



July 27, 2023

Moira McEnespy, Regional Manager

grants@scc.ca.gov

State Coastal Conservancy

Via E-mail

Re: Port of San Francisco Southern Embarcadero Resilience and Enhancement Project Grant Application

Ms. McEnespy,

Please find attached a grant application from the Port of San Francisco for the Southern Embarcadero Resilience and Enhancement Project.

The Port of San Francisco is currently partnering with the U.S. Army Corps of Engineers (USACE) on the San Francisco Waterfront Coastal Flood Study (SF Flood Study), a fully funded \$16 million cost-shared study (\$8 million federal, \$8 million local) of coastal and combined flood risk along the Port of San Francisco's entire jurisdiction. This study will identify a Preferred Plan to address the opportunities and risks along the Port through 2140, conduct analysis under the National Environmental Policy Act and make a recommendation to Congress, which we expect to occur at the end of 2025.

San Francisco strives to stay on the forefront of climate action, and USACE has been directed to develop a *comprehensive benefit plan* that considers economic, environmental, and social effects. However, even with this consideration, USACE operates at a high level of detail under the rules that govern its coastal and riverine flood General Investigations, with a very high degree of focus on quantitative cost-benefit considerations.

This approach downplays key opportunities to advance thinking about:

- how to design an urban line of defense that maintains universal access to the Bay and adapts near-shore transportation and water infrastructure;
- *engineering with nature* approaches that can be incorporated into a working waterfront; and
- how we can improve public access with public amenities that share waterfront history and acknowledge American Indian culture, history, people, and contributions.

In addition to the partnership with the USACE, the Port has two active development partners seeking to invest in Piers 38 and 40 (*Pacific Waterfront Partners*) and Piers 30/32 (*Strada-TCC*) along the Southern Embarcadero. These two development projects will invest approximately \$600 million into historic preservation, bay fill removal, seismic and flood defense, habitat creation and an enhanced public realm. Lastly, the Port and City plan to invest in early resilience for Piers 26 and 28.

To adapt this section of waterfront, the Port needs to develop a schematic plan on how to provide a line of defense against sea level rise in a manner that addresses seismic risk and facilitates tying multiple projects together. The Port plan will provide direction to its two development partners on how to invest in the line of defense to maximize opportunity for public access, provide necessary resilience, create habitat opportunities, and to tell the story of sea level rise, natural and cultural history including the story of American Indian culture.

The Proposed Grant includes five primary tasks, which collectively will prepare the Port, its development partners and other City agencies in delivering a resilient well thought out waterfront public realm and shoreline. Once completed, the project will leverage hundreds of millions of dollars from both private investment as well as local, state and federal resources.

The Task include:

- Task 1- development of Schematic Plan for the Embarcadero Promenade, including the Marginal Wharf Area;
- Task 2- preparation of demolition plans for Piers 30/32, which is required to reconstruct the marginal wharf area;
- Task 3- Detail Design for reconstruction of the Piers 30/32 Marginal Wharf and Promenade area, which will tie into the Piers 38/40 development project and the Port's Piers 26 & 28 early investment project;
- Task 4- development of an interpretive program for the Southern Embarcadero; and
- Task 5- project management.

The Port's Waterfront Resilience Program (WRP) has an established interagency (city agencies) working group that is ready to begin working on this project. In addition, the WRP has been conducting an extensive community outreach process with both stakeholders and regulatory partners. The Port will utilize this working group to begin work immediately and to continue the Port's ongoing commitment to comprehensive and equitable stakeholder outreach.

The Port stands by and is ready and excited to partner with the Coastal Conservancy on this multi-benefit project, which will eventually become a model for addressing sea level rise along an evolving urban waterfront.

Please do not hesitate to contact me with any questions.

Sincerely,

David Beaupre

David Beaupre
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Port of San Francisco
Planning and Environment
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415-215-5465

cc. Amy Hutzal, Executive Director CCC
Erica Johnson, Project Manager CCC

STATE COASTAL CONSERVANCY GRANT APPLICATION

Please read the Grant Application Guide, [found at this link:](https://scc.ca.gov/webmaster/ftp/pdf/forms/SCC_Application-Guide.docx)
https://scc.ca.gov/webmaster/ftp/pdf/forms/SCC_Application-Guide.docx , to
help you fill out this application.

Submit your application to grants@scc.ca.gov

SUMMARY INFORMATION

CONTACT INFORMATION

Organization:	Port of San Francisco
Contact Person:	David Beaupre
Email:	david.beaupre@sfport.com
Phone:	415-215-5465
Webpage (if applicable):	sfport.com

PROJECT INFORMATION

Project Name	Port of San Francisco, Southern Embarcadero Resilience & Enhancement Plan
Project Summary (<u>1 sentence</u>)	This project will develop a schematic design for a .6-mile section of the Embarcadero Promenade, detail design for 600 linear feet for a new elevated flood line of defense, including demolition plans for 600' linear feet of wharf and adjacent Piers 30/32 and develop an interpretive program to educate about sea level rise and seismic risk, all of which is necessary to address the City's need to protect the City and harbor from SLR.
Amount Requested	\$7,800,000
Total Project Cost	\$9,500,000

Estimated Start Date	February 2024
Estimated End Date	February 2026
Project Type: (check all that apply)	<input checked="" type="checkbox"/> Planning <input type="checkbox"/> Acquisition <input type="checkbox"/> Implementation
Total Acres	3200 linear feet and approximately 15 acres (including the Embarcadero Promenade)
Total Trail Miles (if applicable)	.6
Assessor Parcel Numbers (Acquisition projects only)	

LOCATION INFORMATION

County(ies)	San Francisco
Specific Locations	East side of Embarcadero from Harrison to Townsend
Latitude, Longitude (e.g., 37.80630, -122.2735)	Lat: 37°47'5.14"N Long: 122°23'16.47"W
What point is represented by the lat/long (e.g. parking lot, center of site, etc.)	Mid-point of project on the Embarcadero Promenade at intersection with Brannan Street
Is project in, or within 0.5 miles of, a Disadvantaged Community? (mapping tool: https://www.parksforcalifornia.org/communities/?overlays=parks)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially

LEGISLATIVE DISTRICTS

District	Number, Name of Representative
State Assembly	District 17 Matt Haney
State Senate	District 11 Wiener
Congress	District 11 Nancy Pelosi

PROJECT DESCRIPTION-

Complete each of the elements of the project description below with clear, but detailed answers. Add space to each answer as necessary but stay within the suggested limits. Refer to the [Grant Application Guide](#) for specific assistance on each question.

1. **Site Description** (1-2 paragraphs).

The Proposed project includes the Embarcadero Promenade, adjacent marginal wharf,¹ and shoreline, adjacent parking and loading lanes between Harrison and Townsend Streets and Piers 30/32. The Port and City working with the US Army Corps of Engineers (USACE) have identified the promenade and marginal wharf as the area to establish a line of defense for sea level rise. This project will include developing a demolition plan for Piers 30/32 and its adjacent marginal wharf. The project also includes detail design for a replacement marginal wharf and bulkhead wall along the Piers 30/32 length.

2. **Project Need** (one paragraph). Describe the specific problem, issue, or unserved need the project will address.

Sea level rise will increase coastal and inland flooding damages by overtopping the existing seawalls and wharves along The Embarcadero. The Port in partnership with the US Army Corps of Engineers is developing a flood protection plan to reduce flood risk along the Port of San Francisco Waterfront. The plan for this larger area of the Embarcadero Waterfront is to establish a line of defense within the marginal wharf area by constructing a flood barrier at an elevation no less than the 100-year still water level, inclusive of the California Ocean Protection Council's likely sea level rise scenario, with an allowance of an additional two feet of clearance above high tide (freeboard) for waves. In total, this requires a structure that is 3-5' above the existing grade. Rather than install a 3-5' vertical wall along the shoreline, analysis completed to date by the Port, in partnership with USACE, indicates that the increased elevation can be gained through a series of steps, ramps and walls along this portion of the waterfront within the existing promenade, marginal wharf and roadway areas.

3. **Project Activities** (1-3 paragraphs). Describe specifically how the proposed project will address the project need identified in #2 above.

This project will develop a schematic plan that provides sea level rise protection for a 0.6-mile section of waterfront and then develop detailed plans for 600 linear feet, including plans to demolish Piers 30/32. The Port believes that developing a comprehensive plan for this section of waterfront against sea level rise creates an opportunity for multiple benefits, including creation of habitat opportunities along a new sea wall, an enhanced pedestrian promenade that maintains views and access to the Bay, and creation and continuation of the Embarcadero Cycle-track as planned and

¹ The marginal wharf is a pile supported area generally located between the sea wall and the Pier structure; a portion of the Embarcadero Promenade is located on the marginal wharf.

partially constructed by the SF SFMTA. Integrated into the design will be the development of an interpretive program that can educate on sea level rise and other appropriate cultural aspects of the waterfront including the original inhabitants, the Ohlone.

4. **Project Outcomes.** To the extent known, provide information on both the quantitative and qualitative project outcomes. See application guide for sample project outcomes.

Quantitative Outcomes (e.g. Acres of habitat restored; Miles of trail planned or built; Number of each type of access amenities; Number of community members engaged in project, etc.)

Once completed, this project will create waterfront seismic and sea level rise resilience, new habitat, and an improved waterfront public realm for approximately .6 of a mile of San Francisco's downtown urban waterfront within the South Beach Community. Plans developed through this grant would have the benefit of over three years of City and USACE planning for sea level rise resilience and reduce seismic risk. Quantitative outcomes would include:

- incorporate construction techniques that would create an estimated a minimum of 1 acre of new engineered surface area as habitat for a number of Bay species;*
- removal of approximately 6 acres of Bay fill;*
- extensive work with USACE will allow development of a plan through this grant that, in addition to meeting Coastal Conservancy standards, is maximally aligned with Army Corps standards to ensure the greatest possible eligibility for federal construction monies (to date, the Port and USACE have invested over \$50 million in analysis and planning to develop a resilient waterfront for the Port's full 7.5 miles of waterfront); and*
- in the three years of analysis and planning to date the port has hosted over 150 community workshops and reached over 2000 stakeholders and local students to seek feedback on how to build a resilient waterfront. This project would include at least 20 additional meetings to seek community and stakeholder feedback to arrive at detailed implantable plans.*

Qualitative Outcomes (e.g. habitat functions restored; integration of community input into project/design plan; tribal access to land restored, etc.)

Successful completion of this plan accomplished through comprehensive and equitable community outreach, including consultation with tribes and other key stakeholders. Once implemented the plan will provide:

- a platform from which the Port can seek funding from multiple agencies to construct the project, where this plan will facilitate and is a necessary precursor to attracting over \$1 billion in investment by the Port, other public funding;*

- *facilitating and incentivizing an estimated \$600 million in private development investment at Piers 38 and 40 and Piers 30/32;*
- *removal of approximately 6 acres of Bay fill;*
- *new habitat along the .6 mile span of “living seawall” will provide new breeding habitat for Bay species;*
- *an improved public realm for pedestrians and cyclists, including a dedicated cycle track, which will improve safety by minimizing user conflicts on the multi-user promenade, and enhanced user experience of Bay vistas along the Southern Embarcadero Roadway; and*
- *connections to the natural and cultural history of the region through an interpretive sign program, which will dovetail with the Port’s new Ohlone Trail project, which is in early stages of development.*

PROJECT SELECTION CRITERIA

The Grant Application Guide contains the complete list of our project eligibility and project selection criteria. This application only includes those criteria for which we need specific input from you. The other criteria will be assessed based the project description. Refer to the Grant Application Guide for specific assistance on each question.

Project Eligibility

5. **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) Compliance** – IMPLEMENTATION Projects Only:

- Specify the current status of CEQA review:
 - Not Started
 - In Progress
 - Complete

Estimated completion date: n/a
- What document is the CEQA review expected to result in:
 - EXEMPTION
 - NEGATIVE DECLARATION (ND)
 - MITIGATED NEGATIVE DECLARATION (MND)
 - ENVIRONMENTAL REVIEW DOCUMENT (EIR)
 - ADDENDUM
- If an ND, MND, or EIR is required, specify the CEQA LEAD AGENCY:
- If an ND, MND, or EIR has already been completed, provide a link to the document:

6. **Grantee capacity (1 paragraph)** – Summarize your organization’s experience administering grant funds and carrying out similar types of projects. +

Over the last 15 years the Port has received over \$300 million in grant funding for a variety of planning, design, entitlement and capital projects. Projects have ranged in scale from small boat launches, open space, and habitat improvements to major mixed-use development projects such as Mission Rock² and Pier 70³. The Port has managed and delivered large scale projects such as the James Herman Cruise Terminal and Plaza (\$115 million), Downtown Ferry Terminal Phase 1 (\$20 million), Hyde Street Harbor project (\$7 million), Crane Cove Park (\$28 million) and Heron’s Head Park shoreline and habitat enhancements (\$4.5 million). Port staff recently completed the Port Waterfront Plan, which includes an open space and urban design component. The Port’s Waterfront Resilience Program has prepared several alternative options for how to address the public realm along the shoreline where new structures will need to be placed. Additionally, in partnership with the Smithsonian Institute and the Exploratorium Museum, the Port is piloting a Living Sea Wall program to better identify opportunity for habitat integration into new Bay structures.

7. **Site ownership or control** – Check the applicable box. For ACQUISITION projects, the “written agreement” refers to a Purchase and Sale Agreement.

- Applicant owns the site(s) where the project will occur.
- Applicant has a written agreement with the property owner(s) to conduct the project on their property(ies). If checked, please provide a copy as an attachment to your application.
- Applicant does not yet have a written agreement with the property owner(s) to conduct the project on their property. If this answer is checked, specify how and when the property owner agreement will be reached.

8. **Long-term management and maintenance (1 paragraph)** – Summarize the plan for the long-term management, maintenance, and monitoring of the project.

The Port maintains, manages and operates 7.5 miles of San Francisco’s waterfront including over 200 acres of public realm areas. Improvements associated with this project will be maintained by the Port as a part of the Port’s regular operations and maintenance budget.

Project Selection (refer to the [Application Guide](#) for more information)-

Alignment with Conservancy Strategic Plan

As a general matter, the Port intends and believes this project will support directly or indirectly all of the Conservancy’s Strategic Plan goals (excepting 4.2—this project does not address wildfire resilience, as it is not applicable to the project geography).

² www.missionrock.com

³ www.pier70sf.com

9. **Project includes a serious effort to engage tribes.** (1-2 paragraphs). Describe how you have engaged tribes in the development of this project.

The Port has been in consultation with a variety of representatives of the Ohlone tribes through its work on a number of fronts, including: the update to the Port's master planning document, the Port Waterfront Plan; an interpretive art/signage program it is installing on Islais Creek; and through its development partners on the Mission Rock and Pier 70 development projects. Additionally, the Port is in early consultation with Native American Consultation Database representatives about the development of a cultural trail network and integrated interpretation along the entirety of the San Francisco Waterfront. The above are preliminary and early conversations we anticipate will continue.

As this project moves forward, we intend to engage with local tribes in the same way the Port engages with its formal Citizens Advisory Committees as we develop and refine plans.

10. **Project benefits will be sustainable or resilient over the project lifespan** (1-2 paragraphs). Describe how the benefits of your project will be sustainable or resilient over the project lifespan. If you already addressed this in other parts of the application, please indicate where.

The vision supported by this planning application is the development of waterfront resilient to both seismic events and sea level rise. Once completed, this plan will guide all future waterfront development for the Southern Embarcadero Promenade and marginal wharf areas to address sea level rise resilience to 2100 and beyond.

When those plan-guided projects are completed, the seawall structure itself will produce robust flood protection, seismic stabilization and habitat maintenance for as long as the seawall itself exists.

11. **Project delivers multiple benefits and significant positive impact.** (1-2 paragraphs). List the specific project benefits and describe any additional significant positive impact. If you already addressed this in other parts of the application (for example, project outcomes), please indicate where. You do not need to repeat the information if it is already provided elsewhere.

The intent of this project is to develop a comprehensive plan for the Southern Embarcadero sea level rise line of defense that is also seismically sound. Future improvements to the Southern Embarcadero will provide multiple benefits including a Line of Defense against sea level rise and enhanced public realm including a flood proof promenade and cycle-track, bay fill removal, habitat enhancements and interpretation telling the story of sea level rise, environmental conditions, cultural and natural history to enhance the public realm.

12. Project was (or will be) planned with meaningful community engagement and broad community support (1-3 paragraphs). If the communities served by your projects are tribal groups, please write your answer in question 9. If you are serving other groups, please answer this question. Please summarize how you have (or will) engage relevant communities in all phases of the project and describe the community support for the project.

The Port of San Francisco prides itself in extensive community outreach for its planning, operations, leasing and capital projects. The Port has five community advisory groups organized around geography and subject matter. All Port projects go through extensive community outreach. Separately the Port’s Waterfront Resilience Program, which address the City’s resilience needs further expands the outreach the Port generally conducts. The proposed project would utilize the Port’s Northern Advisory Committee (NAC), Maritime Commerce Advisory Committee (MCAC) and the Waterfront Design Advisory Committees (WDAC) for outreach moving forward. To date the WRP has conducted significant outreach through the NAC, MCAC and WDAC, this outreach has helped select the location of the proposed flood line of defense and the height of the proposed defense based upon USACOE and OPC inputs.

TASKS AND SCHEDULE

Fill in the appropriate task and schedule table for your project type. Look at the Grant Application Guide for example tasks and deliverables by different project types (e.g. acquisition, planning, and implementation). If you are not doing one of the tasks in the table, insert “N/A”. You may add tasks as needed and delete tables for the project categories that are not relevant for your project.

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
1	Public Realm/Promenade Schematic Design	<u>Task 1.1 Project Management</u> Develop project charter and work plan, institute reporting and compliance protocols and project controls, develop and implement staffing plan, develop RFP and select consultant, team and consultant	<ul style="list-style-type: none"> - Project charter - Quarterly (or other) and final reports - Staffing plan - RFP 	02/2024 – 09/25

		management, project close-out		
		<p><u>Task 1.2 Technical Working Group and Steering Committee</u> Establish TWG including Port, City, and Regional staff to inform development of proposals</p> <p>Develop multi-agency Decision-Maker Engagement Strategy for project decisions</p>	<ul style="list-style-type: none"> - City and Regional in-reach strategy - Established TWG - Decision-maker engagement strategy - Established Steering Committee 	
		<p><u>Task 1.3 Public Outreach and Engagement</u> Develop and implement communications, public outreach and engagement strategy, including recommendations for an equitable and inclusive process</p>	<ul style="list-style-type: none"> - Communications Strategy - Public outreach and engagement strategy - Public-facing materials - Summaries of public outreach - Translations and accessibility 	
		<p><u>Task 1.4 Literature and Data Review</u></p> <p>Collect and distill existing studies completed through Waterfront Resilience Program, Port/USACE Flood Study, Piers development proposals, Waterfront Land Use Plan, Waterfront Resilience Transportation Assessment, and Embarcadero Enhancement Studies;</p>	<ul style="list-style-type: none"> - Summary of existing plans and projects (doc and ppt) - GIS data layers and attribute tables for relevant data 	

		<p>Compile relevant data (e.g. ROW dimensions, SLR scenarios, elevations)</p>		
		<p><u>Task 1.5 Alternatives Development</u> Develop 2-3 concepts for gaining Line of Defense (LOD) within Promenade, Marginal Wharf and Roadway while maintaining/ enhancing public realm and creating a two way cycle-track utilizing TAC and results of earlier tasks</p> <p>Prepare preliminary high-level cost estimates for each concept to help identify trade-offs</p>	<ul style="list-style-type: none"> - Minimum of Two Alternative Concepts - Preliminary cost estimates - Presentation material for public outreach - 	
		<p><u>Task 1.7 Stakeholder Engagement (Phase 1)</u></p> <p>Vet alternatives with public and other key City and regional stakeholders per public outreach and engagement strategy</p> <p>Utilize community feedback to guide development of preferred Concept Plan</p>	<ul style="list-style-type: none"> - Materials for public workshops - Summaries of public feedback 	
		<p><u>Task 1.8 Draft Concept Plan</u> Utilize input on the Draft Concept Alternatives from Phase 1 of public outreach and further input from TAC to develop Preferred Concept Plan;</p> <p>Develop Preliminary Concept cost estimate</p>	<ul style="list-style-type: none"> - Draft Schematic design concepts for the Southern Embarcadero (Harrison to Townsend), from the railway tracks to the wharf edge. - Draft Schematic design concepts in 	

			<p>site plan for the full corridor length, and sections at key locations (e.g. adjacent to Piers 30-32, Brannan St. Wharf, Piers 38-40.</p> <ul style="list-style-type: none"> - Concepts to include general arrangement of multi-modal travel, and public realm design concepts at a schematic level (bubbles, arrows). 	
		<p><u>Task 1.9 Stakeholder Engagement (Phase 2)</u></p> <p>Vet Draft Concept Plan with public and other key City and regional stakeholders per public outreach and engagement strategy</p> <p>Utilize community feedback to guide development of Final Concept Plan</p>	<ul style="list-style-type: none"> - Materials for public outreach and engagement - Summary of public feedback 	
		<p><u>Task 1.10 Final Concept Plan</u> Develop Final Schematic Plans and more detailed cost estimates and Phasing Alternative</p>	<ul style="list-style-type: none"> - Final schematic design concepts (site plan, section) - Potential eye-level renderings - Final cost estimates 	
		<p><u>Task 1.11 Phasing and implementation</u> Develop phasing and implementation recommendations, including coordination with on-going</p>	<ul style="list-style-type: none"> - Phasing plan - Funding strategy and recommendations - Next steps and action items 	

		<p>development projects, USACE Flood Study, and SFMTA projects;</p> <p>Develop funding strategy including local, state and federal sources and aspects built or funded by private development</p> <p>Identify next steps to refine design and implement the plan</p>		
		<p><u>Task 1.12 Final Report</u></p> <p>Develop final report summarizing process and plan recommendations</p> <p>Consultant team would include:</p> <p>Urban Designers/Landscape Architects/Transportation Planners/ Civil/Structural Engineers, Historic Preservation</p> <p>TAC: SFMTA, SFPUC, SFPW, SF Planning, Department of Emergency Management , SF Fire Department</p> <p>Port/City Project Team to include: Port, SFMTA</p>	- Draft and Final Report	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
2	30/32 Demolition Design/Specs	<u>Task 2.1 – information gathering</u> , including document review, collect existing data on	Task 2. 1 Site survey and environmental assessment	06/2024 to 04/2025

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p>pier structure, analyze potential of hazardous materials, survey structure and bathymetry as necessary, other site visits</p> <p>a. Initial topographic survey to facilitate demolition work. Survey information should include above grade structure location (to be demolished and to be protected), deck elevations and highest point elevations, high/low points of site, pavement materials, ground and utility features.</p> <p>b. Record boundary and easement will be plotted on the base map to identify any site restriction.</p> <p>c. Bathymetric Survey at project area. This will provide information for the demolition limit of the piers and potential options for barging operations. A side scan survey will be provided for the area along the bulkhead wall to the fender line in an attempt to locate and identify on bottom debris that</p>		

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p>will need to be removed and disposed of properly in addition to mudline elevations for determination of pile quantities to be removed.</p> <p>d. Above Water Inspection of marine structures from boat.</p>		
		<p><u>Task 2.2 - develop concept-level (30%) demolition plans and a list of specifications to be used for bidding the contract as a design-build contract</u></p> <p>Conceptual-level report, sketches, drawings and a list of specifications to be used for design-build contract bidding.</p> <p>a. Drawings shall indicate record boundary and conceptual level of information including: general demolition scope, site logistics criteria (such as laydown area, landside and waterside disposal, security fence, stormwater management, etc.), criteria for post-demolition site improvements and</p>	<p>Task 2.2 Conceptual Demolition Plan</p>	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p>utility scope, reference reports and drawings for design-build contractor use.</p> <p>b. Technical specifications shall indicate the Port of San Francisco’s allowable criteria, while providing flexibility for design-build contractor to apply their own means and methods to effectively accomplish the scope. Specifications will be in the CSI Master Format numbering system.</p> <p>c. Special Inspections will be noted in the report and specifications when required by the building Code.</p>		
		<p><u>Task 2.3 – develop permitting requirements</u> and applications, including developing a hazardous material abatement plan</p>	<p>Task 2.2 Information required to secure necessary permits</p>	
		<p><u>Task 2.4 - develop proposed project schedule</u></p>	<p>Task 2.4 Detailed demolition schedule to meet in water work requirements</p>	
		<p><u>Task 2.5 - prepare demolition cost estimate</u></p>	<p>Task 2.5 Detailed cost estimate</p>	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		Development of a formal Class 4 cost estimate with level of detail appropriate for planning phase. Cost estimate should consider professional services costs for design, entitlement, and construction support, as well as hard construction costs.		
3	Piers 30/32 Marginal Wharf and Promenade Detail Design	<p><u>Task 3.1 Existing Data assembly, survey and geotechnical analysis</u></p> <p>a. Review and document existing conditions from Port records and surveys.</p> <p>b. Complete updated project surveys including topographic and bathymetric survey</p> <p>c. Develop complete background drawings (plans and typical sections) depicting existing conditions</p> <p>d. Complete geotechnical borings and report including landside & waterside borings at seawall, soil profiles, and engineering properties for design.</p> <p><u>Task 3.2 Alternatives Analysis & Conceptual Engineering:</u> This task completes pre-design work for replacing the</p>	<p>Task 3.1a Existing Conditions Report</p> <p>Task 3.1b Topographic & Bathymetric Surveys</p> <p>Task 3.1c Background Drawings</p> <p>Task 3.1d Geotechnical Report</p> <p>Task 3.2 Marginal Wharf and Seawall Strengthening/Replacement Alternatives Analysis and Conceptual Engineering Report</p>	9/2024 to 12/2026

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p>marginal wharf, strengthening or replacing the Seawall, building coastal defenses, integrating habitat opportunities, modifying or replacing utilities, and advancing engineering and design of the promenade and roadway schematic design from Task 1. It includes development and analysis of alternatives, selection of an alternative, and completion of conceptual engineering (10%) with cost and schedule.</p> <p><u>Task 3.3 30% Design:</u></p> <p>At the 30% design, the design is progressed toward a coordinated plan set which defines all major elements, the basis of design is finalized, and a list of technical specifications is developed. The intent is to communicate all basic design concepts and how the design meets the project objectives, design assumptions, and suitability of information available.</p>	<ul style="list-style-type: none"> - Alternatives description, schematic engineering, estimated cost, schedule, and evaluation. - Alternatives evaluation & selection - Conceptual Engineering (10%) of selected alternative. - Draft Basis of Design - 10% Cost Estimate - 10% Schedule <p>Task 3.3 30% Design Submittal:</p> <ul style="list-style-type: none"> • Final Basis of Design (Draft is from Pre-Design) • 30% Project Description • 30% Plans (General Plans, elevations, typical sections, defining type/size/location of major elements) • Technical Specifications List • 30% Cost Estimate: Includes construction and total project cost. • 30% Engineer’s Construction Schedule Estimate: includes work windows. High Level and Gantt • 30% Risk Register 	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p><u>Task 3.4 Develop Permitting strategy</u> and meet with permitting bodies to establish schedule and work program</p> <p><u>Task 3.5 60% design</u></p> <p>At the 60% design level, the design shows significant progress toward a complete plan set. The 60% design reflects changes resulting from 30% review, and subsequent meetings and design decisions. The design establishes final locations, alignments, and configurations. All major elements and scope are essentially complete.</p>	<ul style="list-style-type: none"> • 30% QA/QC documents • 30% Design Presentation for Port Interdivisional Review <p>Task 3.4 Permit Strategy and Schedule</p> <p>Task 3.5 - 60% Design Submittal:</p> <ul style="list-style-type: none"> • Basis of Design Revisions: Minor revisions expected from 30% review. • 60% Project Description 60% Plans: Plans begin to resemble a final design package. <ul style="list-style-type: none"> ○ All design features identified and located, but additional detail will be necessary. ○ Critical sections and details are shown. ○ Major conflicts are resolved, and minor conflicts are identified. ○ Regulatory agency requirements, right of way needs, construction staging areas, temporary measures, restoration requirements are shown. • 60% Draft Specifications: Technical Specifications, 	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		<p>Task 3.6 Secure necessary permits</p> <p>Disciplines include: Urban Design and Landscape Architecture, Coastal Engineering, Geotechnical Engineering, Structural Engineering, Civil Engineering, Surveying,</p>	<p>Standard Specification Amendments, Material Specifications</p> <ul style="list-style-type: none"> • 60% Cost Estimate: Includes construction and total project costs. <ul style="list-style-type: none"> ○ Draft bid item list • 60% Engineer’s Construction Schedule Estimate. High Level and Gantt • 60% Risk Register • 60% QA/QC documents • 60% Engineering Calculations: In-progress draft of engineering calculations for initial check. • Responses to 30% Design Review Comments <ul style="list-style-type: none"> ○ Port Engineering, Maintenance, Planning & Environment, Maritime, Real Estate, Finance, Legal • 60% Design Presentation for Port Interdivisional Review <p>Task 3.6 Secure necessary Permits to ready project for construction.</p>	

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		Stormwater and Drainage, Combined Sewer System, Potable Water, Emergency Fire Water System, Electrical Power, Natural Gas, Telecommunications, Traffic Signals, Striping and Signage		
4	Resilience, Cultural and Natural Resources Interpretive Program	<p><u>Task 4.1 Establish a Stakeholder Advisory Team</u> to review and develop content. Including historians, local tribes, environmentalist, neighbors and labor</p> <p><u>Task 4.2 Review existing material relating to the site.</u></p> <p><u>Task 4.3 Develop and present an outline of an interpretive program</u> including a set of themes for the site that relate to one another and tell the story of the southern Embarcadero waterfront to the Advisory Committee</p> <p><u>Task 4.4 Refine the program outline</u> as necessary based upon feedback received.</p> <p><u>Task 4.5 Develop Schematic Plans and designs for the site</u> including preliminary cost estimates and present to Advisory</p>	<p>Task 4. 1 An established Advisory Committee that can help guide content</p> <p>Task 4.2 a memo summarizing past interpretative material for area;</p> <p>Task 4.3 An outline of proposed themes and stories to help guide the interpretive program.</p> <p>Task 4.4 Refined Outline of themes and stories based upon feedback.</p> <p>Task 4.5 Schematic Plans and Cost estimates</p>	3/2024 to 10/2025

	Project Tasks	Description	Deliverables (Documents and Files)	Start Date – End Date
		Committee for comment. <u>Task 4.6 Develop detailed designs, plans and specifications</u> based upon final schematic plans suitable for bidding.	Task 4.6 Detail design drawings and specifications. Submittals for review will be at 30% and 60%	
5	Overall Project Management	Manage Port and City staff, manage necessary consultants; manage grant requirements, including billings, deliverables and schedule		Duration of Grant

Permits

PLANNING and IMPLEMENTATION projects only. Check the permits needed to undertake the project. Refer to the Grant Application Guide to access informational links on each permit and how to obtain them for your project.

Name of permit	Secured	Pending	Included in Scope of Application
<input type="checkbox"/> Coastal or Shoreline Development Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Local Grading, Vegetation, or Other permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CDFW Lake/Streambed Alteration Permit (1600)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CDFW California Endangered Species Act Take Authorization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Regional Water Quality Control Board Certification (401)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> U.S. Army Corps 404 or 408 Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name of permit	Secured	Pending	Included in Scope of Application
<input type="checkbox"/> U.S. Fish and Wildlife Service Biological Opinion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> National Marine Fisheries Service Biological Opinion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other – Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PROJECT COST ESTIMATE

Fill in the Project Cost Estimate table below. The tasks in the Project Cost Estimate table should match the tasks in the Task and Schedule table above. Refer to the Grant Application Guide for examples and specific assistance on each project type and the associated Budget Justification.

Please round all budget numbers up to the nearest \$100.

Estimated Project Cost:

	Project Tasks	Conservancy Grant	Other Funding	Total
1	Embarcadero Promenade Schematic Plan	\$1,700,000	\$500,000 spent to date plus Port staff time to support work	\$2.4 million
2	Piers 30/32 Demolition Plans	\$500,000	\$50,000 supporting permitting to complete work	\$550,000*
3	Detail Design for Piers 30/32 replacement Marginal Wharf	\$4,700,000	\$ 1,000,000 to bring plans from 65% to 100%	\$5,700,000*
4	Schematic and Detail Design for Interpretive Program	\$300,000	\$50,000 Port staff time to coordinate and manage work	\$350,000*
5	Project/Grant Management	\$300,000	\$50,000	\$350,000

	Project Tasks	Conservancy Grant	Other Funding	Total
			Port staff time	
	Indirect Costs	\$200,000	\$100,000	
	TOTAL	\$7,800,000	\$1,700,000	\$9,500,000*

Other Funding

For the Other Funding included in the Project Cost Estimate above, please list the source, the amount, and status (secured, pending, applied for) for each of the other funding sources.

The matching funds are Port of SF operating cost, with the exception of funds already expended, which are General Obligation funds secured by the Port of San Francisco through City Obligation Bonds.

**Note that Task 2 will leverage approximately \$50 million dollars from private capital for the demolition of Piers 30/32; Task 3 will leverage approximately \$300 million in private capital and Task 4 will leverage an additional \$400,000 in private capital or General Obligation Bond funding.*

Budget Justification

Provide an explanation of the costs for each of the project tasks that will be charged to the Conservancy grant. See Grant Application Guide for assistance.

Hourly rates listed below are estimated averages for like-work, based on Port staff's extensive experience with waterfront planning and construction projects. For consultant work, the application assumes \$200 / hour. Per Coastal Conservancy Grant Application Guidelines, the below fees are for consultants only and do not include Port or city staff time (and thus does not include all costs that make up the total project amount and grant request).

1. Community Engagement – (Fee Estimated based upon past experience)
 - Task 1 Embarcadero Promenade Public Realm Schematic Design*
 - *Consultant Fees: \$200,000 estimated to be approximately 1000 hours*
 - *City Staff Fees: \$50,000 estimated to be approximately 350 hours*
 - Task 4 Interpretive Program*
 - *Consultant Fees: \$25,000 estimated to be approximately 125 hours*
2. Technical Studies-- (Fee Estimated based upon past experience)
 - *Task 1- Embarcadero Promenade Public Realm Schematic Design*

- \$1.3 million Consultant Fees
 - Task 2 - Piers 30/32 Demolition Plan
 - \$400,000 Consultant Fees
 - Task 3 – Piers 30/32 Marginal Wharf Detail Design
 - \$1,700,000 Consultant Fees
 - Task 4- Interpretive Plan
 - \$200,000 Consultant Fees
3. Design Drawings and Specifications – (Fees estimated based upon past experience)
- Task 2 - Piers 30/32 Demolition Plan
 - \$100,000 Consultant Fees
 - Task 3 – Piers 30/32 Marginal Wharf Detail Design
 - \$3,000,000 Consultant Fees
 - Task 4- Interpretive Plan
 - \$75,000 Consultant Fees

PROJECT MAPS AND DESIGN PLANS-

Project Location Map

Include a map that clearly shows the project location(s) within the context of the surrounding area. Be sure map shows nearest road access to site. If site can only be accessed via water, show the location of the nearest water access launch point.

Concept Level Site Plan

For IMPLEMENTATION and PLANNING projects where conceptual design work has been completed, you should include a conceptual level site plan showing the key project components. For IMPLEMENTATION projects, more detailed design documents can also be provided as an attachment.

Site Photos

Provide one or more clear photos of the project site that clearly show the character of the site.

Additional Documents

If there are any additional documents that are critical for understanding the project, please attach or provide a link(s) for up to two additional documents. Examples of attachments could include feasibility studies, CEQA documents, appraisals, or other documents that are directly related to the proposed project.

NON-PROFIT APPLICANT REQUIREMENTS

Non-profit applicants should include the following with the applications:

1. Letter of Determination from the Internal Revenue Service indicating current 501(c)(3) status.
2. Completed [Nonprofit Organization Pre-Award Questionnaire](#).

GRANT APPLICATION SURVEY-

The Conservancy seeks to continuously improve our grant application process. Please take some time after completing this grant application to provide feedback on your experience as an applicant. The survey link can be accessed [here](#). Your response will be anonymous, and we will greatly appreciate your constructive criticism.

Southern Embarcadero Resilience and Enhancement Plan

California Coastal Conservancy Grant Application

Port of San Francisco
July 27, 2023

Project Maps, Conceptual Designs, Plans and Photos



Project Location Map

Southern Embarcadero Resilience & Enhancement Plan
California Coastal Conservancy Grant Application
Port of San Francisco

Legend

- Pier 30/32
- Marginal Wharf
- Promenade

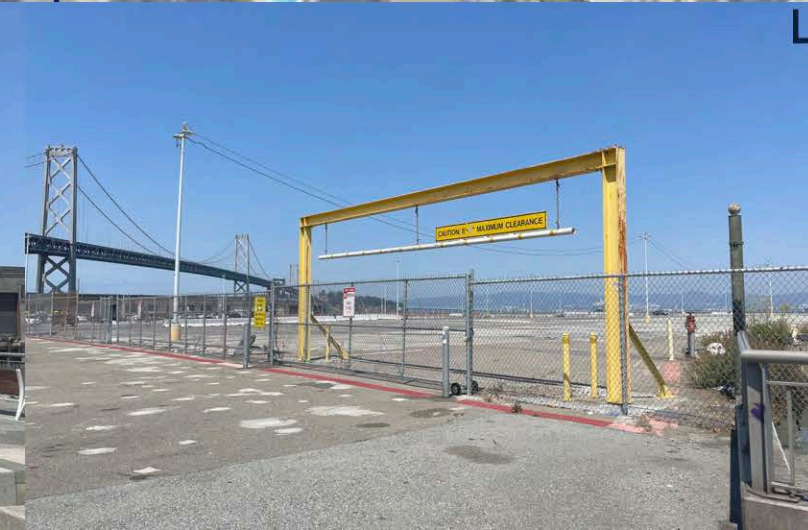


Site Photos

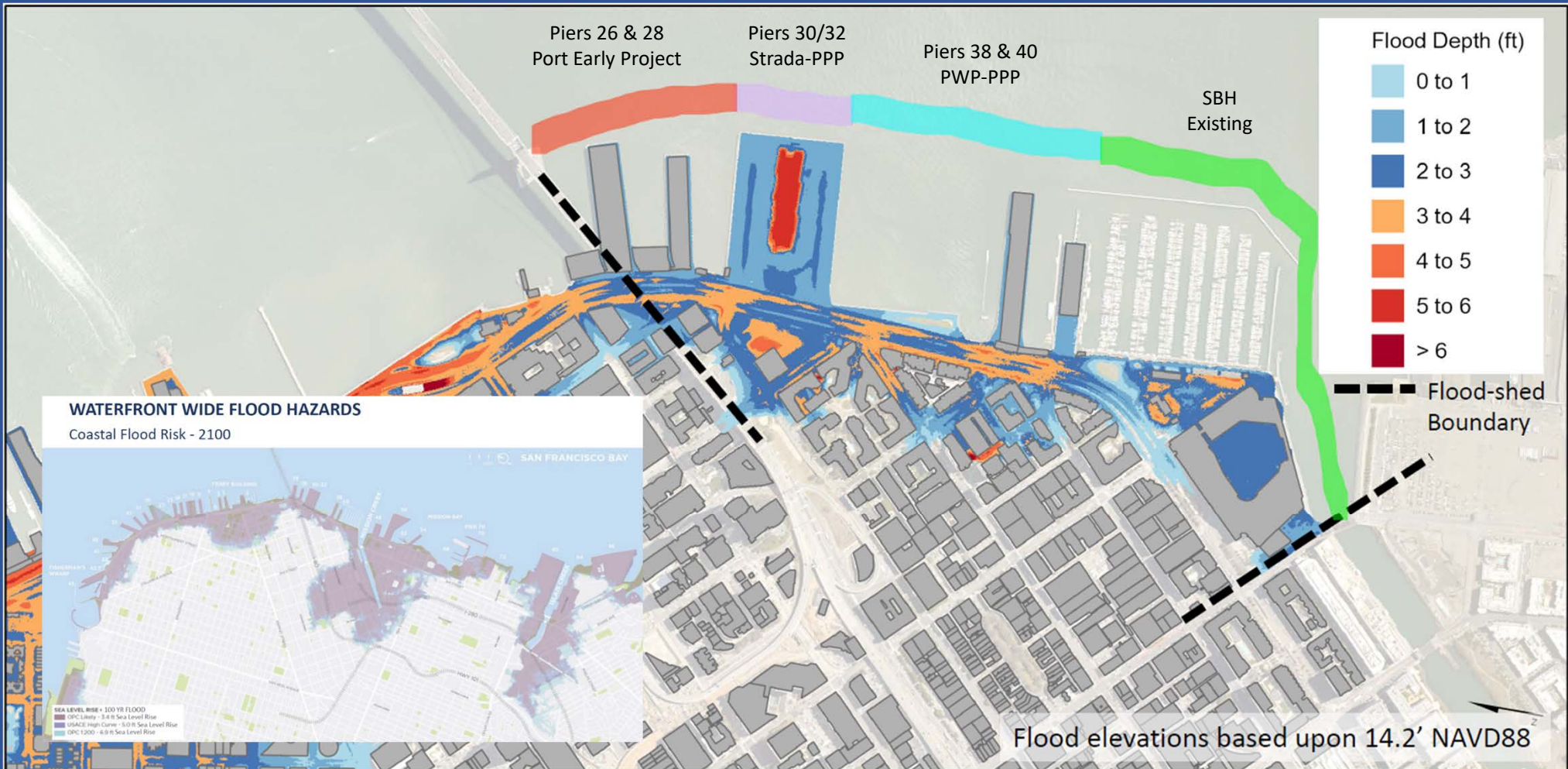
Southern Embarcadero Resilience & Enhancement Plan
California Coastal Conservancy Grant Application
Port of San Francisco

Legend

- Pier 30/32
- Marginal Wharf
- Promenade
- ▶ View Direction
- Photo



Coastal Floor Risk- Projects Protect 1-mile of shoreline at 4.5' SLR with Extreme Tidal Event

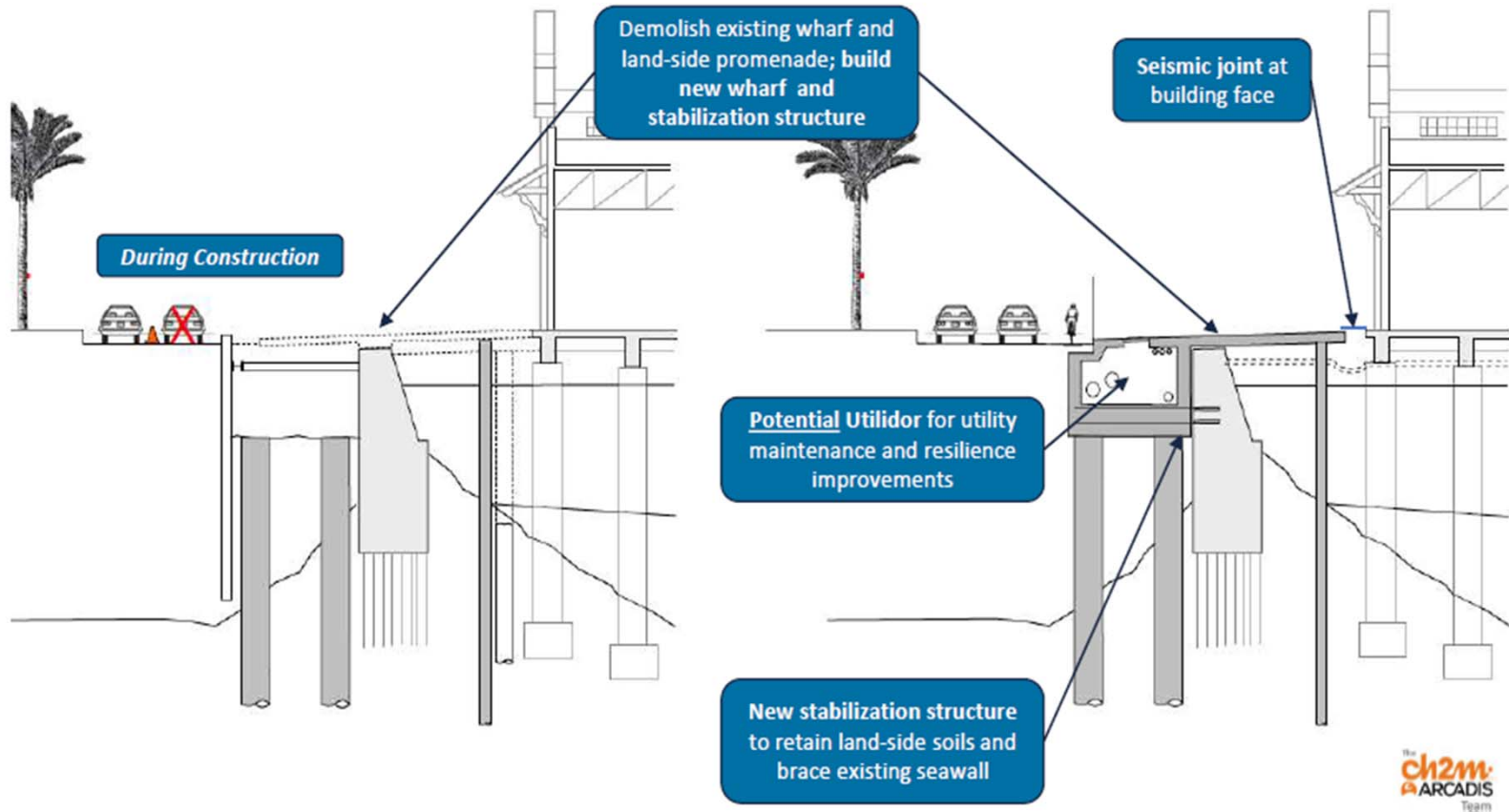


Southern Embarcadero Resilience & Enhancement Plan - California Coastal Conservancy Grant Application

Conceptual Plan for Piers 26 & 28 Marginal Wharf Reconstruction

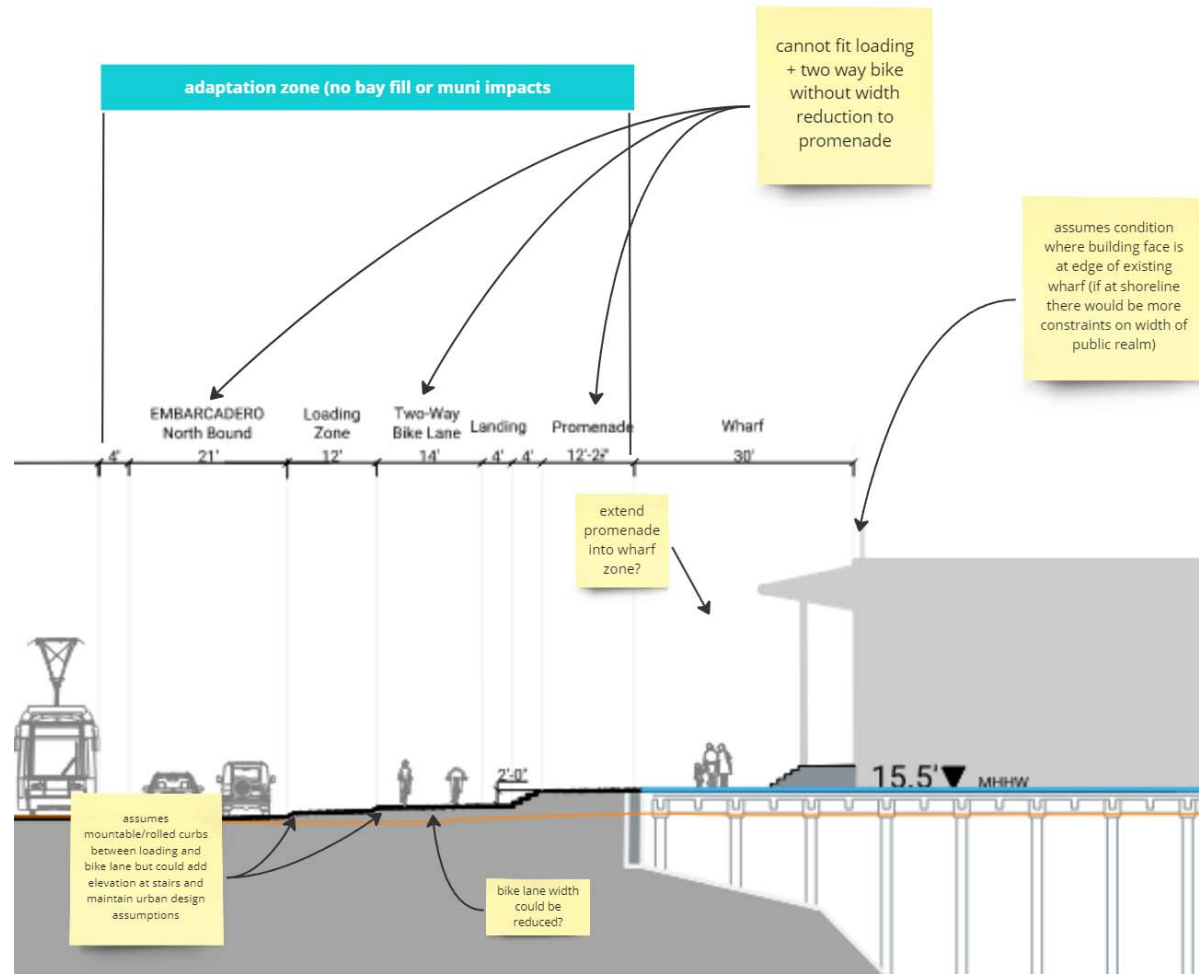
Southern Embarcadero Resilience & Enhancement Plan- California Coastal Conservancy Grant Application

4. Replace Wharf & Stabilize Seawall



Conceptual Plan for Elevating Marginal Wharf at Piers 30/32

Southern Embarcadero Resilience & Enhancement Plan- California Coastal Conservancy Grant Application



Yellow Notes are considerations/observation for planning purposes

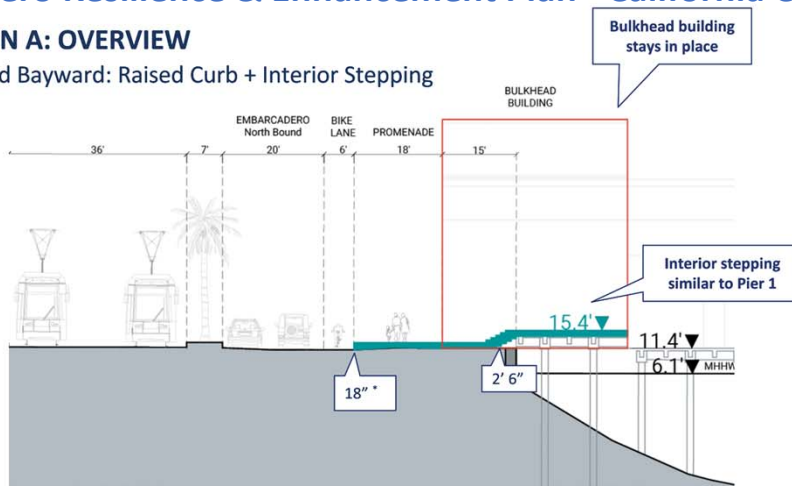


Conceptual Options for Elevating Marginal Wharf at Piers 38 and 40

Southern Embarcadero Resilience & Enhancement Plan- California Coastal Conservancy Grant Application

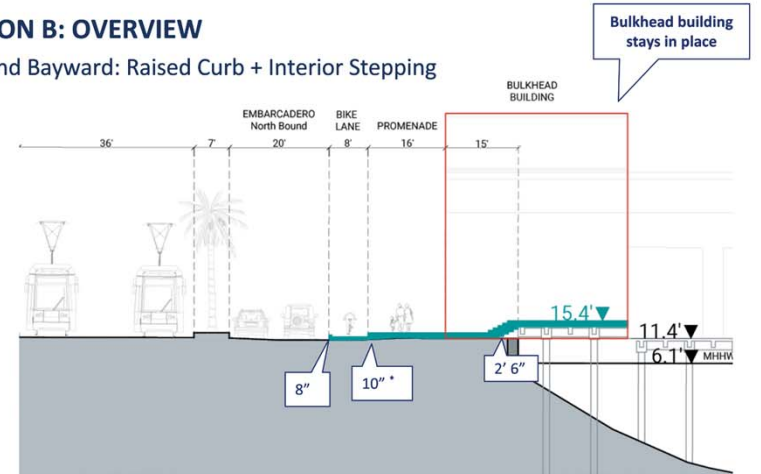
OPTION A: OVERVIEW

Curb and Bayward: Raised Curb + Interior Stepping



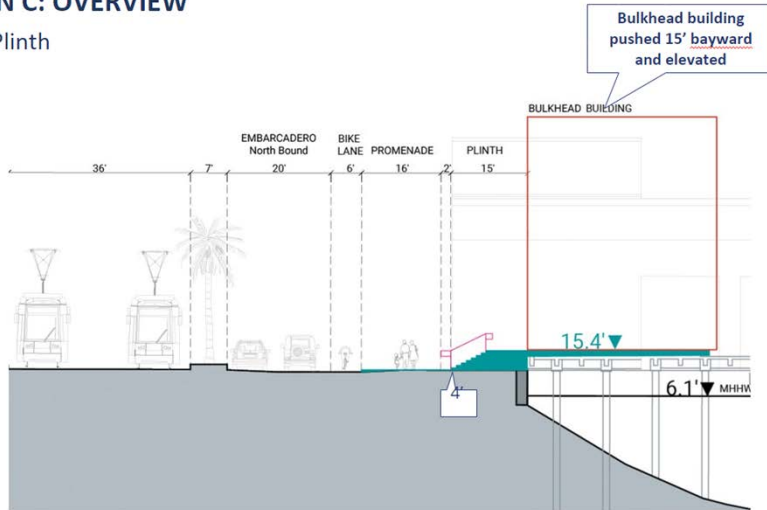
OPTION B: OVERVIEW

Curb and Bayward: Raised Curb + Interior Stepping



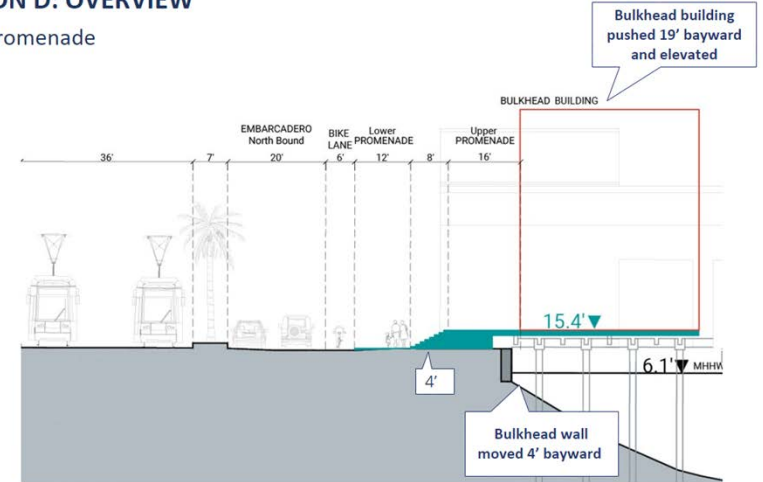
OPTION C: OVERVIEW

Raised Plinth



OPTION D: OVERVIEW

Split Promenade

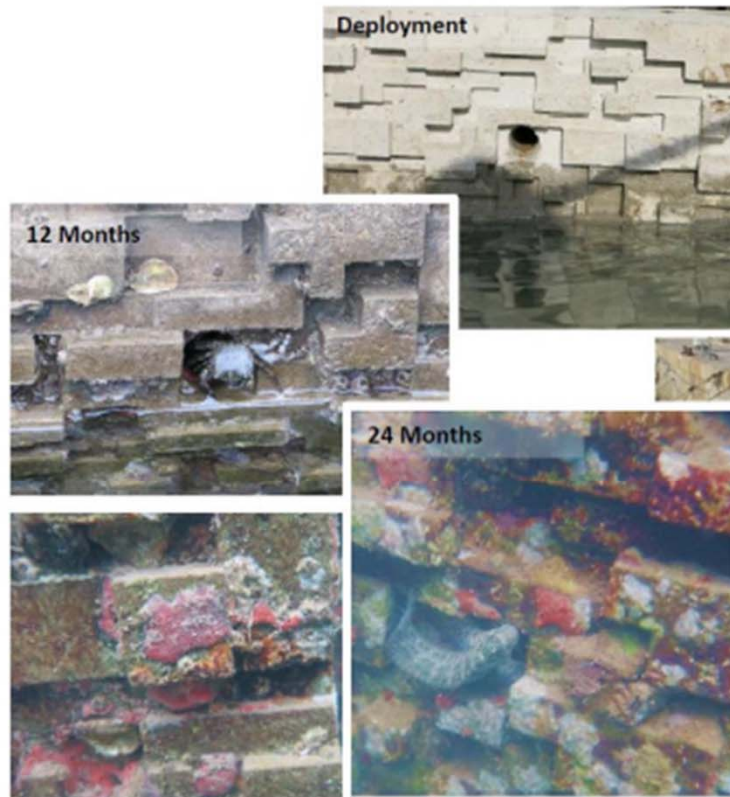


Port Waterfront Resilience Living Sea Wall Pilot

Southern Embarcadero Resilience & Enhancement Plan- California Coastal Conservancy Grant Application

LIVING SEAWALL PILOT

Overview



- Objective: ecological enhancement of seawalls
- Collaboration between Port of San Francisco and Smithsonian Environmental Research Center (SERC)
- Piloting frames with tiles made of precast textured concrete with admixture at:
 - 3 locations along the Embarcadero Seawall
 - 3 tidal elevations
- Study ecological growth on concrete, using textured surfaces and concrete admixture composition
- Two-year monitoring by SERC scientists
- Report on potential benefit to enhance Bay habitat

COVER SHEET FOR
Embarcadero Enhancement Cycle-Track
Concept Drawings



overarching need to discuss vertical dimensions of the bikeway
reconfirm with fire department minimum clearance

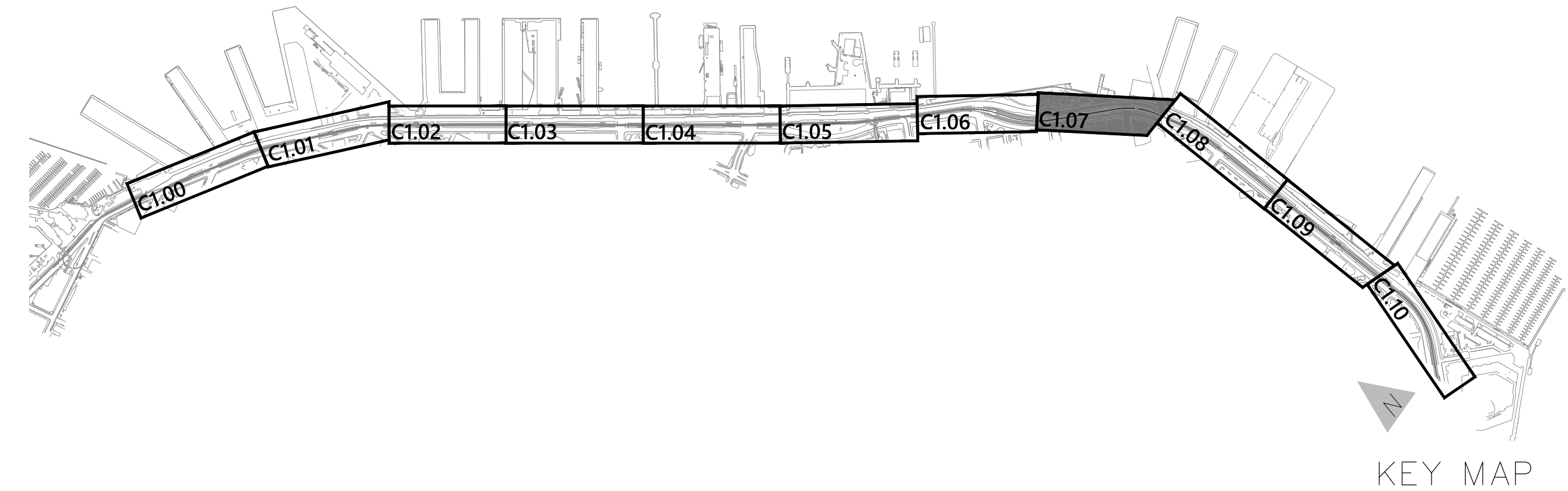
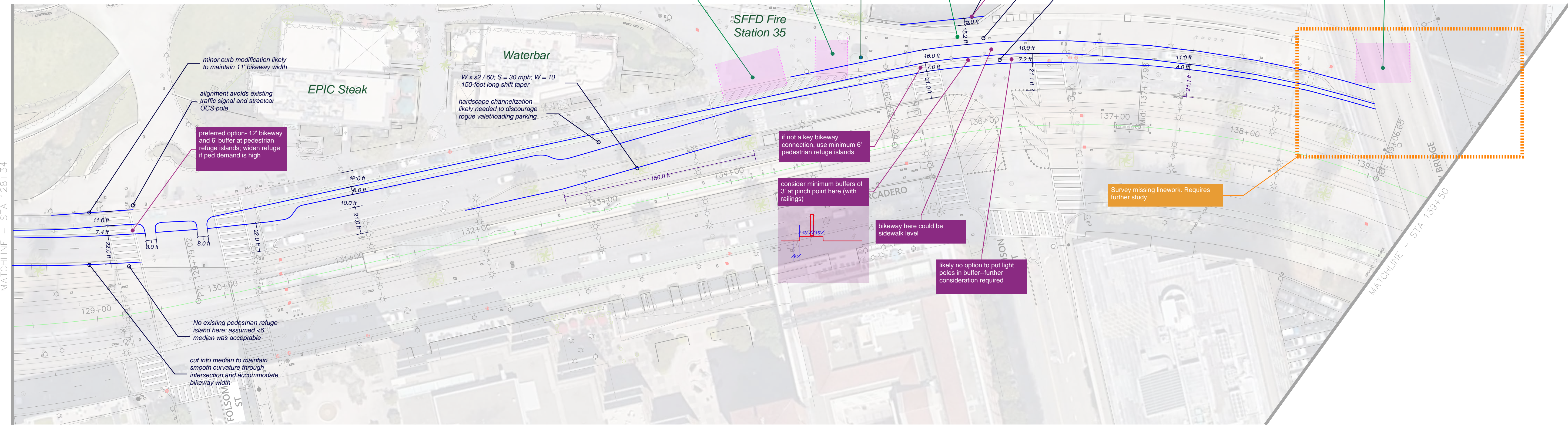
Fire Station minor driveway - large apron

Fire Station minor driveway

Inactive driveway- to be abandoned

Consider small boardwalk/cantilevered walkway to alleviate promenade pinchpoint
extension over water is infeasible

Minor Driveway (under bridge at pier 26) 30' apron draw line order issue



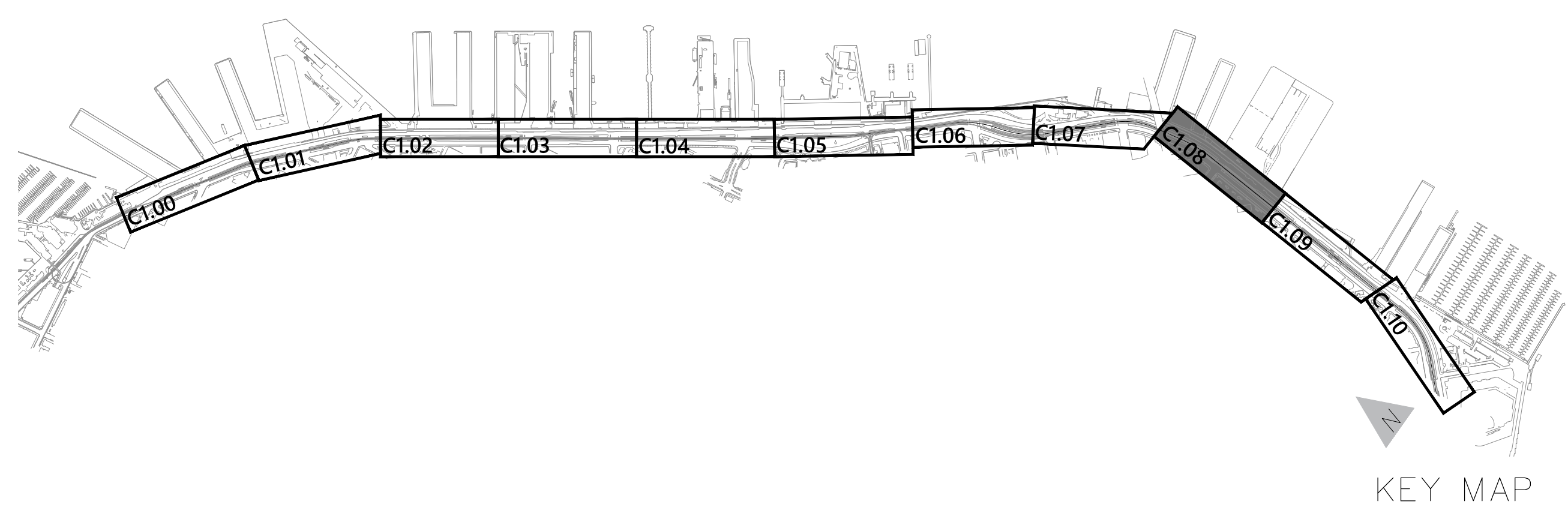
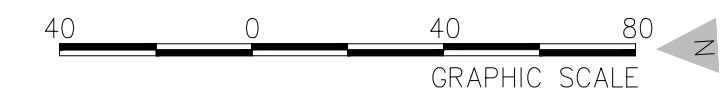
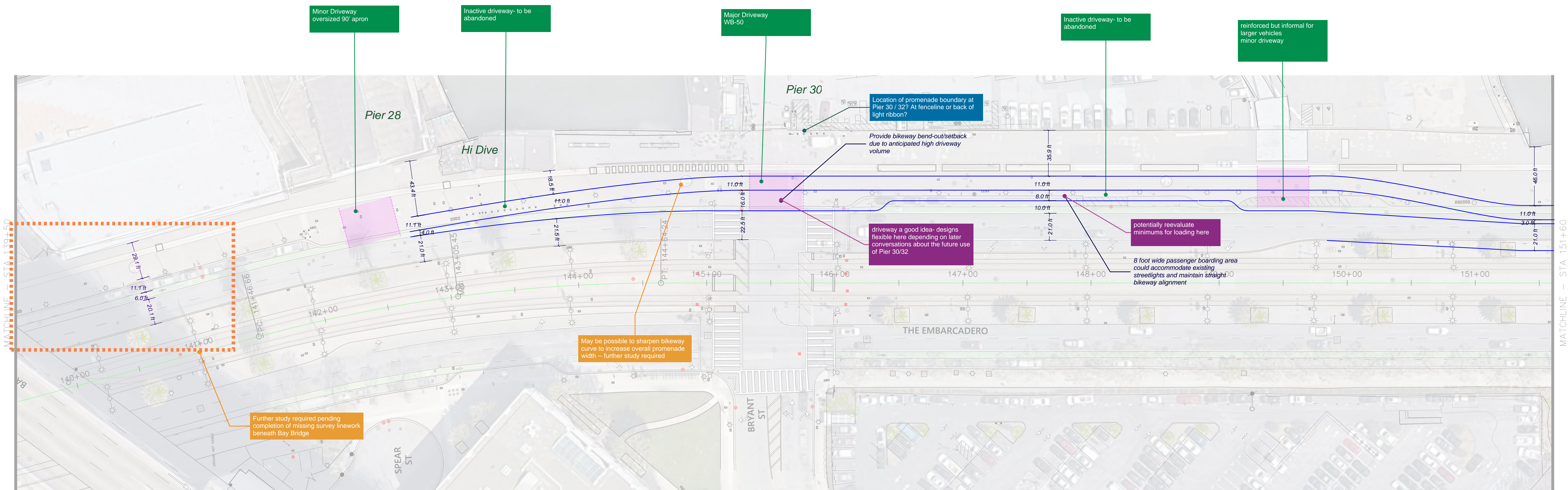
Legend

- SFMTA Input Needed
- Notes from FP/SFMTA Workshop (8/4/20)
- Incomplete Information
- Driveway Status: Includes assumptions for driveway use, access (Needs Port confirmation)

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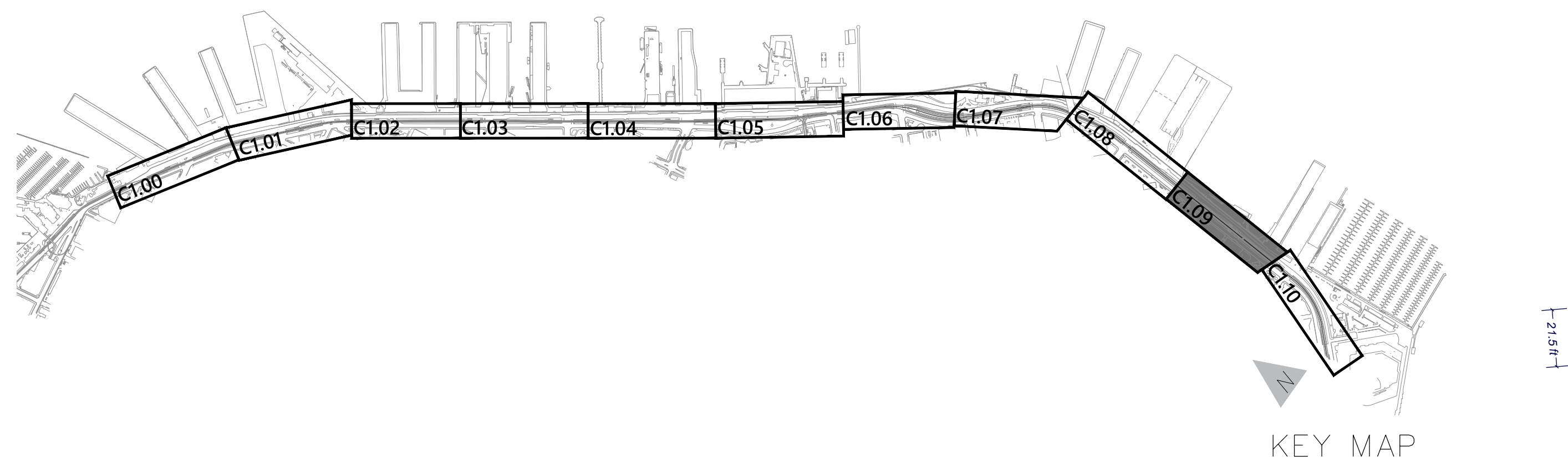
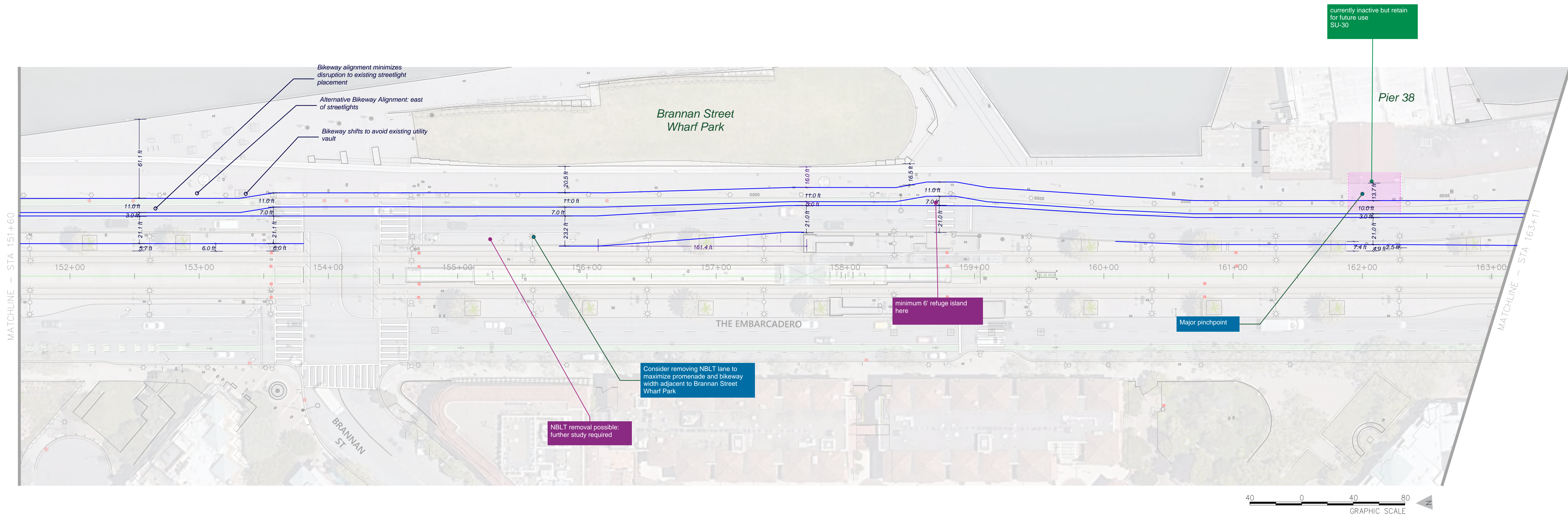
Apr 01, 2020



Legend

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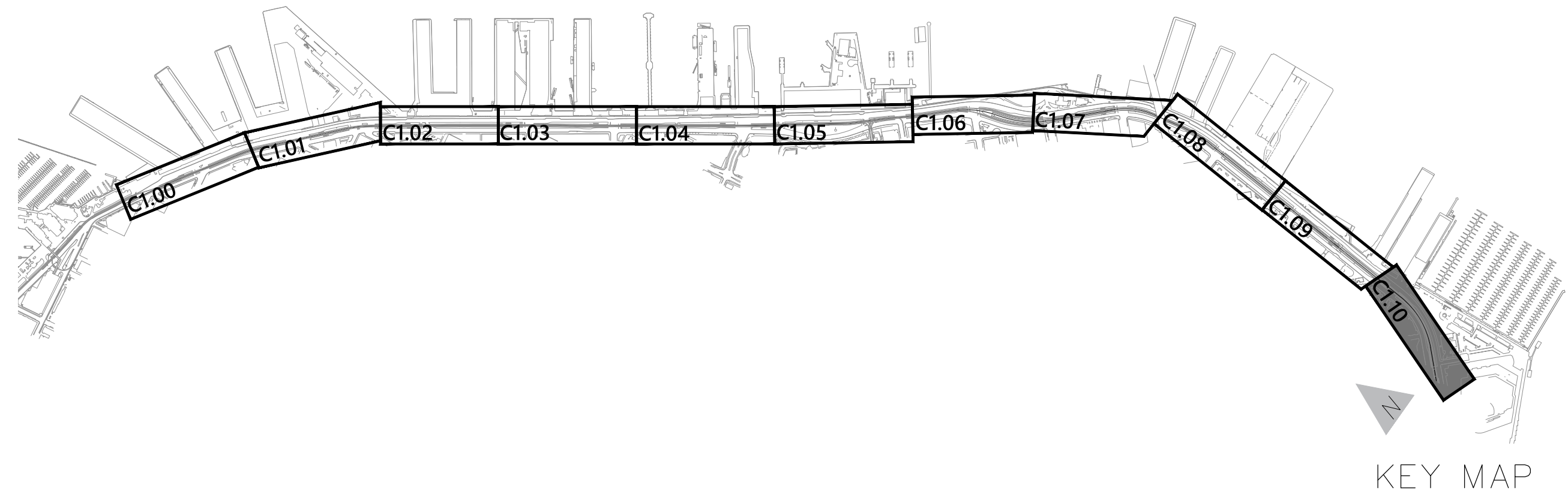
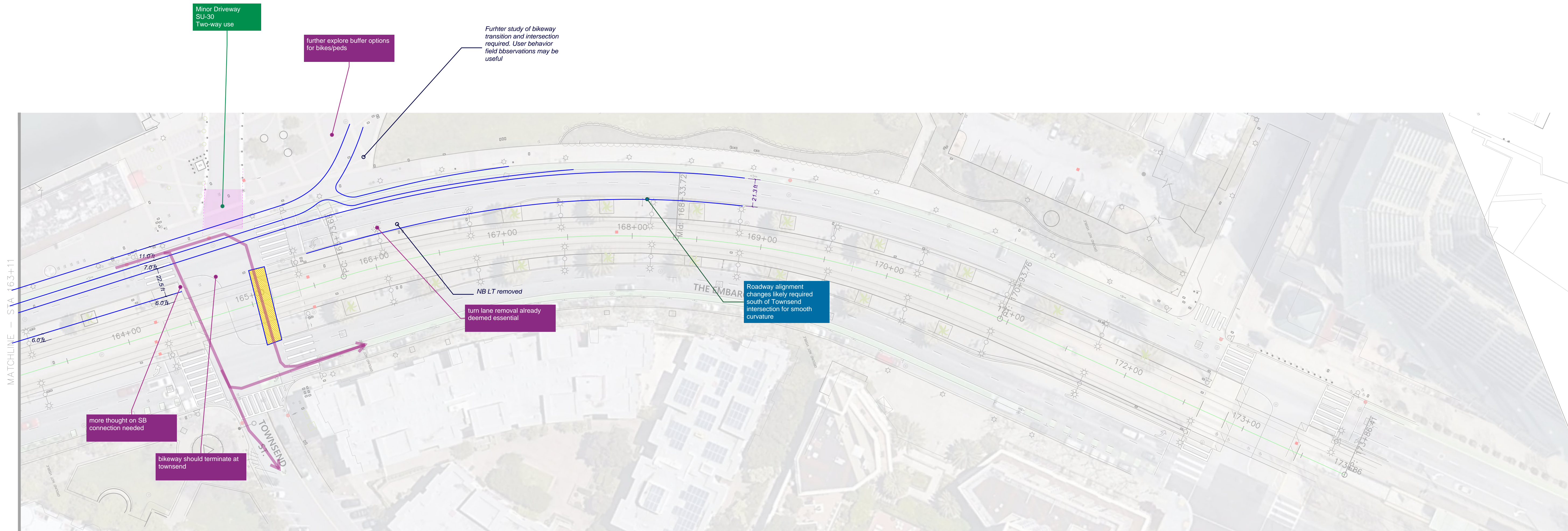
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- Legend**
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CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Apr 01, 2020 C:\000\FILE: \\MS5-F54\Server\MS5\Project\2019\ACS-19-031_SFMTA_Embarcadero_Feasibility (Fern&Peers)\5_Prod\1_CAD\2_Site\C1.00_StreetPlan.dwg



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