FEIR air quality impact analysis; a more modern fleet mix would include a higher proportion of cleaner engines, and therefore would result in reduced emissions compared with the FEIR analysis. The FEIR estimates of PM_{2.5} emissions did not include construction-phase fugitive dust. For this addendum, the District incorporated fugitive dust into the modified project's impact assessment to conservatively assess whether the modified project would result in new or more severe significant air quality impacts. Because unmitigated PM_{2.5} emissions from construction of the approved project in San Anselmo exceeded BAAOMD significance thresholds (refer to FEIR Table 4.3-10), and the calculations for the modified project would include the same equipment along with fugitive dust emissions, it is assumed that the modified project, without mitigation, would result in levels of PM_{2.5} that could exceed the BAAQMD's significance thresholds for exposure to health risks, same as the approved project. The modified project along with construction-phase fugitive dust emissions were then modeled to assess whether, with implementation of adopted Mitigation Measures 4.3-1, BAAQMD Basic Construction Measures, and 4.3-4, Tier 4 Engines for Construction Equipment,

the modified project would result in a new or more severe significant impact related to toxic air contaminant emissions (ESA, 2023). **Table 4** presents the modified project's mitigated construction-phase PM_{2.5} exhaust and fugitive dust concentrations and compares these emissions to the BAAQMD thresholds. As shown, with implementation of adopted Mitigation Measures 4.3-1, BAAQMD Basic Construction Measures, and 4.3-4, Tier 4 Engines for Construction Equipment, this impact would be less than significant with mitigation. The modified project would not result in a new or substantially more severe significant impact related to toxic air contaminant emissions.

Regarding odors, the use of diesel fuel in construction equipment could generate localized objectionable odors. The nearest sensitive receptors to the downtown San Anselmo site are the same as evaluated in the FEIR. Construction activities would take place within the construction hours specified by the applicable local ordinance (discussed in FEIR Section 4.3). Any objectionable odors generated by construction and operational activities of the modified project and perceived by sensitive receptors would occur on a short-term basis or would be intermittent. The modified project would not result in a new or substantially more severe significant impact related to odors.

Cumulative Impacts

The modified project would use the same equipment listed in the FEIR and would construct in the same location for the same duration. Two of the reasonably foreseeable cumulative projects within the geographic scope for toxic air contaminant impacts listed in FEIR Section 5.4.2 (600 Red Hill Avenue and 754 Sir Francis Drake Boulevard) have yet to be constructed and could be constructed concurrently with the modified project and within 1,000 feet of the same receptors affected by the modified project at the downtown San Anselmo site. Therefore, the modified project potential contribution to cumulative air quality impacts would be the same as described in FEIR Section 5.4.2 and would not be cumulatively considerable.

Project Variant (With Baffle)

The Project variant would be constructed in the same location as the Project and would implement the same mitigation measures and practices as the Project, as outlined in the impact discussion above. The Project variant would use the same construction equipment and extend the construction duration by two weeks. Because the criteria air pollutant thresholds are annualized daily averages, construction with the same equipment for an extended duration would not increase the daily average criteria air pollutant emissions. Therefore, the Project variant would not result in any new or substantially more severe impacts related to obstruction of an applicable air quality plan or exceeding criteria air pollutant thresholds.

As shown in FEIR Tables 4.3-9 and 4.3-10, construction at the downtown San Anselmo site would exceed BAAQMD significance thresholds for residential receptors. Because the toxic air contaminant emissions are annualized daily averages, construction with the same equipment for an extended duration would not increase the daily average toxic air contaminant emissions and would have the same potentially significant impact related to toxic air contaminants as the Project. Implementation of adopted Mitigation Measures Mitigation Measures 4.3-1, BAAQMD Basic Construction Measures, and 4.3-4, Tier 4 Engines for Construction Equipment, would reduce this impact to less than significant with mitigation.

TABLE 4 ESTIMATED MITIGATED CONSTRUCTION ANNUAL AVERAGE PM_{2.5} EXHAUST CONCENTRATIONS

		Approved Project (FEIR) P PM _{2.5} Exhaust Concen		Project ^b nust Concentrations (µg/m³)				
Project Element and Emissions Source	Residential Receptor Daycare Receptor School Receptor		Residential Receptor	School Receptor				
Nursery Site FDS Basin								
PM _{2.5} Exhaust Concentrations	0.10	n/a ^a	0.08	More than 1,000 feet from nearest modified project receptors				
BAAQMD Significance Threshold	0.30	0.30	0.30					
Significant Impact?	No	No	No					
Downtown San Anselmo Section								
PM _{2.5} Exhaust Concentrations	0.28	0.02	0.02	0.19	0.04			
BAAQMD Significance Thresholds	0.30	0.30	0.30	0.30 0.30				
Threshold Exceeded?	No	No	No	No	No			

NOTES:

SOURCE: ESA, 2018 and ESA, 2023. See also FEIR Appendix B.

a n/a = not applicable. There are no daycare receptors within 1,000 feet of the Nursery Site FDS Basin.
b The daycare receptor identified in the FEIR near the downtown San Anselmo site is no longer operating and no other daycare receptors are present within 1,000 feet; therefore, the modified project concentrations are not evaluated at a daycare receptor.

Mitigation Measures

The 2018 FEIR identified mitigation measures to reduce identified air quality impacts, which would continue to apply to the Project. Each of the mitigation measures have been adopted as conditions of approval. The following list summarizes the adopted air quality mitigation measures applicable to the Project. No adopted mitigation measures require revision.

Adopted Mitigation Measure 4.3-1: BAAQMD Basic Construction Measures. Measures to limit dust, criteria pollutants, and precursor emissions associated with construction.

Adopted Mitigation Measure 4.3-4: Tier 4 Engines for Construction Equipment. Emissions standards for certain construction equipment.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding air quality. As discussed above, the modified project would not result in new significant impacts related to air quality with implementation of adopted Mitigation Measures 4.3-1 and 4.3-4. No changes to the existing Mitigation Measures, and no additional mitigation measures, are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on air quality.

3.3.4 Biological Resources

Environn	nental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
4. Biolo	ogical Resources. Would	I the Project:				
effect throu on an candi status regior regula Califo and G	a substantial adverse t, either directly or Igh habitat modifications, It species identified as a date, sensitive, or special s species in local or Inal plans, policies, or Inal plans, policies, or Inal plans, or by the Inal Department of Fish It same or U.S. Fish and If e Service?	p. 4.5-38 p. 4.5-44 p. 4.5-45 p. 4.5-48	No	No	No	N/A
effect or oth comm or reg regula Depai	a substantial adverse t on any riparian habitat ner sensitive natural nunity identified in local gional plans, policies, ations or by the California rtment of Fish and Game Fish and Wildlife Service?	p. 4.5-49	No	No	No	N/A
effect wetla 404 o (inclu marsh etc.) t filling	a substantial adverse t on federally protected inds as defined by Section of the Clean Water Act ding, but not limited to, h, vernal pool, coastal, through direct removal, thydrological ruption, or other means?	p. 4.5-53	No	No	No	N/A
move reside wildlit estab migra impec	fere substantially with the tement of any native ent or migratory fish and fe species or with dished native resident or story wildlife corridors, or de the use of native fe nursery sites?	p. 4.5-54	No	No	No	N/A
or ord biolog	ict with any local policies dinances protecting gical resources, such as a preservation policy or ance.	p. 4.5-55	No	No	No	N/A
an ad Conse Comn or oth regior	ict with the provisions of lopted Habitat ervation Plan, Natural munity Conservation Plan, ner approved local, nal, or state habitat ervation plan?	p. 4.5-37	No	No	No	N/A

Findings of FEIR

The FEIR evaluated impacts to fish and other aquatic species (Impact 4.5-1), rare plants (Impact 4.5-2), California red-legged frog and western pond turtle (Impact 4.5-3), nesting birds (Impact 4.5-4), northern spotted owl (Impact 4.5-5) and bats (Impact 4.5-6). Mitigation measures (Measures 4.5-1a, 4.5-1b, 4.5-1c, 4.5-2, 4.5-3a, 4.5-3b, 4.5-4, and 4.5-6) were found to be sufficient to reduce all impacts on special-status species to less-than-significant levels. Mitigation Measures 4.5-7a, 4.5-7b, 4.5-7c, and 4.5-10 were found to reduce impacts on sensitive natural communities, wetlands, and trees to less-than-significant levels. Thus, the approved project had less-than-significant effects on biological resources with implementation of mitigation.

Discussion

This supplemental environmental review included an updated search of the California Natural Diversity Data Base (CNDDB), U.S. Fish & Wildlife Service Information for Planning and Consultation (iPaC) database, and California Native Plant Society (CNPS) records to review special-status species occurrence records from the downtown San Anselmo site and vicinity, as well as reviews of aerial photography. Historical occurrences for obscure bumble bee (*Bombus caliginosus*) and western bumble bee (*Bombus occidentalis*) occur within 2 miles of the downtown San Anselmo site and were not listed in FEIR Table 4.5-2, Special-Status Species with Potential to Occur in the Project Sites (CNDDB, 2023). These species have low potential to occur at the downtown San Anselmo site due to the date of the last recorded observations.

Modified project construction and operation would occur at the downtown San Anselmo site evaluated in the FEIR. Project construction would occur over five months.

Fish and Other Aquatic Resources

The FEIR, Impact 4.5-1, found that in-water construction activities including dewatering and construction of diversion and weir structures could result in a significant impact to special-status aquatic biological resources. The modified project would require in-water construction activities in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed. With implementation of adopted Mitigation Measures 4.5-1a (Seasonal Avoidance of Sensitive Aquatic Species), 4.5-1b (Relocation of Special-Status Fish), and 4.5-1c (Contractor Environmental Awareness Training and Site Protection), the modified project would not result in new or more severe significant impacts on aquatic biological resources.

Special-Status Plants

The FEIR analyzed potential impacts to many special-status species with potential to occur at approved project sites. Three rare plants were considered to have moderate potential to occur, but none of these species, nor other rare plants, were observed during pre-construction rare plant surveys conducted during the appropriate blooming periods for these species. The modified project would require ground disturbance and vegetation removal in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed. Adopted Mitigation Measure 4.5-2 required surveys for special-status plants to be conducted by a qualified botanist prior to construction during the appropriate season,

and relocation, salvage, and monitoring if rare plants were found. With implementation of adopted Mitigation Measure 4.5-2 (Avoid Impacts to Rare Plants), the modified project would not result in any new or more severe significant impacts on rare plants.

California Red-Legged Frog and Western Pond Turtle

The modified project would require in-water construction activities in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed. As discussed in FEIR Impact 4.5-3, construction activities in San Anselmo Creek could directly affect special-status amphibians, such as California red-legged frog and western pond turtle. Special-status amphibian species may be present during foraging or dispersal movements and individuals could be subject to injury or mortality or to habitat loss from construction traffic, vegetation removal, noise or human traffic. Mortality or injury to special-status amphibians, or destruction of substantial habitat, would be a significant impact. Adopted Mitigation Measure 4.5-3b (Avoid Impacts to California Red-Legged Frog and Western Pond Turtle) requires a pre-construction survey for California red-legged frog and western pond turtle. In addition, exclusionary fencing and biological monitoring is required under Mitigation Measure 4.5-3a (Install Wildlife Exclusion Fencing). These mitigation measures reduced impacts to a less-than-significant level for these species; with implementation of Mitigation Measures the modified project would not result in any new or more severe significant impacts on California red-legged frog or western pond turtle.

Nesting Birds, including Northern Spotted Owl

The FEIR found that construction activities could disturb nesting migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code 3503, resulting in significant impacts (Impact 4.5-4). The modified project would require construction activities in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed.

During construction, tree and shrub pruning or removal, and grading could directly impact nesting birds by damaging or destroying nests, causing adults to abandon nests, or directly killing or injuring nesting birds. Additionally, construction and maintenance activities may cause elevated sound levels and vibrations from heavy construction equipment that could cause adult birds to abandon nests, especially larger bird species or birds that are accustomed to relatively low ambient noise levels. Adopted Mitigation Measure 4.5-4 (Avoid Impacts to Special-status and Nesting Birds, including Raptors and Northern Spotted Owls) requires surveys for nesting birds prior to vegetation removal or nearby activities during bird nesting season. For northern spotted owl, a buffer of ¼-mile would be maintained around identified owl activity centers. For migratory birds, a suitable buffer would be placed around active nests until young have fledged. Implementation of this mitigation measure would avoid a new or substantially more severe impact on nesting birds, including northern spotted owl. Thus, with implementation of adopted Mitigation Measure 4.5-4 the modified project would not result in a new or more severe significant impact on nesting migratory birds, including northern spotted owl.

Bats

The FEIR found that bat roosts in trees or nearby buildings could be disturbed by construction activities that damage or remove bat roosting habitat such as trees or structures. Construction activities such as tree and shrub removal, and grading could directly kill or injure roosting special-status bats, and elevated sound levels from construction and maintenance equipment could cause adult bats to abandon maternity roosts. The modified project would require grading activities in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed. With implementation of adopted Mitigation Measure 4.5-6 (Avoid Impacts to Special-Status Bats), the modified project would not result in new or more severe significant impacts on roosting bats.

Riparian Habitat or Other Sensitive Natural Communities

The FEIR identified riparian habitat at the downtown San Anselmo site. The riparian habitat at the downtown San Anselmo site has not changed since FEIR certification. Approximately 300 square feet of the southern end of the retaining wall would be additional permanent fill in riparian habitat. New fill associated with the remaining retaining wall, additional channel protection, and pedestrian bridge abutments would be placed within the footprint of the existing bridge foundations in the creek. Removal of the existing bridge foundations would restore riparian habitat in the area. Project construction could indirectly affect sensitive natural communities by creating a favorable environment for invasive plant species and unintentionally introducing invasive species. Implementation of adopted Mitigation Measures 4.5-7a (Vegetation Protection for Sensitive Natural Communities), 4.5-7b (Habitat Restoration and Monitoring Plan), and 4.5-7c (Avoid Spread of Invasive Species and Pathogens) would address potential impacts of the modified project on riparian habitat and sensitive natural communities. With implementation of adopted Mitigation Measures 4.5-7a, 4.5-7b, and 4.5-7c, the modified project would not result in a new or more severe significant impact on riparian or sensitive vegetation communities.

Protected Wetlands

Federally jurisdictional wetlands are traditionally considered those areas with characteristic hydrology, vegetation and soils which are adjacent to or have a significant nexus with navigable waters (USACE 2007). The California Department of Fish and Wildlife typically extends jurisdiction over wetlands and waters covered under Lake and Streambed Alteration Agreements (Fish and Game Code Section 1602). Wetlands and other waters are present at the downtown San Anselmo site. Project activities at the downtown San Anselmo site would involve removing fill and restoring or enhancing the natural creek channel, as well as replacing existing fill. Project construction would temporarily impact wetlands and other waters at the downtown San Anselmo site. The modified project could also permanently impact waters of the U.S. and state where fill is placed outside of the existing building foundation footprint. Unpermitted permanent loss of wetlands and waters would be a potentially significant impact. The approved project has received permits under federal Clean Water Act Sections 404 and 401, and a lake and streambed alteration agreement under California Fish and Game Code. The approved project is required to restore temporarily impacted areas and implement compensatory mitigation consistent with the approved Final Habitat Restoration and Monitoring Plan referenced in the permits. The modified project

would proceed under these requirements; therefore, the modified project would not result in new or more severe significant impacts on protected waters and wetlands.

Migratory Wildlife and Wildlife Nursery Sites

The modified project would require construction activities in the same location as identified in the FEIR, and the list of special-status species with moderate or high potential to occur has not changed. Construction in the creek channel would temporarily disturb cover for and impede use of the creek as a potential wildlife movement corridor. During construction, impacts from the modified project on wildlife movement corridors would be potentially significant. With implementation of adopted Mitigation Measures 4.5-1a (Seasonal Avoidance of Sensitive Aquatic Species), 4.5-3b (Avoid Impacts to California Red-legged Frog and Western Pond Turtle), 4.5-4 (Avoid Impacts to Special-status and Nesting Birds, including Raptors and Northern Spotted Owls), and 4.5-6 (Avoid Impacts to Special-status Bats), which restrict work activities to the months when sensitive aquatic species are less likely to be present, and require pre-construction surveys and implementation of measures to protect special-status species with the potential to occur at the modified project site, the modified project would not result in a new or more severe significant impact to wildlife corridors or nursery sites.

Local Policies and Ordinances

Marin County has adopted a native tree protection and preservation ordinance (Ordinance 3342, 2002). The modified project would require construction activities in the same location as identified in the FEIR, and trees are present at the site. One tree would be removed at the downtown San Anselmo site. The removal of heritage trees or riparian trees at the modified project site would be a potentially significant impact. With implementation of adopted Mitigation Measure 4.5-10 (Mitigation for Removal of Heritage or Protected Trees), the modified project would not result in a new or more severe significant impact arising from conflict with the local tree protection ordinance or other local policies or ordinances.

Habitat Conservation Plans

No habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans apply to the downtown San Anselmo site, and there would be no impact arising from conflicts with habitat conservation plans. Thus, the modified project would not result in a new or more severe significant impact on provisions of a habitat conservation plan.

Cumulative Impacts

As discussed above, the modified project would have the same biological resources impacts as identified in the FEIR. These impacts include temporary construction impacts on fish and aquatic resources, special-status plants, California red-legged frog and western pond turtle, nesting birds, bats, riparian and wetland habitats, migratory wildlife, and trees. In the long term, modified project activities at the Downtown San Anselmo Site would restore and enhance the riparian corridor and potentially enhance water flow and wildlife forage and shelter opportunities. Cumulative projects in the watershed, including other bridge replacement projects, could result in similar biological resources effects which, although not adjacent to the downtown San Anselmo

site, could affect the same species or habitats in other parts of the watershed. The modified project would avoid, minimize and mitigate biological resources impacts through implementation of Mitigation Measures 4.5-1 through 4.5-10. The modified project contribution to cumulative impacts would be less than cumulatively considerable due to the small size of the resources affected, their location within the watershed, and the presence of similar habitats within the watershed. Therefore, the modified project's cumulative contribution to impacts to biological resources would be less than significant.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and extend the construction duration by two weeks. The Project variant would include installation of the baffle, truss, and additional foundations and placement of additional channel protection at and downstream of the baffle, but otherwise would be the same as the modified project. The baffle and additional channel protection would be placed within the footprint of the existing building foundation and designed to allow similar volumes of water to pass through the site as occurs under existing conditions. Because the Project variant would require in-water work at the same location, the Project variant could have the same impacts as the modified project on fish and other aquatic resources, special-status plants, California red-legged frog and western pond turtle, bats, and migratory wildlife or nursery sites. Implementation of adopted Mitigation Measures 4.5-1a, 4.5-1b, 4.5-1c, 4.5-2, 4.5-3a, 4.5-3b, 4.5-4, and 4.5-6 would reduce or avoid potentially significant impacts on these species. Similar to the modified project, construction of the Project variant could indirectly affect sensitive natural communities and protected wetlands; implementation of adopted Mitigation Measures 4.5-7a, 4.5-7b, and 4.5-7c would reduce potential impacts to less-than-significant levels. The Project variant would remove the same trees as would be removed under the modified project, a potentially significant impact; implementation of adopted Mitigation Measure 4.5-10 (Mitigation for Removal of Heritage or Protected Trees) would address this potential impact. The Project variant would not result in any new or more severe significant impacts than the impacts identified in the FEIR.

Mitigation Measures

The 2018 FEIR identified mitigation measures to reduce identified biological resources impacts, which would continue to apply to the modified project. Each of the mitigation measures have been adopted as conditions of approval. The following list summarizes the adopted biological resources mitigation measures applicable to the modified project. No adopted mitigation measures require revision.

Adopted Mitigation Measure 4.5-1a: Seasonal Avoidance of Sensitive Aquatic Species. Avoidance of work in the creek during seasonal window.

Adopted Mitigation Measure 4.5-1b: Relocation of Special-status Fish. Fish rescue and relocation for in-water work.

Adopted Mitigation Measure 4.5-1c: Contractor Environmental Awareness Training and Site Protection. Training for working in areas of potential endangered species habitat.

Adopted Mitigation Measure 4.5-2: Avoid Impacts to Rare Plants. Special-status plant surveys and avoidance.

Adopted Mitigation Measure 4.5-3a: Install Wildlife Exclusion Fencing. Installation of temporary exclusion fencing around perimeter of construction site.

Adopted Mitigation Measure 4.5-3b: Avoid Impacts to California Red-legged Frog and Western Pond Turtle. Preconstruction California Red-legged Frog and Western Pond Turtle surveys and avoidance.

Adopted Mitigation Measure 4.5-4: Avoid Impacts to Special-status and Nesting Birds, including Raptors and Northern Spotted Owls. Preconstruction owl and nesting bird surveys and avoidance.

Adopted Mitigation Measure 4.5-6: Avoid Impacts to Special-status Bats. Preconstruction bat surveys and avoidance.

Adopted Mitigation Measure 4.5-7a: Vegetation Protection for Sensitive Natural Communities. Establish work areas that reduce impacts on vegetation and revegetate temporarily impacted areas.

Adopted Mitigation Measure 4.5-7b: Habitat Restoration and Monitoring Plan. Restoration plan for affected jurisdictional wetlands and waters and riparian habitat.

Adopted Mitigation Measure 4.5-7c: Avoid Spread of Invasive Species and Pathogens. Measures to avoid introducing noxious weeds to the construction site.

Adopted Mitigation Measure 4.5-10: Mitigation for Removal of Heritage or **Protected Trees.** Requires avoiding impacts on trees and replacing removed trees at least 1:1.

Conclusion

The Project changes consist of additional components within the same downtown San Anselmo site in San Anselmo Creek; as discussed above, potentially significant impacts of the modified project related to biological resources would be less than significant with implementation of previously adopted Mitigation Measures 4.5-1a, 4.5-1b, 4.5-1c, 4.5-2, 4.5-3a, 4.5-3b, 4.5-4, 4.5-6, 4.5-7a, 4.5-7b, 4.5-7c, and 4.5-10. No changes to the existing Mitigation Measures, and no additional mitigation measures, are required. There are no changed circumstances and no new information of substantial importance regarding biological resources. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on biological resources.

3.3.5 Cultural Resources and Tribal Cultural Resources

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
5. Cultural Resources. Would	the Project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	p. 4.6-20	No	No	No	NA
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	p. 4.6-20	No	No	No	N/A
c. Disturb any human remains, including those interred outside the formal cemeteries?	p. 4.6-21	No	No	No	N/A
d. Cause a substantial adverse change in the significance of a tribal cultural resource?	p. 4.6-21	No	No	No	N/A

Findings of FEIR

The FEIR determined that there would be less-than-significant impacts to cultural resources with compliance of Marin Development Code Section 22.20.040 (D), which requires that construction cease in the event of a discovery of cultural resources so the find can be assessed by a qualified archaeologist. The certified FEIR also determined that there would be less-than-significant impacts to human remains if identified during project construction with compliance of Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5, which require the County coroner assess the remains and, if determined to be Native American, the Native American Heritage Commission be contacted to assign a most likely descendant who would make recommendations for the treatment and disposition of the remains. The FEIR concluded the approved project would have no impact on historical resources or landmarks of local cultural or historical importance.

Discussion

Since certification of the FEIR, the building on the concrete foundation at 634-636 San Anselmo Avenue was demolished, but otherwise the environmental setting relevant to cultural resources remains the same as discussed in the FEIR. The modified project would have no impact on architectural and structural resources for the same reasons described in the FEIR.

Archaeological resources can be considered historical resources, according to CEQA Guidelines section 15064.5, as well as unique archaeological resources, as defined in PRC section 21083.2(g). A significant impact could occur if the modified project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource. The FEIR did not identify archaeological

resources in the approved project site and relied on Marin Development Code Section 22.20.040 (D), Public Resources Code Section 5097.98, and Health and Safety Code Section 7050.5 for protocol to follow in the event of an inadvertent discovery of cultural materials or human remains during construction.

The modified project would require ground disturbance in the same locations at the downtown San Anselmo site as evaluated in the FEIR, along with activity in the same geologic unit immediately downstream of the retaining wall. As discussed in the FEIR, based on the results of the background research, surface survey, and subsurface survey, there are no archeological resources in the modified project area. Ground disturbance at the downtown San Anselmo site is subject to:

- the Monitoring and Discovery Plan and Marin Development Code Section 22.20.040(D), which requires that construction cease in the event of a discovery of cultural resources so the find can be assessed by a qualified archaeologist;
- Public Resources Code Section 5097.98, which prohibits knowingly and willfully excavating
 on or removing archaeological, paleontological, or historical features situated on public lands
 and requires coordination with Native Americans identified by the Native American Heritage
 Commission if human remains or burials are found;
- Health and Safety Code Section 7050.5, which prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery

With compliance with existing laws, the modified project would not result in new or substantially more severe significant impacts on cultural or tribal cultural resources.

Cumulative Impacts

The geographic scope of cumulative cultural and tribal cultural resources impacts is the downtown San Anselmo site and adjacent areas. The ReImagine Creek Park project is within the geographic scope for cultural and tribal cultural resources impacts. The ReImagine Creek Park project would be required to comply with the same codes as the modified project (Marin Development Code Section 22.20.040 (D), Public Resources Code Section 5097.98, and Health and Safety Code Section 7050.5), and therefore the modified project and cumulative projects would not result in cumulative cultural and tribal cultural resources impacts.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and would be required to comply with the same municipal code as the modified project. Therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in new or substantially more severe significant impacts on cultural or tribal cultural resources.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The changed circumstance of the demolition of the building at 634-636 San Anselmo Avenue has been considered; the modified project would not result in a new significant impact related to cultural or tribal cultural resources due to the changed circumstances. There is no new information of substantial importance regarding cultural resources or tribal cultural resources. As discussed above, the modified project would not result in new significant impacts related to cultural resources and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on cultural resources or tribal cultural resources.

3.3.6 Energy

Environmental Issue Area 6. Energy. Would the Project:	Where Impact Was Analyzed in FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	p. 4.4-10	No	No	No	N/A
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	p. 4.10-14	No	No	No	N/A

Findings of FEIR

The FEIR determined that with implementation of FEIR Mitigation Measure 4.3-1, BAAQMD Basic Control Measures, approved project construction would have less-than-significant impacts related to the approved project's use of energy. The approved project was found to have a less-than-significant impact related to use of energy during operations.

Discussion

Setting

At the time of FEIR publication, Appendix F (Energy Conservation) and Appendix G (Environmental Checklist Form) of the State CEQA *Guidelines* did not list potential thresholds of significance for an evaluation of energy-related impacts. For the purposes of the FEIR analysis, the following applicable thresholds of significance consistent with Appendix N of the County's Environmental Impact Review Guidelines (EIR Guidelines; Marin County, 1994) were used to determine whether implementing the approved project would result in a significant impact related to energy use. An impact related to energy resources is considered significant if implementation of the modified project would do any of the following when compared against existing conditions:

- a) Utilize energy, oil, or natural gas in an inefficient manner
- b) Encourage activities that would result in the use of large amounts of energy, oil, or natural gas
- c) Exceed the capacity of the energy supplier to supply the project's energy needs with existing or planned supplies
- d) Require the development of new energy resources

Since the adoption of the FEIR, the State CEQA Guidelines were updated to require an examination of energy impacts of a project. A significant impact may occur if a project would result in wasteful, inefficient, or unnecessary consumption of energy, including the project's transportation energy use.

The Marin Countywide Plan's Energy and Green Building Element establishes goals and policies for energy consumption, and conservation. The Energy and Green Building Element includes no policies that directly apply to restoration activities or general construction fuel use.

Policies of the Marin County Climate Action Plan (Marin County, 2020), though related to energy usage, are discussed in Section 3.3.8 Greenhouse Gas Emissions.

Since certification of the FEIR, the town of San Anselmo has adopted a Climate Action Plan (San Anselmo CAP; Town of San Anselmo, 2019). The San Anselmo CAP identifies local strategies that incorporate State reduction strategies that have been approved, programmed, and/or adopted that aim to reduce local community emissions from 2016 levels. The local strategies are grouped into six categories: low carbon transportation; energy efficiency; renewable energy; waste reduction; water conservation; and sequestration. The first three categories include strategies related to energy use.

Impact Discussion

The modified project would require the use of energy resources for construction, operation, and maintenance. For modified project construction, the same equipment described in the FEIR would be used. After construction, operations and maintenance would be the same as described in the FEIR. The use of fuel for construction equipment and worker transportation for the new construction activities would not be wasteful, inefficient, or unnecessary such that potentially significant environmental effects would result. Therefore, the modified project would not have a new or substantially more severe significant impact involving wasteful, inefficient, or unnecessary consumption of energy resources.

The modified project would apply Basic Construction Mitigation Measures and BAAQMD's Additional Mitigation Measures, which include measures that would reduce energy consumption. California Green Building code standard requirements would be implemented during construction.

The San Anselmo CAP strategies related to energy use focus on low-carbon transportation; energy efficiency in residential, commercial, and municipal operations; and implementing renewable energy generation and building electrification. The modified project would not require electricity during operations and does not include land uses that generate person or vehicle trips. Other strategies of the San Anselmo CAP that relate to reducing greenhouse gas emissions are discussed in Section 3.3.8, Greenhouse Gas Emissions. The modified project would not obviously conflict with or obstruct a state or local plan for energy efficiency and would not have a new significant impact related to a conflict or obstruction of a state or local plan for renewable energy or energy efficiency.

Project Variant (With Baffle)

The Project variant would be constructed in the same location as the modified project. The Project variant would use the same construction equipment and extend the construction duration by two weeks. Although the Project variant would necessitate the use of additional energy to construct the baffle and additional channel bed scour protection, construction activities would not be conducted in a manner that is wasteful, inefficient, or unnecessary such that potentially significant environmental effects would result. As with the modified project, the Project variant would be required to implement mitigation measures that would result in efficient use of energy. Therefore, the Project variant would have less-than-significant impacts related to energy.

Mitigation Measures

Implementation of Mitigation Measure 4.3-1, BAAQMD Basic Control Measures, is discussed in Section 3.3.3, Air Quality.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR; as discussed above, the modified project would not result in new significant impacts related to energy and no additional mitigation measures are required. The changed circumstance of impact thresholds based on the State CEQA Guidelines Appendix G (Environmental Checklist) questions has been considered; the modified project would not result in a new significant impact related to energy due to the changed circumstance. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to energy.

3.3.7 Geology and Soils

		1		1	1
Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
7. Geology and Soils. Would the	Project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii. Strong seismic ground	p. 4.7-22	No	No	No	N/A
shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides?					
b. Result in substantial soil erosion or the loss of topsoil?	p. 4.7-25	No	No	No	N/A
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	p. 4.7-26	No	No	No	N/A
d. Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	p. 4.7-26	No	No	No	N/A
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	p. 4.7-21	No	No	No	N/A
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	p. 4.6-21	No	No	No	N/A

Findings of FEIR

The FEIR determined that, with implementation of geotechnical recommendations and compliance with relevant design standards, the approved project would have less-than-significant impacts related to geology and soils. The FEIR determined that the approved project would have no impact on paleontological resources or unique geologic features.

Discussion

The potential for adverse impacts related to geologic, seismic, and soil hazards is evaluated in FEIR Section 4.7, Geology, Seismicity, Soils, and Paleontological Resources. No new information regarding geologic, seismic, or soil hazards is applicable to the downtown San Anselmo site.

The modified project components at downtown San Anselmo site would not alter the risk of potential adverse effects involving rupture of a known earthquake fault or strong seismic ground shaking because the modified project components would be constructed in the same location as discussed in the FEIR, would not reduce the stability of creek banks, and would not be habitable structures. The modified project would not result in new or substantially more severe significant seismic hazard impacts.

The work at the downtown San Anselmo site would disturb approximately 0.5 acre of land and would be required to comply with the Marin County and Town of San Anselmo stormwater and erosion control regulations, which are described in FEIR Section 4.7.2. The town regulations require implementation of an Erosion and Sediment Control Plan, which would include the application of best management practices to control stormwater run-on and runoff from construction work sites. The modified project components include a retaining wall and bioengineered slopes to prevent and reduce bank erosion in the area during operation. Therefore, the Project would not result in substantial erosion or the loss of topsoil and would not result in new or substantially more severe significant impacts related to this topic.

The modified project components would be constructed on the same geologic units described in the FEIR. Constructing a retaining wall instead of a bioengineered slope would not alter the potential for landslide, lateral spreading, subsidence, liquefaction or collapse, or slope instability. The pedestrian bridge abutments would be designed consistent with existing regulations and construction best management practices.

The effects of the project on creek bank stability and erosion are discussed in FEIR Section 4.9, Hydrology and Water Quality, and Section 3.3.10 of this document.

As noted in the FEIR, expansive soils are not present at the downtown San Anselmo site and the Project does not propose the use of septic tanks or alternative wastewater disposal systems.

Because the modified project components are proposed at the same site as evaluated in the FEIR, the modified project would have no impact on paleontological resources for the reasons discussed in FEIR Impact 4.7-6.

The geographic scope of cumulative geology and soils impacts is the downtown San Anselmo site and adjacent areas. The ReImagine Creek Park project is within the geographic scope for geology and soils impacts. The ReImagine Creek Park project would be required to comply with Marin County and Town of San Anselmo stormwater and erosion control regulations and would not create new slopes or require excavation within San Anselmo Creek. The modified project along with cumulative projects would not result in significant cumulative geology and soils impacts.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and includes similar construction activities; therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe impacts related to geology and soils.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding geology and soils. As discussed above, the modified project would not result in new significant impacts related to geology and soils and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on geology and soils.

3.3.8 Greenhouse Gas Emissions

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
8. Greenhouse Gas Emissions	s. Would the Project:				
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	p. 4.3-47	No	No	No	N/A
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	p. 4.3-47	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would not conflict with applicable plans and policies and would not exceed the BAAQMD-recommended thresholds of significance for greenhouse gas emissions; therefore, the approved project was found to have a less than significant impact associated with greenhouse gas emissions.

Discussion

Setting

Statewide and regional climate change planning has proceeded since the adoption of the FEIR. In September 2018, Governor Brown signed SB 100 into law, setting a state target of 100 percent carbon-free electricity by 2045. SB 100 also sets interim requirements for 50 percent renewable electricity by 2026 and 60 percent by 2030, superseding previously established targets. Also in September 2018, Governor Brown signed Executive Order B-55-18, which establishes a new statewide goal to "achieve carbon neutrality as soon as possible, no later than 2045, and achieve and maintain net negative emissions thereafter."

In September 2022, Governor Newson signed AB 1279, the California Climate Crisis Act which requires the state to achieve net-zero GHG emissions no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels and directs the California Air Resources Board (CARB) to work with relevant state agencies to achieve these goals.

The CARB Climate Change Scoping Plan was most recently updated in 2022 to incorporate the 85 percent reduction and carbon neutrality targets for 2045 established by AB 1279. The actions and outcomes in the 2022 Scoping Plan aim to achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate

pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and then capture and storage of carbon.

BAAQMD most recently updated its *CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* in April 2022. In response to SB 32's target for 2030 and EO B-15 target for carbon neutrality no later than 2045, BAAQMD adopted new CEQA significance thresholds for GHGs and published a Justification Report (BAAQMD, 2022). For land use development projects, BAAQMD recommends using the approach endorsed by the California Supreme Court in Center for Biological Diversity v. Department of Fish & Wildlife (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the State's long-term climate goals. As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less-than-significant impact on climate change under CEQA. If a project would contribute its "fair share" of what will be required to achieve those long-term climate goals, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change (62 Cal.4th 220–223).

Applying this approach, BAAQMD analyzed what will be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. BAAQMD, based on this analysis, has identified best management practices as significance thresholds that projects would have to comply with to ensure consistency with the state's long-term GHG reduction goals. BAAQMD developed these thresholds of significance based on typical residential and commercial land use projects focusing on operational emissions from building energy use and transportation. In addition, BAAQMD has not identified a construction-related climate impact threshold at this time.

The BAAQMD *CEQA Thresholds* also state that, alternatively, a project may be found to have a less-than-significant impact related to GHG emissions if it complies with a locally adopted GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Since adoption of the FEIR, and after changes in state GHG reduction goals, the Marin County Climate Action Plan has been updated. The Marin County Climate Action Plan 2030 (2030 CAP), adopted by the County Board of Supervisors on December 8, 2020, updates the County's previous 2014 climate action plan to make it consistent with current State GHG reduction goals and inventory methodologies, and to incorporate the outcome of Drawdown: Marin. Drawdown: Marin was a two-year planning process conducted by the County Community Development Agency that engaged residents and businesses in a comprehensive, science-based, countywide campaign to identify actions to dramatically reduce GHG emissions, address equity, and increase community resilience.

In the 2030 CAP, the County establishes the goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and, through a combination of emission reductions and carbon sequestration, reducing net carbon emissions to 60 percent below 2005 levels by 2030 (a goal initially established by Drawdown: Marin), and to zero by 2045. These targets meet and exceed the State goals of reducing emissions 40 percent below 1990 levels by 2030 and carbon neutrality by 2045.

To establish the 1990 baseline for the 2030 goal, and consistent with CARB's guidance to local governments, the 2030 CAP estimates 1990 emissions levels as 15 percent below 2005 levels. Using this methodology, GHG emissions from the unincorporated County area in 1990 are estimated at 419,632 MTCO2e, based on the 2005 inventory of 493,685 MTCO2e. The 2030 CAP reports that in 2018 emissions were 380,318 MTCO2e, about 23 percent below the 2005 level, and about 10 percent below the 1990 level.

The 2030 CAP is a "Qualified GHG Reduction Plan" within the meaning of CEQA Guidelines Section 15183.5, which means that a finding of consistency with the 2030 CAP may be used to determine that a project's GHG impacts would be less than significant.

On June 11, 2019, the Town of San Anselmo adopted the San Anselmo CAP, which supports state and local policies and programs in partnership with the San Anselmo Sustainability Commission and Marin Climate Energy Partnership (MCEP). Similar to the 2030 CAP, the San Anselmo CAP establishes goals of reducing GHG emissions 45% below 1990 levels by 2030 and 80% below by 2050. The actions identified in the 2030 CAP and the San Anselmo CAP are modeled from an example climate action plan developed by the MCEP.

Impact Discussion

Greenhouse gas emissions from the modified project would be generated primarily during construction with mechanical equipment, and automobile and truck trips associated with commuting workers. As discussed above, BAAQMD has not adopted quantitative or qualitative significance thresholds for the evaluation of GHG emissions from construction. GHG emissions from off-road construction equipment represent a very small portion of overall statewide emissions (0.6 percent), and CARB has identified only limited emission reduction strategies to control emissions from off-road construction equipment. Therefore, CARB's climate action planning has focused on the reduction of operational emissions that have technology available to yield greater reductions. In other words, CARB estimates that the state can achieve its 2030 target with very limited emission reductions in the construction sector.

The 2017 Scoping Plan Update calls for reducing emissions from certain sources substantially (like vehicle emissions and building energy use) while not targeting emissions for other sources (like construction emissions). The 2022 Update, which lays out a sector-by-sector roadmap for California to decarbonize the economy and achieve carbon neutrality by 2045, identifies transportation electrification, VMT reduction and building decarbonization as the main areas for GHG reductions with residual emissions addressed by re-envisioning the natural and working lands for carbon storage and sequestration. Under this strategy, the State can still achieve its 2030 GHG reduction target without relying on the reductions in the construction sector. Similarly, the BAAQMD thresholds focus on operational GHG emissions from land use development projects that provide major reductions and do not rely on any reduction in GHG emissions from the construction sector to meet the state's GHG reduction goals for 2030 and beyond. Because BAAQMD's thresholds are based on consistency with statewide targets, the conclusion that emissions from construction are less-than-significant is warranted. For these reasons, the construction-related GHG emissions of the modified project are not considered cumulatively considerable, and the impact would be less than significant. The modified project would not result

in new or substantially more severe significant impacts related to construction greenhouse gas emissions.

Once operational, the modified project would not increase staff at the District, nor would it generate any new operational and maintenance truck trips to the project site. Additionally, the modified project does not introduce any new stationary sources of pollutants. Therefore, there would be no increase in direct GHG emissions at the project site over existing conditions. Once operational, the modified project would not change the energy requirements at the site, increase water use or generate wastewater and solid waste. Therefore, there would be no increase in direct or indirect GHG emissions due to project operations, and the modified project would not result in new or substantially more severe significant impacts related to greenhouse gas emissions during operation.

The modified project does not include ongoing transportation, energy use, waste generation, water use, or agricultural activity, and would not obviously conflict with greenhouse gas reduction strategies identified in the 2030 CAP or the San Anselmo CAP. The modified project would not result in new or substantially more severe significant impacts related to greenhouse gas emissions.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project. The Project variant would use the same construction equipment and extend the construction duration by two weeks. The Project variant would not alter modified project operations. For the same reasons discussed above for the modified project, the Project variant would not result in new or substantially more severe significant impacts related to construction or operations greenhouse gas emissions.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR; as discussed above, the modified project would not result in new significant impacts related to greenhouse gas emissions and no mitigation measures are required. The changed circumstance of the updated state and local emissions reductions plans and policies has been considered; the modified project would not result in a new significant impact related to greenhouse gas emissions due to these changed circumstances. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to greenhouse gas emissions.

3.3.9 Hazards and Hazardous Materials

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?			
9. Hazards and Hazardous	9. Hazards and Hazardous Materials. Would the Project:							
a. Create a significant hazard the public or the environm through the routine transp use, or disposal of hazardo materials?	ent ort,	No	No	No	N/A			
b. Create a significant hazard the public or the environme through reasonably foresees upset and accident conditio involving the release of hazardous materials into the environment?	ent able ns	No	No	No	N/A			
c. Emit hazardous emissions of handle hazardous or acute hazardous materials, substances, or waste within one-quarter mile of an existing or proposed schoo	y . n	No	No	No	N/A			
d. Be located on a site which is included on a list of hazardo materials sites compiled pursuant to Government Co Section 65962.5 and, as a result, would it create a significant hazard to the pul or the environment?	ous ode	No	No	No	N/A			
e. For a Project located within airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise fereight people residing or working the Project area?	ne or	No	No	No	N/A			
f. Impair implementation of of physically interfere with an adopted emergency resporplan or emergency evacuat plan?	nse	No	No	No	N/A			
g. Expose people or structures either directly or indirectly, significant risk of loss, injury death involving wildland fire	to a	No	No	No	N/A			

Findings of FEIR

The FEIR determined that activities at the Downtown San Anselmo site could include activities on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but implementation of Mitigation Measures 4.8-2a, 4.8-2b,

and 4.8-2c would reduce impacts associated with encountering potentially contaminated soil or groundwater to less than significant levels by controlling contact with and release of these materials into the environment. With compliance with existing regulations, the FEIR found that all other potential hazards and hazardous materials impacts would be less than significant.

Discussion

Since certification of the FEIR, the building on the concrete foundation at 634-636 San Anselmo Avenue was demolished. The modified project would require ground disturbance in San Anselmo Creek in the same location as identified in the FEIR.

Based on a search of the Department of Toxic Substances Control (DTSC) EnviroStor database and the State Water Resources Control Board (SWRCB) GeoTracker database, there is one listed hazardous materials site near the modified project (DTSC, 2023; SWRCB, 2023). The former Chevron service station, which was located at 700/750 Sir Francis Drake Boulevard, approximately 400 feet north of the downtown San Anselmo site as shown on FEIR Figure 4.8-1, is an active underground storage tank (UST) cleanup site (Pangea, 2023). Soil and groundwater have been contaminated with gasoline, diesel, motor oil, and the fuel additive methyl tertiary butyl ether (MTBE). The fuel and waste oil USTs were removed in December 1995 and January 1996, along with 1,700 cubic yards of contaminated soil and 75,000 gallons of contaminated groundwater. The extent of residual soil contamination is limited to the site and is below regulatory action levels.

The direction of groundwater flow is to the south. Groundwater contaminated with gasoline and the fuel additive MTBE is present on the former Chevron station site and extends downgradient (south) but is still being delineated to its full extent. As of March 13, 2023, groundwater contamination extended south towards Center Boulevard (Pangea, 2023). A workplan to further investigate the extent was submitted to the Regional Water Quality Control Board (RWQCB) dated August 24, 2023. The RWQCB approved the workplan on October 19, 2023, and requested the investigation report be submitted to the RWQCB by December 18, 2023. Adopted Mitigation Measure 4.8-2a required using updated information from the SWRCB GeoTracker website to inform the Health and Safety Plan and Soil Management Plan. Based on the current GeoTracker information, adopted Mitigation Measure 4.8-2a has been clarified to further specify the information to be incorporated into the Health and Safety Plan and Soil Management Plan, as shown below. With implementation of Mitigation Measure 4.8-2a, hazardous materials impacts during construction would be reduced to less than significant levels.

The modified project would include the use of equipment that would use fuels, oil and lubricants, and cleaning solvents. Construction contractors would be required to prepare a SWPPP for construction activities according to the NPDES General Construction Permit requirements and similar related county and town regulations. With implementation of the SWPPP and compliance with existing regulations, the potential impact related to routine transport and accidental releases of hazardous materials would be less than significant. Exposure to ACM, LBP, or other hazardous materials in structures would only occur during demolition of the concrete foundations in San Anselmo Creek during construction activities. Once the structures have been removed, there would be no further exposure during operations to hazardous building materials and therefore no impact.

The two schools within 0.25 mile of the work site are not immediately adjacent to the work sites and are not on the roads that would be used to travel to and from the work sites. This modified project would handle limited quantities of hazardous materials and only during construction. Therefore, there would be no impact related to use or transport of hazardous materials in proximity to schools. There are no airports or airstrips within two miles of the modified project site. Therefore, there would be no impacts related to proximity to airports.

Access to the Downtown San Anselmo site would be by San Anselmo Avenue and Center Boulevard or Sir Francis Drake Boulevard. Center Boulevard is a designated emergency or evacuation route. Although not a designated emergency or evacuation route, San Anselmo Avenue and Sir Francis Drake Boulevard are primary routes through downtown San Anselmo. A Traffic Management Plan (see Mitigation Measure 4.15-1) would be prepared that would ensure that the effect of modified project traffic is reduced to less than significant. Contract specifications shall mandate approval of the Traffic Management Plan by the Flood Control District and the County of Marin as well as full compliance with all applicable local, state, and federal regulations. Upon completion of construction activities, occasional maintenance vehicles would access the sites. However, the vehicles would be parked off the streets, no lane closures would be required, and the potential impact related to emergency or evacuation plans would be less than significant.

According to the Fire and Resource Assessment Program (FRAP) maps published by the California Department of Forestry and Fire Protection (CAL FIRE), the site of the modified project is not within or near a high or very high fire hazard severity zones (CAL FIRE, 2007, 2008).

The geographic scope of cumulative hazards and hazardous materials impacts is the downtown San Anselmo site and adjacent areas. The ReImagine Creek Park project is within the geographic scope for hazards and hazardous materials impacts. The ReImagine Creek Park project would be required to comply with Marin County and Town of San Anselmo stormwater and erosion control regulations, would handle limited quantities of hazardous materials only during construction, and would not alter roadways. Therefore the modified project in combination with cumulative projects would not result in cumulative hazards and hazardous materials impacts.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and includes similar construction activities; therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe impacts related to hazards and hazardous materials.

Mitigation Measures

The 2018 FEIR identified mitigation measures to reduce identified hazards and hazardous materials impacts, which would continue to apply to the modified project. Each of the mitigation measures have been adopted as conditions of approval. The following list summarizes the adopted hazardous materials mitigation measures applicable to the modified project.

Mitigation Measure 4.8-2a: Check 700/750 Sir Francis Drake Boulevard investigation status.

Prior to beginning construction activities, the contractor shall check the status of the ongoing investigation at the former site at 700/750 Sir Francis Drake Boulevard investigation available at the SWRCB GeoTracker website at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0604100222. The downgradient extent of the contaminated groundwater is unknown and a workplan to further investigate was submitted to the Regional Water Quality Control Board (RWQCB) dated August 24, 2023. The RWQCB approved the workplan on October 19, 2023, and requested the investigation report be submitted to the RWQCB by December 18, 2023.

<u>The contractor shall use the latest r. Relevant information from the GeoTracker website</u> shall be used to inform the Health and Safety Plan and Soil Management Plan, described in <u>subsequent mMitigation mMeasures 4.8-2b and 4.8-2c</u>.

Adopted Mitigation Measure 4.8-2b: Health and Safety Plan. Health and safety plan to protect construction workers and the public during all excavation and grading activities.

Adopted Mitigation Measure 4.8-2c: Soil Management Plan. Plan specifying how contractor shall remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The modified project consists of additional components within the same downtown San Anselmo site in San Anselmo Creek. New information regarding the nearby underground storage tank cleanup site has been considered; as discussed above, potentially significant impacts of the modified project related to hazards and hazardous materials would be less than significant with implementation of previously adopted Mitigation Measures 4.8-2a, 4.8-2b, and 4.8-2c, as clarified above. No additional mitigation measures are required. There are no changed circumstances of substantial importance regarding hazards and hazardous materials. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects on hazards and hazardous materials.

3.3.10 Hydrology and Water Quality

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?			
10. Hydrology and Water Quality. Would the Project:								
Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?	p. 4.9-40	No	No	No	N/A			
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin?	р. 4.9-44	No	No	No	N/A			
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:								
i) result in substantial erosion or siltation on- or off-site?	p. 4.9-46	No	No	No	N/A			
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	p. 4.9-51	No	No	No	N/A			
iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	p. 4.9-37	No	No	No	N/A			
iv) impede or redirect flood flows?	p. 4.9-60	No	No	No	N/A			
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	p. 4.9-61	No	No	No	N/A			
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	p. 4.9-40, p. 4.9-44	No	No	No	N/A			

Findings of FEIR

The FEIR determined that the approved project would have significant and unavoidable impacts, with mitigation, related to impeding or redirecting flood flows, and that potential channel scour impacts would be less than significant with mitigation. The FEIR determined that compliance with the Construction General Permit, including preparation and implementation of the

Stormwater Pollution Prevention Plan (SWPPP) and associated BMPs as well as inspection and reporting, would effectively reduce degradation of surface water and groundwater quality to a less-than-significant level. With compliance with existing regulations, the FEIR determined that all other potential hydrology and water quality impacts would be less than significant.

Discussion

Setting

Since project approval, the environmental setting relevant to hydrology and water quality at the downtown San Anselmo site has not changed. All federal, state, and local regulations discussed in the FEIR for the downtown San Anselmo site remain applicable to the modified project.

Impact Discussion

Water Quality

The modified project would require construction activities in the same location as identified in the FEIR for the downtown San Anselmo site and would disturb an area of nearly 0.5 acre during construction. Construction could degrade water quality as a result of construction-related soil disturbance. Additionally, fuels and other chemicals used during construction could also degrade the water quality of receiving waters if spilled and entrained into stormwater runoff or dewatering discharges.

Consistent with San Anselmo Municipal Code Section 5-8.10, the contractor would be required to implement appropriate best management practices (BMPs) to prevent the discharge of construction wastes or contaminants from construction materials, tools, and equipment from entering San Anselmo Creek. Construction-phase BMPs include erosion and sediment controls and pollution prevention practices. Erosion control BMPs may include, but are not limited to, scheduling and timing of grading activities, timely revegetation of graded areas, the use of hydroseed and hydraulic mulches, and installation of erosion control blankets. Sediment control may include properly sized detention basins, dams, or filters to reduce entry of suspended sediment into the storm drain system and watercourses, and installation of construction entrances to prevent tracking of sediment onto adjacent streets. Pollution prevention practices may include designated washout areas or facilities, control of trash and recycled materials, tarping of materials stored on-site, and proper location of and maintenance of temporary sanitary facilities. Adherence to these requirements would also effectively reduce potential impacts associated with spills or leaks of hazardous materials and stormwater quality during construction and thus impacts would be less than significant.

Construction dewatering at the downtown San Anselmo site would be required to create dry work areas for work within the creek channel (areas separated from the surrounding creek by a cofferdam). Waters isolated within cofferdam areas would likely contain high concentrations of sediment as a result of the amount of ground disturbance within the isolated work area. These discharges could violate water quality standards or substantially degrade water quality resulting in a potentially significant water quality impact. Implementation of Condition 2.9 in the approved project's lake and streambed alteration agreement (Dewater Work Site) requires that muddy or

otherwise contaminated water from work areas shall be pumped into a settling tank, dewatering filter bag, upland area, or other CDFW-approved location prior to entering the creek.

The downtown San Anselmo site would not include substantial new impervious area or other new potential sources of polluted runoff, and therefore would not result in water quality impacts related to these topics.

Groundwater

The modified project does not include increased impervious area or new groundwater pumping; therefore, the modified project would not result in any new or more severe significant impacts on groundwater than identified in the FEIR. Operation of the modified project would reduce the amount of stormwater in the floodplain, which typically increases groundwater recharge in areas with pervious surfaces. However, the existing floodplain in the modified project area is composed almost entirely of impervious surfaces and so no groundwater recharge currently occurs during flood events. The modified project would not substantially deplete groundwater supplies or interfere with groundwater recharge; the impact would be less than significant, same as the impact in the FEIR.

Erosion and Sedimentation

The modified project would require construction activities in the same location as identified in the FEIR and would require implementation of stormwater best management practices (BMPs), which would reduce the potential for sediment to be released into stormwater or adjacent waterbodies. In addition, the work area in San Anselmo Creek channel would be dewatered during construction, further reducing the risk of mobilizing sediment during construction. The modified project would have the same less-than-significant impacts on erosion and sedimentation during construction as described in the FEIR.

By changing the channel characteristics at the downtown San Anselmo site, the modified project could alter patterns of erosion in the area during operations. As discussed in the FEIR, as a general principle, higher flow velocities can be used to evaluate the potential for a stream to scour or erode away the stream banks or incise the channel bottom. To assess the potential for the increased flow velocities to substantially increase erosive potential, this analysis used the HEC-RAS hydrologic model's outputs of flow velocity as the measure of erosive potential.

The results indicate there would be little change in the flow velocities during a 10-year or 25-year event for the modified project. During a 100-year event, depending on the location along that stream reach, the flow velocities for the modified project would increase by up to 4 percent; however, flow velocity increases at all of the affected locations would be within the existing range of flow velocity variability. The slight increases in maximum flow velocities and potential increases in scour and erosion that could arise from modified project implementation also would occur only for brief periods in large and infrequent flood events, and in only a few locations.

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Determined by comparing the modeled future flow velocities along the creek channel to the standard deviation of the set of modeled existing flow velocities along the same channel. As noted previously, flow velocities vary widely in modeled existing conditions (between 3 and 7 feet per second). All modeled changes in flow velocities were within one standard deviation of the mean of existing flow velocities.

Furthermore, the modified project includes scour protection along the toe of the banks and retaining wall, which would reduce the potential for increases in scour and erosion during modified project operation. This impact would be less than significant.

Flooding

Hydraulic Model Updates

The 2018 FEIR hydraulic modeling, used to estimate changes in flooding, represented the downtown San Anselmo project component by removing the building bridge structure, restoring the creek banks, and modifying the model topography to reflect approved project channel grading. Since FEIR certification, the District updated the hydraulic model used to simulate the San Anselmo Creek floodplain in the following ways, which are discussed in greater detail below (refer also to **Appendix A**):

• Existing Conditions: Added model cross sections and updated topography at the downtown San Anselmo site (referred to as the "corrected existing conditions" in Appendix A);

• Project Conditions:

- Added to the model surveyed cross sections along Fairfax Creek near the flood diversion and storage (FDS) basin, recalibrated the model for the Fairfax Creek reach, and updated the model to reflect the final (as-built) (FDS) design, which includes a smaller storage capacity;
- Updated downtown San Anselmo component designs used in the 2018 EIR modeling to reflect the current design (retaining wall instead of sloped channel bank, new pedestrian bridge abutments)⁷;
- **Project Cumulative Conditions:** Modified the other foreseeable (cumulative) project designs used in model, as available.

The additional model cross sections and updated topography at the downtown San Anselmo site affect the modeling results of both existing and with-project conditions. The additional cross sections enhance the model's ability to simulate the hydraulic (flooding) effects of structures in the channel at the downtown San Anselmo site, and consist of:

- one cross section immediately upstream of the proposed pedestrian bridge abutments for simulating their hydraulic effect and, if required, that of the baffle; and
- one cross section at the center of the existing stage deck in ReImagine Creek Park to simulate the hydraulic effect of the stage deck under both existing and proposed raised stage deck conditions.

Hydraulic modeling of project conditions also included the pedestrian bridge superstructure, which is part of the ReImagine Creek Park project; however, the bridge superstructure would be designed to avoid creating a new hydraulic constriction and therefore the flood effects of the project with or without the bridge superstructure would not be substantially different. The bridge superstructure is proposed immediately downstream of Building Bridge 3 (638 San Anselmo Avenue), and would have a soffit elevation of at 47.7 feet NAVD88. The soffit elevation of the proposed pedestrian bridge is designed to be 1 foot higher than the bottom elevation of the upstream Building Bridge 3 (46.7 feet NAVD88), so that the pedestrian bridge would not become a new hydraulic constriction after removal of BB2 (which has an existing bottom elevation at about 44.8 feet NAVD88).

The basis for the hydraulic model topography used for the FEIR at the downtown San Anselmo site was a survey conducted in 2006-2007. Results from the most recent (2017) topographic survey for the downtown San Anselmo site were incorporated into the current model update. The updated topography allows the model to simulate the current channel hydraulic condition more realistically.

During flood events in San Anselmo and Ross, water exits the creek channel and flows through adjacent developed areas ("overland flow"). As shown in **Figure 7** (with the updated cross sections and topography), the modeled existing water surface elevation *in the channel* during the 100-year flood is up to approximately 1 foot higher than was modeled in the FEIR (with the greatest increase at the downtown San Anselmo site, decreasing downstream), whereas the modeled existing water surface elevation *along the overland flow path* is slightly lower than was modeled in the FEIR as shown in **Figure 8**.

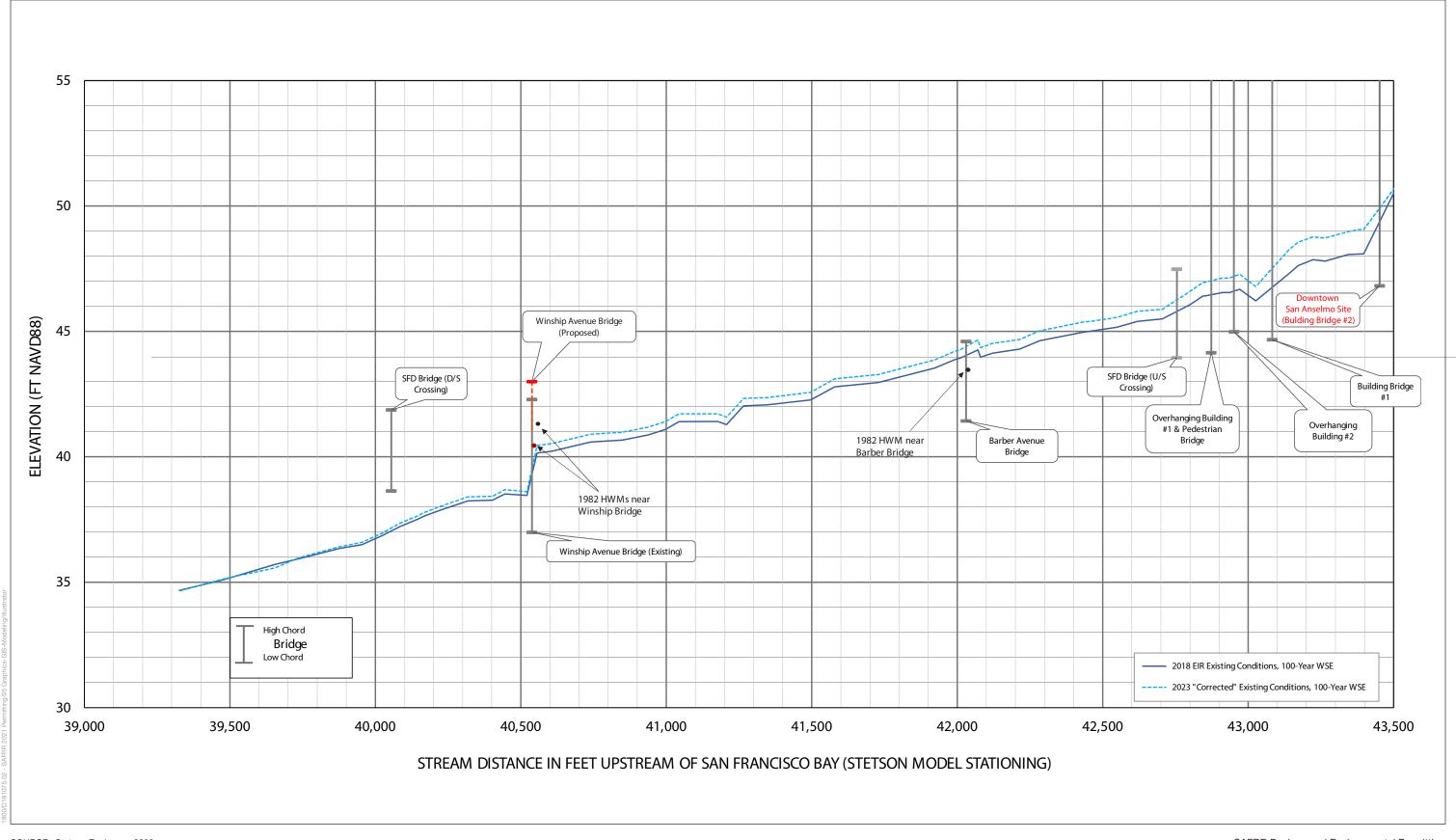
Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo Compared to Existing Conditions

Hydraulic model results for the 10-year, 25-year, and 100-year flood events are summarized below in **Table 5**. The FEIR found that the approved project would reduce flooding during the 10-year flood event, cause a minor increase in the inundation extent in lower downtown San Anselmo during the 25-year flood event, and increase flood depth but not extent during the 100-year flood event. Updated model results indicate that the modified project would not increase the inundation extent beyond the existing floodplains and flood depth would decrease in some locations, as discussed below. The updated model results differ from the results in the FEIR due to the combination of new information about existing conditions (updated topography and additional site-specific cross sections) and the modified project design.

The 10-year Flood Event

During the 10-year flood event, the modified project would reduce the extent of inundation in Fairfax and downtown San Anselmo:

- Fairfax. The floodplain is slightly reduced and the depth of inundation declines slightly in most areas of the floodplain. The greatest reduction in flood depth would be up to 4 inches in locations along Fairfax Creek near Arroyo Road.
- Upper Downtown San Anselmo. The modified project would reduce the extent of inundation north of San Rafael Avenue by approximately half. Inundation depth in areas near San Anselmo Creek north of San Rafael Avenue would decline by up to 13 inches. Nearly all overland flow between San Rafael Avenue and Tunstead Avenue would be eliminated. However, even along San Anselmo Avenue north of Magnolia Avenue, where inundation would not be completely eliminated, the depth of inundation would be reduced by up to 11 inches.
- Lower Downtown San Anselmo. The modified project would substantially reduce the extent of inundation. All overland flow between Tunstead Avenue and Fernhill Avenue west of Sir Francis Drake Boulevard would be eliminated. The extent of inundation within San Anselmo Creek channel (east of Sir Francis Drake Boulevard) would remain the same, although the depth of water in the channel would increase. The extent of inundation surrounding Ross Creek would remain the same.



SOURCE: Stetson Engineers, 2023

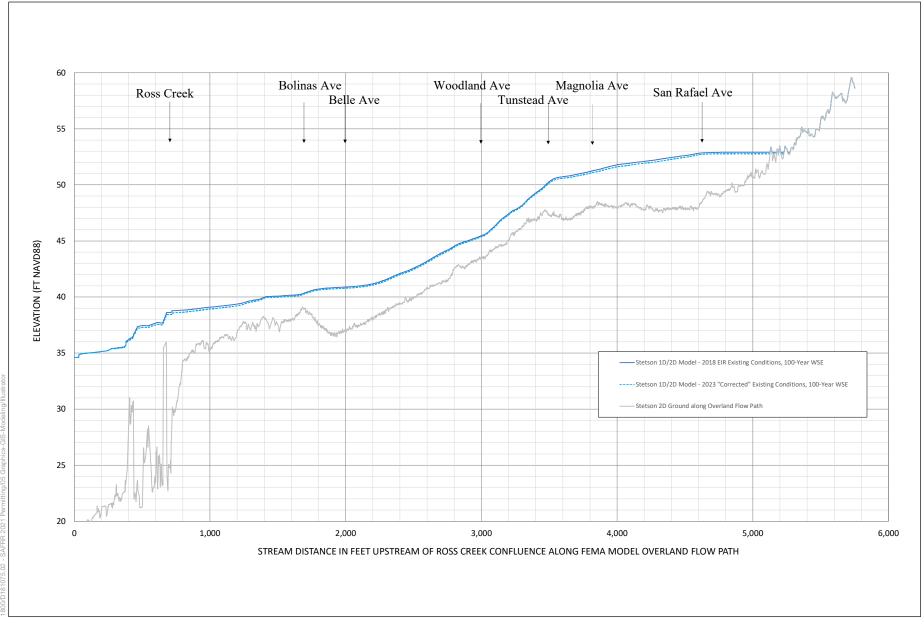
SAFRR Designs and Environmental Permitting



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68



SOURCE: Stetson Engineers, 2023

SAFRR Designs and Environmental Permitting



Existing 100-Year Flood Water Surface Elevation Profiles along Overland Flow Path – 2018 and 2023 Model Comparison



Table 5

Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo Compared to Existing Conditions ^a

=		F	FEIR (Approved) Project			Modified Project			
Flood Event	Location	Maximum Inundation Depth Reduction in the Floodplain (inches)	Change in Inundation Extent	Inundation Depth Increase in areas of new flooding (inches; where relevant)	Maximum Inundation Depth Reduction in the Floodplain (inches) ^b	Change in Inundation Extent	Inundation Depth Increase in areas of new flooding (inches; where relevant)		
	Fairfax	17			4				
10 Year	Upper Downtown San Anselmo	20	reduction		13	reduction			
	Lower Downtown San Anselmo	20			19				
	Fairfax	2			4	reduction			
25 Year	Upper Downtown San Anselmo	6	nearly zero		4				
	Lower Downtown San Anselmo	6	minor increase	4	4	nearly zero			
	Fairfax	4			1				
100 Year	Upper Downtown San Anselmo	5	nearly zero	3	3	nearly zero			
. 541	Lower Downtown San Anselmo	5		3	2				

NOTES:

SOURCE: San Anselmo Flood Risk Reduction Project Final Environmental Impact Report, 2018; Stetson Engineers, 2023 (Appendix A).

a Changes in flood inundation depth and extent for the modified project use the "corrected existing conditions" as the baseline for comparison.

b In Fairfax, the maximum inundation depth reduction for the modified project is lower than identified for the approved project due to the reduced capacity of the FDS basin and new information about Fairfax Creek channel (additional surveyed cross sections and model recalibration).

The 25-year Flood Event

During a 25-year flood event, the modified project would slightly reduce the extent of inundation in Fairfax and downtown San Anselmo:

- Fairfax. The extent of inundation in Fairfax would be reduced in the vicinity of Sequoia Road. Elsewhere the depth of inundation would be reduced by up to 3 inches but flood extent would remain similar to existing conditions.
- Upper downtown San Anselmo. The extent of inundation would remain nearly the same as existing conditions, but the depth of inundation would decrease throughout the area. The largest decline in overland flow inundation depth (a 4-inch reduction) would occur in the vicinity of San Rafael and Tamalpais Avenues.
- Lower Downtown San Anselmo. The extent of inundation would remain nearly the same as existing conditions, and the depth of inundation would generally decrease throughout the area. The maximum reduction in depth (up to 3 inches) would occur in areas near Fernhill Avenue. The extent of inundation east of Sir Francis Drake Boulevard would be slightly reduced, although the depth of water within a very small portion of the existing overland floodplain would increase near the upstream side of Winship Bridge. Inundation would not occur in areas outside the existing floodplain during the 25-year event. While the FEIR identified a minor increase in inundation extent as a result of the approved project, the modified project would cause nearly zero change in inundation extent. These different results are due to the combination of new information about existing conditions (updated topography and additional site-specific cross sections) and the modified project design.

The 100-year Flood Event

The modified project's effects on flooding extent and depth are further reduced during increasingly severe storms. During a 100-year flood event, the modified project would not substantially change existing flood inundation extent:

- **Fairfax**. During the 100-year flood event, the modified project would not change existing flooding inundation extent in Fairfax and would slightly reduce inundation depth.
- Upper Downtown San Anselmo. Inundation extent would remain approximately the same as current conditions in upper downtown San Anselmo. Inundation depths in upper downtown San Anselmo would decline or remain the same as existing flood conditions, except for areas in San Anselmo Creek channel between BB2 and Lincoln Court where inundation depth would increase slightly within the existing floodplain. Inundation would not occur in areas outside the existing floodplain during the 100-year event. While the FEIR identified a minor increase in inundation depth as a result of the approved project, the modified project would cause no change in inundation depth. These different results are due to the combination of new information about existing conditions (updated topography and additional site-specific cross sections) and the modified project design.
- Lower Downtown San Anselmo. Inundation extent would remain approximately the same as current conditions in lower downtown San Anselmo. Inundation depths in lower downtown San Anselmo would decline or remain the same as existing flood conditions. Inundation would not occur in areas outside the existing floodplain during the 100-year event. While the FEIR identified a minor increase in inundation depth as a result of the approved project, the modified project would cause no change in inundation depth. These different results are due to the combination of new information about existing conditions (updated topography and additional site-specific cross sections) and the modified project design.

Summary

Compared to existing conditions, the modified project would result in a reduction in flooding for the 10-year and 25-year flood events and would slightly reduce flooding during the 100-year flood event. Based on the updated topography, added cross sections, and modified project design, model results indicate that the modified project would not result in new areas of inundation. The modified project would result in less-than-significant impacts related to altering flood patterns onor offsite or impeding or redirecting flood flows. No mitigation would be required.

Cumulative Impacts

The FEIR evaluated cumulative flooding conditions in Chapter 5, Growth-Inducing and Cumulative Effects. The cumulative scenario for hydrology and water quality included the approved project along with the bridge replacement projects (at Winship Avenue, Azalea Avenue, Nokomis Avenue, Madrone Avenue, and Center Blvd-Sycamore Avenue). Since FEIR certification, the status of some of these projects has changed. To assess cumulative impacts of the modified project, an updated cumulative scenario was simulated that included the same bridge replacement projects using current bridge replacement designs, where available, along with preliminary designs for the Bridge Avenue Bridge Replacement.⁸

As summarized below in **Table 6**, the modified project along with cumulative projects would not result in new inundation in reasonably foreseeable future conditions. These results indicate that, same as described in the FEIR, in the near-term expected future cumulative scenario, the floodplain extent and inundation depths would generally be reduced compared to existing conditions.

TABLE 6
CHANGE IN FLOOD INUNDATION DEPTH AND EXTENT IN FAIRFAX AND SAN ANSELMO – CUMULATIVE

Q	Location	Maximum Inundation Depth Reduction in the Floodplain (inches)	Change in Inundation Extent	Inundation Depth Increase in areas of new flooding (inches; where relevant)
	Fairfax	9	reduction	
10	Upper Downtown San Anselmo	26	reduction	
	Lower Downtown San Anselmo	29	reduction	
	Fairfax	20	reduction	
25	Upper Downtown San Anselmo	23	reduction	
	Lower Downtown San Anselmo	4	reduction	
	Fairfax	12	nearly zero	
100	Upper Downtown San Anselmo	15	reduction	
	Lower Downtown San Anselmo	12	nearly zero	

SOURCE: Stetson Engineers, 2023 (Appendix A).

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Updated bridge replacement or removal designs were available for: Nokomis Bridge replacement, Madrone Bridge replacement, Center Ave/Sycamore Ave Bridge replacement, Bridge Street Bridge replacement, and Winship Bridge replacement. Updated designs were not available for the Azalea Bridge replacement and Army Corps Unit 4 Project; the same design information from the FEIR modeling was used for these two projects.

Project Variant (With Baffle)

The project variant would be in the same location as the modified project and construction would occur over approximately two weeks in addition to the modified project timeline. The project variant would include installation of the baffle, truss, and additional foundations and placement of additional channel protection at and downstream of the baffle, but otherwise would be the same as the modified project.

Water quality and groundwater impacts of the project variant would be the same as discussed above for the modified project. The primary purpose of the project variant is to closely mimic the existing hydraulic conditions (i.e., the existing floodplain) during the 25-year and 100-year flood events. Hydraulic modeling indicates the project variant would maintain the existing floodplain by obstructing the same volume of creek flow through a combination of the baffles, the truss, and the floodwall along San Anselmo Avenue (which would block overland flow from reentering the creek). Consequently, the project variant would not alter flood patterns on- or offsite, or impede or redirect flood flows, in upper and lower Downtown San Anselmo areas compared with existing conditions. The reduction in flood depth and extent in Fairfax described above would still occur due to operation of the completed flood diversion and storage basin.

While the project variant would mimic the existing hydraulic conditions, the baffle could alter patterns of erosion and scour immediately downstream of the baffle at the downtown San Anselmo site without additional channel bed scour protection. The project variant includes additional channel bed scour protection, which would prevent additional erosion or scour caused by the baffle.

The project variant would result in less-than-significant impacts related to hydrology and water quality.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The modified project consists of additional components within the same downtown San Anselmo site in San Anselmo Creek; as discussed above, the modified project would not result in new significant impacts related to hydrology and water quality and no additional mitigation measures are required. The new information of the updated existing conditions hydraulic modeling and potential foreseeable projects have been considered; the modified project would not result in a new significant impact related to hydrology and water quality due to the new information. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to hydrology and water quality.

3.3.11 Land Use and Planning

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
11. Land Use and Planning. W	ould the Project:				
a. Physically divide an established community?	p. 4.10-13	No	No	No	N/A
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	p. 4.10-14	No	No	No	N/A
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	p. 4.10-17	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would not conflict with local land use plans or policies, physically divide a community, or substantially alter the character or functioning of a community, and that land use and planning impacts of the approved project would be less than significant.

Discussion

The modified project components on the downtown San Anselmo site are surrounded by commercial and park land uses. As discussed in the FEIR, the modified project would not physically divide an established community because it would not alter existing means of access to Creek Park or surrounding commercial uses. The modified project would not result in a new or substantially more severe significant impact related to dividing an established community.

FEIR Table 4.10-3 lists relevant policies of the San Anselmo General Plan. The modified project components do not alter the analyses provided in FEIR Table 4.10-3; for the reasons presented in the FEIR, the modified project would not obviously conflict with or obstruct applicable land use plans.

The modified project would not result in a new or substantially more severe significant impacts arising from a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the modified project adopted for the purpose of avoiding or mitigating an environmental effect.

There are no adopted habitat conservation plans, natural community conservation plans, or other approved plans that apply to the modified project. Therefore, the modified project would not result in new or substantially more severe significant environmental impacts arising from conflicts with an applicable habitat conservation plan or natural community conservation plan.

Cumulative Impacts

The geographic scope of cumulative land use impacts includes the Town of San Anselmo and Marin County. The modified project would not obviously conflict with or obstruct land use plans of the Town of San Anselmo or Marin County. Reasonably foreseeable cumulative projects within the geographic scope for land use impacts (600 Red Hill Avenue, 754 Sir Francis Drake Boulevard, ReImagine Creek Park) have yet to be constructed and could be constructed concurrently with the modified project. As discussed in FEIR Section 5.4.9, the modified project and cumulative projects would be required to demonstrate consistency with the goals, policies, and objectives of the land use plans in effect for that area, applicable regional plans, and compatibility with surrounding land uses. Due to the dispersed nature of the other cumulative projects, implementation of the other projects would not cumulatively interact with the proposed modified project, and the cumulative impact on land use would be less than significant.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project, proposes the same use for the site as the modified project, and would not alter the existing access to surrounding land uses; therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe significant environmental impacts related to land use and planning.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding land use. As discussed above, the modified project would not result in new significant impacts related to land use and planning and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to land use and planning.

3.3.12 Mineral Resources

Environmental Issue Area 12. Mineral Resources. Woul	Where Impact Was Analyzed in the FEIR. d the Project:	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	p. 4.4-10	No	No	No	N/A
b. Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	p. 4.4-10	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would have no mineral resources impacts because the FDS Basin and Downtown San Anselmo sites do not contain any known mineral resources sites.

Discussion

The potential for adverse impacts related to mineral resources is evaluated in FEIR Section 4.4, which included a summary of mineral resources sites identified in the 2007 Marin Countywide Plan. The California Mining and Geology Board issued the "Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties" in January 2018 (California State Mining and Geology Board, 2018). The downtown San Anselmo site is not near or within any designated regionally significant aggregate resource areas. For the reasons discussed in FEIR Section 4.4.3, the modified project would not change the availability of mineral resources (no impact).

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project; therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe effects related to mineral resources.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no

changed circumstances and no new information of substantial importance at the downtown San Anselmo site regarding mineral resources. As discussed above, the modified project would not result in new significant impacts related to mineral resources and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to mineral resources.

3.3.13 Noise

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
13. Noise. Would the Project	result in:				
Exposure of persons to or generation of noise levels in excess of standards established in the local genera plan or noise ordinance, or applicable standards of other agencies?	p. 4.11-18	No	No	No	N/A
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	p. 4.11-19	No	No	No	N/A
c. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	p. 4.11-15	No	No	No	N/A
d. A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	p. 4.11-20	No	No	No	N/A
e. For a Project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?		No	No	No	N/A
f. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?		No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would have less-than-significant noise impacts because: (a) the approved project would be required to implement a construction noise reduction plan as a condition of approval; (b) the approved project would not operate outside of the daytime construction exemption hours specified in the Marin County and Town of San Anselmo municipal codes (see Table 4.11-6) and would not exceed the Town of San Anselmo construction noise standard; (c) the nearest sensitive land uses to the FDS Basin and Downtown San Anselmo sites would not be exposed to vibration levels that would exceed the established adverse human reaction threshold or the building damage threshold; and (d) sensitive land uses would not be

exposed to noise levels that would exceed the applied FTA adverse community reaction threshold of 90 dBA L_{eq} .

Discussion

Setting

The project site is in downtown San Anselmo within zoning designation C-2, Downtown Commercial, and adjacent to parcels within zoning designation PF, Public Facilities, to the south. Surrounding land uses primarily include commercial and retail stores, restaurants, and Creek Park immediately southeast. The nearest sensitive receptor remains single-family residential land use west of the site, same as identified in the FEIR.

Impact Discussion

As described in FEIR Section 4.11.3, the Town of San Anselmo has established allowed construction hours provided construction equipment do not exceed 80 dBA from a distance of 50 feet. The allowed construction hours identified in the Town of San Anselmo municipal code are summarized in FEIR Table 4.11-6. Construction activities proposed at the downtown San Anselmo site would only occur within the allowed hours identified in the Town of San Anselmo municipal code (see FEIR Table 4.11-6),

The modified project would not operate outside of the daytime construction hours specified in the Town of San Anselmo municipal code (see FEIR Table 4.11-6). The modified project would use the same equipment listed in the FEIR and would construct in the same location for up to five months. The nearest noise receptors have not changed since certification of the FEIR. Therefore, the nearest sensitive receptors would be exposed to the same noise levels as identified in the EIR, which would not exceed the Town of San Anselmo construction noise standard. In addition, for the reasons discussed in FEIR Impact 4.11-1, sensitive land uses near the downtown San Anselmo site would not be exposed to noise levels substantially higher than existing ambient noise levels during construction. The modified project would not result in new or substantially more severe significant impacts related to changes in ambient noise or exceedance of noise standards.

The proposed operation and maintenance activities at the downtown San Anselmo site would remain the same as described in the FEIR and be similar to those already conducted by the Flood Control District, Marin County Department of Public Works, and the Town of San Anselmo as aspects of their management responsibilities. Therefore, the modified project would not result in a substantial temporary or permanent increase in ambient noise levels from the modified project's vicinity.

As discussed in the FEIR, receptors that are exposed to vibration levels that exceed 0.9 in/sec PPV and 0.3 in/sec PPV would result in adverse human reaction or building damage. The modified project would use the same equipment listed in the FEIR and would construct in the same location for up to five months. For the reasons discussed in FEIR Impact 4.11-3, the typical equipment that would be used for the project would not exceed thresholds that would result in adverse human reactions or building damage. Therefore, the modified project would not result in excessive groundborne vibration or groundborne noise levels.

There are no public airports or private airstrips near the modified project. The modified project would not result in the placement of workers in areas where they would be exposed to excessive noise levels associated with airports or airstrips. Therefore, the modified project would not result in new or substantially more severe significant impacts related to the exposure of people to excess noise due to proximity to an airport or private airstrip.

Cumulative Impacts

The geographic scope of cumulative noise impacts is the downtown San Anselmo site and surrounding areas where construction activities could occur. Two of the reasonably foreseeable cumulative projects within the geographic scope for noise impacts listed in FEIR Section 5.4.10 (600 Red Hill Avenue and 754 Sir Francis Drake Boulevard) and the ReImagine Creek Park project have yet to be constructed and could be constructed concurrently with the modified project. The modified project would use the same equipment listed in the FEIR and would construct in the same location for up to five months. Therefore, for the reasons discussed in FEIR Section 5.4.10, the modified project's contribution to potential cumulative noise impacts would not be cumulatively considerable.

Project Variant (With Baffle)

The Project variant would be in the same location as the Project. The Project variant would use the same construction equipment and extend the construction duration by two weeks. The Project variant would be subject to the same municipal code requirements. The same sensitive receptors identified in the FEIR would be affected by the Project variant. Therefore, for the reasons discussed above, the Project variant would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to noise.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding noise. As discussed above, the modified project would not result in new significant impacts related to noise and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to noise.

3.3.14 Population and Housing

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
14. Population and Housing. W	ould the Project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	p. 4.12-7	No	No	No	N/A
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	p. 4.12-7	No	No	No	N/A
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	p. 4.12-7	No	No	No	N/A

Findings of FEIR

The FEIR determined that due to the nature of the approved project, which would not construct housing nor displace existing housing, it would not induce substantial population growth or conflict with housing and population projections and policies, and that the approved project would generally reduce flood risk in developed areas, a less-than-significant impact.

Discussion

The modified project components would not include housing; therefore, the modified project would not directly induce growth in San Anselmo or Marin County. The modified project would not displace any housing, same as described in the FEIR, and would not necessitate construction of replacement housing. As discussed in greater detail in Section 3.3.10, Hydrology and Water Quality, inundation would not occur in areas outside the existing floodplain during the 10-year, 25-year, or 100-year event; as a result, no displacement of housing is anticipated and the modified project would not cause a measurable change in the population status and trends. Therefore, the modified project would not displace substantial numbers of existing housing units or people and would not result in new or substantially more severe significant impacts related to this topic.

The modified project would not create or displace housing and would not extend roads or other infrastructure into areas lacking such services. Further, this modified project would reduce flood risk in existing developed areas and in areas where growth is already anticipated in the Countywide Plan or in the Town of San Anselmo's General Plan. Cumulative projects that would construct new residential units are within developed areas where growth is anticipated in the Town of San Anselmo's General Plan. Therefore, cumulative impacts related to population and housing would be less than significant.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project, proposes the same use for the site as the modified project, and would not alter the existing floodplain; therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe effects related to population and housing.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding population and housing. As discussed above, the modified project would not result in new significant impacts related to population and housing and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to population and housing.

3.3.15 Public Services

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?				
15. Public Services. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any the public services:									
Fire protection?	p. 4.13-9	No	No	No	N/A				
Police protection?	p. 4.13-9	No	No	No	N/A				
Schools?	p. 4.13-9	No	No	No	N/A				
Parks?	p. 4.13-9	No	No	No	N/A				
Other public facilities?	p. 4.13-9	No	No	No	N/A				

Findings of FEIR

The FEIR determined that approved project construction would not result in a substantial increase in the local population and project operation would not result in any permanent increase in the local population, and therefore that the impact of construction and operation of the approved project on public services would be less than significant.

Discussion

While the modified project includes construction of additional components (primarily the pedestrian bridge abutments), the additional duration of construction activities would not require additional construction workers such that the modified project would cause a substantial increase in the local population. Therefore, for the reasons discussed in the FEIR, the modified project would not be expected to result in increased response times such that new or physically altered facilities would be required to maintain service. Therefore, the modified project would not result in new or substantially more severe significant impacts related to this topic.

The modified project components do not involve the construction of residences or businesses and would not result in increased maintenance staff, consequently, the modified project would not result in a permanent increase in the local population. The modified project would not affect existing governmental facilities. Operation of the modified project would not require new or physically altered governmental facilities, and the modified project would not result in new or substantially more severe significant impacts related to this topic.

The geographic scope of cumulative public services impacts includes public services in the Town of San Anselmo and Marin County. As discussed in Section 3.3.14, the modified project would not construct housing or indirectly induce growth. Furthermore, the modified project would not alter governmental facilities. Therefore, there would be no cumulative impact related to public services to which the modified project would contribute.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project, would not substantially prolong construction activities, and proposes the same use for the site as the modified project, therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe impacts related to public services.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding public services. As discussed above, the modified project would not result in new significant impacts related to public services and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to public services.

3.3.16 Recreation

Environmental Issue Area 16. Recreation.	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
a. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	p. 4.14-11	No	No	No	N/A
b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	p. 4.14-12	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would have less-than-significant impacts related to recreation because the closure of recreational facilities for use by project construction would be temporary and would not increase the use of other recreational facilities such that substantial physical deterioration of those facilities would occur. The FEIR also determined that the approved project's recreational facility improvements would not have adverse physical effects on the environment beyond the effects identified in other sections of the EIR, and that the approved project would have no impact related to the need for additional parkland or conformance with park standards because it would not eliminate parkland.

Discussion

Recreational uses of Creek Park have not changed since project approval in 2018 and consist of picnicking and walking. Creek Park would be temporarily closed during construction, and construction of the modified project components would use the same area within Creek Park for construction staging as was described in the FEIR. Temporary closure of areas of Creek Park during construction would not permanently displace park users such that substantial physical deterioration of other facilities would occur.

As discussed in Section 3.3.14, construction and operation of the modified project would not create new housing or other development that would increase the area's population or otherwise place additional burdens on local or regional recreational facilities. As such, the net use of existing recreational facilities would not be affected, and the modified project would not result in new or substantially more severe significant impacts related to this topic.

Cumulative Impacts

The geographic scope of cumulative recreation impacts is the downtown San Anselmo site and adjacent parks and recreational areas. Two reasonably foreseeable projects in the geographic scope of cumulative recreation impacts are proposed: the Town of San Anselmo's ReImagine Creek Park and Memorial Park Parking Lot Rehabilitation. Construction of the Memorial Park Parking Lot Rehabilitation is expected to be complete prior to modified project construction. ReImagine Creek Park would be constructed after the modified project is complete and would enhance existing recreational facilities in the vicinity of the modified project. Therefore, the modified project and cumulative projects would not result in cumulative recreation impacts.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and would extend the construction duration by two weeks. Same as the modified project, construction of the Project variant would be temporary and would not permanently displace park users such that substantial physical deterioration of other facilities would occur, nor would the net use of existing recreational facilities be affected. Therefore, the Project variant would have the same impacts discussed above for the modified project and would not result in any new or substantially more severe effects related to recreation.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. There are no changed circumstances and no new information of substantial importance regarding recreation. As discussed above, the modified project would not result in new significant impacts related to recreation and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to recreation.

3.3.17 Transportation/Traffic

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
17. Transportation/Traffic. Wo	ould the Project:			<u> </u>	
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No impact of this kind was identified in the FEIR	No	No	No	N/A
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No impact of this kind was identified in the FEIR	No	No	No	N/A
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	p. 4.15-9	No	No	No	N/A
e. Result in inadequate emergency access?	No impact of this kind was identified in the FEIR	No	No	No	N/A

Findings of FEIR

The FEIR determined that construction activity associated with the approved project could temporarily affect vehicle or transit circulation, impede access for emergency vehicles, have an adverse effect on pedestrian and bicycle safety, and temporarily increase traffic safety hazards due to incompatible uses. The FEIR determined that implementation of Mitigation Measure 4.15-1: Traffic Management Plan, reduces these construction impacts to less than significant levels. The FEIR determined that approved project operation would not have significant transportation impacts because it would not alter existing roadway features.

Discussion

Setting

With respect to Issue b), the FEIR did not evaluate consistency with CEQA Guidelines Section 15064.3, Subdivision (b), as that issue was introduced as part of the December 2018 update to the CEQA Guidelines, which occurred after the FEIR was certified. With the changes to the State CEQA Guidelines, automobile delay, as measured by level-of-service (LOS) and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. Therefore, the vehicle miles traveled (VMT) impacts of the modified project are analyzed below and LOS is not discussed further.

Impact Discussion

The modified project would not directly or indirectly eliminate existing or planned alternative transportation corridors or facilities (such as bike paths, lanes, or bus turnouts). In addition, the modified project would not include changes in policies or programs that support alternative transportation, and it would not construct facilities in locations in which future alternative transportation facilities are planned. No new or more severe environmental impacts related to conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities would result from the modified project.

As discussed above in *Setting*, the FEIR did not evaluate whether the approved project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), as the issue was introduced as part of the December 2018 update to the current State *CEQA Guidelines*, which occurred after the FEIR was certified. Section 15064.3 of the State CEQA Guidelines suggests that the analysis of VMT impacts applies mainly to land use and transportation projects. The modified project would not generate or attract new vehicle trips due to the land use changes proposed (flood detention basin; downtown San Anselmo Creek Park land use would remain the same). Furthermore, impacts due to construction activities would be temporary and would not result in any meaningful long-term or permanent change in VMT. Consistent with statewide guidance, since the modified project is a small project and a land use that is unlikely to generate or attract vehicle trips, it can be assumed to have a less than significant impact with respect to VMT.⁹ The modified project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind. Therefore, the modified project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b).

The modified project would not include new design features for any roadways (e.g., new facilities or obstructions within public roadways) or alterations of existing features (e.g., road realignment). Construction staging and activities would occur at Creek Park and in the parking lane of San Anselmo Avenue. There would be no change to lane or roadway configuration as part of the modified project. No new or more severe environmental impacts related to traffic safety would result from implementation of the modified project.

The modified project would not lead to any long-term changes in emergency access and would not impede any roadways or public rights of way important for emergency access. Project construction could include staging within the parking lane of San Anselmo Avenue, which could affect emergency access. Implementation of adopted Mitigation Measure 4.15-1, Traffic Management Plan, would reduce the potential impact on emergency access by requiring that access for emergency vehicles be maintained at all times, and advance notification given of construction activities that could affect the movement of emergency vehicles on roadways. With implementation of adopted Mitigation Measure 4.15-1, no new or more severe environmental impacts related to emergency access would result from the modified project.

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Oalifornia Office of Planning and Research (OPR), 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Cumulative Impacts

Cumulative projects in the vicinity, including the 600 Red Hill Avenue and 754 Sir Francis Drake Boulevard projects, could overlap with Project construction and affect the same roadways as the Project. The ReImagine Creek Park project would not be constructed until after modified project construction is complete. The modified project would use the same equipment listed in the FEIR and would construct in the same location for the same duration. Construction activities could impede access to local streets or adjacent uses, including access for emergency vehicles, could have an adverse effect on pedestrian and bicycle accessibility and safety, and could temporarily increase traffic safety hazards due to incompatible uses. The modified project would implement a Traffic Management Plan (TMP), as discussed above, which would reduce the modified project's contribution to cumulative transportation impacts. Therefore, for the reasons discussed in FEIR Section 5.4.14, the modified project's contribution to potential cumulative transportation impacts would not be cumulatively considerable.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and extend the construction duration by two weeks. The Project variant would have the same impacts described above for the modified project because it would be in the same location, would be the same land use, would not change roadway design, and would include construction staging in the parking lane of San Anselmo Avenue. With implementation of Mitigation Measure 4.15-1, Traffic Management Plan, the Project variant would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to transportation and traffic.

Mitigation Measures

The 2018 FEIR identified mitigation measures to reduce identified transportation and traffic impacts, which would continue to apply to the modified project. Each of the mitigation measures have been adopted as conditions of approval. The following list summarizes the adopted transportation and traffic mitigation measure applicable to the modified project. No adopted mitigation measures require revision.

Adopted Mitigation Measure 4.15-1: Traffic Management Plan. Implement traffic management measures in a plan prepared by a qualified traffic engineer.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The modified project consists of additional components within the same downtown San Anselmo site in San Anselmo Creek; as discussed above, potentially significant impacts of the modified project related to transportation and traffic would be less than significant with implementation of previously adopted Mitigation Measure 4.15-1. The changed circumstance of a change in the focus of transportation impact analysis under CEQA, from LOS to VMT, has been considered; the modified project would not result in a new significant impact from an increase in VMT. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to transportation and traffic.

3.3.18 Utilities and Service Systems

Environmental Issue Area 18. Utilities and Service Systen	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
a. Require or result in the relocation or construction of new or expanded water, wastewater or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	p. 4.13-17	No	No	No	N/A
b. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	p. 4.13-18	No	No	No	N/A
e. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	p. 4.13-18	No	No	No	N/A
f. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	p. 4.13-20	No	No	No	N/A
g. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	p. 4.13-21	No	No	No	N/A

Findings of FEIR

The FEIR determined that the approved project would have less-than-significant impacts related to utilities and service systems because the approved project's demand for solid waste would be within capacity of nearby landfills, the approved project would comply with regulations and statutes regarding solid waste, and the approved project would not require construction of new utilities.

Discussion

The modified project will modify four existing storm drains that currently discharge into the creek channel. The modifications would extend three of the existing storm drains to be able reach the creek channel and would have the same capacity as the existing storm drains (the fourth

would be removed). However, these new project components would not necessitate the relocation or construction of new or expanded stormwater drainage facilities that could cause significant environmental effects. The modified project would not generate wastewater and would not create substantial new impervious areas. Further, project operations would not require the use of new electric power, natural gas, or telecommunications facilities. Therefore, no new or more severe environmental impacts related to construction or expansion of utilities would result from the modified project.

The modified project would not require the additional use of any water supply beyond what is identified in the FEIR. No additional water supply, and no operations phase water supply, would be required, and therefore no new or more severe environmental impacts related to water supply would result from the modified project.

For the same reasons discussed in the FEIR, the modified project would not result in a determination by the wastewater treatment provider which serves or may serve the modified project that it does not have adequate capacity to serve the modified project's projected demand in addition to the provider's existing commitments.

Project construction includes demolition of the concrete building footings in San Anselmo Creek, as described in the FEIR. Material types to be disposed are expected to include dirt, soil, rock, concrete, wood, and other residential and commercial construction materials, same as described in the FEIR. Because the building at 634-636 San Anselmo Avenue has been demolished, the remaining volume of solid waste that could be sent to nearby landfills would be smaller than identified in the EIR. The volume of demolition solid waste would be within the permitted capacity of nearby landfills (Geosyntec, 2019). Operation of the modified project would not generate solid waste. No new or more severe environmental impacts related to solid waste would result from the modified project.

The modified project would comply with federal, state, and local statutes and regulations related to solid waste and would be subject to management practices identified in the FEIR. Therefore, no new or more severe environmental impacts related to compliance with statutes and regulations would result from the modified project.

The geographic scope of cumulative utilities impacts includes the service providers of solid waste facilities. As discussed in FEIR Impact 4.13-3, Marin County Ordinance 3389 requires all construction and demolition projects to reuse or recycle at least 50 percent of materials generated, and Zero Waste Marin ensures Marin County's compliance with state recycling mandates and provides residents and businesses with information on household hazardous waste collection, recycling, composting, and waste disposal. All Marin County projects would be required to implement these or similar regulatory requirements, and there is sufficient landfill capacity for the modified project's demolition debris as discussed above. Therefore, cumulative impacts related to exceeding landfill capacity, compliance with federal, state, or local statutes and regulations related to solid waste.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and would not require additional utilities or modifications to existing utilities beyond those identified for the modified project. The Project variant would not necessitate the use of water supply, would not generate volumes or types of solid waste above the permitted capacity of nearby landfills, and would comply with federal, state, and local statutes and regulations related to the solid waste. Therefore, the Project variant would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to utilities and service systems.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The modified project consists of additional components within the same downtown San Anselmo site in San Anselmo Creek; as discussed above, the modified project would not result in new significant impacts related to utilities and no additional mitigation measures are required. The changed circumstance of impact thresholds based on the State CEQA Guidelines Appendix G (Environmental Checklist) questions has been considered; the modified project would not result in a new significant impact related to utilities due to the changed circumstance. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to utilities and service systems.

3.3.19 Wildfire

Environmental Issue Area	Where Impact Was Analyzed in FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?
19. Wildfire. If located in or nea zones, would the Project:	ar state responsibilit	y areas or lands o	classified as very	high fire hazard	l severity
a. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Topic not addressed in FEIR	No	No	No	N/A
b. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Topic not addressed in FEIR	No	No	No	N/A
c. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Topic not addressed in FEIR	No	No	No	N/A
d. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Topic not addressed in FEIR	No	No	No	N/A

Findings of FEIR

The FEIR, Section 4.8, Hazards and Hazardous Materials, Impact 4.8-2, addressed the potential for the approved project to increase wildfire hazards, and determined that the impact was less than significant. See further discussion of potential wildfire hazards of the modified project in Section 3.3.9, Hazards and Hazardous Materials.

Discussion

In 2012, Senate Bill 1241 was passed, requiring the Governor's Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection (Cal FIRE) to develop amendments to the initial study checklist of the State CEQA Guidelines for the inclusion of questions related to fire hazard impacts for projects located on lands classified as state responsibility areas, and on lands classified as very high fire hazard severity zones (FHSZs) (Governor's Office of Planning and Research, 2017). The additions to the Checklist implementing SB 1241 were included in the 2019 revisions to the State CEQA Guidelines, Appendix G, which is used as the basis for the topical questions in this Supplemental Environmental Review.

In accordance with California Public Resource Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, Cal FIRE maps areas of significant fire hazards because of fuels, terrain, weather, and other relevant factors. Cal FIRE's statewide and county maps (adopted November 2007) depict FHSZs that are within the State Responsibility Area (SRA). The SRA is the area where the State of California is financially responsible for the prevention and suppression of wildfires. The areas within the SRA are further classified as being Moderate, High, or Very High FHSZs. The downtown San Anselmo site is not within an SRA (Cal FIRE, 2022). Cal FIRE has also recommended draft maps for very high fire hazard severity zones in local responsibility areas; the downtown San Anselmo site is not on the draft map for Marin County (Cal FIRE, 2008).

Marin County also designates lands within the Wildland-Urban Interface (WUI), per Marin County Code Section 16.17.080. The downtown San Anselmo site is not within the mapped WUI (Marin County, 2023).

The modified project would include the development of a retaining wall, pedestrian bridge abutments, storm drain outfalls, and additional bioengineered creek bank and channel protection in downtown San Anselmo. The modified project would not require the construction of infrastructure to protect the area from wildfire hazards. The downtown San Anselmo site is located in a highly developed, relatively flat area. The modified project would not cause significant impacts related to items 19a through 19d. The modified project would not have a new or substantially more severe significant impact related to wildfire.

Project Variant (With Baffle)

The Project variant would be in the same location as the modified project and would include a concrete baffle and channel protection in addition to the modified project components, which are not designed to protect the area from wildfire hazards. Therefore, the Project variant would have no impacts related to wildfire.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. The modified project consists of additional components within the same downtown San Anselmo site in San Anselmo Creek; as discussed above, the modified project would not result in new significant impacts related to wildfire and no mitigation measures are required. The changed circumstance of impact thresholds based on the State CEQA Guidelines Appendix G (Environmental Checklist) questions has been considered; the modified project would not result in a new significant impact related to wildfire due to the changed circumstance. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to wildfire.

3.3.20 Mandatory Findings of Significance

Environmental Issue Area	Where Impact Was Analyzed in the FEIR.	Do Proposed Changes in the Project Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Do Previously Adopted FEIR Mitigation Measures Address/ Resolve Impacts?			
20. Mandatory Findings of Significance.								
a. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels threaten to eliminate a plai or animal community, redu the number or restrict the range of a rare or endangered plant or anima or eliminate important examples of the major periods of California history or prehistory?	Geology and Soils	No	No	No	N/A			
b. Does the Project have impact that are individually limited, but cumulatively considerable ("Cumulatively considerable means that the incremental effects of a Project are considerable when view in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	Inducing and Cumulative Effects	No	No	No	N/A			
c. Does the Project have environmental effects whic will cause substantial adverse effects on human beings, either directly or indirectly?	Chapter 4, Environmental Setting, Impacts, and Mitigation Measures; Chapter 5, Growth- Inducing and Cumulative Effects	No	No	No	N/A			

Discussion

This environmental checklist and the FEIR provide a comprehensive discussion of the potential for the modified project to affect the quality of the environment. Specifically, topic 3.3.4, Biological Resources, discusses the potential for the modified project to substantially affect habitats, fish/wildlife populations, and sensitive natural communities. As discussed, all impacts related to biological resources would be less than significant, or less than significant with mitigation. Topic 3.3.5, Cultural Resources and Tribal Cultural Resources discusses the potential for the modified project to affect important examples of California history. As discussed, all impacts related to cultural resources would be less than significant, or less than significant with mitigation. Topics 3.3.5, Cultural Resources and Tribal Cultural Resources and 3.3.7, Geology and Soils, discuss the potential for the modified project to affect important examples of California

prehistory. As discussed, all impacts on archeological resources and paleontological resources would be less than significant with implementation of mitigation.

The modified project in combination with the past, present and reasonably foreseeable projects, including remaining approved project construction, as discussed in Section 3.3, *Environmental Checklist*, would not result in significant cumulative impacts.

Potential adverse effects on human beings have been considered as a part of the analysis of individual environmental topics in this environmental checklist. As discussed above, the modified project would not adversely affect human beings with implementation of mitigation. The FEIR assesses this topic and identifies mitigation measures where applicable.

Mitigation Measures

None.

Conclusion

As discussed in Chapter 2, Project Description, the project components proposed at the downtown San Anselmo site have been modified since approval of the FEIR. As discussed above, the modified project would not result in new significant impacts related to mandatory findings of significance and no mitigation measures are required. Therefore, the modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to mandatory findings of significance.

CHAPTER 4

Summary and Conclusion

4.1 Summary Findings of Checklist

Table 7 provides a summary of the conclusions for each environmental topic reached in Chapter 3, Checklist for Supplemental Environmental Review. The table indicates for each topic whether the modified project would result in a new significant impact or a substantially more severe significant impact than identified in the FEIR, and if so, whether existing or revised mitigation measures would reduce the impact to less than significant. Those topical issue areas for which there is the potential for a significant impact that cannot be mitigated should be further evaluated in a subsequent EIR, pursuant to State CEQA Guidelines Section 15162, or a supplement to the FEIR, pursuant to State CEQA Guidelines Section 15163. As shown in the table, the modified project would not result in a new or substantially more severe significant impact, and an addendum to the FEIR may be prepared, pursuant to State CEQA Guidelines Section 15164.

Table 7

Conclusions Regarding New or Substantially More Severe Significant Effects

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less Than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less Than Significant
Aesthetics	X		
Agriculture	X		
Air Quality	Х		
Biological Resources	Х		
Cultural Resources and Tribal Cultural Resources	Х		
Energy	Х		
Geology and Soils	Х		
Greenhouse Gas Emissions	Х		
Hazards and Hazardous Materials	Х		
Hydrology and Water Quality	Х		
Land Use and Planning	Х		
Mineral Resources	Х		
Noise	Х		
Population and Housing	Х		
Public Services	Х		
Recreation	Х		

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less Than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less Than Significant
Transportation and Traffic	X		
Utilities and Service Systems	X		
Wildfire	X		
Mandatory Findings of Significance	X		

4.2 Revisions to Mitigation Measures

Proposed revisions to one mitigation measure from the 2018 FEIR are compiled here. Mitigation Measure 4.8-2a is revised as shown below to reflect new information regarding a nearby underground storage tank cleanup site. As explained in Section 3.3.9 above, these proposed changes are for clarification, and are not proposed in response to any new or more severe impacts resulting from the modified project.

Hazards and Hazardous Materials Mitigation Measure 4.8-2a: Check 700/750 Sir Francis Drake Boulevard investigation status.

Prior to beginning construction activities, the contractor shall check the status of the ongoing investigation at the former site at 700/750 Sir Francis Drake Boulevard investigation available at the SWRCB GeoTracker website at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0604100222. The downgradient extent of the contaminated groundwater is unknown and a workplan to further investigate was submitted to the Regional Water Quality Control Board (RWQCB) dated August 24, 2023. The RWQCB approved the workplan on October 19, 2023, and requested the investigation report be submitted to the RWQCB by December 18, 2023.

<u>The contractor shall use the latest-Rrelevant information from the GeoTracker website</u> shall be used to inform the Health and Safety Plan and Soil Management Plan, described in subsequent mMitigation mMeasures 4.8-2b and 4.8-2c.

4.3 References – Environmental Checklist

Bay Area Air Quality Management District, 2022. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans. April.

Blake, M.C., Jr., R.W. Graymer, and D.L. Jones, 2000. Geologic Map and Map Database of Parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma Counties, California. California Geological Survey. Map. Scale 1:75,000.

California Department of Conservation, 2018. Marin County Important Farmland, 2018. Map. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Marin.aspx.

- California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Data Base. Rarefind 5 report for San Quentin and San Rafael USGS 7.5-minute quadrangles. January 30.
- California Department of Forestry and Fire Protection (CAL FIRE), 2008. Marin County Very High Fire Hazard Severity Zones in LRA as Recommended by CalFIRE. October 16, 2008.
- California Department of Forestry and Fire Protection (CAL FIRE), 2022. State Responsibility Area, Fire Hazard Severity Zones. Fire and Resource Assessment Program. November 21, 2022. Map. Scale 1:245,000.
- California Department of Water Resources, 2023. Groundwater Basin Boundary Assessment Tool. https://gis.water.ca.gov/app/bbat/.
- California Geological Survey, 2023. CGS Information Warehouse: Regulatory Maps, https://maps.conservation.ca.gov/cgs/informationwarehouse/.
- California State Mining and Geology Board, Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties, California. January 2018. SMGB Designation Report No. 17.
- California Native Plant Society (CNPS). 2023. Inventory of Rare, Threatened and Endangered Plants of California. http://www.rareplants.cnps.org/
- Department of Toxic Substances Control (DTSC), 2023. EnviroStor database. Hazardous materials sites near San Anselmo, CA. Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed September 27, 2023.
- ESA, 2023. AERMOD Modeling of Modified Downtown San Anselmo Component of the San Anselmo Flood Risk Reduction Project. November.
- Federal Emergency Management Agency (FEMA), 2009. Flood Insurance Rate Map, Marin County, California, and Incorporated Areas. Panel 0275D (Panel 275 of 531). Map Number 06041C0275D. Effective date: May 4, 2009. National Flood Insurance Program. Map. Scale 1:2,000.
- Geosyntec, 2019. Joint Technical Document Redwood Landfill, Marin County, California. August 19, 2019.
- Governor's Office of Planning and Research, 2017. Proposed Updates to the CEQA Guidelines. November 2017. https://opr.ca.gov/docs/20171127 Comprehensive CEQA Guidelines Package Nov 2017.pdf.
- Marin County, 2020. Climate Action Plan 2030. https://www.marincounty.org/-/media/files/departments/cd/planning/sustainability/climate-and-adaptation/draft-climate-actionplan-2030.pdf?la=en.
- Marin County, 2023. MarinMap online geographic information system for Marin County. www.marinmap.org Accessed March 24, 2023.

- MarinMap, 2023. Zoning and Land Use Information for San Anselmo. Available at: https://www.marinmap.org/Html5Viewer/Index.html?viewer=smmdataviewer. Accessed October 2, 2023.
- State Water Resources Control Board (SWRCB), 2023. GeoTracker database. Hazardous materials sites near Woodacre, CA. Accessible at https://geotracker.waterboards.ca.gov/. Accessed January 27, 2023.
- Stinson, Melvin C., Michael W. Manson, and John J. Plappert, 1982. Mineral Land Classification Map Aggregate Resources Only.
- U.S. Army Corps of Engineers (USACE). 1987. Corps of Engineers Wetland Delineation Manual, January 1987, Final Report, Department of the Army Waterways Experiment Station, Vicksburg, Mississippi. http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf.
- U.S. Fish and Wildlife Service (USFWS). 2023. Information for Planning and Conservation (iPaC). USFWS Official Species List. https://ecos.fws.gov/ipac/.

Appendix A
Supplemental Hydraulic
Modeling for the SAFRR Project
to Support the Amendment to
the 2018 FEIR

Supplemental Hydraulic Modeling for the SAFRR Project to Support the Amendment to the 2018 FEIR

Stetson Engineers Inc. 10/6/2023

1. Background and Purpose

The Final EIR (FEIR) for the San Anselmo Flood Risk Reduction (SAFRR) Project was prepared and approved in 2018. The FEIR evaluated the two main project elements; the construction of a flood diversion and storage (FDS) basin at the former Sunnyside Nursery site in Fairfax and the removal of Building Bridge 2 (BB2) located at 634-636 San Anselmo Avenue in downtown San Anselmo. The FEIR also evaluated the cumulative impact of the SAFRR Project combined with the foreseeable future projects. Table 1 is a summary of the foreseeable projects and the design bases that were used in the cumulative impact analysis in the 2018 EIR hydraulic modeling.

Table 1 Design Bases That Were Used in the Cumulative Impact Analysis in the 2018 EIR Hydraulic Modeling for the SAFRR Project

	Project	Design Basis Used in the 2018 EIR Modeling		
CAEDD Duciest	Sunnyside FDS	2017 conceptual design drawings by Stetson.		
SAFRR Project	Removal of BB#2	2014 conceptual design drawings by Stetson.		
	Azalea Bridge Replacement	2017 preliminary design drawings by CIC for bridge replacement.		
	Nokomis Bridge Replacement	2016 preliminary design drawings by Quincy for bridge replacement.		
Other Foreseeable	Madrone Bridge Replacement	2016 preliminary design drawings by Quincy for bridge replacement.		
Future Projects	Center Ave/ Sycamore Ave Bridge Replacement	No designs at the time. Remove bridge.		
	Bridge St Bridge Replacement	No designs at the time. Remove bridge.		
	Winship Bridge Replacement	2017 preliminary design drawings by Quincy for bridge replacement.		
	Army Corps Unit 4 Project	Unit 4 Measures 1, 2, and 3*		

^{*} Unit 4 Measures 1, 2, and 3 in the Stetson's 2008 Letter Report to the Corps: (1) Ross fish ladder removal, (2) transition at the fish ladder from the downstream concrete channel to the upstream natural channel, and (3) channel widening just upstream of the fish ladder.

Since the 2018 FEIR there have been changes with respect to these two main project elements. The FDS has been designed, built, and completed. The as-built FDS was changed from an "active" FDS as evaluated in the 2018 FEIR (with a storage capacity of about 33 acre-ft at the full water surface elevation (WSE) of 235 ft NAVD88 (the diversion structure spillway crest elevation)) to a "passive" FDS (with a storage capacity of about 13.5 acre-ft at the full WSE of 230.3 ft NAVD88 (the side weir crest elevation)). The BB2 project is still in the design stage, but the design has also changed since the 2018 FEIR from the complete BB2 removal to the current design that adds a pedestrian bridge associated with the Town of San Anselmo's ReImagine Park. Baffles structurally connected to the proposed pedestrian bridge abutments at the upstream face of the bridge are also included as an option in the BB2 Project design. In addition, the designs for some of the foreseeable future projects have also been updated.

The Marin County Flood Control District (District) has contracted with ESA to evaluate the environmental impacts of this project change under CEQA and prepare supplements to permit applications. The purpose of this supplemental hydraulic modeling is to provide information to support supplemental CEQA analysis. As directed by the District, the supplemental hydraulic modeling considered the following two BB2 design options for the SAFRR Project:

- a) BB2 without baffles
- b) BB2 with baffles

As with the 2018 EIR modeling, the supplemental hydraulic modeling analyzed the following three conditions under three flood events (Q10, Q25, and Q100):

- Existing condition;
- SAFRR Project only condition; and
- SAFRR Project plus foreseeable projects condition.

2. Differences between the 2018 EIR Modeling and the Supplemental Hydraulic Modeling

Both the 2018 EIR hydraulic modeling and this supplemental hydraulic modeling used the Stetson 1D/2D unsteady-flow hydraulic model. The main differences between the 2018 EIR hydraulic modeling and the supplemental hydraulic modeling include the following four aspects:

- Changes from the <u>active FDS</u> designs (operations required) used in the 2018 EIR modeling to the final (as-built) <u>passive FDS</u> designs (no operations needed) used in the supplemental modeling;
- Changes from the preliminary BB2 Project designs used in the 2018 EIR modeling to the current designs used in the supplemental modeling;
- Changes from the preliminary foreseeable project designs used in the 2018 EIR modeling to the updated designs used in the supplemental modeling; and
- Changes of the hydraulic model itself in the BB2 Project area and in the Fairfax Creek reach as well.

¹ The storage capacities here do not include the additional floodwater detention storage due to the WSE surcharge above the spillway crest of the active FDS or the side weir crest of the passive FDS.

1) Changes of the FDS Designs

Table 2 summarizes the changes of the FDS designs.

2) Changes of the BB2 Designs

The 2018 EIR modeling represented the BB2 removal project by removing the structure and restoring the creek banks and modifying the model in the vicinity of the BB2 upstream and downstream bounding cross sections to reflect the channel gradings as preliminarily designed by Stetson in 2014.

The supplemental modeling represented the BB2 structure removal and the following additional features:

- Construction of a retaining wall on the right side (replacing in-kind the existing BB2 abutment;
- Minor channel grading;
- Adjacent ReImagine Creek Park project improvements (left side looking downstream) of the BB2 reach, including
 - O Construction of a pedestrian bridge spanning the creek at the interface of Building Bridge 3 (BB3)² and existing BB2, which is intended to connect and integrate the Plaza area (i.e., the San Anselmo Ave side of the BB2 reach) with the Park area on the opposite site of the creek for public recreation and enjoyment after removal of BB2;
 - o Park area improvements along the park side (left side looking downstream) of the BB2 reach (e.g., stage deck).

3) Changes of the Foreseeable Projects Designs

Table 3 below is a summary of the design changes for the foreseeable future projects that were used in the cumulative impact analysis of the SAFRR Project.

4) Changes of the Stetson Hydraulic Model Itself in the BB2 Project Area and in the Fairfax Creek Reach

The supplemental modeling used the Stetson "corrected" existing conditions model as the baseline model ³. Compared to the 2018 EIR modeling, Stetson developed a corrected existing conditions model that (1) added new cross sections to enable simulation/evaluation of BB2 Project and ReImagine Creek Park effects on base flood elevation (BFE) or flooding; and (2) utilized new, updated topography (2017) within the BB2 Project reach. The added new cross sections included:

² BB3 refers to the building at 638 San Anselmo Avenue. It is located immediately upstream of BB2.

³ The term "corrected" existing conditions model is meant to correspond to the terminology used by FEMA. In FEMA terminology, the FEMA corrected effective model is the model that corrects any errors that occurred in the FEMA effective model, adds any additional cross sections to the effective model, or incorporates more detailed topographic information than that used in the effective model.

- one cross section immediately upstream of the proposed pedestrian bridge for simulating the hydraulic effect of the pedestrian bridge and the baffle; and
- one cross section at the center of the existing stage deck in the ReImagine Creek Park to simulate and account for the hydraulic effect of the stage deck under both existing and proposed raised stage deck conditions.

Additional cross sections would enhance the model's ability to simulate the hydraulic effects of the structures, and updated topography would allow the model to simulate the current channel hydraulic condition more realistically.

Figure 1a compares the simulated 100-year WSE profiles along the main channel reach between the 2018 existing condition and the 2023 "corrected" existing condition. Similarly, Figure 1b compares the simulated 100-year WSE profiles along the FEMA model overland flow path. Figure 1a shows higher WSE for the 2023 "corrected" existing condition than the 2018 existing condition. Figure 1a also shows the available high water marks during the 1982 flood (an approximate 150-year flood) at/near Winship Ave Bridge and Barber Ave Bridge. The simulated higher 100-year WSE for the 2023 "corrected" existing condition matched better with the high water marks at Winship Ave Bridge, but worse with the high water mark at Barber Ave Bridge. This indicates that the simulated 100-year WSE profile for the 2023"corrected" existing condition is still acceptable.

In addition, during the 2019 final design for the "active" FDS, to improve the hydraulic representation of the model for the Fairfax Creek reach for more accurate evaluation of the flood reduction benefit of the FDS and appropriate design of the FDS hydraulic features, the following model updates were made:

- Added additional surveyed cross sections along the Fairfax Creek reach;
- Re-calibrated the model to the observed in-channel HWMs during the 1/16/2019 storm event. It is worth noting that the model re-calibration only adjusted the in-channel Manning's n for the Fairfax Creek reach upstream of the Loma Alta Creek confluence. This model re-calibration would not affect the 2017 original model calibration results for the Fairfax Creek reach in the downtown Fairfax area. The 2017 calibrated model⁴ was the model used in the 2018 EIR modeling.

⁴ The 2017 Ross Valley HEC-RAS 1D/2D flood model was built upon a collaboration between Stetson and the U.S. Army Corps of Engineers (USACE) in 2016 and 2017, as part of the alternatives analysis for the USACE's Corte Madera Creek Flood Risk Management Project. The model was calibrated to one historical top of bank event (on December 15, 2016) and one historical approximately 100-year flood (on December 31, 2005) on Corte Madera Creek. The model was validated based on the January 4, 1982 flood event (an approximate 150-year flood). The model was peer-reviewed by USACE modeling experts. The USACE standard review process includes two steps and three tiers. The first step is called District Quality Control (DQC) which includes quality checks and Project Delivery Team (PDT) reviews. Quality checks (QC) and reviews (first tier) occur during the development process and are carried out as a routine management practice. Quality checks are typically performed by supervisors, work leaders, team leaders, or other qualified staff. PDT reviews (second tier) are reviews conducted by members of the PDT to ensure consistency and effective coordination across all project disciplines. The second step is Agency Technical Review (ATR; third tier) which is undertaken to ensure the quality and credibility of the government's scientific information and is considered an Independent Technical Review (ITR). The Ross Valley model had gone through the USACE standard review process and has had the highest level of peer review.

Table 2 Changes of the FDS Designs

Key FDS Feature	Previous Design Used in the 2018 EIR Modeling	Final Design Used in the 2023 Supplemental Modeling Passive FDS (No operations needed)		
FDS Type	Active FDS (Operations required)			
Diversion Structure:				
 Spillway 	 Type: Ogee spillway Cross section shape: rectangular Crest elevation: 235 ft Effective length: 114 ft Discharge coefficient: 3.7 Elevated deck with vertical support for maintenance vehicle passage 	None		
Gated Culvert	 Type: Box culvert Width: 18 ft Invert elevation: 222 ft Top elevation: 228 ft Fully open dimensions: 18 ft x 6 ft Dimensions in the partially closed position: 18 ft x 1.3 ft 	None		
Storage Basin:				
Perimeter Berm	o Top elevation: 238 ft	Same as the old design		
Basin Bottom	o Bottom elevation: 223.8 ft–226.1 ft	Same as the old design		
• 36" Low-Level Outlet (closed during flood event)	 Size: 36 inches in diameter Inlet elevation: 223.8 ft Outlet elevation: 222 ft Outflow capacity: 70 cfs Empty time for the basin: 9 hours 	Same as the old design		
• 18" Low-Level Outlet (open all the time)	None	Added		
Active Side Diversion Weir behind the Diversion Dam	 Weir crest elevation: 230 ft Weir length at crest: 200 ft Weir length at top: 306 ft 	None		
Passive Side Diversion Weir upstream of the Sunnyside Bridge	None	 Weir crest elevation: 230.3 ft Weir length at crest: 102.5 ft Weir length at top: 102.5 ft 		
Basin Volume	At full WSE (el. 235 ft): 33 acre-ft	At full WSE (el. 230.3 ft): 13.5 acre-ft		

Elevation datum: NAVD88

Table 3 Changes of the Foreseeable Projects Designs

		Designs Used in the 2018 EIR Modeling	Updated Designs Used in the Supplemental Modeling	
SAFRR	Sunnyside FDS	2017 conceptual design drawings by Stetson.	As built	
Project	Removal of BB#2	2014 conceptual design drawings by Stetson.	Most recent design drawings by RHAA	
	Azalea Bridge Replacement	2017 preliminary design drawings by CIC for bridge replacement.	Same as in the 2018 EIR modeling	
	Nokomis Bridge Replacement	2016 preliminary design drawings by Quincy for bridge replacement.	2018 updated design drawings by Quincy	
	Madrone Bridge Replacement	2016 preliminary design drawings by Quincy for bridge replacement.	2018 updated design drawings by Quincy	
Other Foreseeable	Center Ave/ Sycamore Ave Bridge Replacement	No designs yet. Remove bridge.	2018 preliminary design drawings by Quincy	
Future Projects	Bridge St Bridge Replacement	No designs yet. Remove bridge.	2018 preliminary design drawings by Quincy	
	Winship Bridge Replacement	2017 preliminary design drawings by Quincy for bridge replacement.	Same as the 2017 Quincy designs except for Stetson 2022 modified channel gradings	
	Army Corps Unit 4 Project	Unit 4 Measures 1, 2, and 3	Same as in the 2018 EIR modeling	

3. Supplemental Hydraulic Modeling Results for the Without Baffle Condition

Results of Hydraulic Analysis in Terms of Floodplain Inundation

Figures 2a to 2c show the changes in the HEC-RAS model-simulated floodplain inundation extent and depth between the SAFRR Project and existing conditions for the 10-year flood. Figures are provided covering Fairfax, Upper San Anselmo, and Lower San Anselmo areas. Similarly, Figures 3a to 3c show the model-simulated results for the 25-year flood and Figures 4a to 4c for the 100-year flood.

Figures 5a to 5c show the changes in the HEC-RAS model-simulated floodplain inundation extent and depth between SAFRR Project + Foreseeable Projects and existing conditions for the 10-year flood. Similarly, Figures 6a to 6c show the model-simulated results for the 25-year flood and Figures 7a to 7c for the 100-year flood.

Table 4 is a summary of results for the SAFRR Project only and Table 5 is a summary of results for the SAFRR Projects + Foreseeable Projects.

Both the SAFRR Project condition and the Foreseeable Projects condition would not show any new flooding areas with inundation depth increases. Compared to the 2018 EIR, the updated modeling results would not show any new flooding areas or greater inundation depth increases.

Table 4 Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo under the SAFRR Project Condition

(without Baffle at BB2) Maximum **Inundation Depth** Inundation **Increase in areas Depth Reduction** Change in of new flooding in the Floodplain Inundation (inches; where 0 Location (inches) Extent relevant) 4 Fairfax reduction Upper Downtown San 13 reduction Anselmo 10 Lower Downtown San 19 reduction Anselmo Fairfax 4 reduction --Upper Downtown San 4 nearly zero 25 Anselmo Lower Downtown San 4 nearly zero Anselmo Fairfax 1 nearly zero Upper Downtown San 3 nearly zero 100 Anselmo Lower Downtown San 2 nearly zero Anselmo

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Table 5 Change in Flood Inundation Depth and Extent in Fairfax and San Anselmo under the SAFRR Project and Foreseeable Projects Condition

(without Baffle at BB2)

Q	Location	Maximum Inundation Depth Reduction in the Floodplain (inches)	Change in Inundation Extent	Inundation Depth Increase in areas of new flooding (inches; where relevant)
'	Fairfax	9	reduction	
10	Upper Downtown San Anselmo	26	reduction	
	Lower Downtown San Anselmo	29	reduction	
	Fairfax	20	reduction	
25	Upper Downtown San Anselmo	23	reduction	
	Lower Downtown San Anselmo	4	reduction	
100	Fairfax	12	nearly zero	
	Upper Downtown San Anselmo	15	reduction	
	Lower Downtown San Anselmo	12	nearly zero	

Channel Velocity Results

Removal of BB2 would allow more floodwater in the creek channel and, thus, would increase the maximum stream flow velocities, relative to existing conditions. Figures 8a – 8c show the modeled flow velocities in the main channel reach between Barber Ave Bridge and the Sir Francis Drake downstream crossing under Q10, Q25, and Q100, respectively. The figures also show the 2018 modeling results. Table 6 is a summary of the modeled flow velocities. As expected, higher floods would result in higher flow velocities.

As shown in the figures, the existing channel flow velocities would vary from around 3-7 feet per second (fps) in this reach for the three flood events.

The results indicate that there would be little change in the flow velocities during a 10-year or 25-year event for the SAFRR Project (see Figures 8a and 8b). During a 100-year event, depending on the location along that stream reach, the flow velocities for the SAFRR Project would increase by up to 4 percent (see Figure 8c); however, flow velocity increases at all of the affected locations would be within the existing range of flow velocity variability⁵ (see Table 6).

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⁵ Determined by comparing the modeled future flow velocities along the creek channel to the standard deviation of the set of modeled existing flow velocities along the same channel. As noted previously, flow velocities vary widely in modeled existing conditions (between 3 and 7 feet per second). All modeled changes in flow velocities were within one standard deviation of the mean of existing flow velocities.

Under the Foreseeable Projects condition, flow velocities would increase for all the three flood events. However, compared to the 2018 EIR modeling, the increased flow velocities would be slightly smaller.

Table 6 Summary of Channel Velocity (feet per second or fps) Results between Barber Ave Bridge and SFD Downstream Crossing

2018 EIR Modeling									
	Q10		Q25		Q100				
	Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition	Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition	Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition
Maximum Velocity	6.92	6.72	6.29	6.93	6.91	6.48	6.98	7.12	7.15
Minimum Velocity	3.37	3.41	3.42	3.37	3.48	3.52	3.47	3.64	3.72
Mean Velocity	5.40	5.37	5.22	5.41	5.48	5.34	5.68	5.87	5.84
Standard Deviation	0.91	0.88	0.84	0.92	0.91	0.86	0.97	0.98	0.95
	2023 Supplemental Modeling								
		Q10		Q25		Q100			
	"Corrected" Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition	"Corrected" Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition	"Corrected" Existing Condition	SAFRR Project Condition	Foreseeable Projects Condition
Maximum Velocity	6.93	6.88	6.29	6.98	6.94	6.52	7.02	7.02	6.91
Minimum Velocity	3.37	3.47	3.42	3.40	3.49	3.54	3.46	3.60	3.67
Mean Velocity	5.41	5.46	5.22	5.45	5.49	5.36	5.60	5.74	5.71
Standard Deviation	0.92	0.90	0.84	0.92	0.91	0.86	0.95	0.95	0.92

4. Supplemental Hydraulic Modeling Results for the With Baffle Condition

Background

Removal of BB2 is intended to reduce its backwater effect and, thus, reduce flooding by reducing overtopping of the creek bank upstream. In doing so this keeps more water in the channel. Keeping more water in the channel would result in BFE rise in the channel downstream, within the regulatory floodway, which occurs in the vicinity of some downstream structures that are situated along the channel. The baffle is intended to create a condition that closely mimics the hydraulic effect of existing BB2 so that the channel hydraulics after removal of BB2 and installation of the baffle would be similar to existing conditions. The baffle would either be connected to the abutments of the proposed pedestrian bridge which are located at the BB3 - BB2 interface or be a separate structure in the middle of the creek. The baffle is temporary and will be removed in the future when the District has an opportunity to coordinate with downstream property owners regarding downstream WSE rise associated with removal of BB2, so that the removal of BB2 will achieve its intended flood reduction benefit.

The bridge deck of the proposed pedestrian bridge was represented in the Stetson model with a top elevation at 49.0 ft NAVD88⁶ and a soffit elevation at 47.7 ft NAVD88. The soffit elevation of the proposed pedestrian bridge is designed to be 1 ft higher than the bottom elevation of the upstream BB3 (46.7 ft NAVD88), so that the proposed pedestrian bridge would not become a new hydraulic constriction after removal of BB2 (which has an existing bottom elevation at about 44.8 ft NAVD88).

Modeling Results of Baffle Dimensions and Project Effects under Q25 and Q100

Figure 9 shows the baffle opening dimensions determined through iterative design-modeling using the Stetson HEC-RAS 1D/2D unsteady-flow model with a design objective of not causing a rise in the WSE in the downtown San Anselmo floodplain or along the channel where structures are located, under both O25 and O100 conditions. The baffle was sized with an opening width of 34.5 ft and a top elevation of 47.7 ft, which is the same elevation as the soffit elevation of the proposed pedestrian bridge. The baffle would not need to extend vertically above the bridge deck, meaning overflow would be allowed over the bridge deck during large floods. The Stetson 'corrected' existing conditions model (and also the 2018 EIR model) included the "hydraulic gap" along the right bank between BB3 and BB2 that would allow some overland floodwater to return back into the channel during large floods. Under the BB2 Project condition, the proposed pedestrian wall along the right bank would prevent overland floodwater flowing in the floodplain from returning back to the channel during large floods. To mimic the existing hydraulics for the Project condition, the baffle would not need to extend vertically above the proposed pedestrian bridge deck, so that overflow would be allowed over the bridge deck. This would require that the pedestrian bridge railing needs to be an "open railing" to allow overflow over the bridge deck.

Stetson model (reasonably) added an allowance of 0.3' to account for camber and foot curbs commonly placed along the sides of the deck.

⁶ The most recent design by RHAA (60% design) showed the bridge deck top elevation at 48.7 ft NAVD88. The

Figure 10a compares Stetson model results depicting the Q100 WSE profiles along the main channel reach under existing and BB2 Project conditions for the baffle (the baffle shown in Figure 9). Figure 10b provides the same comparison along the overland flow path. The BB2 Project condition WSEs match closely with the existing conditions WSEs under the Q100.

Figures 11a and 11b provide similar comparisons as in Figures 10a and 10b but for the Q25.

As demonstrated in Figures 10a/10b and 11a/11b, the BB2 Project with the baffle would <u>not</u> cause a rise in flooding in the downtown San Anselmo floodplain or along the channel, under both Q25 and Q100 conditions based on the Stetson model.

Since the BB2 Project with the baffle would be able to closely mimic the existing condition hydraulics under both Q25 and Q100, the BB2 Project with the baffle would have the same flooding results as current conditions for the upper and lower Downtown San Anselmo areas. The change in floodplain inundation depth and extent for the Fairfax area caused by the FDS would be the same as for the without baffle condition analyzed in the previous Section 3.

Figure 1a

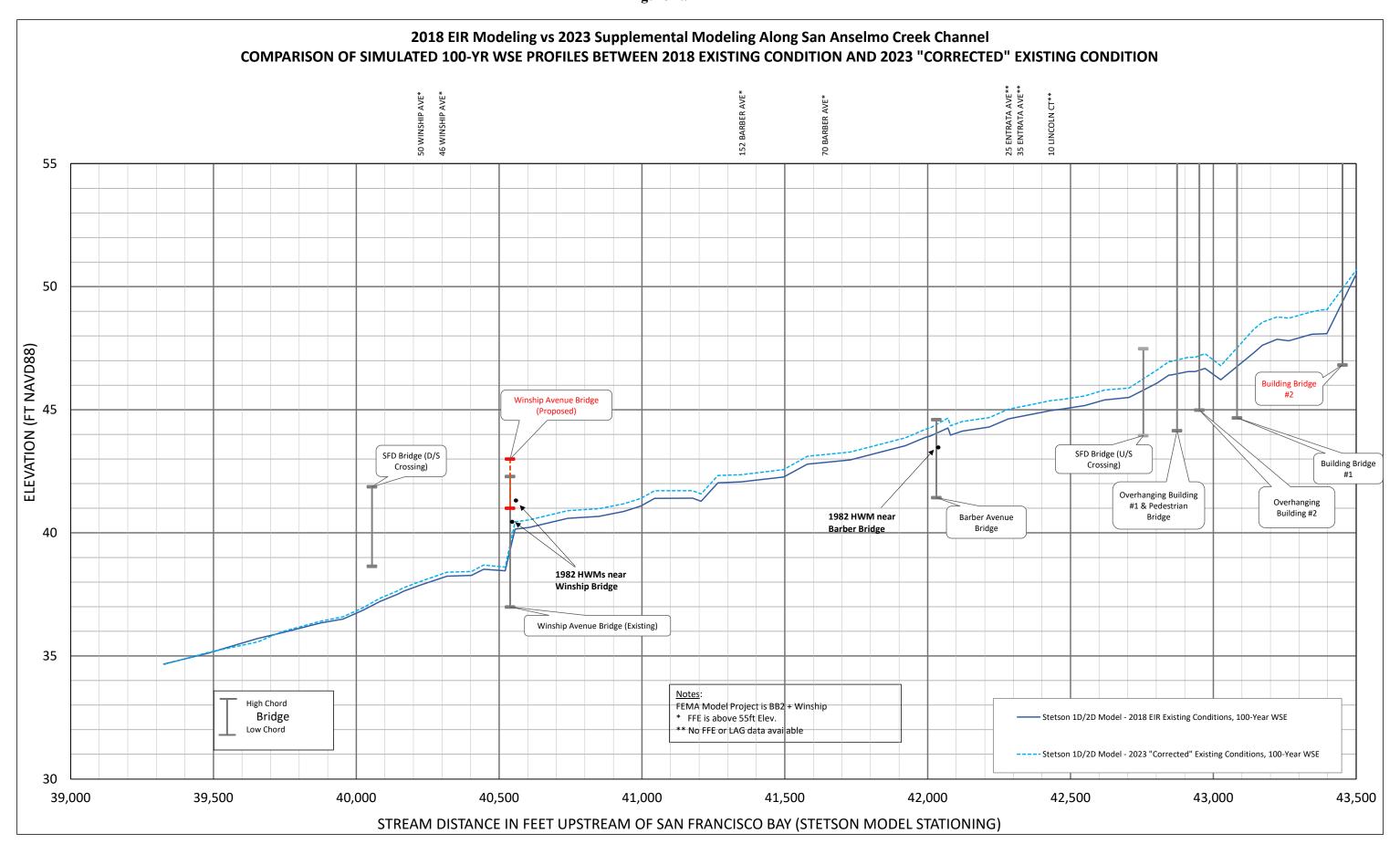


Figure 1b

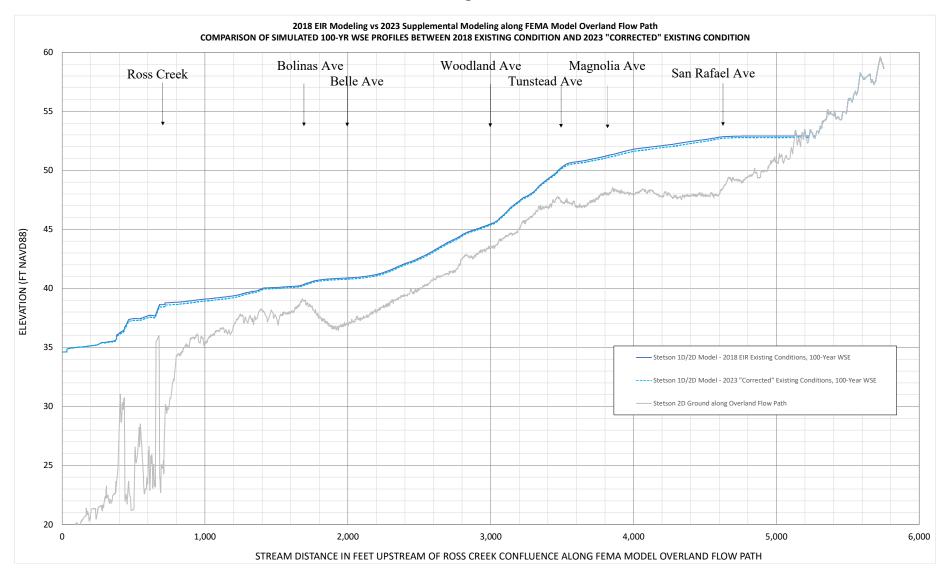


Figure 2a

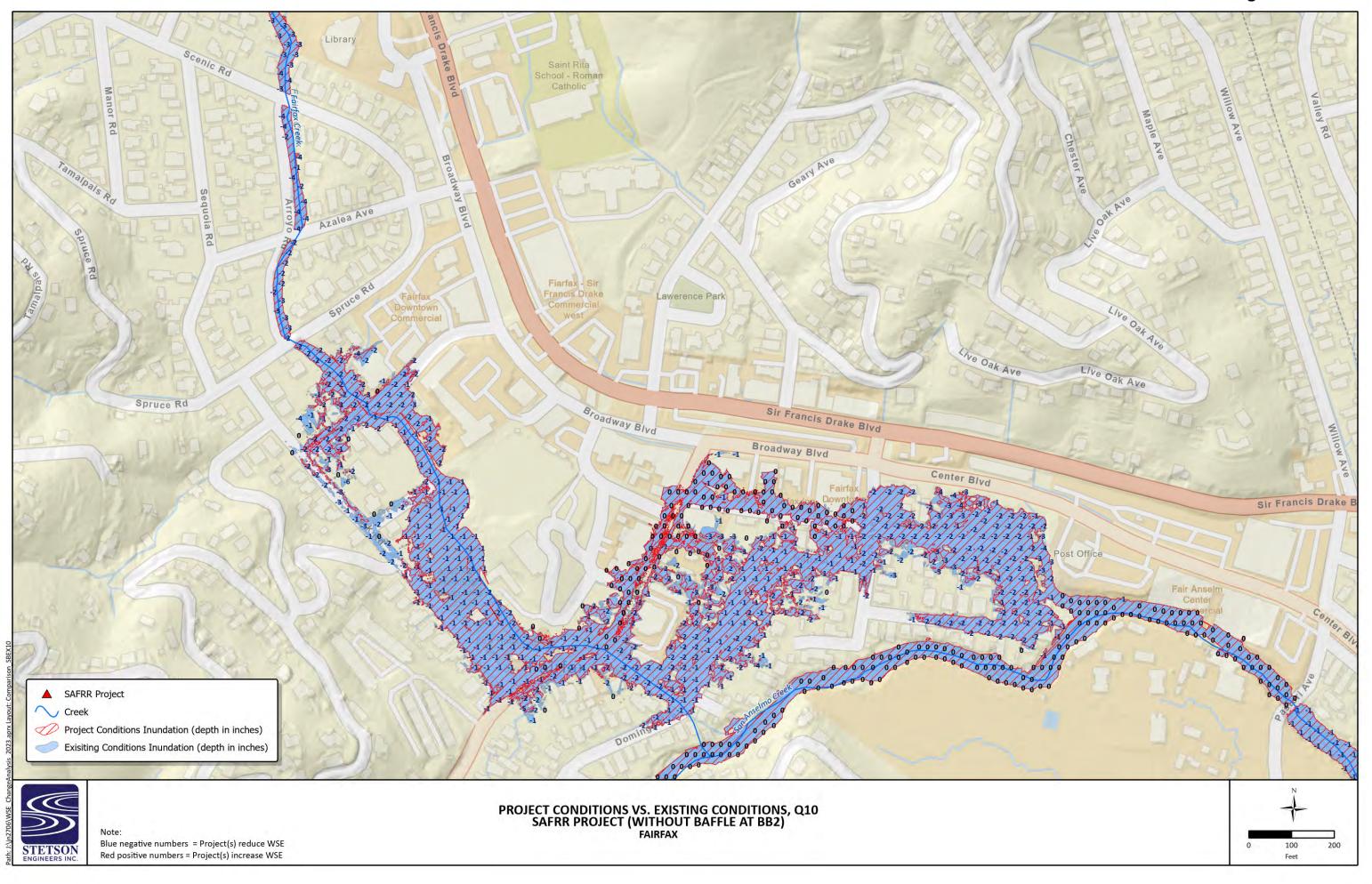
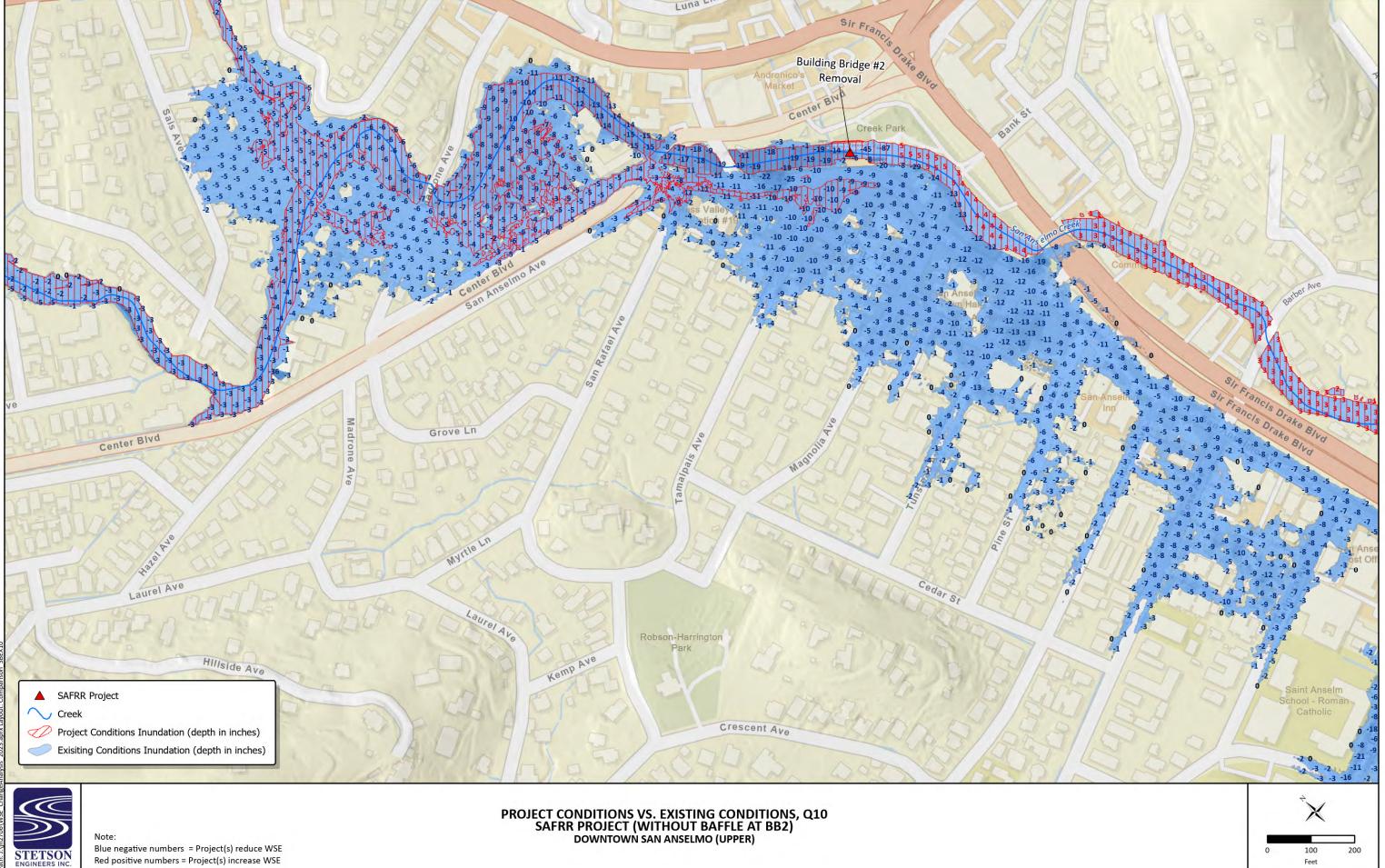


Figure 2b



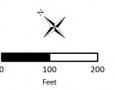


Figure 2c

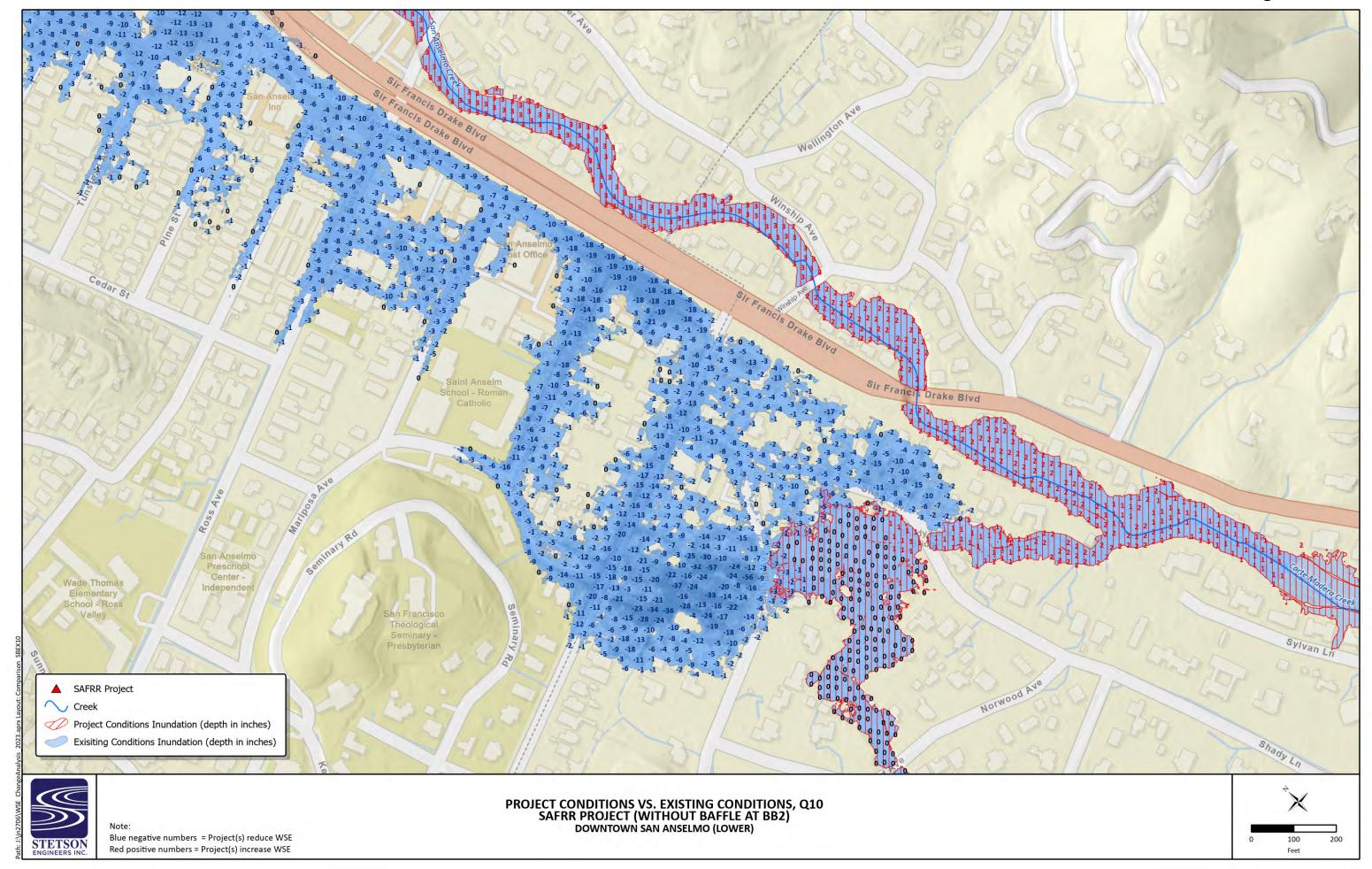


Figure 3a

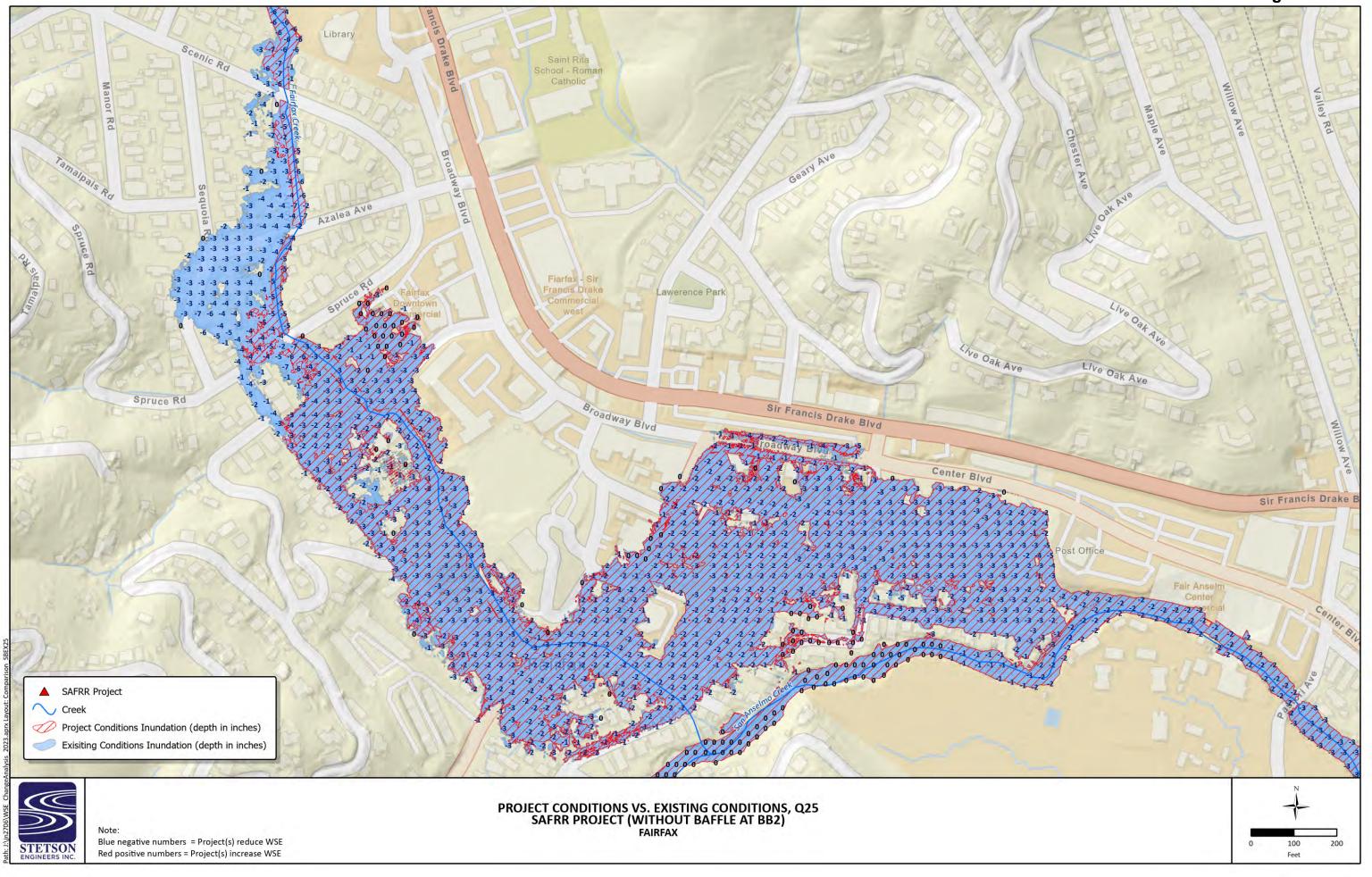


Figure 3b

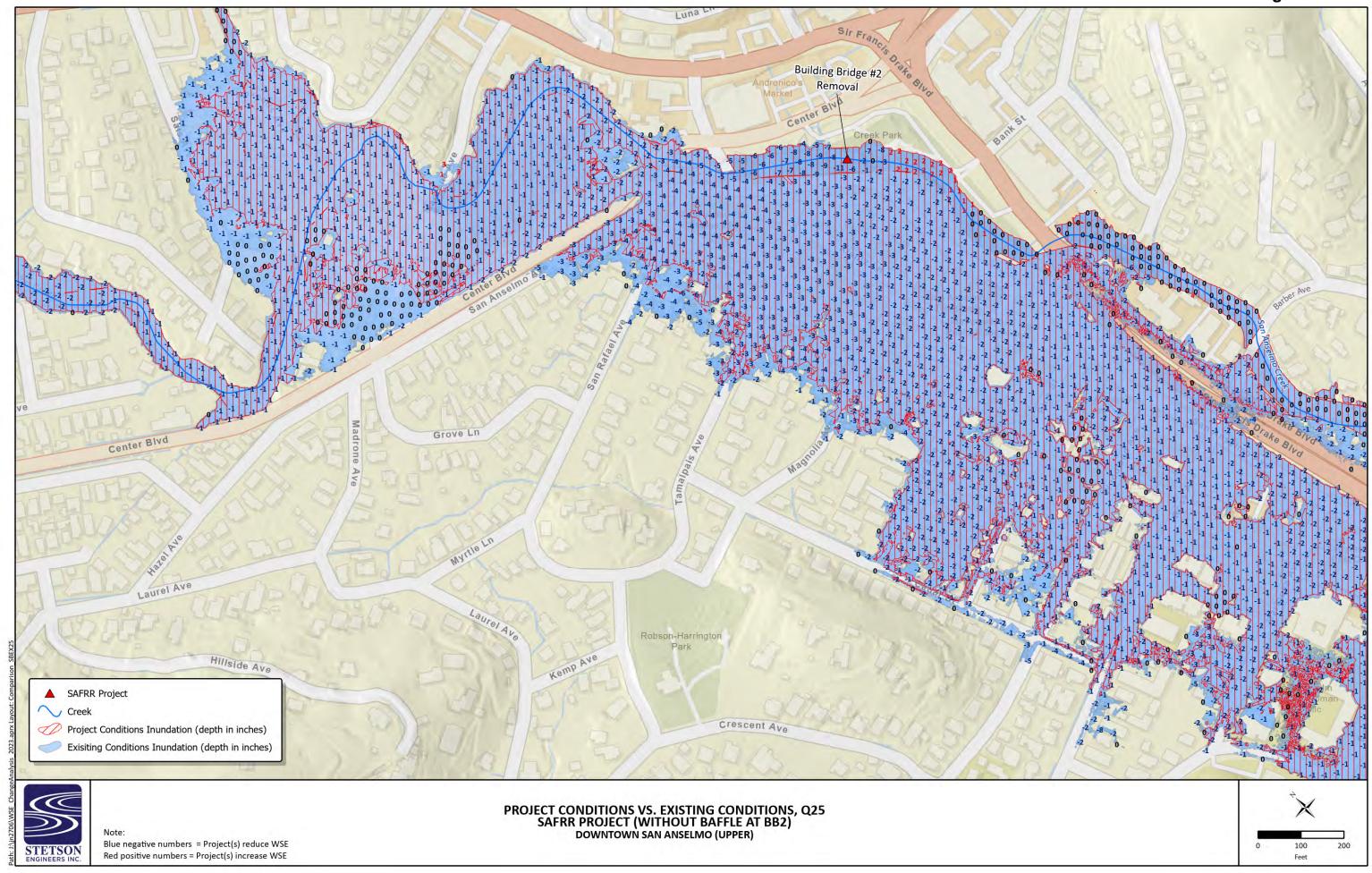


Figure 3c

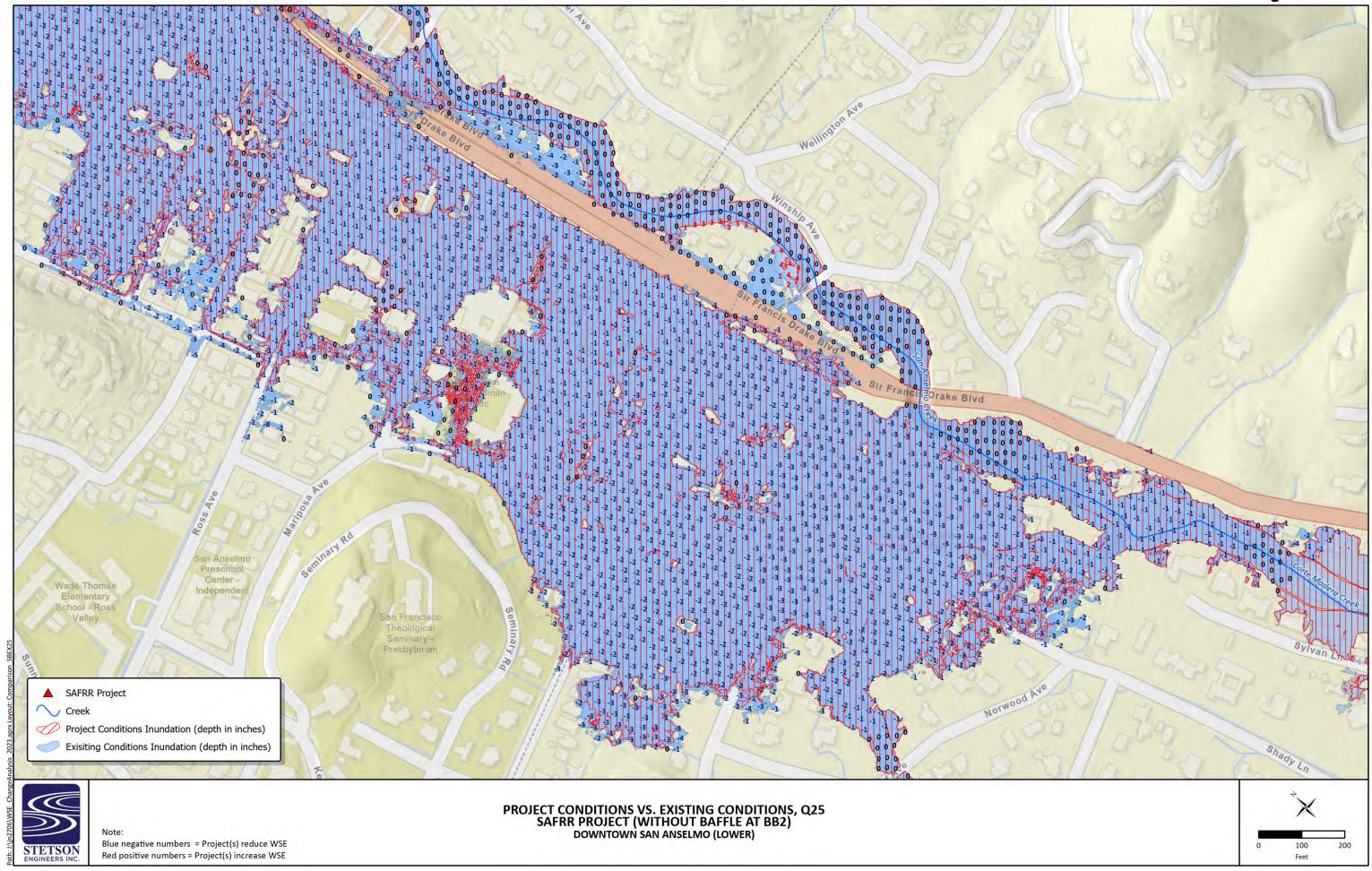


Figure 4a

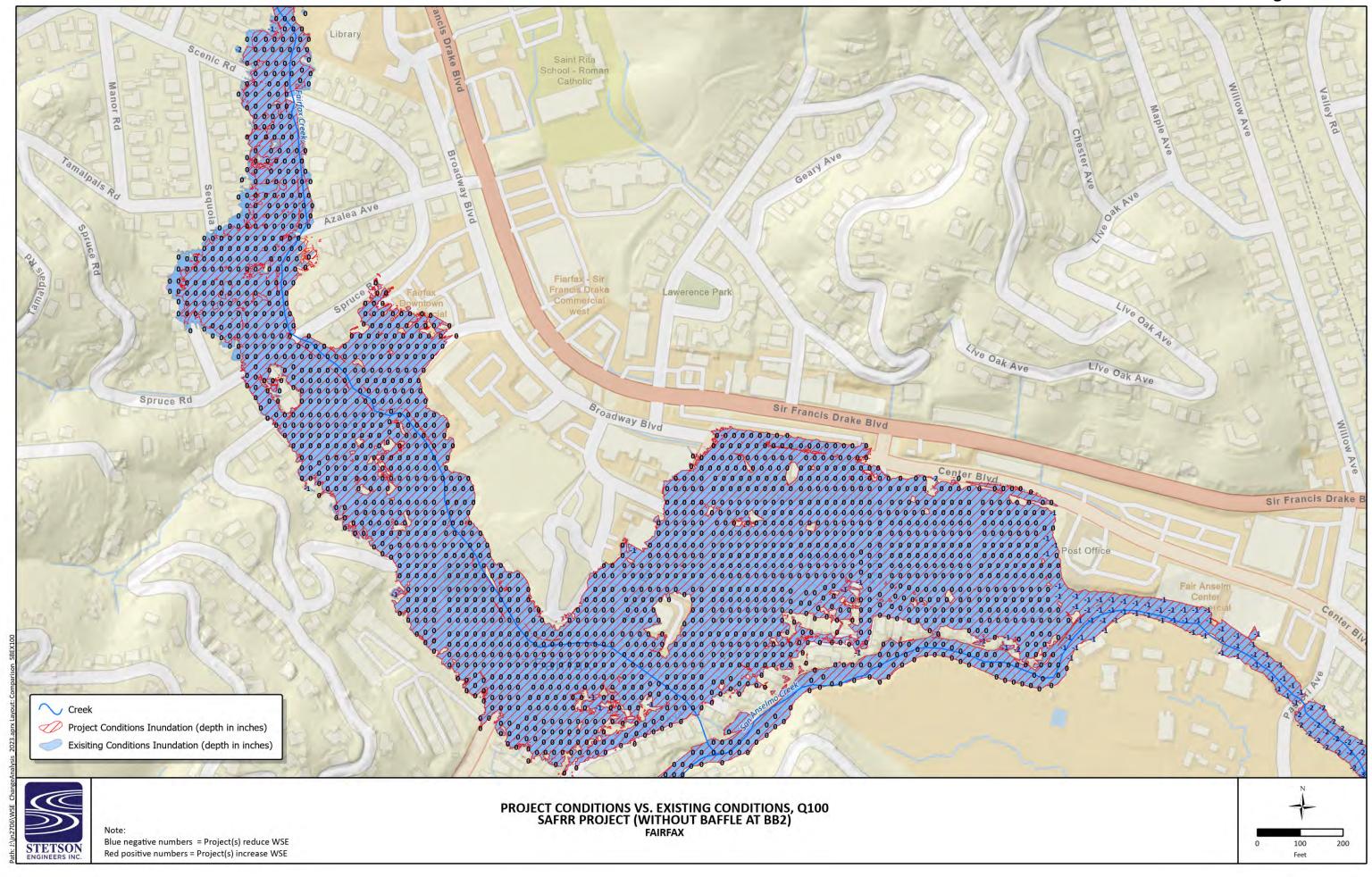


Figure 4b

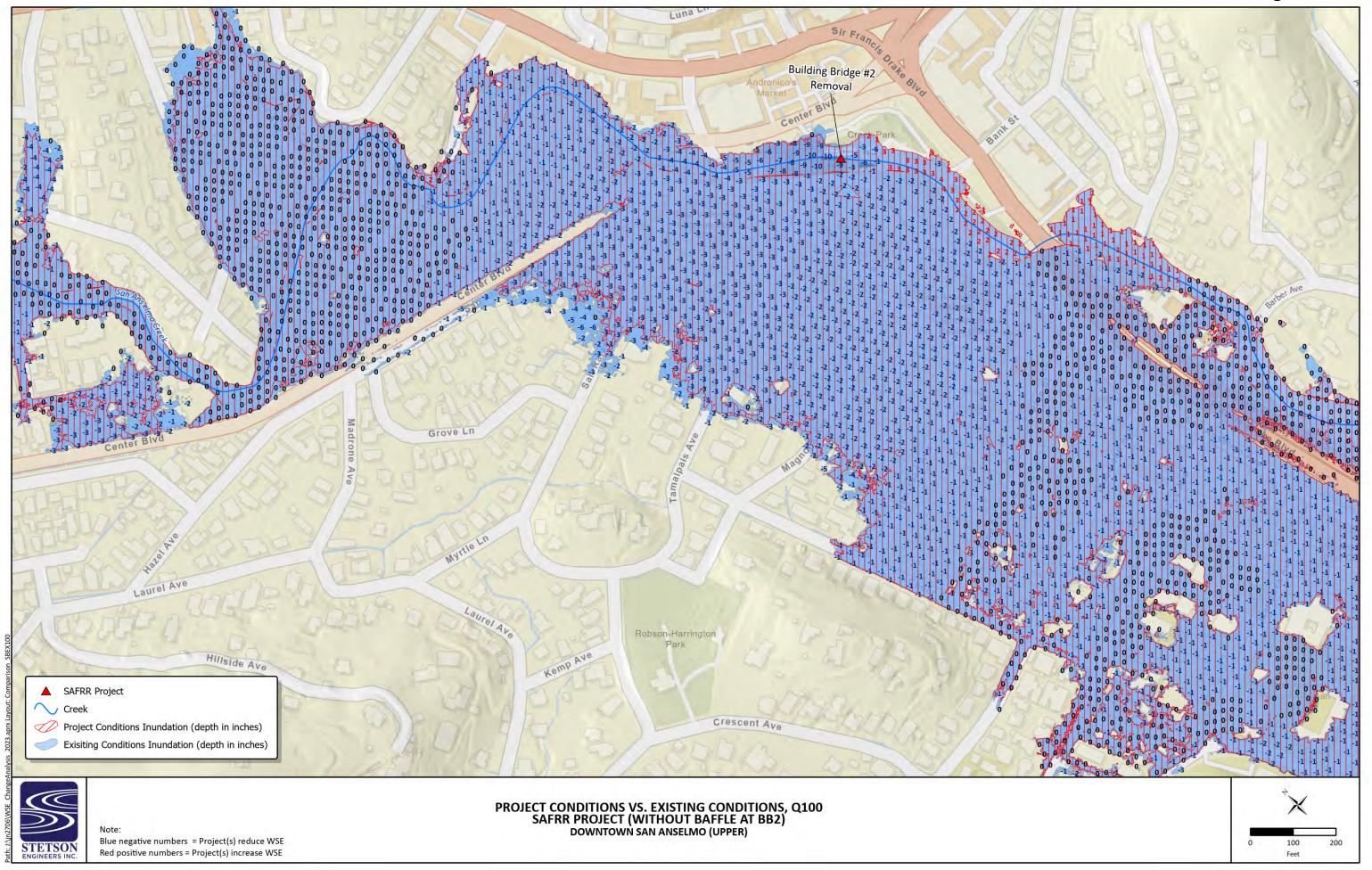


Figure 4c

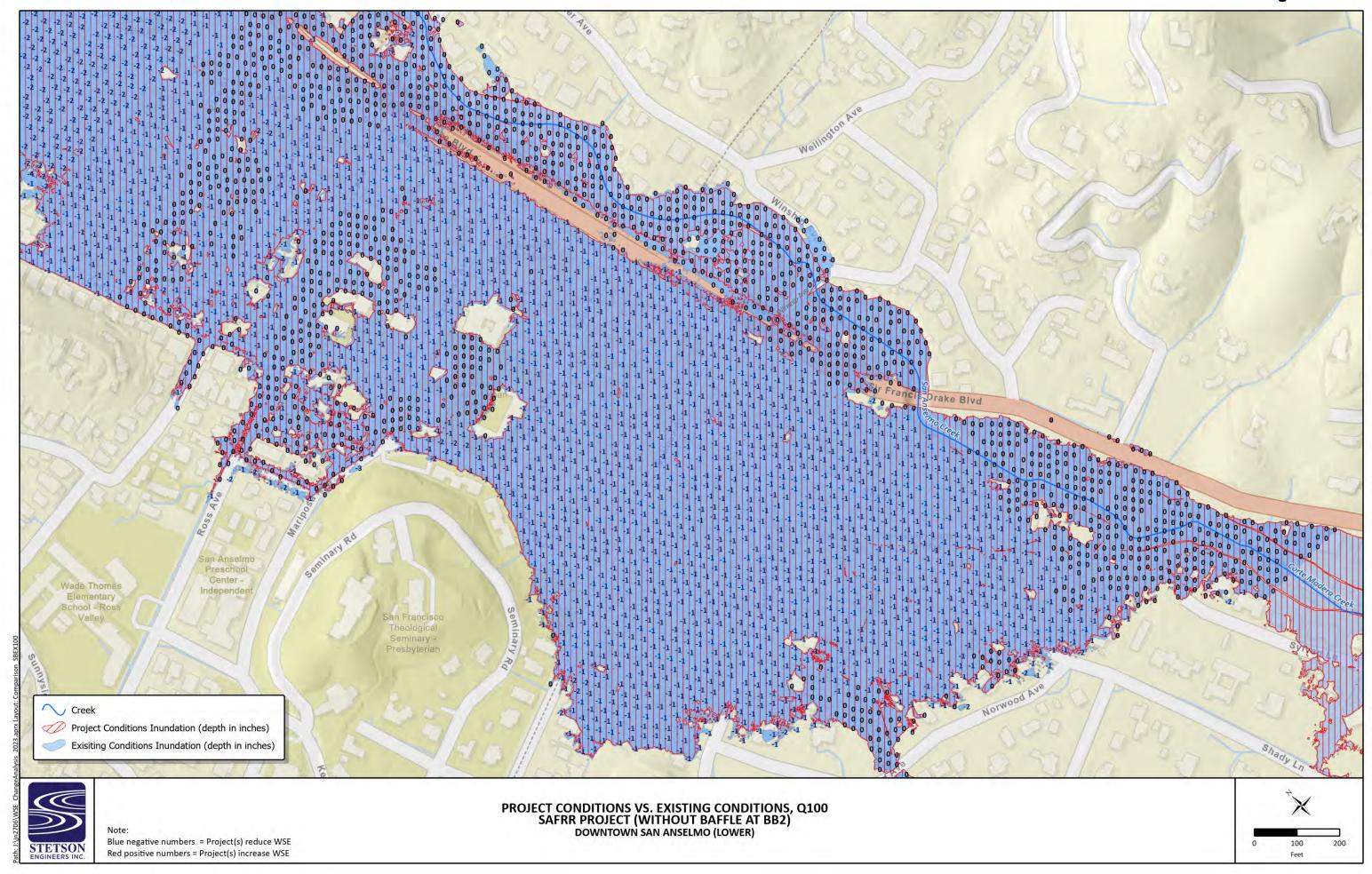


Figure 5a

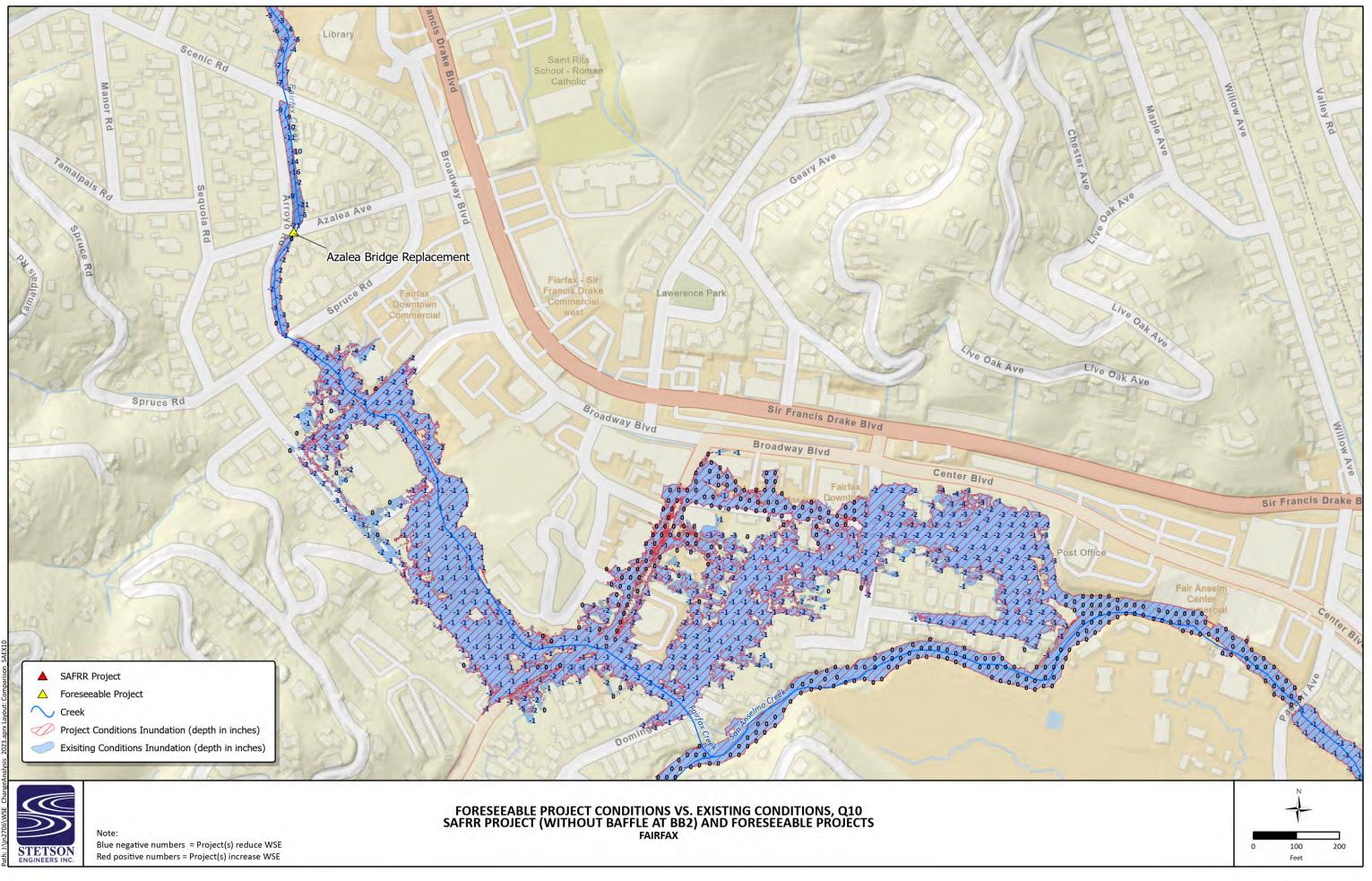


Figure 5b

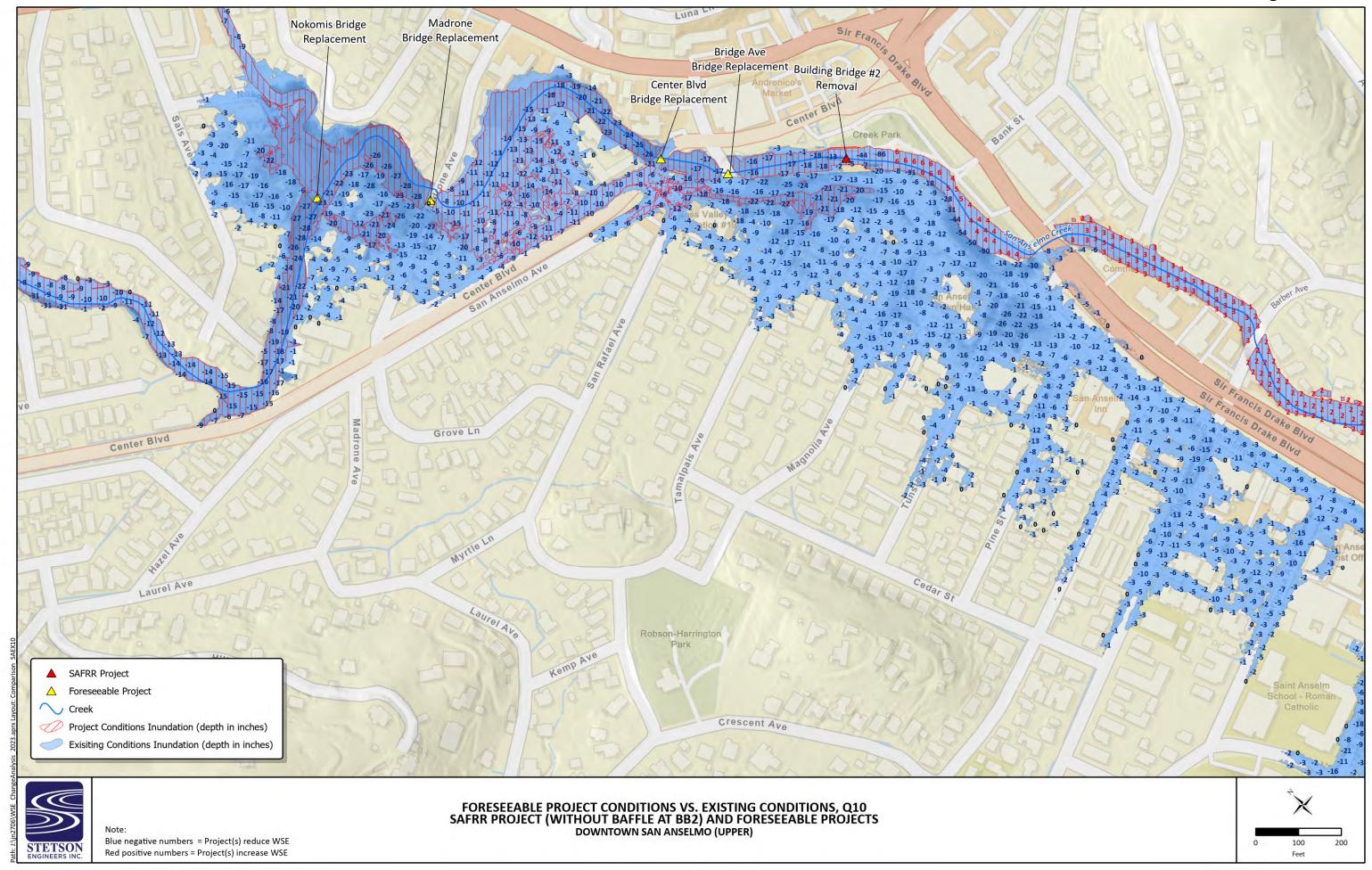


Figure 5c

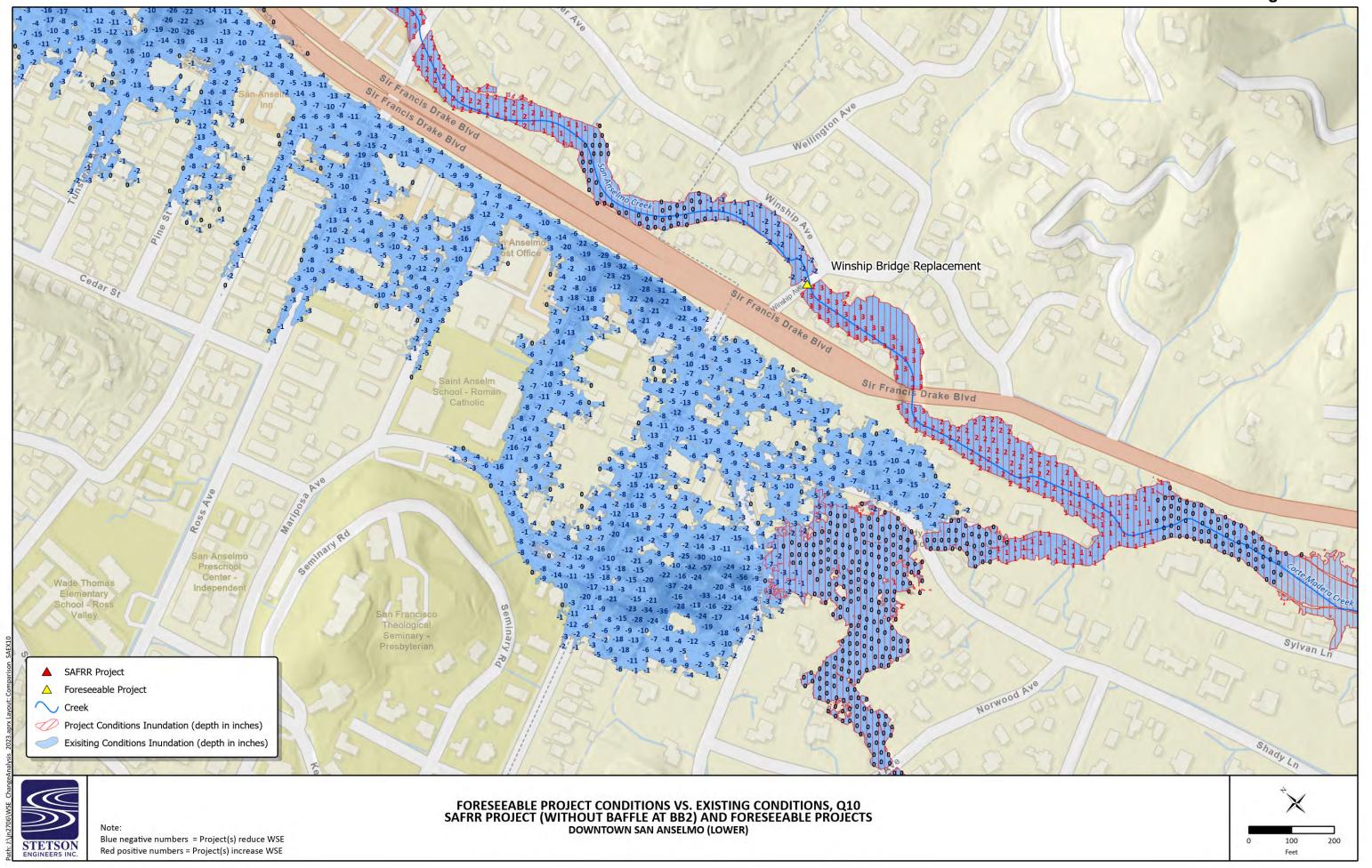


Figure 6a

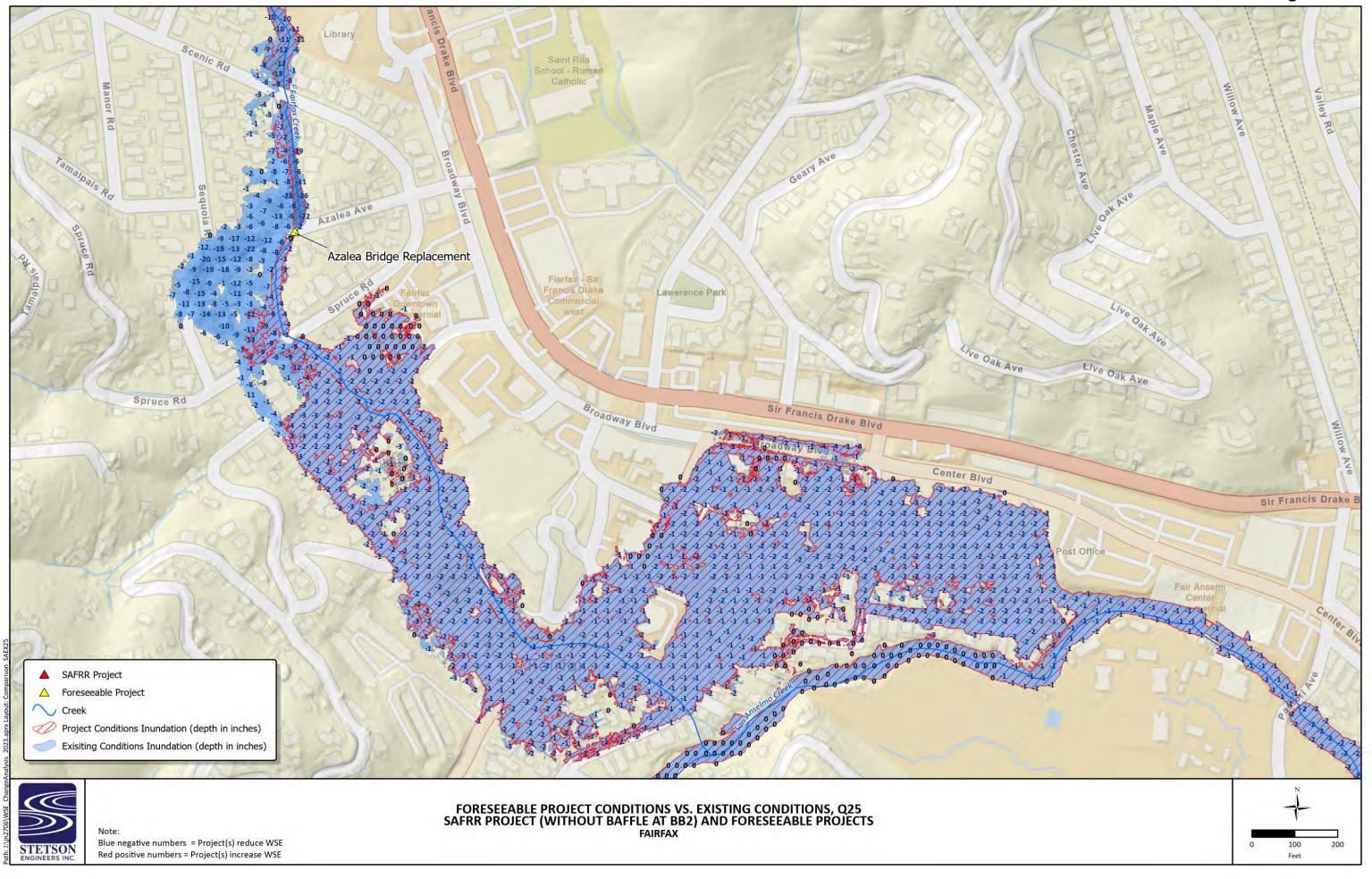


Figure 6b

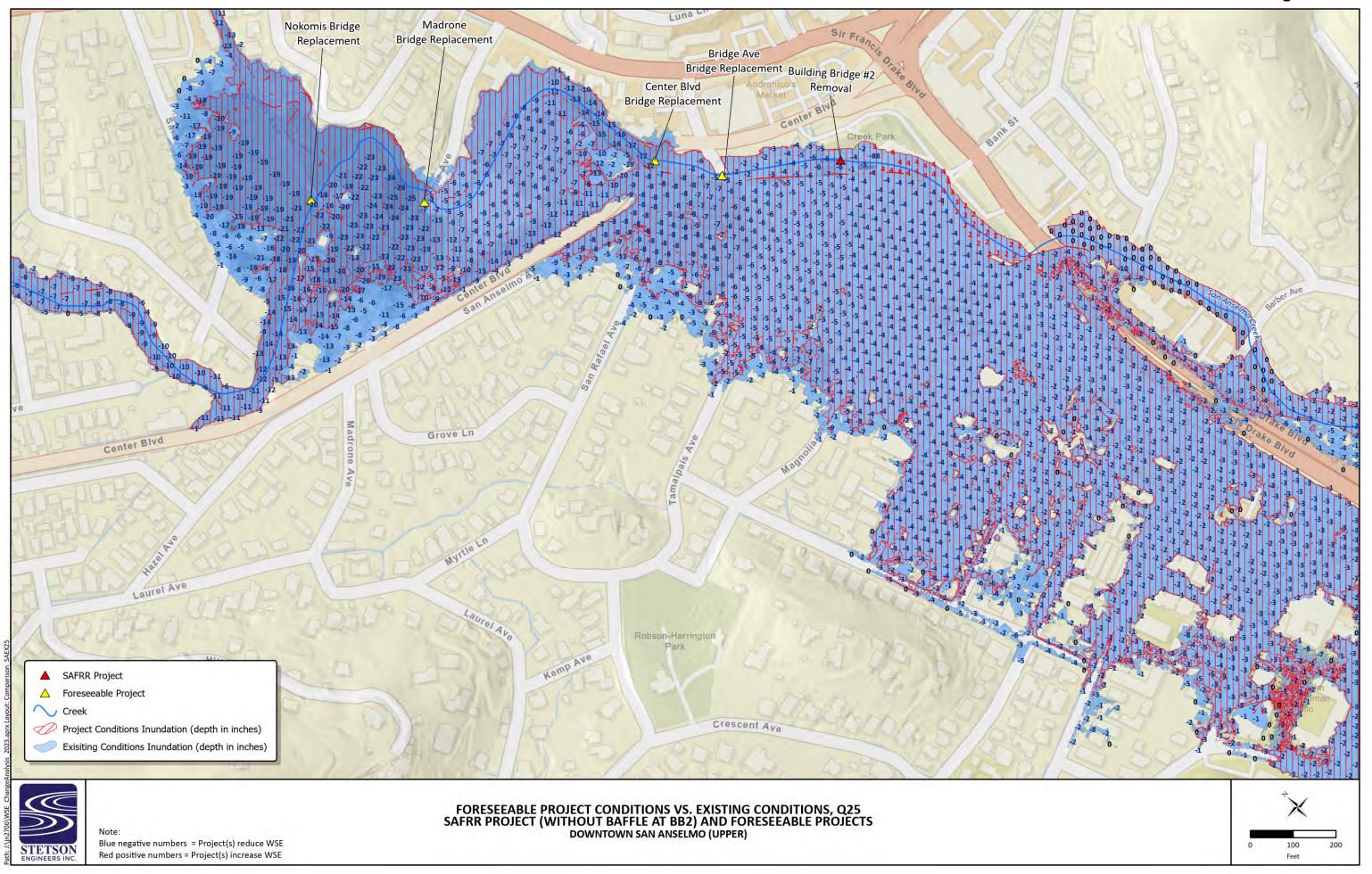


Figure 6c

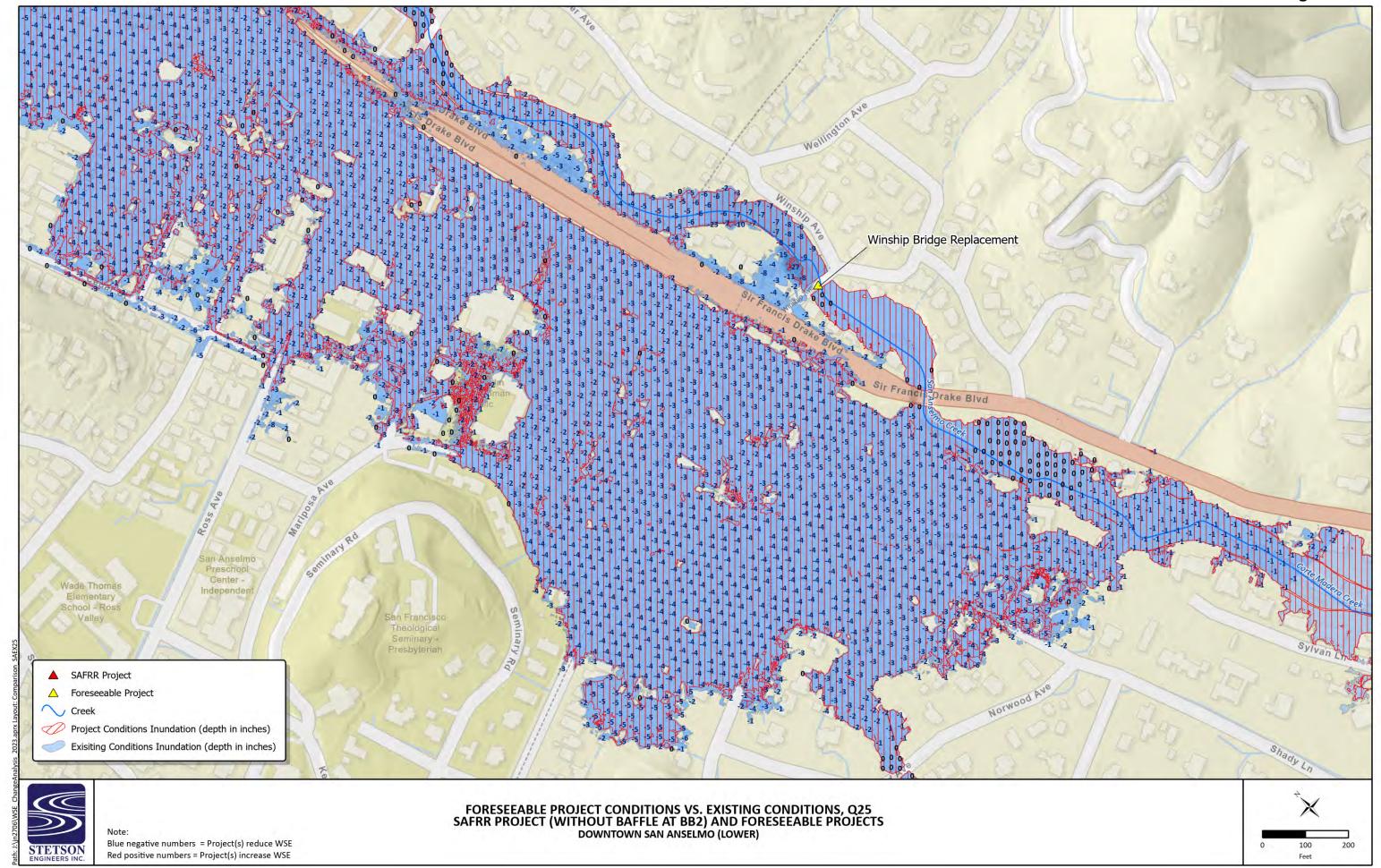


Figure 7a

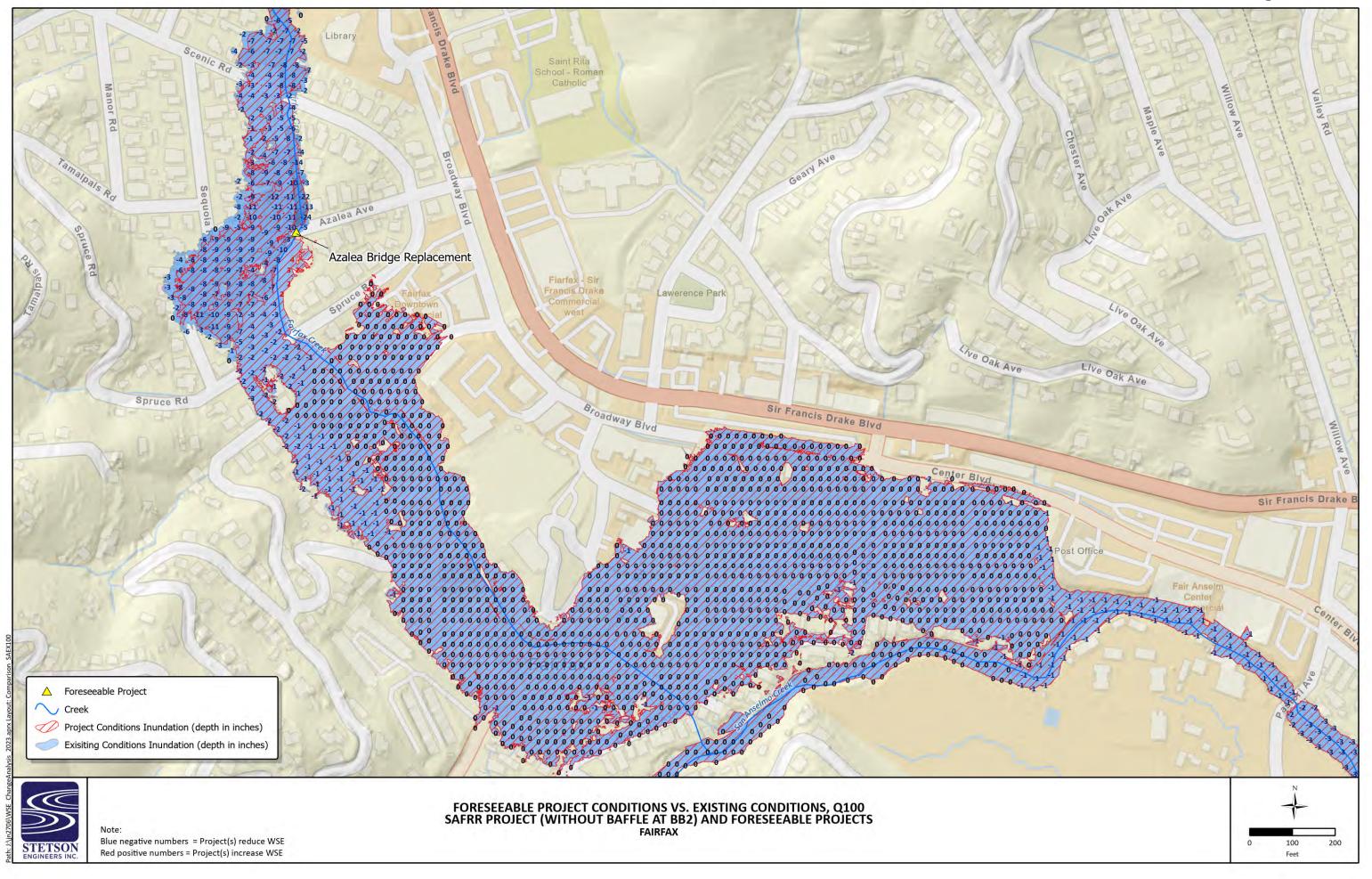


Figure 7b

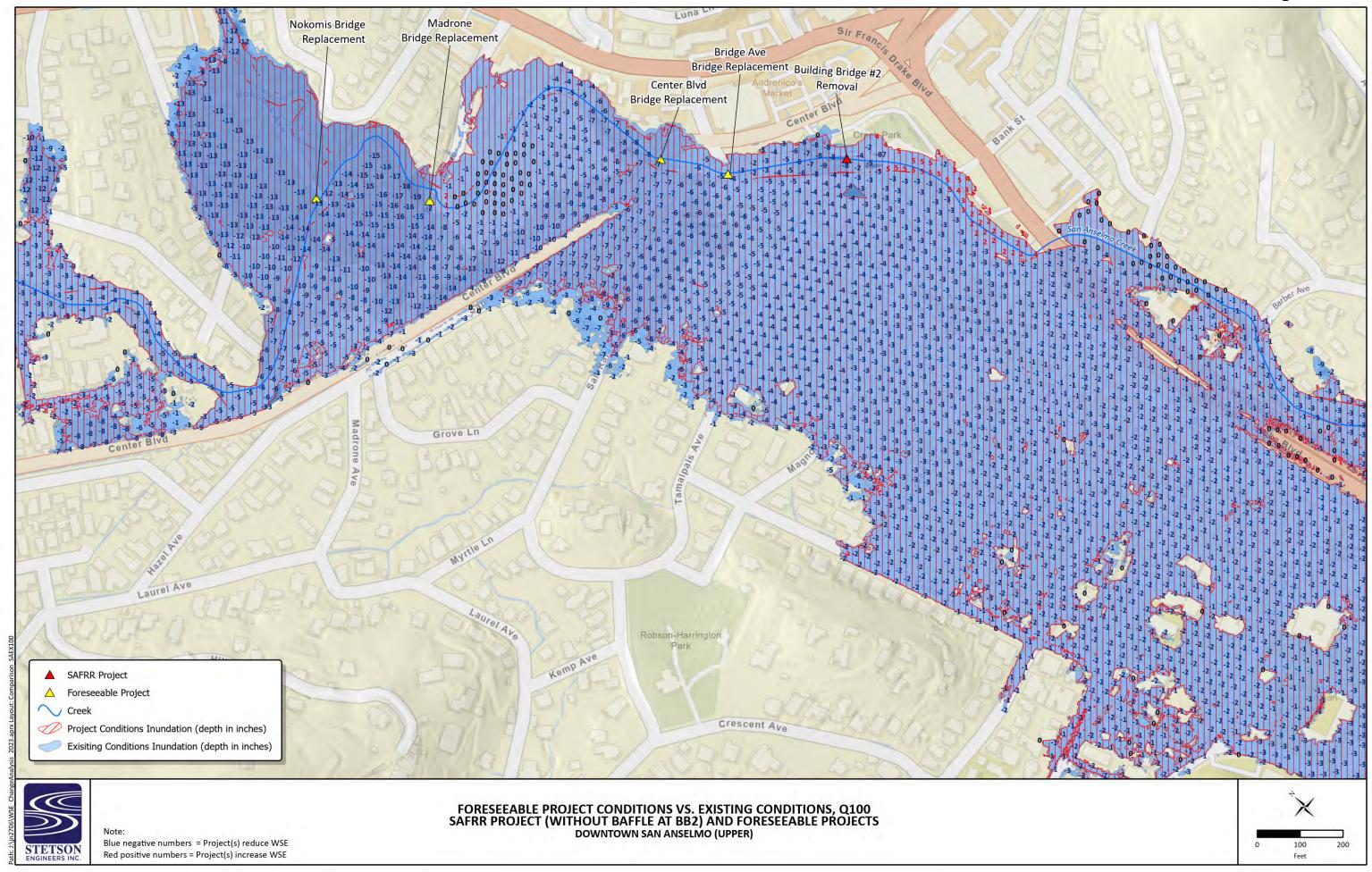


Figure 7c

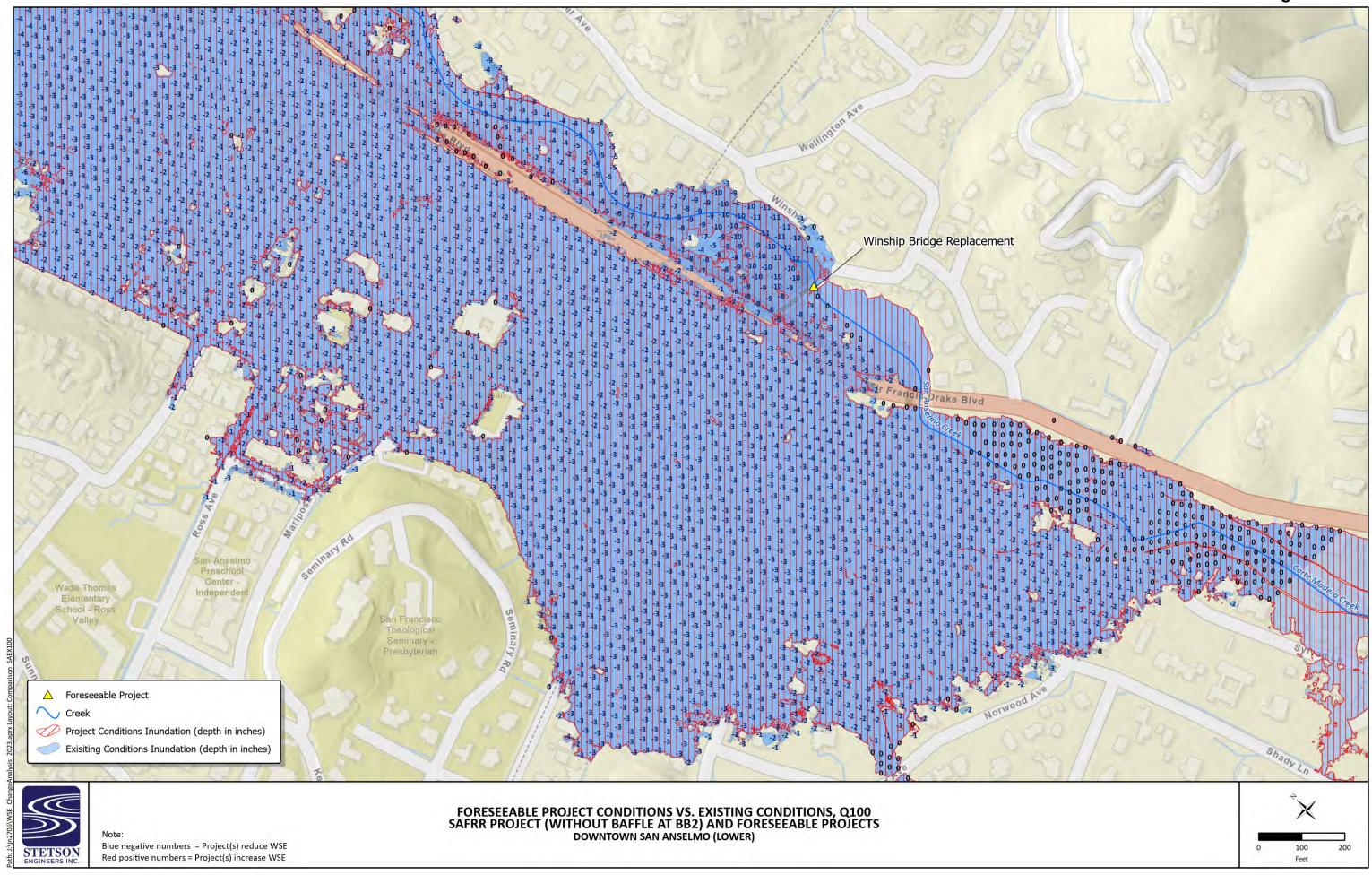


Figure 8a

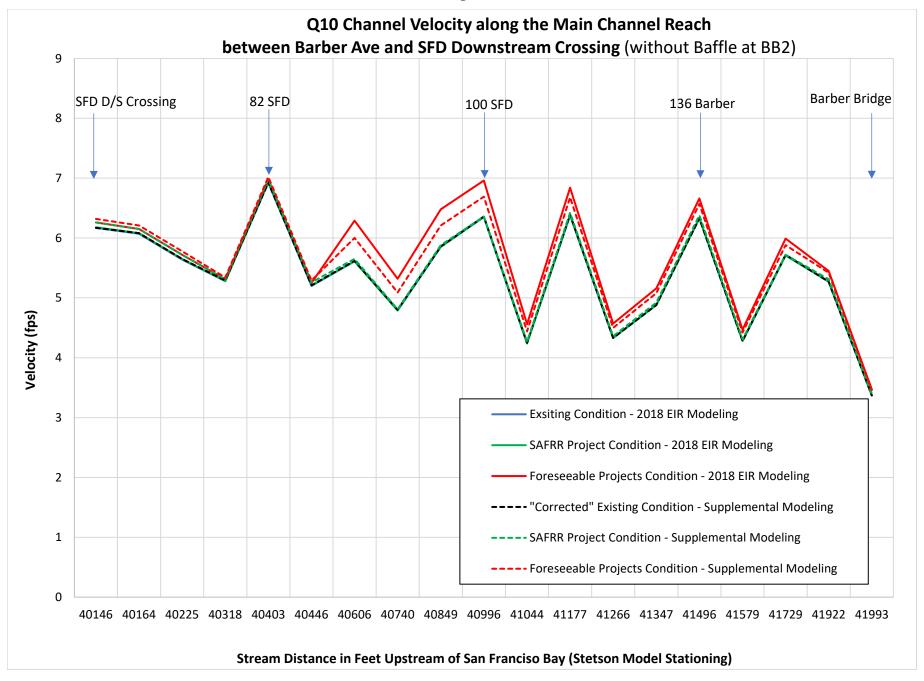


Figure 8b

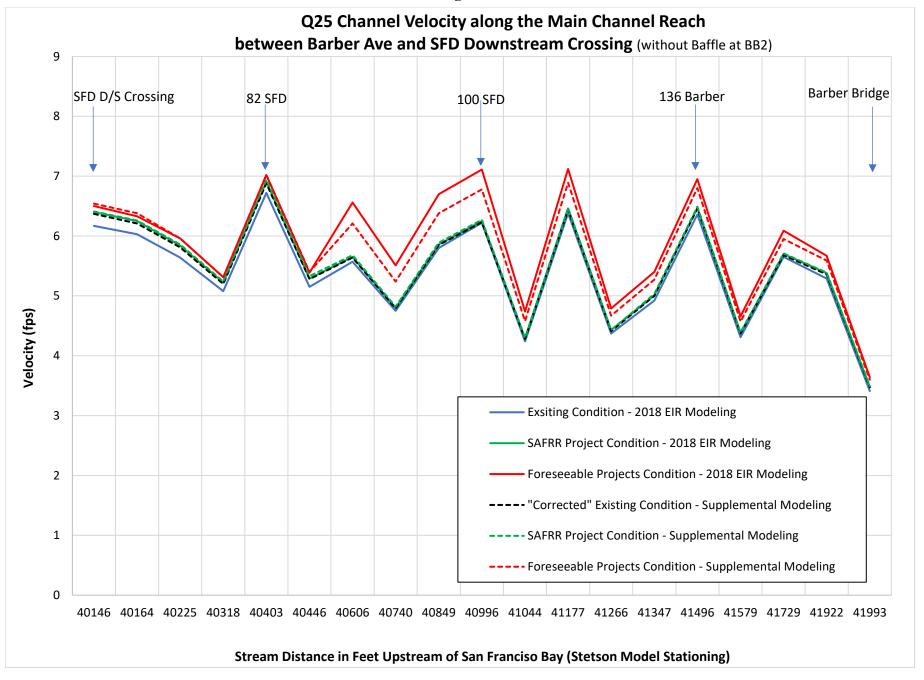
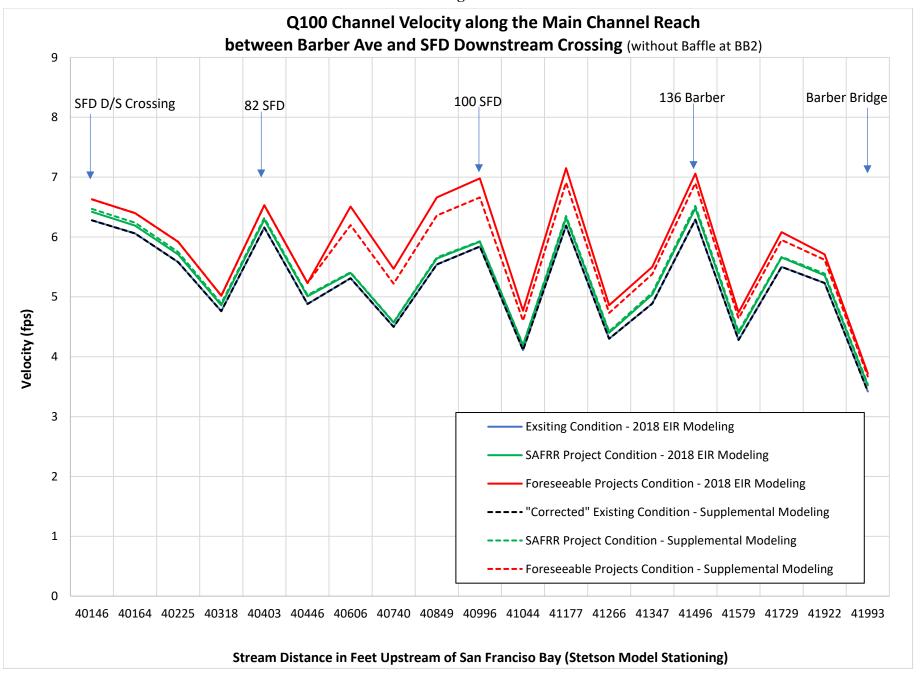


Figure 8c



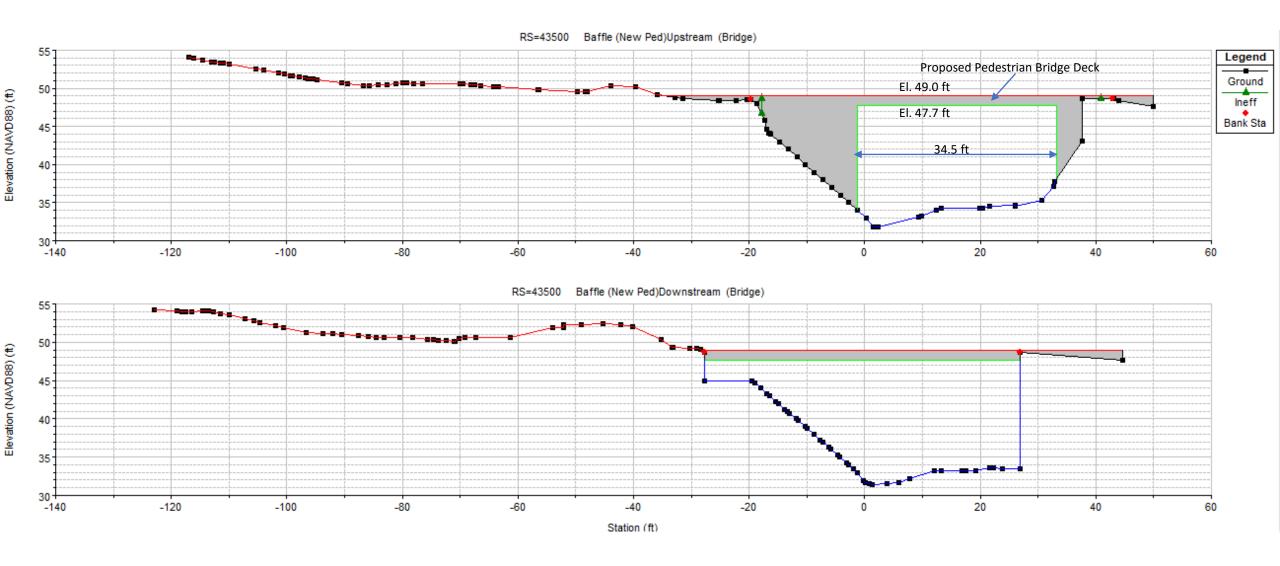


Figure 9 Baffle Opening Sized Using the Stetson 1D/2D Model (Looking Downstream)

Figure 10a

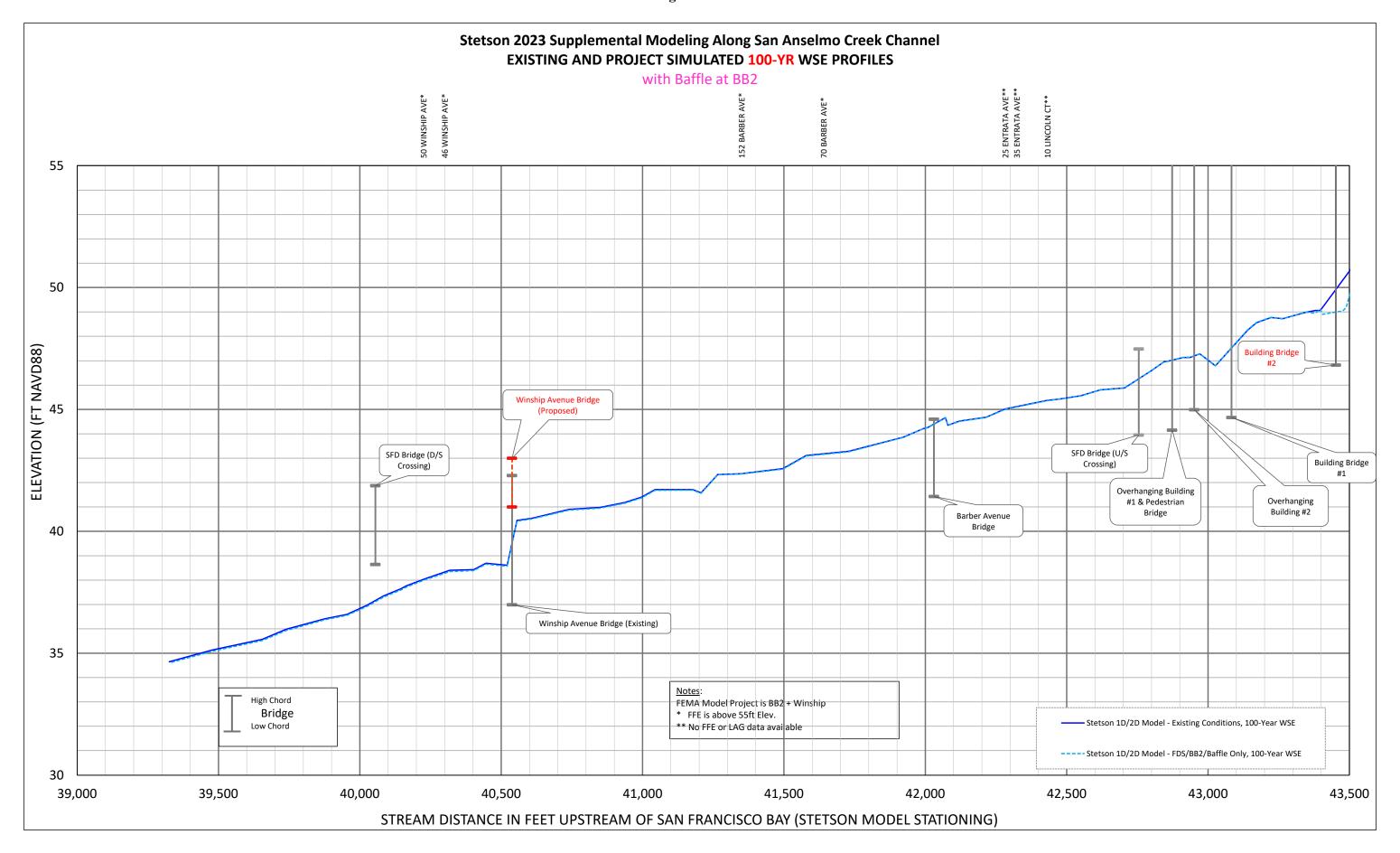


Figure 10b

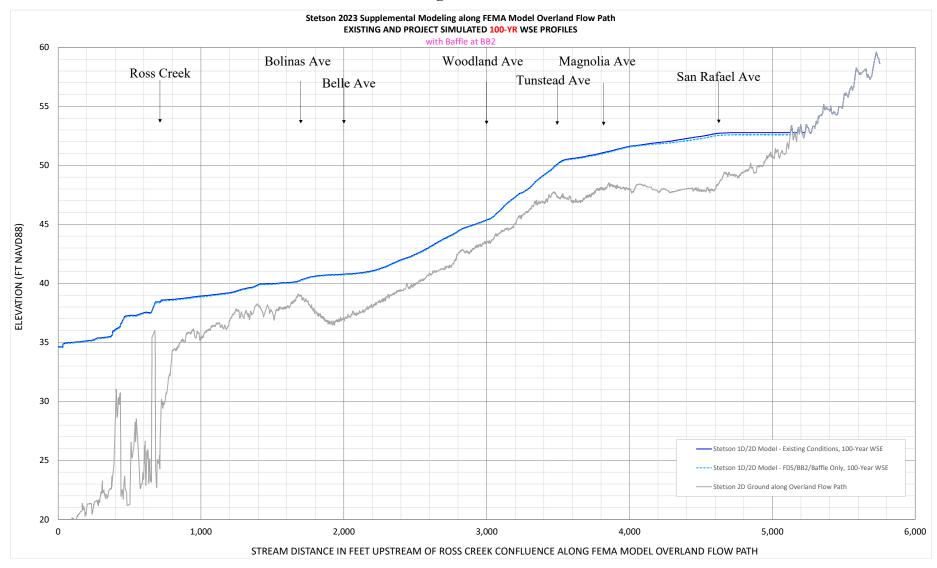


Figure 11a

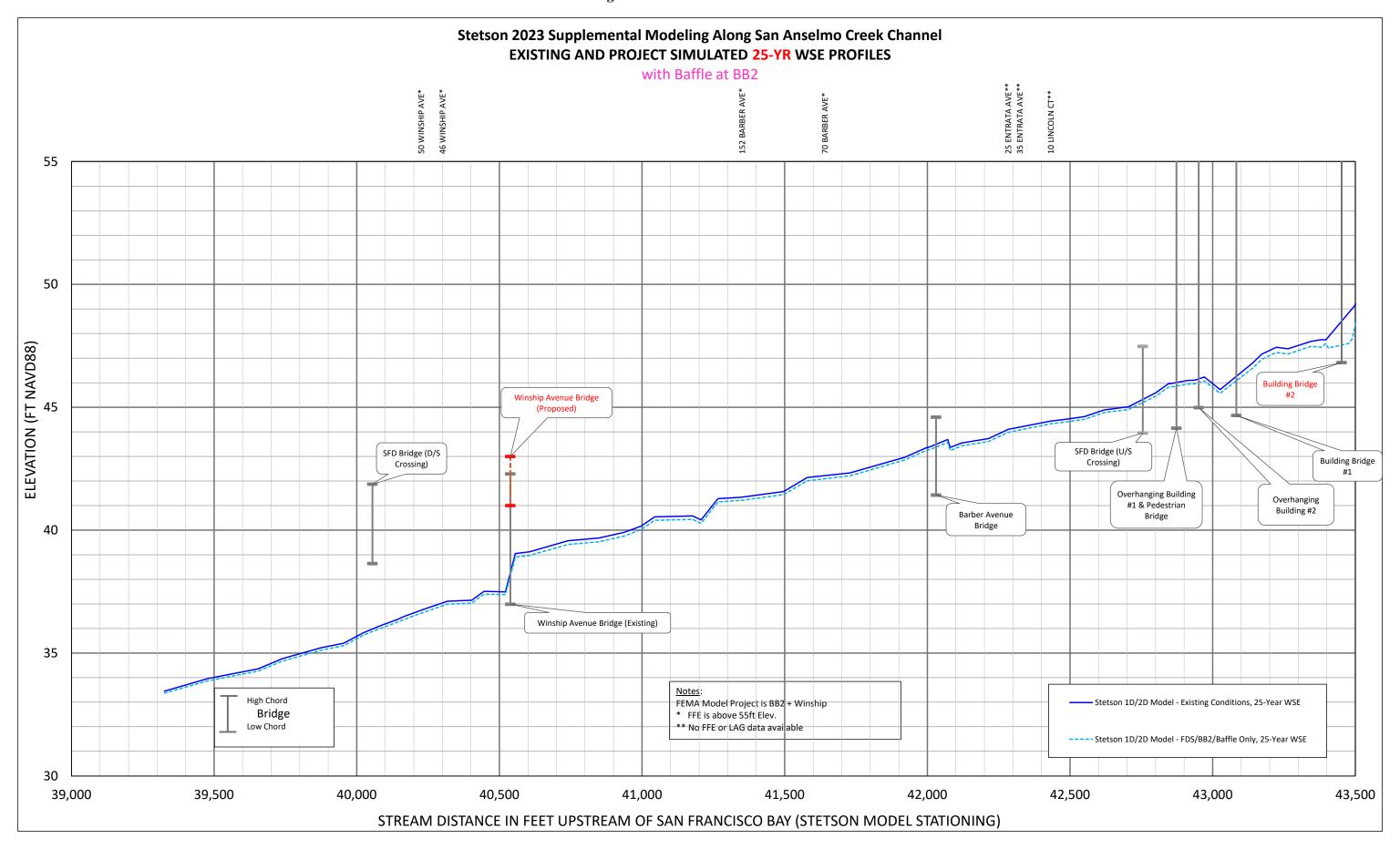


Figure 11b

