

**AGENDA
SPECIAL MEETING
BELVEDERE CITY COUNCIL
NOVEMBER 29, 2021, 5:30 PM
REMOTE ZOOM MEETING**

On March 3, 2020 Governor Newsom proclaimed a State of Emergency due to the COVID-19 pandemic that remains in effect. This meeting will be held remotely consistent with Executive Order N-29-20 and Assembly Bill 361, modifying provisions of the Brown Act to allow remote meetings at the current time. Members of the public are encouraged to participate remotely via Zoom or telephone pursuant to the information and link below. Public comment will be accepted during the meeting. The public may also submit comments in advance of the meeting by emailing the City Clerk at: clerk@cityofbelvedere.org. Please write "Public Comment" in the subject line. Comments submitted one hour prior to the commencement of the meeting will be presented to the City Council and included in the public record for the meeting. Those received after this time will be added to the record and shared with City Councilmembers after the meeting.

City of Belvedere is inviting you to a scheduled Zoom meeting.

Topic: Belvedere Regular City Council Meeting

Time: November 29, 2021, 5:30 P.M.

Join Zoom Meeting:

<https://us02web.zoom.us/j/82390881957?pwd=MnNyUHQycUtaSzRrRmcxVGliSWhCUT09>

Webinar ID: 823 9088 1957

Passcode: 005542

877 853 5247 US Toll-free

888 788 0099 US Toll-free

The City encourages that comments be submitted in advance of the meeting. However, for members of the public using the Zoom video conference function, those who wish to comment on an agenda item should write "I wish to make a public comment" in the chat section of the remote meeting platform or use the raise hand function. At the appropriate time, the city clerk will allow oral public comment through the remote meeting platform. Any member of the public who needs special accommodations to access the public meeting should email the city clerk at clerk@cityofbelvedere.org, who will use her best efforts to provide assistance.

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COMMENTS ON AGENDA ITEMS BY MEMBERS OF THE AUDIENCE

The audience will be given an opportunity to speak on the special meeting item. Upon being recognized by the Mayor, please state your name and address, and limit your oral statement to no more than three minutes. The Council welcomes comments and questions raised by interested citizens but typically does not respond during the comment period. After public comment, the City Council will adjourn to attend the virtual closed session meeting.

5:30 P.M. CALL TO ORDER IN ZOOM MEETING

SCHEDULED ITEMS

1. Adopt a Resolution to Continue Remote Public Meetings pursuant to Assembly Bill 361.
2. Discuss options for funding of the Critical Infrastructure Project.

ADJOURN

NOTICE: WHERE TO VIEW AGENDA MATERIALS

Staff reports and other materials distributed to the City Council are available for public inspection at the following locations:

- Online at www.cityofbelvedere.org/archive.aspx
- Belvedere City Hall, 450 San Rafael Avenue, Belvedere. *(Materials distributed to the City Council after the Thursday before the meeting are available for public inspection at this location only.)*
- Belvedere-Tiburon Library, 1501 Tiburon Boulevard, Tiburon.

To request automatic mailing of agenda materials, please contact the City Clerk at (415) 435-3838.

NOTICE: AMERICANS WITH DISABILITIES ACT
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The following accommodations will be provided, upon request, to persons with a disability: agendas and/or agenda packet materials in alternate formats and special assistance needed to attend or participate in this meeting. Please make your request at the Office of the City Clerk or by calling 415/435-3838. Whenever possible, please make your request four working days in advance.

SCHEDULED ITEMS

BELVEDERE CITY COUNCIL NOVEMBER 29, 2021

To: Mayor and City Council

From: Beth Haener, City Clerk

Reviewed by: Craig Middleton, City Manager
Emily Longfellow, City Attorney

Subject: A Resolution Authorizing the Continuation of Remote Public Meetings pursuant to Assembly Bill 361

RECOMMENDATION

That the City Council adopt a Resolution authorizing the continued use of remote meetings pursuant to Assembly Bill 361 and give direction to staff as necessary.

BACKGROUND

At the October 11, 2021, regular meeting, the City Council adopted Resolution 2021-41 authorizing the continuation of virtual public city meetings during the continuing state of emergency relating to the COVID1-19 pandemic for the 30-day period beginning October 11, 2021, and making the required findings pursuant to AB 361. Subsequently, at the November 8th, 2021 regular meeting, the City Council adopted Resolution 2021-44, adding another 30-day period and making the required findings pursuant to AB 361.

In order to continue to hold remote meetings, the City Council must continue to declare every 30 days that (i) the state of emergency continues to be in place; and (ii) State or local officials continue to impose or recommend measures to promote social distancing; or (iii) as a result of the declared emergency, meeting in-person would result in an imminent risk to the health or safety of attendees.

The attached resolution makes the findings to confirm the conditions still exist to allow the continuation of virtual public meetings pursuant to AB 361 for the City Council and on behalf all lower legislative bodies in the City.

The attached resolution anticipates and authorizes remote meetings including hybrid meetings held both via teleconference and in-person. This resolution will allow members of the public to safely observe and participate in local government teleconference meetings during the continued pandemic.

ENVIRONMENTAL DETERMINATION

A meeting format determination under AB 361 is not a “project” under the California Environmental Quality Act, because it does not involve an activity that has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Pub. Res. Code § 21065).

CORRESPONDENCE

As of the writing of this report, no correspondence has been received regarding this agenda item.

RECOMMENDED ACTION

That the City Council adopt the Resolution authorizing the continued use of remote meetings pursuant to Assembly Bill 361 and give direction to staff as necessary.

ATTACHMENTS

1. Resolution.

CITY OF BELVEDERE

RESOLUTION NO. 2021-XX

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELVEDERE
AUTHORIZING THE CONTINUATION OF VIRTUAL PUBLIC CITY MEETINGS
DURING THE CONTINUING STATE OF EMERGENCY RELATING TO THE COVID-
19 PANDEMIC PURSUANT TO ASSEMBLY BILL 361**

WHEREAS, on March 4, 2020 Governor Newsom declared a State of Emergency pursuant to Government Code section 8625 due to the COVID-19 pandemic, which State of Emergency remains in effect; and

WHEREAS, State Executive Orders N-25-20 and N-29-20, suspended certain provisions of the Brown Act (Gov. Code, §§ 54950 *et seq.*) to allow public meetings to be held virtually without opening a physical space to the public, which provisions expired September 30, 2021; and

WHEREAS, effective September 16, 2021, Assembly Bill 361, allows local agencies to continue to hold remote public meetings through December 31, 2023 when there is a State-declared emergency, and when state or local officials have imposed or recommended measures to promote social distancing or as a result of the declared emergency, meeting in-person would result in an imminent risk to the health or safety of attendees; and

WHEREAS, the Government Code section 8625 State of Emergency remains in effect; and

WHEREAS, state and local officials continue to impose and recommend measures to promote social distancing due to the continued rates of transmission of the COVID-19 virus and variants as follows:

- a. The July 28, 2021 California Department of Public Health Guidance for the Use of Facial Coverings recommending universal masking indoors statewide to promote social distancing is still in effect; and
- b. The Marin County Public Health Department continues to recommend the use of masking indoors.
- c. On September 22, 2021, the Marin County Director of Health and Human Services, Benita McLarin, issued a letter recommended continued social distancing for governmental meetings, including the use of video and teleconference meetings.

WHEREAS, public meetings involve many people in shared indoor spaces, in close proximity for hours, and City meetings rooms have limited mechanical and natural ventilation, creating a health risk for members of the public at this time; and

WHEREAS, as a result of the continuing declared emergency, public meetings in-person would result in an imminent risk to the health or safety of attendees.

WHEREAS, a meeting format determination under AB 361 is not a “project” under the California Environmental Quality Act, because it does not involve an activity that has the potential to cause a direct or reasonably foreseeable indirect physical change in the environment. (Pub. Res. Code § 21065.)

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Belvedere based on the findings set forth above and incorporated herein, that public meetings of the City’s legislative bodies shall be held using remote technology in compliance with the requirements of Government Code section 54953(e) and all other applicable laws for thirty (30) days following the date of adoption of this Resolution.

PASSED AND ADOPTED at a special meeting of the City Council of the City of Belvedere on November 29, 2021, by the following vote:

AYES: Steve Block, James Lynch, Nancy Kemnitzer, Sally Wilkinson, and Mayor Campbell
NOES: None
ABSENT: None
ABSTAIN: None

APPROVED: _____
James Campbell, Mayor

ATTEST: _____
Beth Haener, City Clerk

SCHEDULED ITEMS

**BELVEDERE CITY COUNCIL
NOVEMBER 29, 2021**

To: Mayor and City Council

From: Craig Middleton, City Manager
Amber Johnson, Administrative Services Director

Subject: Background Information: Workshop on Funding Options for Critical Infrastructure Project

Recommended Action

Tonight’s City Council meeting is a public workshop intended to review the emerging strategies for funding the City’s Critical Infrastructure Project – a project that would strengthen levees to withstand earthquakes and take action to protect utilities, ensure emergency access, and prevent largescale flooding. The objective tonight is to discuss the two primary funding strategies and to hear from the public. No action is agendized for this meeting; it is anticipated that the Council may wish to select a funding strategy in December.

Summary/Overview

On November 3, 2021, the Council considered updated project designs for a project that has been under serious consideration for several years. The designs have progressed significantly since the Council approved a concept design for the project in the Fall of 2020. The project, the “Critical Infrastructure Project,” is a comprehensive approach to protecting the City from current and future threats. By strengthening key access routes and utility arteries and providing additional protections against storm surges and waves, the project would not only ensure resilience of public assets but would also add value to every property in Belvedere.

As the design parameters of the Project have come into sharper focus, so has the projected cost. The current estimated cost, based on 60%-level designs and including a substantial 30% contingency, is \$28M. Of this amount, some portion will likely be supported through grants. A grant writing consultant was hired last year and continues to work to obtain grant monies that would effectively reduce the total number of dollars that would be asked of Belvedere residents. Given that we, as of this writing, do not know what level of success that this effort will achieve, staff and the Finance Committee have assumed conservatively that all of the \$28M will need to be raised through a funding mechanism that would involve a tax of some kind. The funding strategies that are being considered can be adjusted to reflect the final cost estimate, net of grant proceeds.

The Finance Committee created a task force earlier this year that researched funding options for raising \$28M (or a subset of that amount) and determined that the most equitable approaches would be:

1. An ad valorem tax sufficient to support the repayment of 30-year bonds that would be issued by the City to pay for the Project. An ad valorem tax is based on assessed property value and would be paid by property owners each year for the 30-year life of the bond. It is estimated that, to raise sufficient funds to support a general obligation bond of \$28M at an interest rate of 3.5%, the average annual tax would be \$330 per \$1M of assessed valuation.
2. A real property transfer tax would provide funding for the City's general fund, which would, in turn, enable the City to fund lease payments on city assets such as City Hall and Community Park. This "lease-leaseback" approach has already been used by the City to retire pension debt. It involves the City leasing assets to the Belvedere Financing Corporation (part of the City of Belvedere). The Corporation then leases the same assets back to the City in return for a certain lease payment. The stream of lease payments – over a period of years – is capitalized so as to provide a sum of money sufficient to accomplish the project. The real property transfer tax provides proceeds to the general fund of the City so that it has sufficient funds to pay the lease payments.

A real property transfer tax is a tax levied when a property is sold. It is not levied unless the property is sold. The Finance Committee has determined that, based on the average number and sales prices of properties sold each year in Belvedere, a tax of 1% of the sales price, at time of sale, would be sufficient to fund the lease payments. This would support a project costing \$28M.

Either of these two options would raise the \$28M needed to fully fund the Critical Infrastructure Project. One of the options – the ad valorem/general obligation bond approach – would involve an annual property tax based on assessed value. The other option – the real property transfer tax/lease-leaseback approach – would involve a tax only upon the sale of a property. There would be no increase in annual property tax associated with this approach.

Another key difference among the two approaches relates to how funds can be used. Proceeds raised by a general obligation bond and supported by an ad valorem tax can be used to fund the construction of the Critical Infrastructure Project. They cannot be used to fund maintenance of the project once it is built.

Because the real property transfer tax is a general tax, meaning that proceeds are placed in the City's general fund, there is more flexibility as to how tax monies can be used. These monies could, for example, be used to fund maintenance of the improvements that are constructed.

Implementation

Once the City Council hears public comment and then selects a preferred funding approach, the voters of Belvedere would vote on whether or not to support it.

Approval of an ad valorem tax that would support a general obligation bond would require the support of 2/3 of those voting.

Approval of a real property transfer tax would require the support of a simple majority of those voting. Because only charter cities are authorized by the State Constitution to levy real property transfer taxes, voters would also, by majority vote, need to elect to become a charter city. Over a quarter of California cities are charter cities.

Charter Cities vs. General Law Cities

A charter city's municipal affairs are governed by a charter rather than by state law. A general law city is governed by state law as it applies to cities. Belvedere is currently a general law city. While charter cities could appropriately be viewed as having an enhanced level of local control as compared to general law cities, the state has the ability to determine what constitutes a municipal affair over which the charter may control. A number of cities have elected to create narrow charters that give them the authority to take certain actions that general law cities cannot take – such as levying a real property transfer tax. In these instances, the city is essentially a general law city in regards to issues/actions that are not specifically addressed in their narrowly-drawn charters. As mentioned, the charter must be adopted by majority vote of those voting in a municipal election; it can also be amended by majority vote.

If Belvedere were to become a charter city, it would join a long list of other such charter cities in California. In Marin County, San Rafael is a charter city; other nearby charter cities include Alameda, Albany, Palo Alto, Berkeley, Monterey and San Francisco.

For the purposes envisioned in this staff report – namely, providing funds sufficient for the construction and maintenance of the Critical Infrastructure Project – a narrow charter would be proposed. After two public hearings of the City Council at which the proposed charter would be discussed, the Council would place a combined charter city/real property transfer tax measure on the November 2022 ballot.

Attachments

- A. Belvedere Taskforce on Critical Infrastructure Financing: Recommendation to the Finance Committee
- B. Staff Report: Update and Key Feature Review of the “CIP” Design Plans & Cost, dated November 3, 2021

**Belvedere Taskforce on Critical Infrastructure Financing:
Recommendation to Finance Committee**

Date: October 18, 2021

Background

On July 30, 2021, the City of Belvedere’s Finance Committee established a Brown Act *Taskforce on Critical Infrastructure Financing* (“taskforce”), comprising four of its seven members (Bob McCaskill, Greg Ostroff, Sally Wilkinson, and John Wilton). The taskforce was assigned the job of analyzing options for financing critical infrastructure improvements to San Rafael Avenue and Lower Beach Road, a project which is estimated to cost \$28 million, including a 30% contingency. The taskforce met four times in public session over the course of three months. Councilmember Jim Lynch attended meetings as a member of the public. This report provides a summary of its analysis and recommendations.

Professional Advisors

The taskforce relied on various outside advisors to complete its work, as follows:

- Bond Counsel: Brian Forbath of Stradling Yocca Carlson & Rauth
- Ballot Counsel: Sky Woodruff of Myers Nave
- Financial Advisor: James Fabian of Fieldman Rolapp & Associates
- Polling Consultant: Bryan Godbe of Godbe Research
- Political Consultant: Charles Heath of TBWB Strategies

Debt-Free Financing Options

The taskforce began its work by considering the scope to fund a \$28 million critical infrastructure project (CIP) from the City’s current budget and/or reserves. It concluded that the City’s \$8.6 million annual budget is fully assigned, and its \$3.5 million operating reserve is intended to cushion against catastrophic loss, not finance capital improvements.

It discussed the appeal of grant funding and encouraged staff to aggressively pursue state and federal funding options, which it is doing with the help of a grant writer. At the same time, it acknowledged the improbability of securing \$28 million in grants for such a local project. Given the urgency of the CIP, which will be shovel ready by 2023 and is expected to take two years to complete, the taskforce accepted that the City will likely have to borrow funds to pay for the project and must create a new revenue stream/or streams to repay that debt. The amount borrowed could be scaled down if grant funding is forthcoming.

Legal Restrictions on Local Government Taxes and Debt

The taskforce set about understanding the complex legal rules on issuing debt and introducing new taxes in California. In broad terms, municipalities cannot issue debt without first introducing a new tax stream to pay debt service and the electorate must approve the tax by a two-thirds supermajority. The rule is commonly known as the balanced budget rule or debt limit. It is intended to force municipalities to maintain budget balance, and only accumulate debt if at least two-thirds of the electorate consents ahead of time to pay the higher taxes needed to repay that debt, thereby ensuring intergenerational equity. Moreover, only certain taxes can be pledged as sources of repayment for municipal debt.

Taxes that cannot be pledged as sources of repayment for debt can typically be adopted with a simple majority vote of the electorate and are normally used to help fund general expenses on an ongoing basis. In practice, these tax streams may also be leveraged in indirect ways to fund debt, by using legal exceptions

to the debt rule to issue debt without a public vote. The “lease exception” is commonly used by municipalities to issue lease revenue bonds to pay for capital projects. The newly created tax receipts may, in effect, be used to make annual lease payments. The taskforce therefore concluded that it should study all possible tax streams, not just those authorized to be directly pledged to repay debt. After that, it would explore how to leverage the chosen revenue stream/streams to issue debt.

Debt Service Costs

In ballpark terms, the City’s financial advisors estimate that annual debt service on a \$28 million bond will be approximately \$1.5 million, based on 30-year maturity (matching the useful life of the assets) and a 3.5% interest rate (cushioning for a backup in market rates from current levels).

Desired Tax Features

The taskforce discussed the desired characteristics of a tax to pay for the CIP and agreed that taxpayer equity (who pays, who benefits), voter appeal, revenue certainty and administrative ease are all important considerations. It discussed the issue of who benefits from the infrastructure improvements and concluded that all residents gain when the City’s utility trunk lines (water, electricity, gas, sewage) and critical access roads are protected from the impacts of earthquakes and other hazards. That said, there was broad agreement that owners of more valuable properties, with more expensive assets at risk, should pay more tax than owners of less valuable properties.

Funding Streams

The taskforce discussed the range of possible tax streams capable of generating \$1.5 million annually. It ruled out local add-on sales taxes, business taxes and transient occupancy taxes given the City’s minimal commercial activity. Utility user taxes were also discarded given the small number of residences in Belvedere. It identified four possible options: a parcel tax, a Mello-Roos tax, an ad valorem property tax, and a real property transfer tax.

Table 1: Taxes Levied by California Local Governments

Tax	Description
Ad Valorem Property Tax	A levy on property based on property’s assessed value and used for voter approved debt.
Parcel Tax	A levy on property, typically a fixed amount per parcel. Cannot be based on a property’s value.
Sales Tax	A levy on the retail sale of tangible goods.
Transient Occupancy Tax	A levy on the occupancy of hotels, motels, or other short-term lodging.
Utility User Tax	A levy on the use of utilities, such as electricity, gas, or telecommunications.
Business Tax	A levy on operators of businesses.
Mello-Roos Tax	A levy on property in a defined zone, typically a fixed amount per parcel. Cannot be based on property’s value.
Real Property Transfer Tax	A one-time levy on the sale of property based on the property’s sales price.

Source: Legislative Analyst’s Office

Option 1: Parcel Tax

A parcel tax is an annual tax levied at a fixed amount per parcel (or per room or per square foot). There are 935 taxable parcels in Belvedere, thus a parcel tax to fund the CIP would cost roughly \$1,600 per parcel per year. Members felt that a parcel tax was not the right funding vehicle and were particularly concerned about the ability of elderly residents living on fixed incomes to pay the tax.

Table 2: Key Parcel Taxes in Belvedere 2021-22

Tax	Tax Per Parcel
Reed Union School District ¹	\$624.58
Tamalpais Union High School District ¹	\$483.68
Belvedere Fire Tax	\$906.00
Sanitary District 5	\$1,987.00
Belvedere Tiburon Library Agency	\$66.00
Marin Municipal Water District	\$75.00

¹Seniors' exemption. Source: Marin County Tax Collector

Option 2: Mello-Roos Tax

A Mello-Roos tax is a levy on property in a defined zone, known as a Community Facilities District, used to finance infrastructure investment and some public services. The tax cannot be linked to property values, but otherwise the formula for apportionment is flexible, including its frequency. The taskforce was unable to create a formula which it believed was equitable. The option was dropped.

Option 3: Ad Valorem Property Tax

An ad valorem property tax is an annual levy on property charged in proportion to a parcel's assessed value (over and above the standard 1% ad valorem levy provided by Proposition 13). The proceeds must be used for voter-approved debt tied to a specific infrastructure project. The total assessed value of properties in Belvedere currently stands at \$2.6 billion (2021-22 property tax roll), thus an ad valorem property tax to fund the CIP would cost taxpayers annually about 5.6 cents per \$100 of assessed value, or put another way, \$560 per \$1 million of assessed value (assuming level debt service – see later discussion).

Table 3: Ad Valorem Property Taxes in Belvedere 2021-22

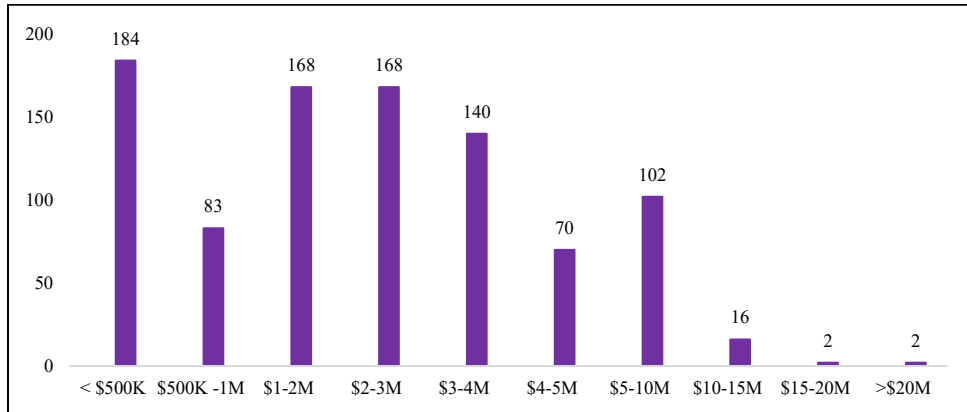
Tax	Tax Rate Per \$100 of Assessed Value
Basic Tax	100.00 cents
School Bonds	7.66 cents
Health Bonds	2.18 cents

Source: Marin County Tax Collector

The taskforce reviewed the data on assessed values in Belvedere and noted the often-wide gap between a property's assessed value and its market value. Assessed values are based on 1978 property prices indexed for inflation. They are only rebased to fair market value when a property is sold or remodeled. Chart 1 shows the distribution of assessed values in Belvedere by valuation band, based on the 2020-21 property tax roll.

The taskforce discussed the imperfect nature of tying a tax to assessed values, but also noted that all properties do eventually change hands, and then the property tax burden shifts more heavily to those newly assessed properties. They also noted that an ad valorem tax cannot be used to fund ongoing maintenance of the capital improvements. Members saw value in the revenue certainty of this option (the tax is simply levied until the debt is repaid) and the ease of collection, as a new line item on property tax bills. They also noted that elderly people living on fixed incomes tend to live in properties that have not been reassessed for many years and would therefore pay significantly less tax. It concluded that, of the choices, this was an option worth pursuing in more detail.

Chart 1: Belvedere Assessed Values by Valuation Band (Number of Properties)



Source: City of Belvedere 2020-21 Property Tax Roll. Total assessed value of 935 taxable parcels = \$2.53 billion

Option 4: Real Property Transfer Tax

A RPTT is a one-time levy on the transfer of real estate based on a property’s selling price. Exclusions are given for transfers that do not constitute a sale. RPTTs are commonplace throughout California, albeit not in Marin, and are add-ons to the 0.11% documentary transfer tax that all cities charge. Buyers and sellers are most often made jointly and severally liable for the tax and the decision over who pays is part of the contract negotiation.

Table 4: California Cities with Real Property Transfer Taxes

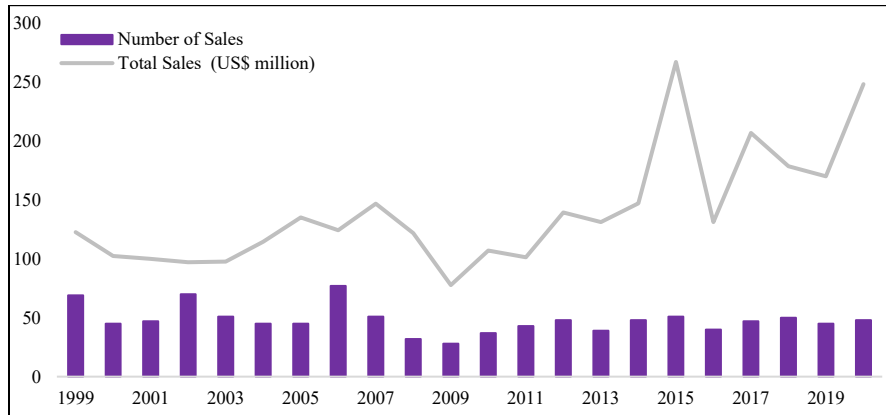
City	RPTT Rate	City	RPTT Rate
Alameda County		Marin County	
Alameda	1.20%	San Rafael	0.20%
Albany	1.15%	Sacramento County	
Berkeley	Banded from 1.50% to 2.50%	Sacramento	0.275%
Emeryville	1.20%	San Francisco County	
Hayward	0.85%	San Francisco	Banded from 0.50% to 6.00%
Oakland	Banded from 1.00% to 2.50%	San Mateo County	
Piedmont	1.30%	San Mateo	0.50%
San Leandro	0.60%	Santa Clara County	
Contra Costa County		Mountain View	0.33%
El Cerrito	1.20%	Palo Alto	0.33%
Richmond	Banded from 0.70% to 3.00%	San Jose	Banded from zero to 3.00%
Los Angeles County		Solano County	
Pomona	0.22%	Vallejo	0.33%
Redondo Beach	0.22%	Sonoma County	
Santa Monica	0.30%	Petaluma	0.20%
		Santa Rosa	0.20%

Source: California City Finance

The taskforce discussed the positive features of a RPTT. First, given the strength of Belvedere’s real estate market, a tax on property sales could generate significant revenue. Belvedere sees about 50 property sales per year, with the average selling price now trending around \$4 million, generating over \$200 million in annual property sales. A 1.0% RPTT, for example, would therefore generate an estimated \$2 million annually, easily covering debt service. Second, although only a fraction of taxpayers would pay the tax in any given year, Belvedere properties change hands, on average, every twenty years, so nearly everyone would eventually pay the tax. Third, the administrative lift would be low, with the tax collected by the

County of Marin alongside the existing documentary transfer tax (for a small per-transaction fee). Fourth, the tax could be used to fund ongoing maintenance of the capital improvements.

Chart 2: Belvedere Property Sales 1999-2020



Source: Author's calculations using documentary transfer tax data provided by Marin County Recorder

The taskforce also discussed certain challenges associated with the RPTT option. First, property sales are not guaranteed, creating a volatile and uncertain RPTT revenue stream. Second, RPTT revenues cannot be directly pledged as a source of repayment for debt, so a more complex financial structuring would be required (see next). Third, under the California Constitution, only charter cities can adopt RPTTs, and the City of Belvedere is currently a general law city. Conversion, the taskforce learned, is relatively simple, with few downsides and some potential benefits in terms of greater local control. On balance, the taskforce felt the RPTT option was worth pursuing, in parallel with the ad valorem property tax option.

Table 5: Ad Valorem Property Tax vs RPTT (Key Features)

Feature	Ad Valorem Property Tax	Real Property Transfer Tax
Frequency of tax	Annual	Once, when property is sold
Revenue certainty	High	Volatile
Administration	Easy	Easy
Fairness	Medium/High	Medium/High
Source of repayment for debt	Yes	No
Fund ongoing maintenance	No	Yes
Complicating factors	None	Requires charter city conversion

Source: Author

Debt Financing

Next, the taskforce discussed how an ad valorem property tax and a RPTT could be leveraged to support debt.

1. Ad Valorem Property Tax/GO Bond Issue

An ad valorem tax is specifically designed as the funding source for a General Obligation (GO) Bond. By approving an ad valorem property tax, the taxpayer is essentially agreeing to tax itself at an amount necessary to make annual debt service on the bond, until the debt is repaid, at which point the tax sunsets. The bond is backed by the full faith and credit of the issuing municipality, based on its ability to levy the tax on its residents.

GO bonds can either be structured with level debt service or escalating debt service. **Level debt service** means that debt payments are roughly the same in nominal terms from year to year. As assessed values grow, the tax rate declines. According to the City’s financial advisors, the annual tax rate on a \$28 million GO level debt service bond would decline from an estimated 5.6 cents to 1.8 cents per \$100 of assessed value (equivalent to \$560 and \$180 per \$1 million of AV) over the 30-year life of the bond. With **escalating debt service**, the tax *rate* is kept broadly steady over time, thus nominal debt service payments increase over time as assessed values rise. The financial advisors estimate that the average annual tax rate using escalating debt service would be 3.3 cents per \$100 (\$330 per \$1 million) of assessed value over the life of the bond. Because escalating debt service pushes more of the repayment stream into the outer years, interest costs - and therefore aggregate debt service costs - are higher than using level debt service. Nevertheless, the taskforce agreed that using escalating debt service was a superior option, to lessen the upfront burden on pocketbooks, and allow the tax charge to rise in line with rising incomes.

Overall, debt financing using an ad valorem tax as the source of repayment is straightforward and offers the lowest costs of financing available to a municipality. Based on Belvedere’s overall excellent financial standing, the City is likely to secure a strong AA category credit rating. The same rating category would apply to the GO bond.

Table 6: Estimated Tax Rates to Service \$28 million 30-Year GO Bond

Tax	Level Debt Service	Escalating Debt Service
Starting Tax Rate	5.6 cents per \$100 of AV	3.6 cents per \$100 of AV
Ending Tax Rate	1.8 cents per \$100 of AV	3.3 cents per \$100 of AV
Average Tax Rate	3.4 cents per \$100 of AV	3.3 cents per \$100 of AV
Total Debt Service	\$46,300,000	\$51,100,000

Assumes 4.0% annual growth in aggregate assessed values and 3.5% interest rate. Source: Fieldman Rolapp & Associates, Inc

2. Real Property Transfer Tax/Lease Revenue Bond

Issuing a debt financing using RPTT proceeds is more complicated. Under the California Constitution, RPTT revenues cannot be pledged directly as a source of repayment for debt. However, the City is permitted to issue lease-revenue bonds secured by \$28 million of City assets and *de facto* use RPTT revenues as the source of repayment on the bonds. Because lease financing is considered an expense and not a debt under the California Constitution, lease revenue bonds do not need voter approval.

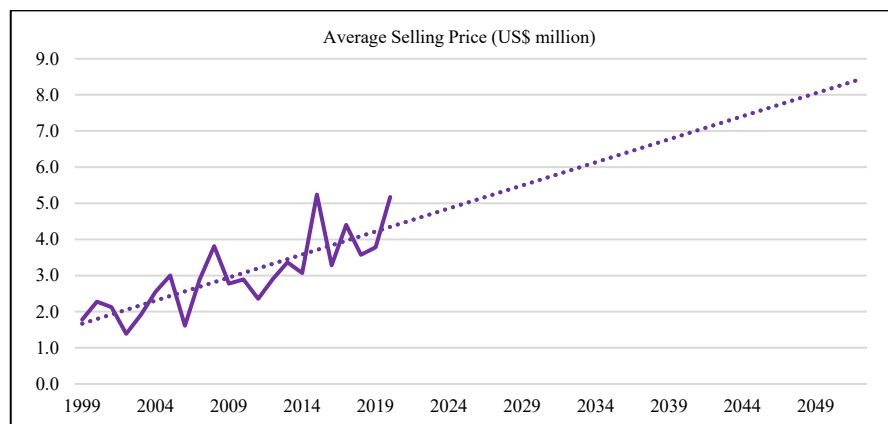
In vanilla terms, a lease revenue bond is a tax-exempt bond issued by a municipality that is secured with revenues generated by leasing out public assets to a third party. In practice, municipalities are allowed to lease those assets to themselves. The municipality leases the asset to a special purpose financing authority for a nominal fee, which leases the asset back to the municipality in return for annual lease payments. The financing authority can issue lease revenue bonds secured by those lease payments, up to the full value of the asset.

The taskforce worked with bond counsel to understand which City assets could be included in the lease. The upgraded levees could eventually become the leased asset, but not during construction, because the asset must be available for beneficial use for the lease to be valid. Other public assets would need to be assigned during construction. Staff determined that the combined value of City Hall, Community Park and Tom Price Park would likely exceed \$28 million based on market comps, subject to appraiser verification. Lease financing arrangements are already in use at the City of Belvedere. In 2017, it signed a 15-year lease-leaseback of its corporation yard, with \$2.6 million of funds released to pay down part of the City’s unfunded pension obligation.

Under a lease financing structure, the lease would be secured by the City’s general fund. RPTT revenues would flow into the general fund and would be critical in ensuring market confidence in the City’s ability to make timely lease payments. The financial advisors advised adopting a **1 percent RPTT tax rate** given the volatility of the income stream, which they believe would allow the lease revenue bond to secure a debt rating just one notch lower than a GO bond. Financing costs would therefore be about 25 basis points higher than for a GO bond, based on conservative assumptions about market spreads. Unlike GO bonds, annual lease payments must be flat in dollar terms over time, ruling out the option of escalating debt service.

The taskforce discussed the real possibility that RPTT revenues exceed debt service costs by an increasing margin over time, as sales values move higher. The lease could be structured with various call provisions and the tax would sunset once the lease is paid off (subject to a vote of the electorate).

Chart 3: Trend Analysis of Average Selling Price of Belvedere Properties

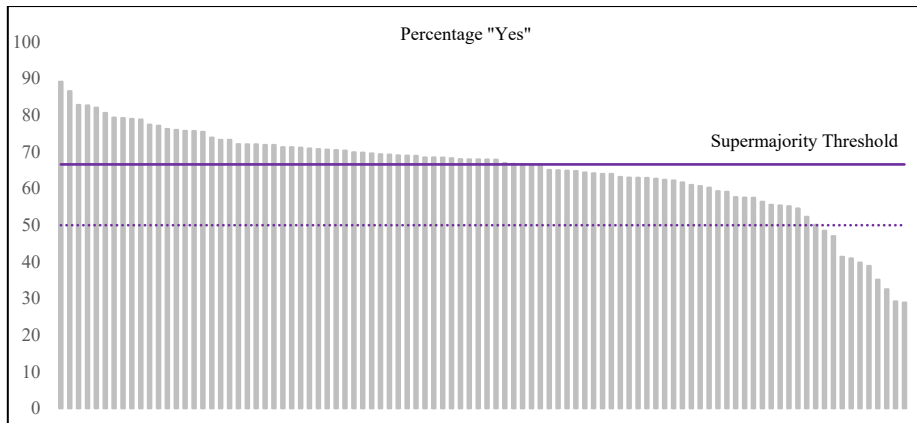


Source: Author’s trend analysis based on historic documentary transfer tax data

Political Considerations

The taskforce moved on to discuss non-financial factors that might favor one tax over the other, notably vote thresholds and election timing. It learned that adoption of an ad valorem property tax requires supermajority (two-thirds) approval by Belvedere voters. There are four dates on which ad valorem property tax/GO bond elections can be held in any given year. The dates differ between odd and even years. By contrast, adoption of a RPTT requires only simple majority approval of the Belvedere electorate. Charter city conversion also requires simple majority approval, and the two questions can be combined into a single ballot question. The vote must coincide with the general election of City Councilmembers, held in November of even years i.e., the next opportunity would be November 2022. The taskforce discussed the difficulty of reaching a two-thirds threshold, based on historic election results. According to the California Debt and Investment Advisory Commission, between 2006 and 2020 there were 96 GO bond/ad valorem property tax measures on the ballot in California. 53 of them passed the supermajority threshold. Of the 43 failing measures, all but ten received majority voter approval. Super majorities are hard to achieve. Simple majorities are not.

Chart 4: California GO Bond Results 2006-2020



Source: California Debt and Investment Advisory Commission

Weighing the Options

The taskforce weighed the two tax options. Members were drawn to the simplicity and familiarity of the ad valorem property tax and the fact that it supports cheap, flexible financing. But members also surmised that the electorate might favor the RPTT option, as a one-time tax at a moment of high liquidity. Members also noted the fact that there is personal choice involved in the decision to sell a house, and thus pay the RPTT, whereas the ad valorem charge takes away personal choice. They also liked the fact that a RPTT could be used to support ongoing upkeep of the critical infrastructure improvements, which an ad valorem tax cannot. Members mused the idea of introducing both taxes at lower rates, but the City’s consultants advised against putting two taxes on the ballot. Ultimately, the taskforce concluded that with two very credible tax options on the table, it should poll likely voters to see which option voters might prefer, before making its recommendation to the full finance committee.

Polling

Councilmembers Lynch and Wilkinson, alongside staff, worked with the City’s pollsters, Godbe Research, to develop the poll. Brown Act considerations prohibited the full subcommittee from being involved in the design of the poll. The poll targeted likely voters in Belvedere and ran for 19 days in late September/early October. 268 returns were counted, representing a good sample size. Although the results are still being analyzed, the numbers look promising and both taxes appear to have good community appeal. Of the two options, the RPTT has greater chance of success at the ballot box because of the lower threshold (50%+1) that is required for passage.

Taskforce Recommendation

Based on its complete analysis, including likely success at the ballot box, the taskforce therefore recommends the City ask voters to approve adoption of a RPTT as a general tax, allowing it to issue lease revenue bonds to finance critical infrastructure improvements to San Rafael Avenue and Lower Beach Road.

SCHEDULED ITEMS

**BELVEDERE CITY COUNCIL
NOVEMBER 3, 2021**

To: Mayor and City Council

From: Robert Zadnik, Director of Public Works
Reviewed by: Craig Middleton, City Manager

Subject: **Update and Key-Feature Review of the “CIP” Design Plans & Cost**

Recommended Action

This report provides a summary of Feasibility-Level design work to-date and ongoing. No Council action is necessary; however feedback is welcomed.

Summary and Findings

The project development team consist of the following firms:

- Stetson Engineers Inc. – *Principal Engineer*
- Miller Pacific Engineering Group– *Geotechnical & Geo-Civil Engineer*
- RHAA—*Landscape Architectural Design*
- Amy Skewes-Cox, AICP--*Environmental Planning/Permitting*
- Remy Moose and Manley, LLP—*Environmental Law*
- BK Cooper; Ghilotti Construction – *Professional Cost Estimators*

The team is currently wrapping up the Feasibility-Level design. This work was informed and preceded by the Alternatives Analysis, a multi-year process that delved into the issues and vulnerabilities threatening Belvedere’s access and egress immediately following natural disaster such as earthquake or flooding. Criteria for the design was established from those discussions, and the community provided valuable feedback on earlier proposals. Ultimately, the project was modified to minimize changes to traffic, drivability and existing parking. Resident feedback was valuable in limiting the scope of work and controlling costs. The project consists of four main components:

San Rafael Avenue

The San Rafael Avenue levee stretches just over 2,000 linear feet and consists primarily of dredged bay mud and liquifiable sand layers. A geotechnical analysis was performed during the Alternatives Analysis and again in more detail during the Feasibility Study. To prevent deformation of the levees during a moderate to serious seismic event, interlocking steel sheet piles in depths ranging from 30-50 feet are necessary in zones of instability—approximately half of the total length of the levee starting from the southern end of San Rafael Avenue at West Shore Road up to Winward Road, including a short section of piling between the areas of Hilarita Circle and Lagoon Road. The extent of the sheet piles can be

referenced by the blue and square-boxed line detail in the updated plans from Stetson (see attached San Rafael Ave Site Plan).

An analysis was performed of the existing mainline utilities within the levee where all utilities have been undergrounded (see attached Utility Plan). Electric and Communication (AT&T and Comcast) lines are already installed in flexible PVC conduits and are generally more resilient towards lateral shifts and movement. Water, Sewer and Gas utility lines are most vulnerable. Of those, the water lines, although upgraded to welded steel in 2010, are only capable of withstanding 12 inches of lateral displacement. Based on this data, limiting levee movement in susceptible zones to under 12 inches of displacement was set as the design criteria when determining the extent and depth of the sheet piling. While it is possible to even further reduce levee movement by extending the depth of piles to 70 feet and beyond, the cost vs benefit of that effort quickly becomes impracticable.

The weakest segment of any pipeline is at the coupling; therefore, some modification of the Water, Sewer and Gas lines will be necessary. The industry offers flexible couplings to improve lateral displacement performance. Staff is coordinating this effort with the utility companies and is looking for opportunities to accelerate their short-term Capital Improvement programs by communicating the City's project timelines and, in some cases, offering to share costs to accelerate the retrofit.

West Shore Road

Although there is low seismic and utility damage risk on West Shore Road, there is still a need to extend the San Rafael Avenue flood barrier approximately 530 feet south onto West Shore Road where elevations are below the design height threshold.

Several barrier options were considered for West Shore during the Alternatives Analysis. Early discussions with residents indicated a strong preference for a barrier structure on the outboard (water) side of these properties. Those collaborations also revealed that the look and feel of the improvements is of critical importance in gaining resident support. An effort has to be made to incorporate the wall feature into their existing landscaping in a way that compliments their landscaping and home. To start this process, a survey was performed and existing elevation data was gathered. RHAA photographed the back yards of these properties and developed preliminary architectural design plans with a focus on materials use and minimizing visual impacts. This work is still ongoing. Currently, the architectural renderings and photos are being reviewed at the staff level to respect the privacy of the residents.

The seawall feature on West Shore is unique to the project in that it is being constructed on private land. In addition to agreeing to a final design, property owners will be required to provide maintenance easements to the city for inspections and potential future modifications to the structure as the environmental need evolves. Staff and the project attorney have developed the easement document and are currently refining the contract language. The City is also considering back-up alternatives as part of the scope of work for the EIR and CEQA process. In the event that the city cannot come to an agreement for all property owners on West Shore, a less-preferred alternative (such as the West Shore median barrier) may need to be considered.

Beach Road

Beach Road from the San Francisco Yacht Club to Main Street is an earthen levee with a structurally deficient seawall. These conditions have led to the seawall rotating outward, away from the sidewalk and levee. Emergency repairs were undertaken in 2014 and 2019 to shore-up the seawall's insufficient

foundation, yet these were only interim repairs and further work is needed. Soil conditions on Beach Road consist of materials that are similar to what can be found on San Rafael Avenue—primarily intermixed sand and bay-mud layers produced from the dredging process that established the lagoon and levee embankments. These layers are continually settling and are prone to liquefaction in an earthquake. The simplest solution to control these vulnerabilities is the installation of sheet piles (See 2019 Beach Road Stabilization photos).

Similar criteria was evaluated when balancing costs vs benefits of sheet pile length. A length of 50' was deemed sufficient to limit lateral movement, stabilize the concrete seawall structures and protect existing utilities.

Unlike San Rafael Avenue, the entirety of the Beach Road Levee requires structural stabilization. This measures to approximately 900 linear feet of sheet piles (when factoring in 2019 work) of the total 1,400 linear feet of the project limits. To control regulatory permitting hurdles and environmental impacts, the piles will be installed on the inboard side of the seawall, under the existing sidewalk area. This will provide the same structural and seismic benefit as placing piles on the outboard side of the seawall.

Another key component of the project is the reduction of flooding and wave overtopping of the levees. Failure to undertake this task would lead to utility damage, sewage overflows, and power outages as subterranean structures become inundated with seawater. These threats are present under today's conditions and are anticipated to become more frequent as storm and sea-level-rise conditions intensify. The project addresses these threats by incorporating a continuous seawall. Special consideration was given to balancing the need to increase seawall height with aesthetic and view impacts. A balance is achieved by lowering the barrier to a level that is sufficient to prevent a majority of wave overtopping, while at the same time preventing stillwater inundation from a severe coastal storm event. This translates to a barrier elevation of 12.4 feet for the majority of Beach Road—for comparison, the existing sidewalk on Beach Road ranges between 8 and 9 feet in elevation. Additionally, the linear park feature on Beach Road hides a majority of the seawall structure by incorporating it into an attractive landscaped promenade that can be enjoyed by residents (see attached Prelim. Beach Road rendering by RHAA).

The City has met on several occasions with the San Francisco Yacht Club (SFYC) and the Belvedere Land Company. RHAA has been helpful in providing visualizations for the waterfront stakeholders that are most influenced by the seawall. Attached to this report are a few renderings showing the frontage of the SFYC and the linear park area. These drawings are preliminary; community-wide outreach will continue as we approach the final design. It is worth noting that both these stakeholders are interested in how the design could be modified if they were to raise their building structures. The SFYC is also considering the possibility of raising its breakwater height which, inversely, would allow the seawall barrier fronting the Club to be reduced in height by several inches. From the City's perspective, these items can be studied independently and in parallel with the preferred design; however, each stakeholder will be responsible for their project engineering costs, permitting and construction of the improvements.

Tiburon Barrier

A component of the project's storm and flood protection element that cannot be overlooked includes the construction of a Tiburon flood protection barrier. Belvedere and Tiburon officials have discussed overall project goals and specific options for the Tiburon barrier. These talks are continuing. The low elevation of Main Street in Tiburon provides an opportunity for stillwater incursion during a severe coastal event. Bay water would overtop Main Street and flow downhill towards Belvedere. The Town is currently updating

its General Plan, which includes a Climate Action Plan, flood impact study, and summary of recommendations for managing those impacts. Belvedere staff will stay apprised of this work and will continue to collaborate with Tiburon in efforts to develop a comprehensive flood prevention project that will protect both the Town and the City.

Cost Estimating

The City, through Stetson Engineers, retained professional estimators BK Cooper and Ryan Strong of Ghilotti Brothers Construction to develop refined cost estimates. Their work included an evaluation of current and anticipated market pricing of steel and other commodity materials as the main driver of project costs. In total, **\$18.25M** is anticipated to cover seismic and stability retrofit of the levees, utility hardening, flood protection improvements, and landscape work. In addition to this, 30% of the construction total is recommended for Contingency at the current design level, along with 20% for Construction Management and Engineering services. The total project estimate is \$27.38M for the preferred alternative as presented. Cost estimates will be refined as the design level moves towards completion.

CEQA & Environmental Process

This project requires an Environmental Impact Report (EIR) as part of the CEQA process and permits from several regulatory agencies before construction can begin. To fulfill the CEQA requirements, the City's consultant is recommending a minimum of three community meetings that would begin this winter.

- Scoping meeting. This meeting will solicit concerns before the EIR gets underway and after a Notice of Preparation has been made public for review.
- Draft EIR public hearing. This forum will be used to solicit comments after the Draft EIR has been made public. These comments are responded to in the Final EIR.
- Certification Hearing. This meeting is used to certify that all CEQA requirements have been met. Typically, few public comments are received at this meeting at which the City certifies the report and findings.

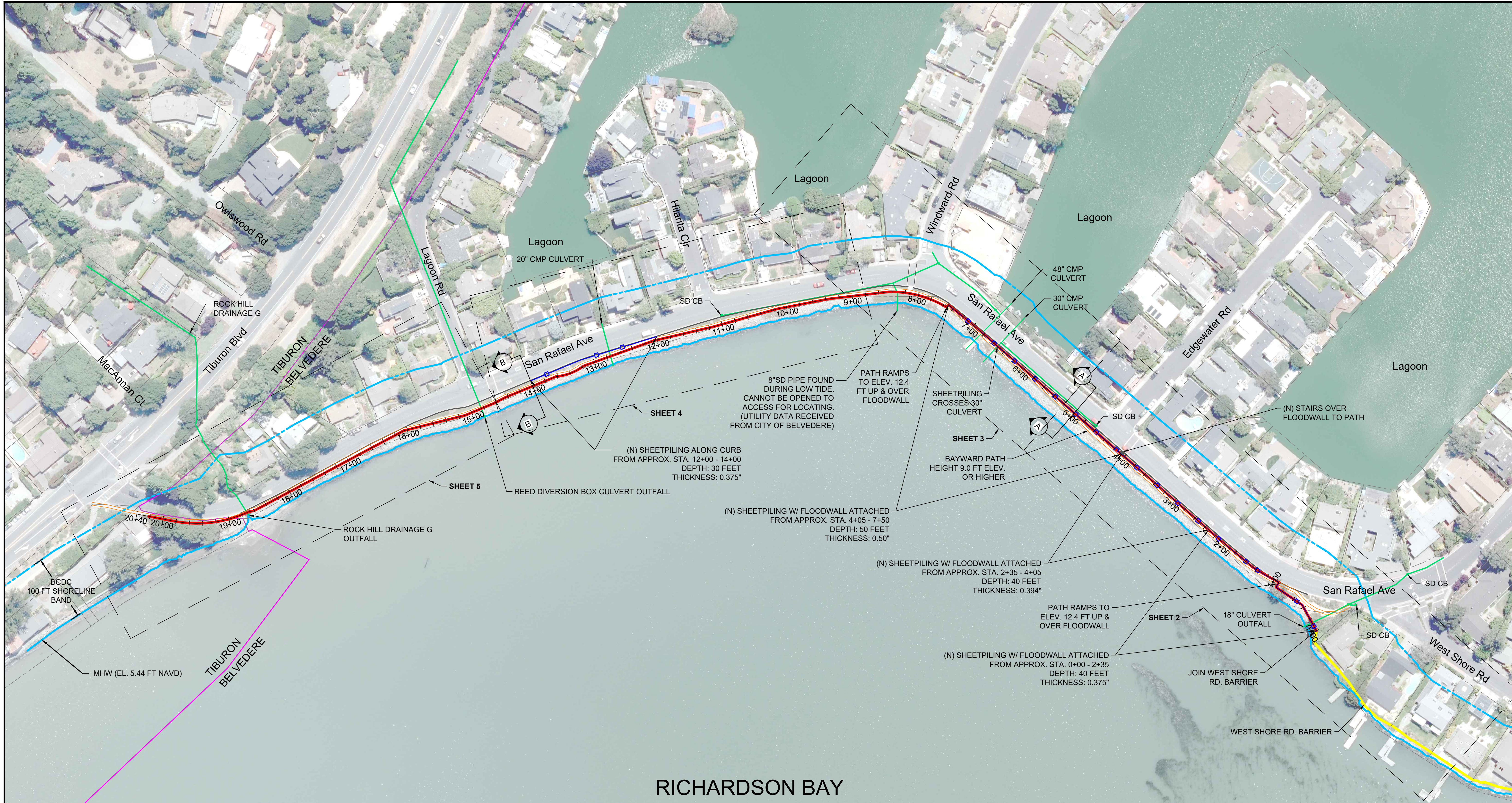
It is important to note that Staff and the project development team will continue to meet with residents individually and in groups to review plans and discuss ways to improve the project. Public outreach will continue throughout the CEQA process and residents will have opportunities to provide feedback.

Representatives from Stetson Engineers and Miller Pacific will be available on November 3rd to answer any technical questions.

Attachments:

1. San Rafael Ave. Preliminary Site Plan
2. Beach Rd. Preliminary Site Plan
3. Utility Mapping
4. 2019 Beach Road Emergency Repair (Sheet Pile Install)

5. Sample of Beach Road RHAA Design Collaboration Renderings



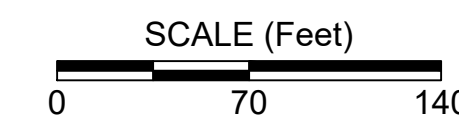
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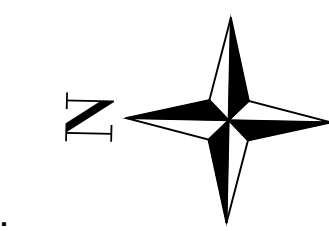
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- SHEET PILING
- WEST SHORE RD. FLOOD BARRIER ALIGNMENT (10.8 FT ELEV.)
- INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- EXISTING STORM DRAIN
- EXISTING PATH
- EXISTING CURB
- CITY BOUNDARY

NOTES:

1. ALL STREET PARKING TO REMAIN UNCHANGED FROM EXISTING.
2. SHEETPIILING DESIGN BASED ON 475-YR EARTHQUAKE RETURN PERIOD (0.46g).



VERTICAL DATUM: NAVD88.
HORIZONTAL DATUM: NAD83.



NO.	DATE	ISSUE/REVISION	APP

Stetson Engineers Inc.
2171 E. Francisco Blvd., Suite K
San Rafael, CA. 94901
(415) 457-0701

Project Number: 2364
Date: October 26, 2021

Designed: L.S. / J.F.
Checked:
Drawn: L.S.
Approved:

DRAFT

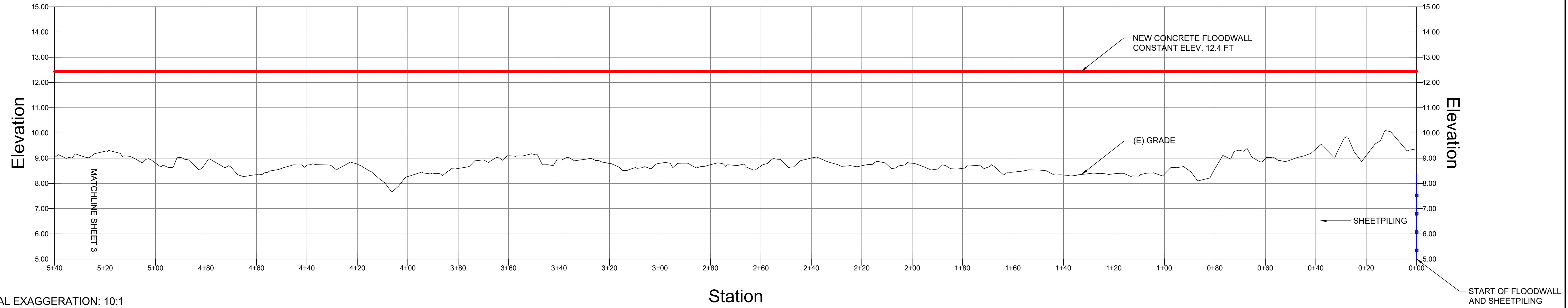
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COASTAL LEVEE IMPROVEMENT PROJECT
BELVEDERE, CA

**SAN RAFAEL AVE.
OVERVIEW AND INDEX SHEET**

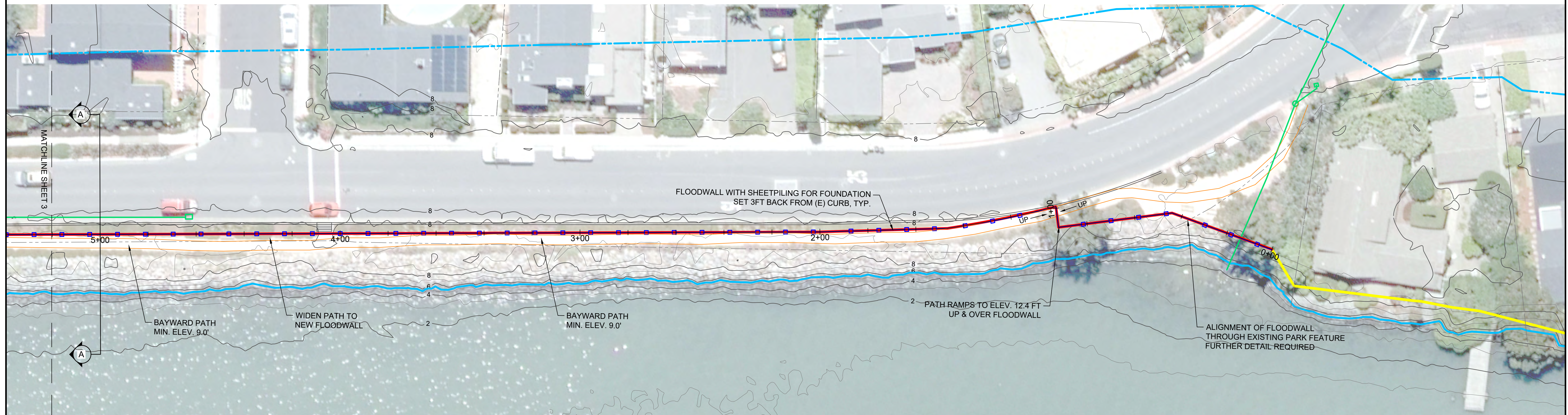
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 SHEET NO.
1 of 11

NEW FLOODWALL ALIGNMENT PROFILE



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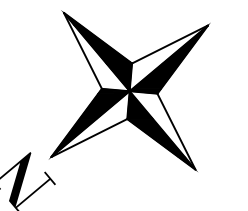
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- □ SHEET PILING
- WEST SHORE RD. FLOOD BARRIER ALIGNMENT (10.8 FT ELEV.)
- - - INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- EXISTING STORM DRAIN
- EXISTING PATH
- EXISTING CURB
- CITY BOUNDARY

- ~ MAJOR CONTOUR (2 FT INTERVAL)
- ~ MINOR CONTOUR (1 FT INTERVAL)

SCALE (Feet)
0 20 40

VERTICAL DATUM: NAVD88.
HORIZONTAL DATUM: NAD83.

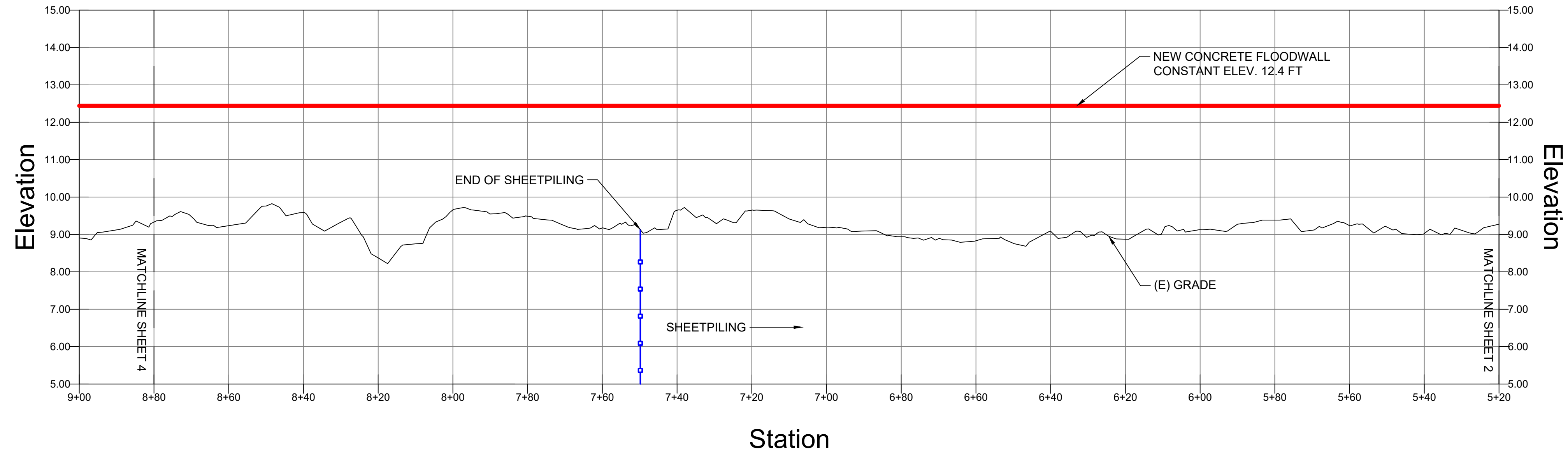


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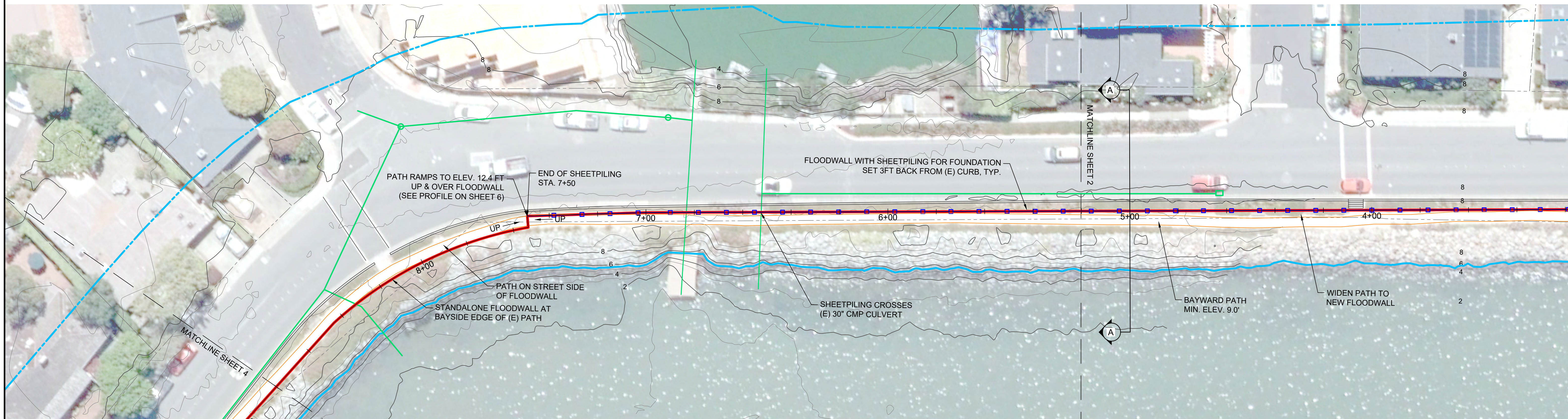
 2171 E. Francisco Blvd., Suite K San Rafael, CA. 94901 (415) 457-0701 Project Number: 2364 Date: October 26, 2021	Designed: L.S. / J.F.	DRAFT
	Checked:	
	Drawn: L.S.	
	Approved:	

BELVEDERE LAGOON COASTAL LEVEE IMPROVEMENT PROJECT BELVEDERE, CA	DWG NO. SHEET NO. 2 of 11
SAN RAFAEL AVE. PLAN VIEW AND PROFILE STA 0+00 TO 5+20	

NEW FLOODWALL ALIGNMENT PROFILE



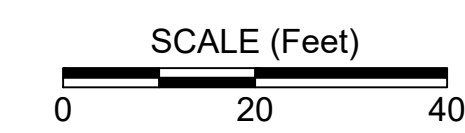
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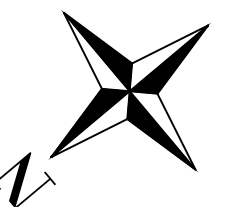
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- □ SHEET PILING
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- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- EXISTING STORM DRAIN
- EXISTING PATH
- EXISTING CURB
- CITY BOUNDARY

- MAJOR CONTOUR (2 FT INTERVAL)
- MINOR CONTOUR (1 FT INTERVAL)



VERTICAL DATUM: NAVD88.
HORIZONTAL DATUM: NAD83.



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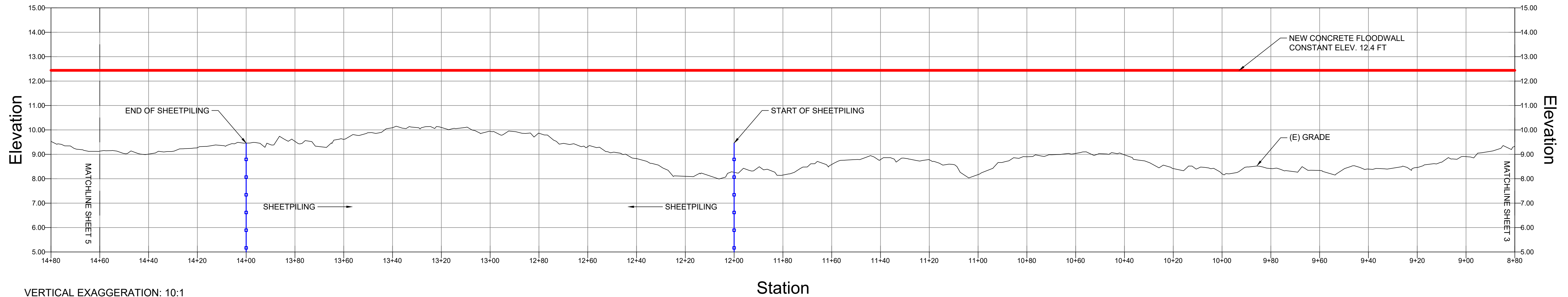
BELVEDERE LAGOON
 COASTAL LEVEE IMPROVEMENT PROJECT
 BELVEDERE, CA

SAN RAFAEL AVE.
 PLAN VIEW AND PROFILE
 STA 5+20 TO 8+80

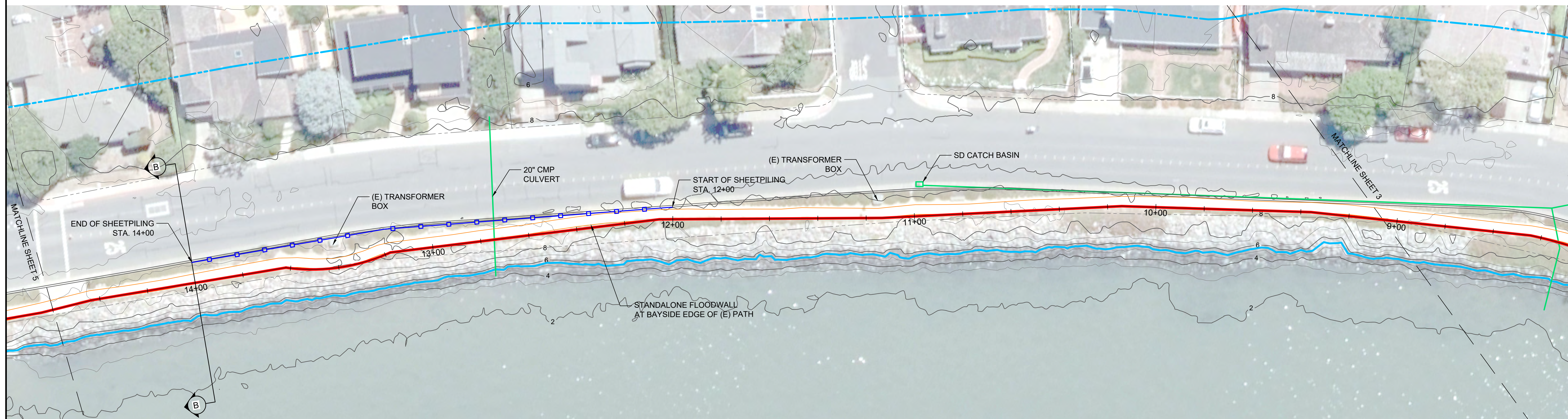
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3 of 11

NEW FLOODWALL ALIGNMENT PROFILE



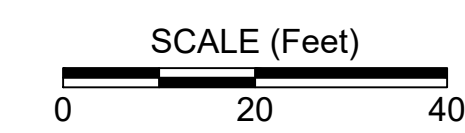
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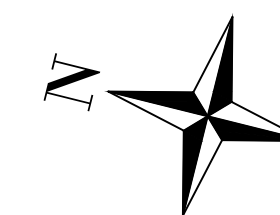
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- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- EXISTING STORM DRAIN
- EXISTING PATH
- EXISTING CURB
- CITY BOUNDARY

- ~ MAJOR CONTOUR (2 FT INTERVAL)
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HORIZONTAL DATUM: NAD83.

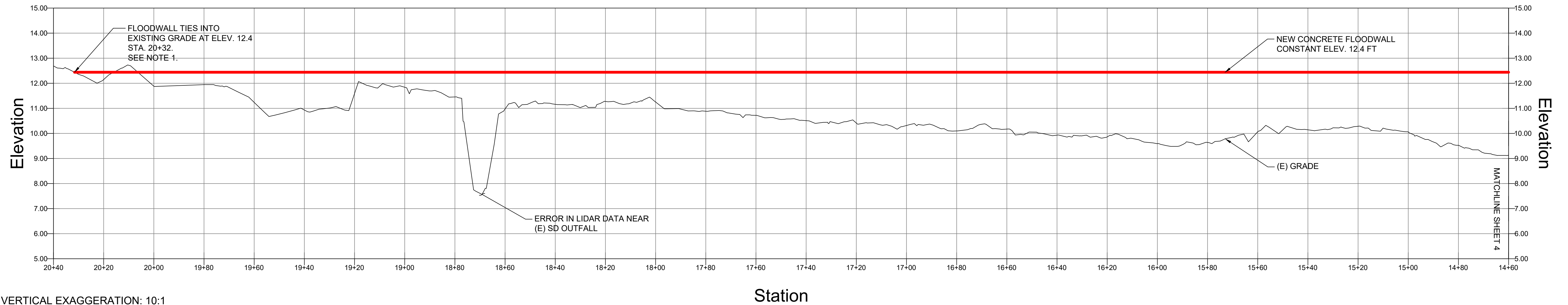


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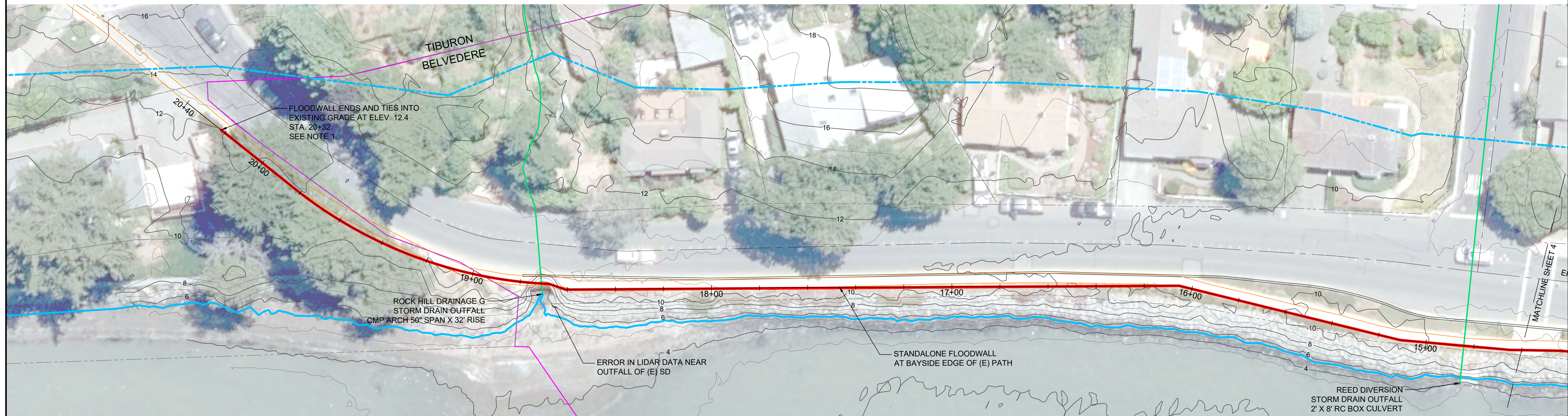
	2171 E. Francisco Blvd., Suite K San Rafael, CA. 94901 (415) 457-0701	Designed: L.S. / J.F.	DRAFT
	Project Number: 2364	Checked:	
	Date: October 26, 2021	Drawn: L.S.	
		Approved:	

BELVEDERE LAGOON COASTAL LEVEE IMPROVEMENT PROJECT BELVEDERE, CA	DWG NO.
SAN RAFAEL AVE. PLAN VIEW AND PROFILE STA. 8+80 TO 14+80	SHEET NO. 4 of 11

NEW FLOODWALL ALIGNMENT PROFILE



VERTICAL EXAGGERATION: 10:1



LEGEND:

- FLOODWALL (TOP OF WALL 12.4 FT ELEV.)
- - - INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- EXISTING STORM DRAIN
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- EXISTING CURB
- CITY BOUNDARY

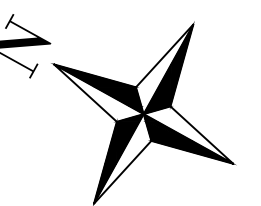
- ~ MAJOR CONTOUR (2 FT INTERVAL)
- ~ MINOR CONTOUR (1 FT INTERVAL)

NOTES:

1. FLOODWALL TIES INTO EXISTING GRADE AT ELEV. 12.4 FT NEAR SOUTH EDGE OF DRIVEWAY. COORDINATE WITH PROPERTY OWNER TO RAISE DRIVEWAY CURB TO MINIMUM ELEV. 12.4 FT IF REQUIRED.

SCALE (Feet)

 VERTICAL DATUM: NAVD88.
 HORIZONTAL DATUM: NAD83.

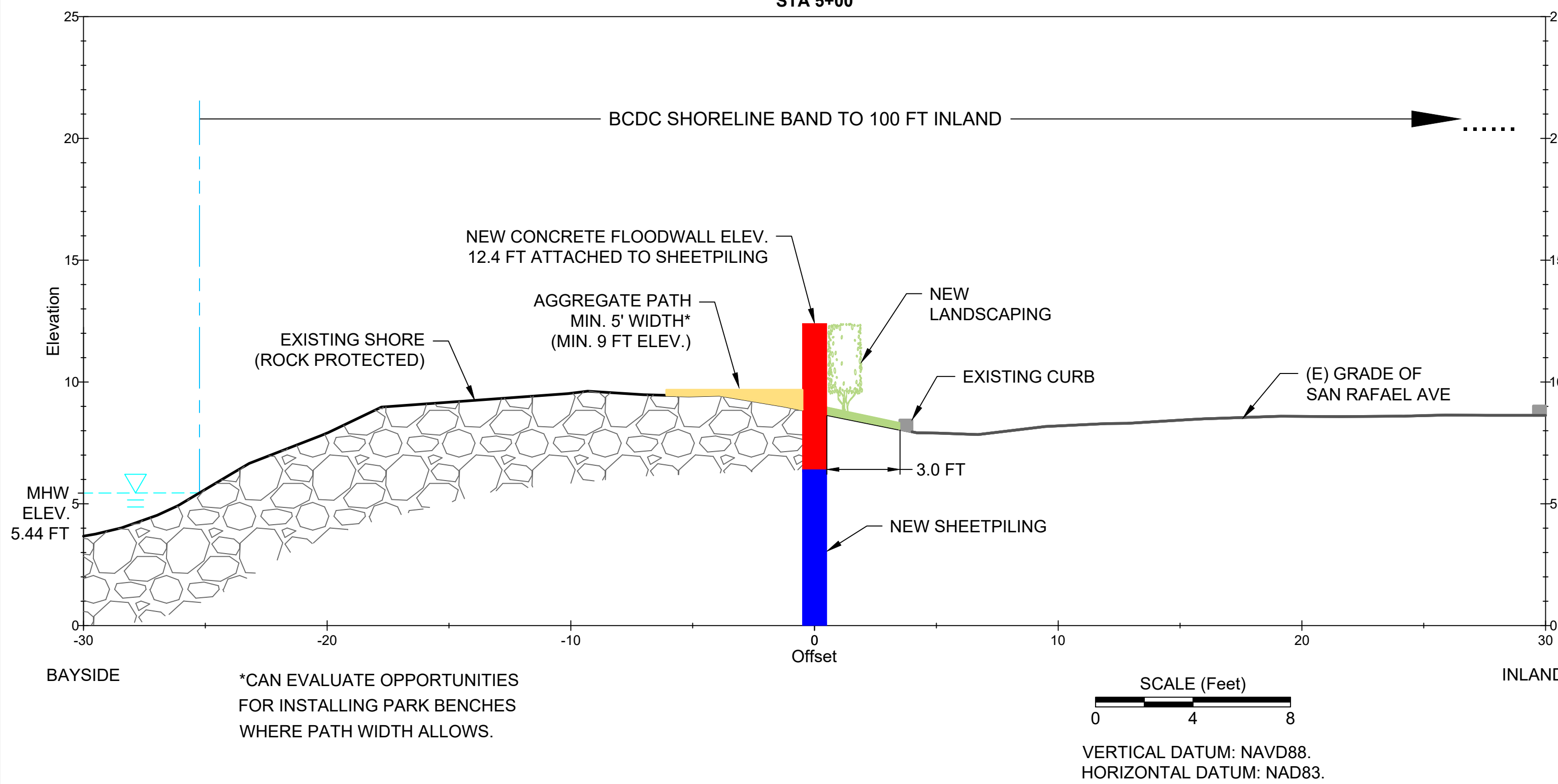


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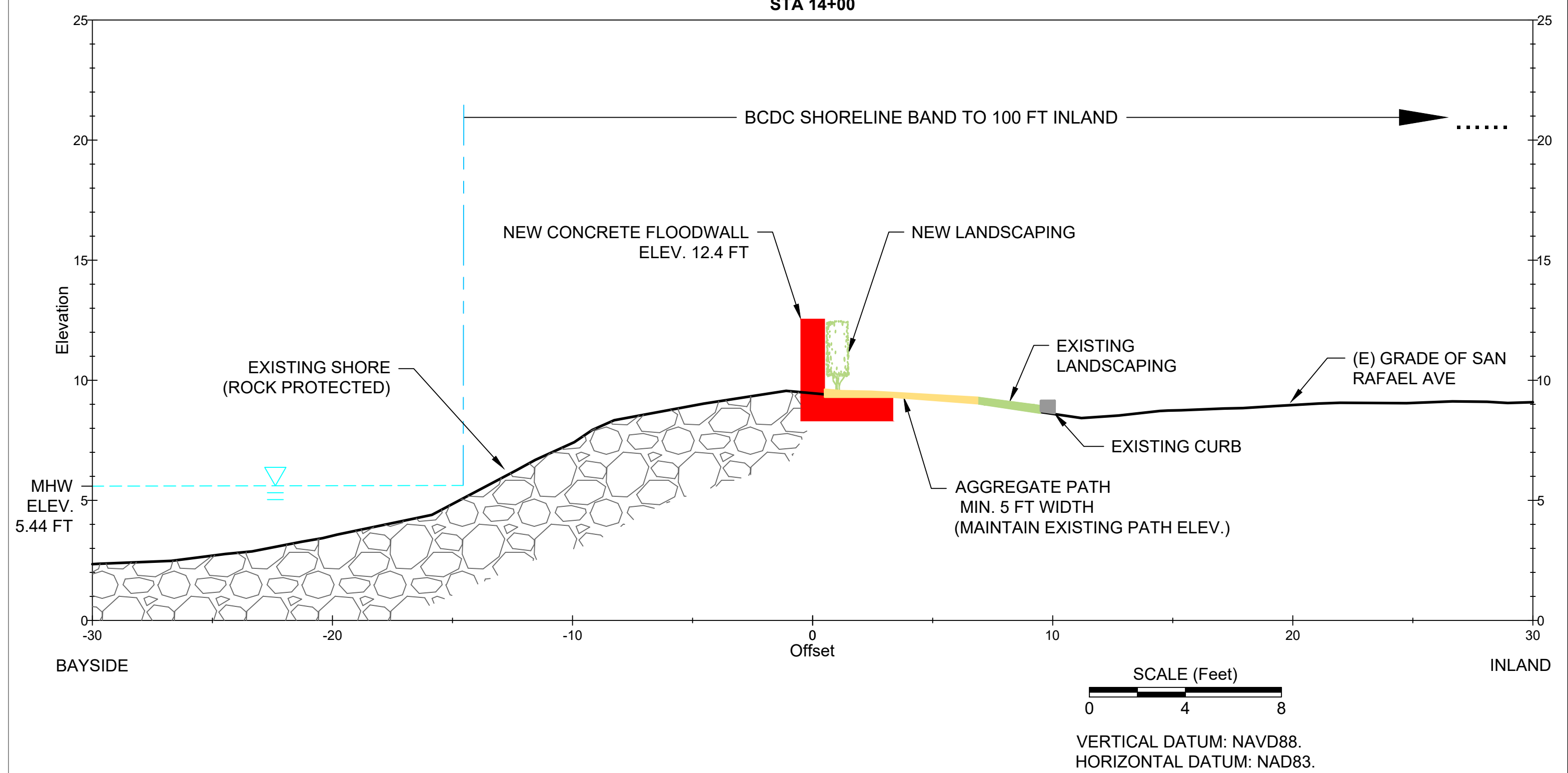
 2171 E. Francisco Blvd., Suite K San Rafael, CA. 94901 (415) 457-0701 Project Number: 2364 Date: October 26, 2021	Designed: L.S. / J.F.	DRAFT
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	Drawn: L.S.	
	Approved:	

BELVEDERE LAGOON COASTAL LEVEE IMPROVEMENT PROJECT BELVEDERE, CA	DWG NO.
SAN RAFAEL AVE. PLAN VIEW AND PROFILE STA 14+40 TO 20+40	SHEET NO. 5 of 11

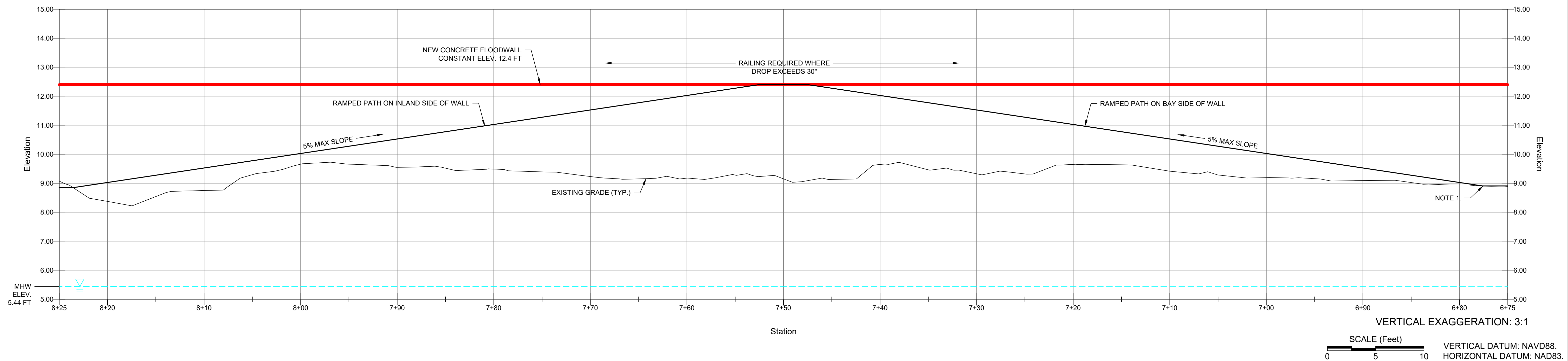
SECTION A (TYP.) - PATH LOCATED BAYWARD OF FLOODWALL
STA 5+00



SECTION B (TYP.) - PATH LOCATED STREET SIDE OF FLOODWALL
STA 14+00



"UP & OVER" PATH PROFILE
STA. 6+75.00 TO 8+25.00



NOTES:

1. PATH ON BAYSIDE OF FLOODWALL MIN. ELEVATION OF 9.0 FT
2. 5% MAX RUNNING SLOPE FOR COMPACTED D.G. PATHS PER ADA REQUIREMENT.

Attention:



If this scale bar does not measure 1" then drawing is not original scale.

NO.	DATE	ISSUE/REVISION	APP
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Stetson Engineers Inc.
2171 E. Francisco Blvd., Suite K
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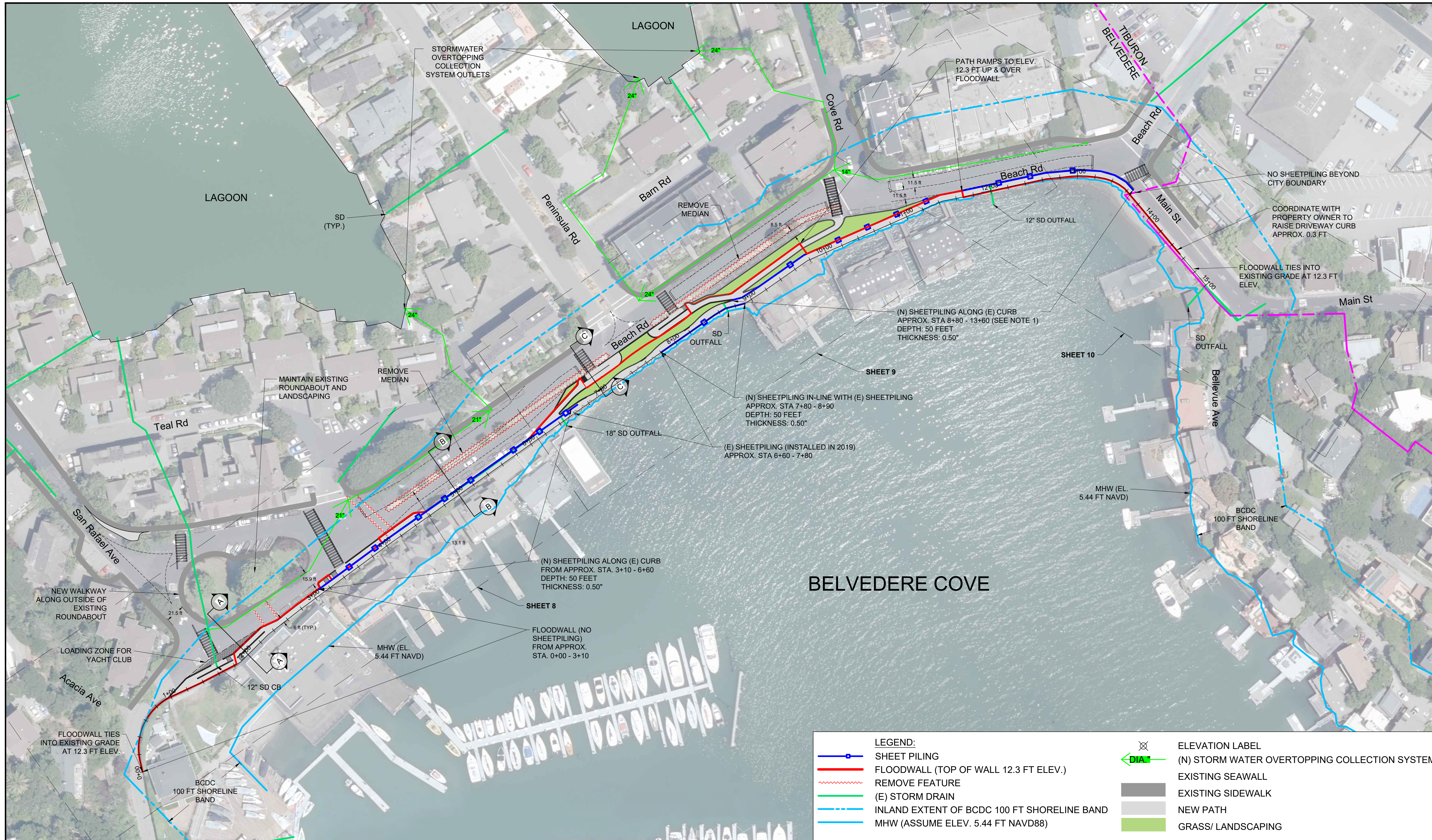
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BELVEDERE LAGOON
COASTAL LEVEE IMPROVEMENT PROJECT
BELVEDERE, CA

SAN RAFAEL AVE.
TYPICAL CROSS SECTIONS AND
"UP & OVER" PATH PROFILE

DWG NO.

SHEET NO.
6 of 11

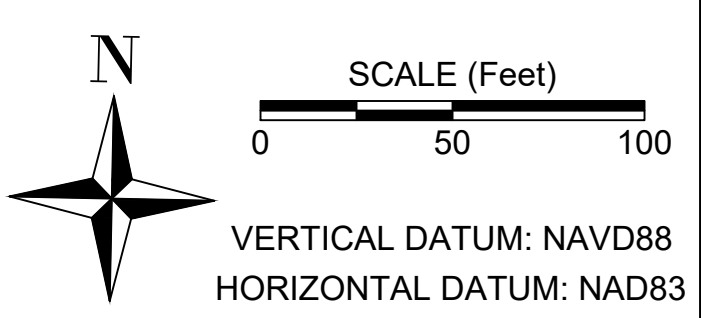


BELVEDERE COVE

LEGEND:

- SHEET PILING
- FLOODWALL (TOP OF WALL 12.3 FT ELEV.)
- - - - REMOVE FEATURE
- (E) STORM DRAIN
- - - - INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- ⊗ ELEVATION LABEL
- ◇— (N) STORM WATER OVERTOPPING COLLECTION SYSTEM
- EXISTING SEAWALL
- EXISTING SIDEWALK
- NEW PATH
- GRASS/ LANDSCAPING

- NOTES:**
1. SHEETPIILING FROM APPROX. STA. 11+50 - 13+60 TO BE INSTALLED ON BAYSIDE OF (E) SEAWALL OR AT (E) CURB AND BOLTED TO (E) SEAWALL.
 2. SHEETPIILING DESIGN BASED ON 475-YR EARTHQUAKE RETURN PERIOD (0.46g).



Attention:

0									
NO.	DATE	ISSUE/REVISION	APP						

Stetson Engineers Inc.
 2171 E. Francisco Blvd., Suite K
 San Rafael, CA. 94901
 (415) 457-0701
 Project Number: 2364
 Date: October 26, 2021

Designed: L.S. / J.F.
 Checked:
 Drawn: L.S.
 Approved:

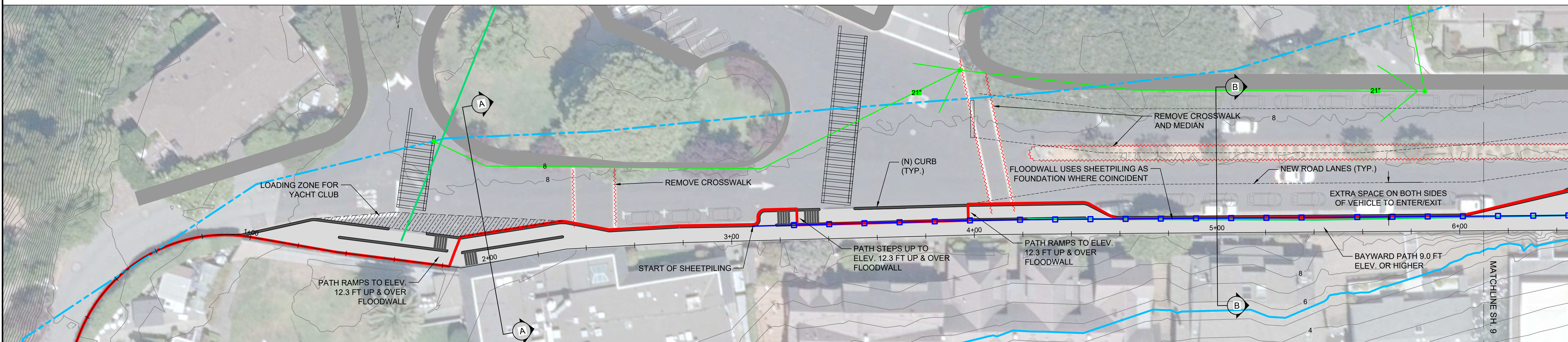
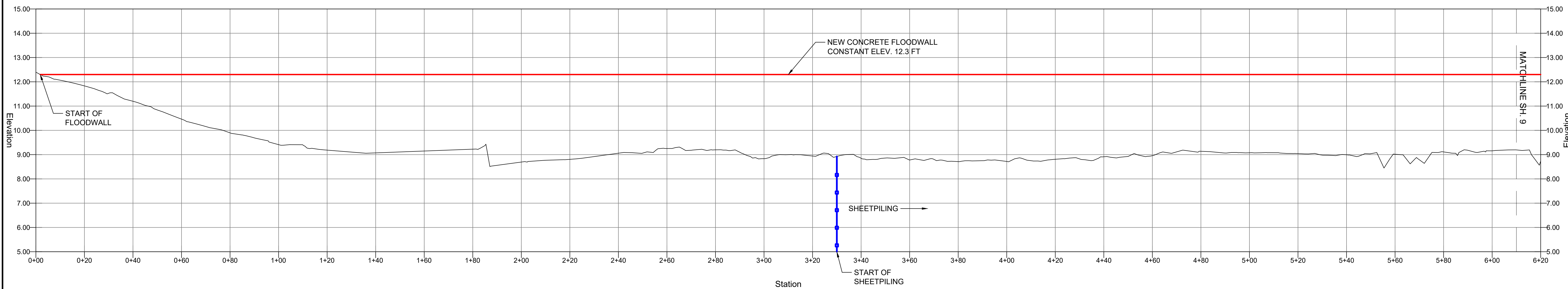
DRAFT

BELVEDERE LAGOON
 COASTAL LEVEE IMPROVEMENT PROJECT
 BELVEDERE, CA

**BEACH RD.
 PROJECT OVERVIEW AND INDEX SHEET**

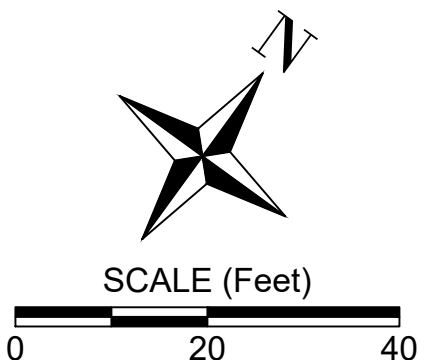
DWG NO.
 SHEET NO.
 7 of 11

NEW FLOODWALL ALIGNMENT PROFILE



<p>LEGEND:</p> <ul style="list-style-type: none"> —●— SHEETPIILING — FLOODWALL (TOP OF WALL 12.3 FT ELEV.) - - - REMOVE FEATURE — (E) STORM DRAIN - - - INLAND EXTENT OF BCDC 100 FT SHORELINE BAND — MHW (ASSUME ELEV. 5.44 FT NAVD88) 	<ul style="list-style-type: none"> ⊗ ELEVATION LABEL — (N) STORM WATER OVERTOPPING COLLECTION SYSTEM — EXISTING SEAWALL — EXISTING SIDEWALK — NEW PATH — GRASS/ LANDSCAPING
---	--

- NOTES:**
1. VERTICAL DATUM: NAVD88.
 2. HORIZONTAL DATUM: NAD83.



Attention:
0 1"
If this scale bar does not measure 1" then drawing is not original scale.

NO.	DATE	ISSUE/REVISION	APP
0			

Stetson Engineers Inc.

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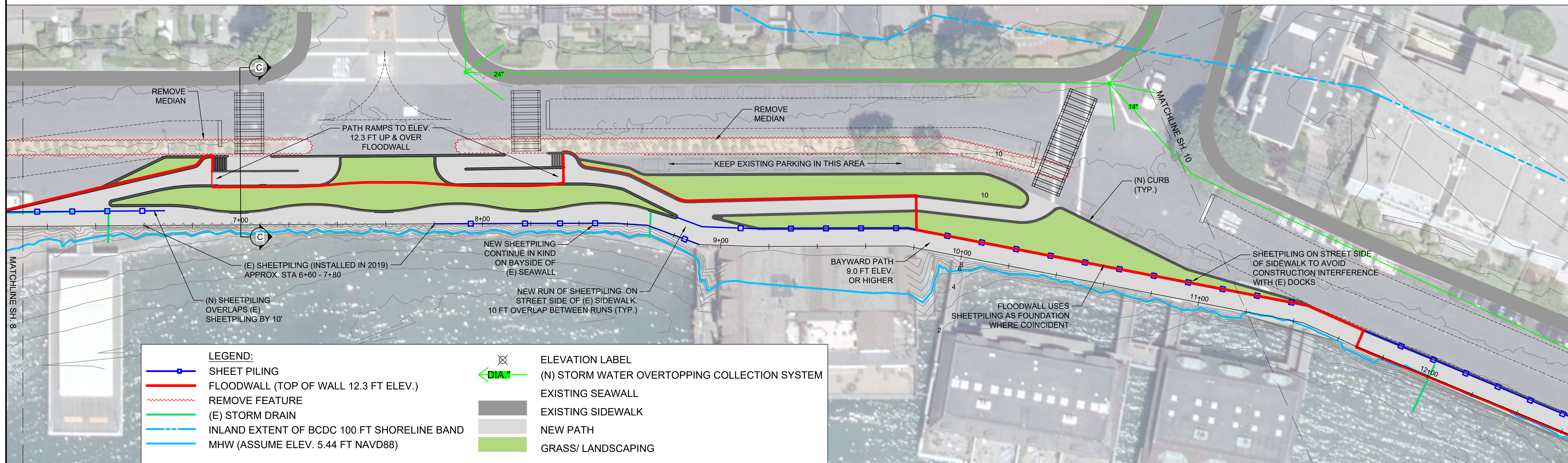
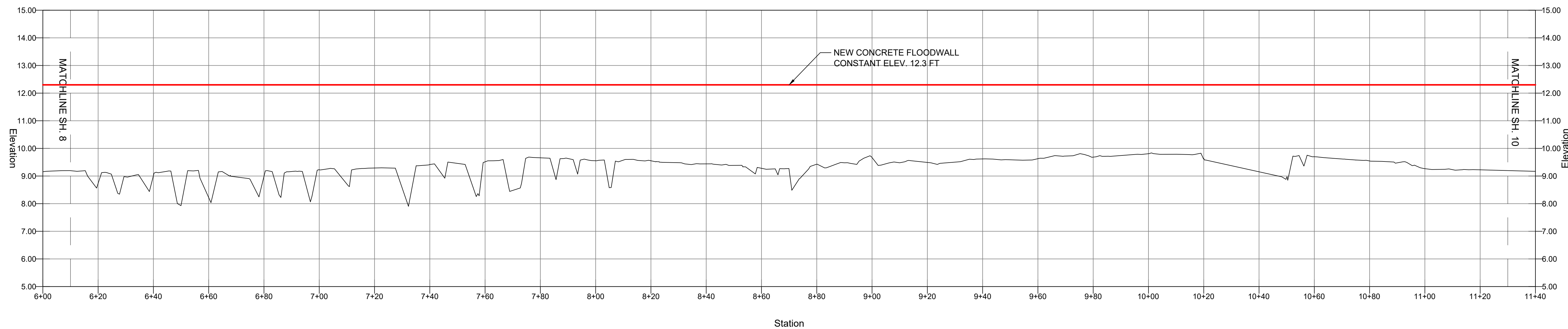
BELVEDERE LAGOON
 COASTAL LEVEE IMPROVEMENT PROJECT
 BELVEDERE, CA

**BEACH RD.
 PLAN VIEW AND PROFILE
 STA. 0+00 TO 6+10**

DWG NO.

 SHEET NO.
8 of 11

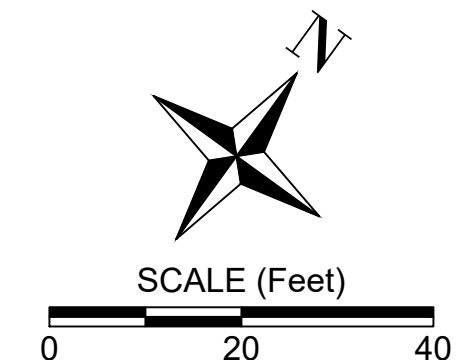
NEW FLOODWALL ALIGNMENT PROFILE



LEGEND:

- SHEET PILING
- FLOODWALL (TOP OF WALL 12.3 FT ELEV.)
- - - REMOVE FEATURE
- (E) STORM DRAIN
- - - INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
- MHW (ASSUME ELEV. 5.44 FT NAVD88)
- ⊗ ELEVATION LABEL
- DIA— (N) STORM WATER OVERTOPPING COLLECTION SYSTEM
- EXISTING SEAWALL
- EXISTING SIDEWALK
- NEW PATH
- GRASS/ LANDSCAPING

- NOTES:**
1. VERTICAL DATUM: NAVD88.
 2. HORIZONTAL DATUM: NAD83.



Attention:					
If this scale bar does not measure 1" then drawing is not original scale.	NO.	DATE	ISSUE/REVISION	APP	

Stetson Engineers Inc.
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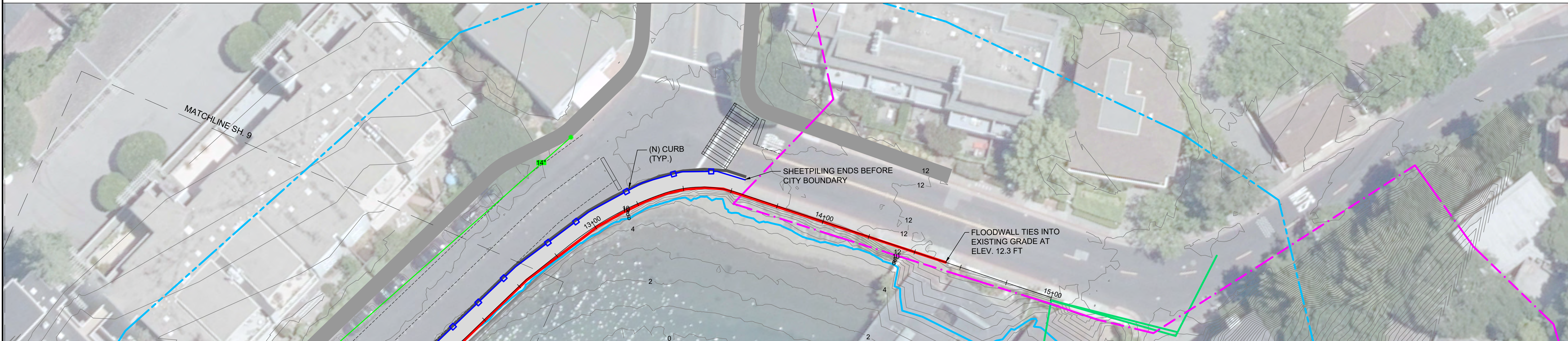
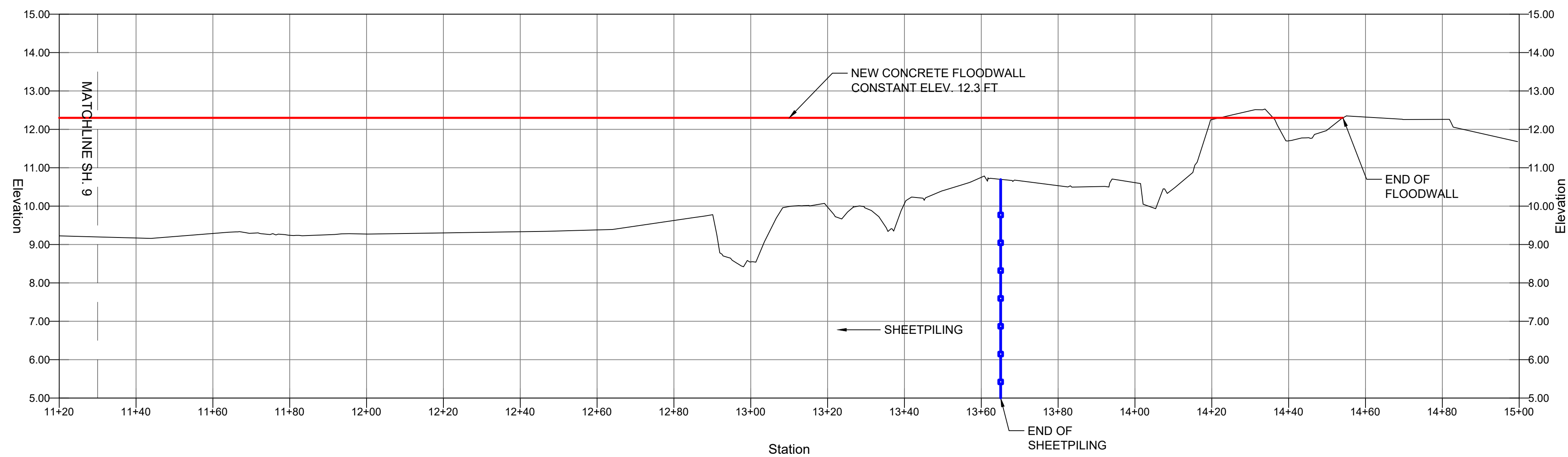
BELVEDERE LAGOON
 COASTAL LEVEE IMPROVEMENT PROJECT
 BELVEDERE, CA

**BEACH RD.
 PLAN VIEW AND PROFILE
 STA. 6+10 TO 11+30**

DWG NO.

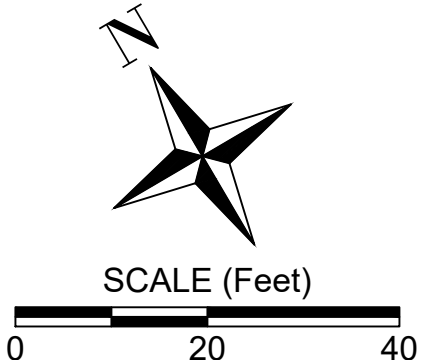
 SHEET NO.
9 of 11

NEW FLOODWALL ALIGNMENT PROFILE



LEGEND:	
	SHEET PILING
	FLOODWALL (TOP OF WALL 12.3 FT ELEV.)
	REMOVE FEATURE
	(E) STORM DRAIN
	INLAND EXTENT OF BCDC 100 FT SHORELINE BAND
	MHW (ASSUME ELEV. 5.44 FT NAVD88)
	ELEVATION LABEL
	(N) STORM WATER OVERTOPPING COLLECTION SYSTEM
	EXISTING SEAWALL
	EXISTING SIDEWALK
	NEW PATH
	GRASS/ LANDSCAPING

- NOTES:**
- VERTICAL DATUM: NAVD88.
 - HORIZONTAL DATUM: NAD83.



Attention:

 If this scale bar does not measure 1" then drawing is not original scale.

NO.	DATE	ISSUE/REVISION	APP
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Stetson Engineers Inc.
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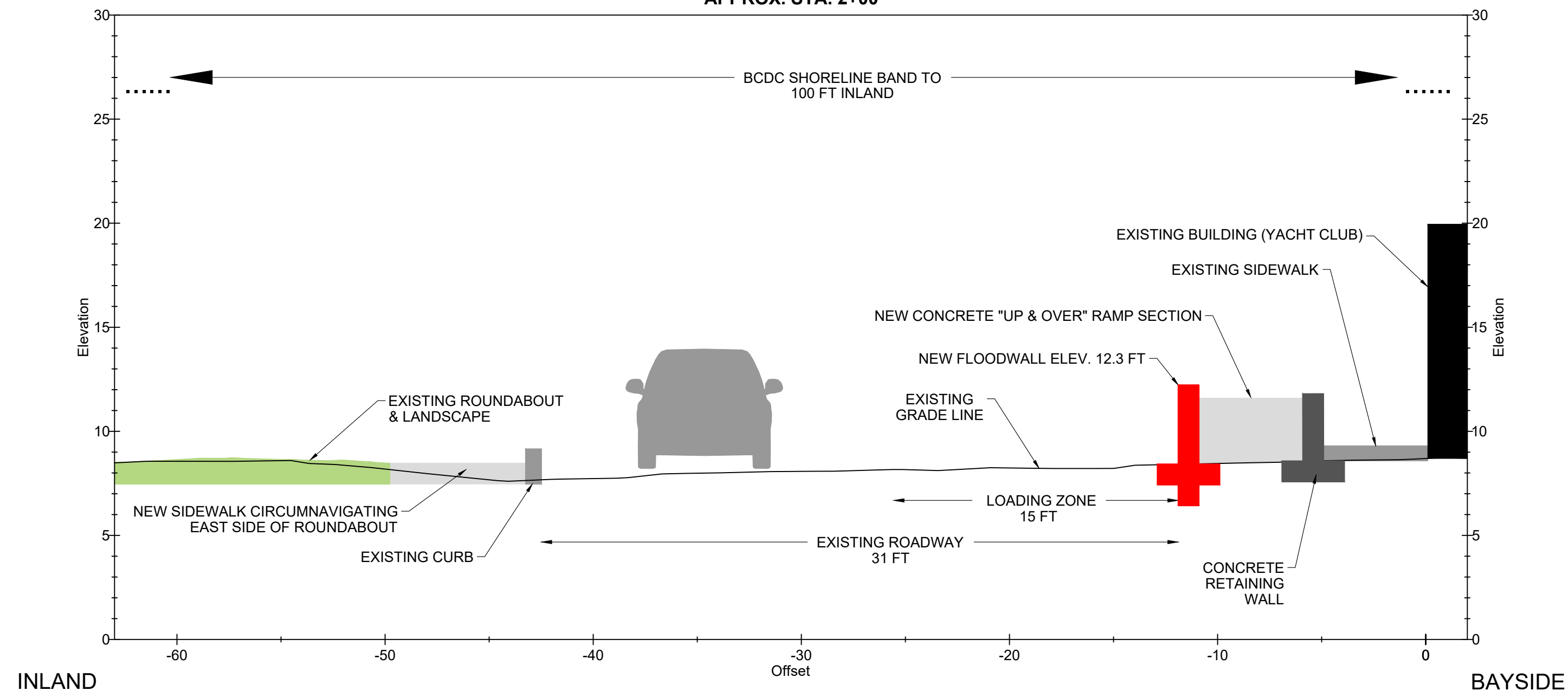
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BELVEDERE LAGOON
 COASTAL LEVEE IMPROVEMENT PROJECT
 BELVEDERE, CA

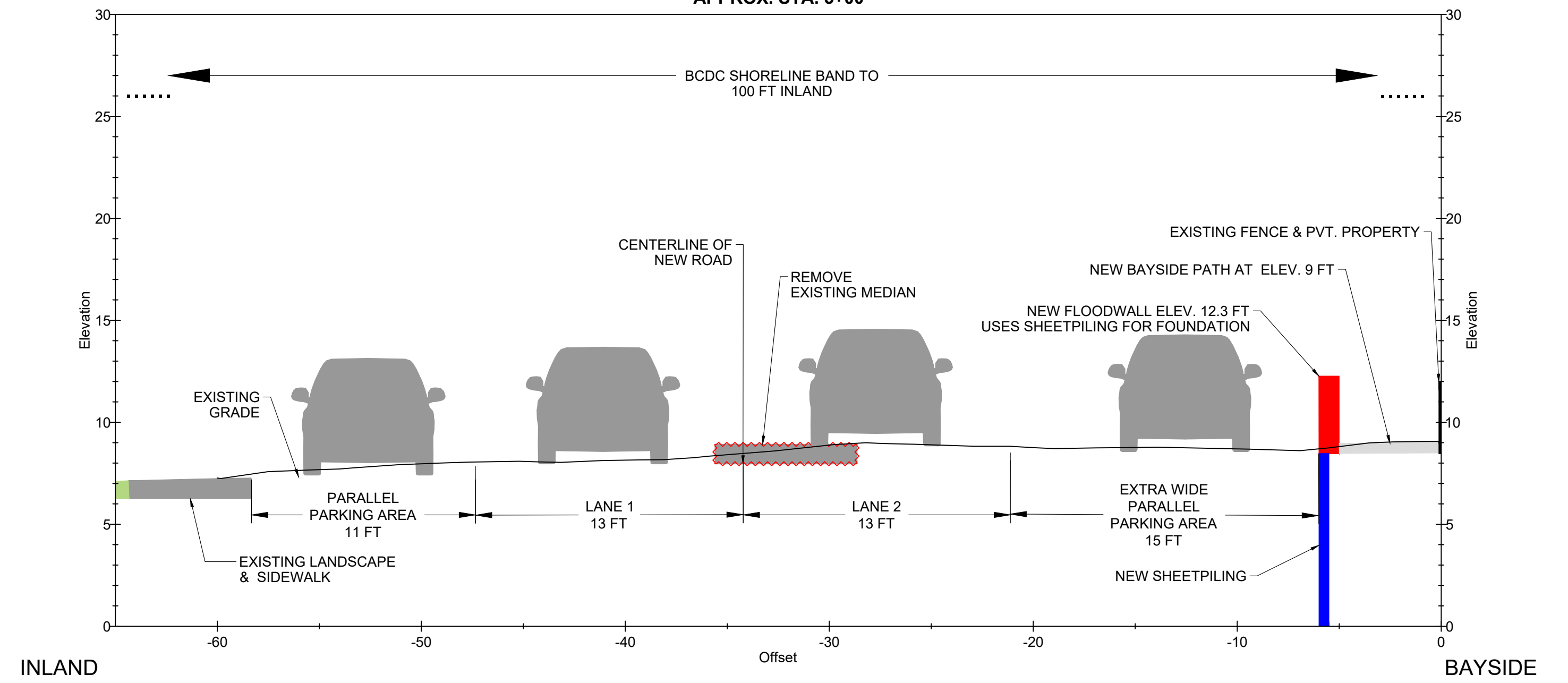
BEACH RD.
 PLAN VIEW AND PROFILE
 STA. 11+30 TO 15+00

DWG NO.
 SHEET NO.
 10 of 11

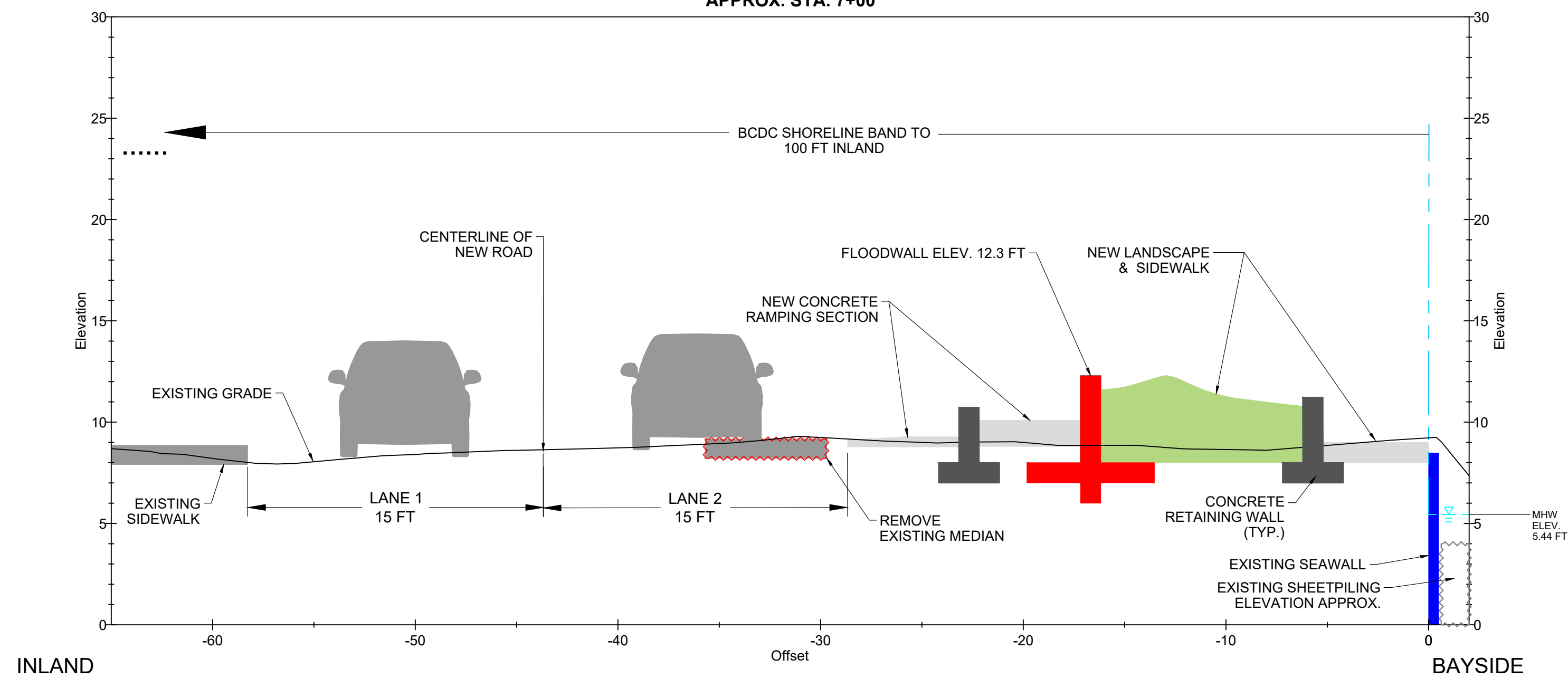
**SECTION A (TYP.)
APPROX. STA. 2+00**



**SECTION B (TYP.)
APPROX. STA. 5+00**



**SECTION C (TYP.)
APPROX. STA. 7+00**



LEGEND:

EXISTING GRADE BASED ON 2010 LIDAR



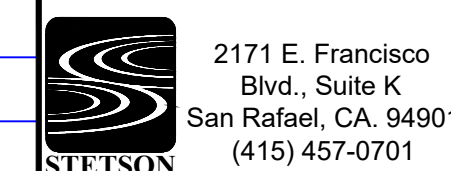
Attention:



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NO.	DATE	ISSUE/REVISION	APP

Stetson Engineers Inc.



Project Number: 2364
Date: October 26, 2021

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Checked:

Drawn: L.S.

Approved:

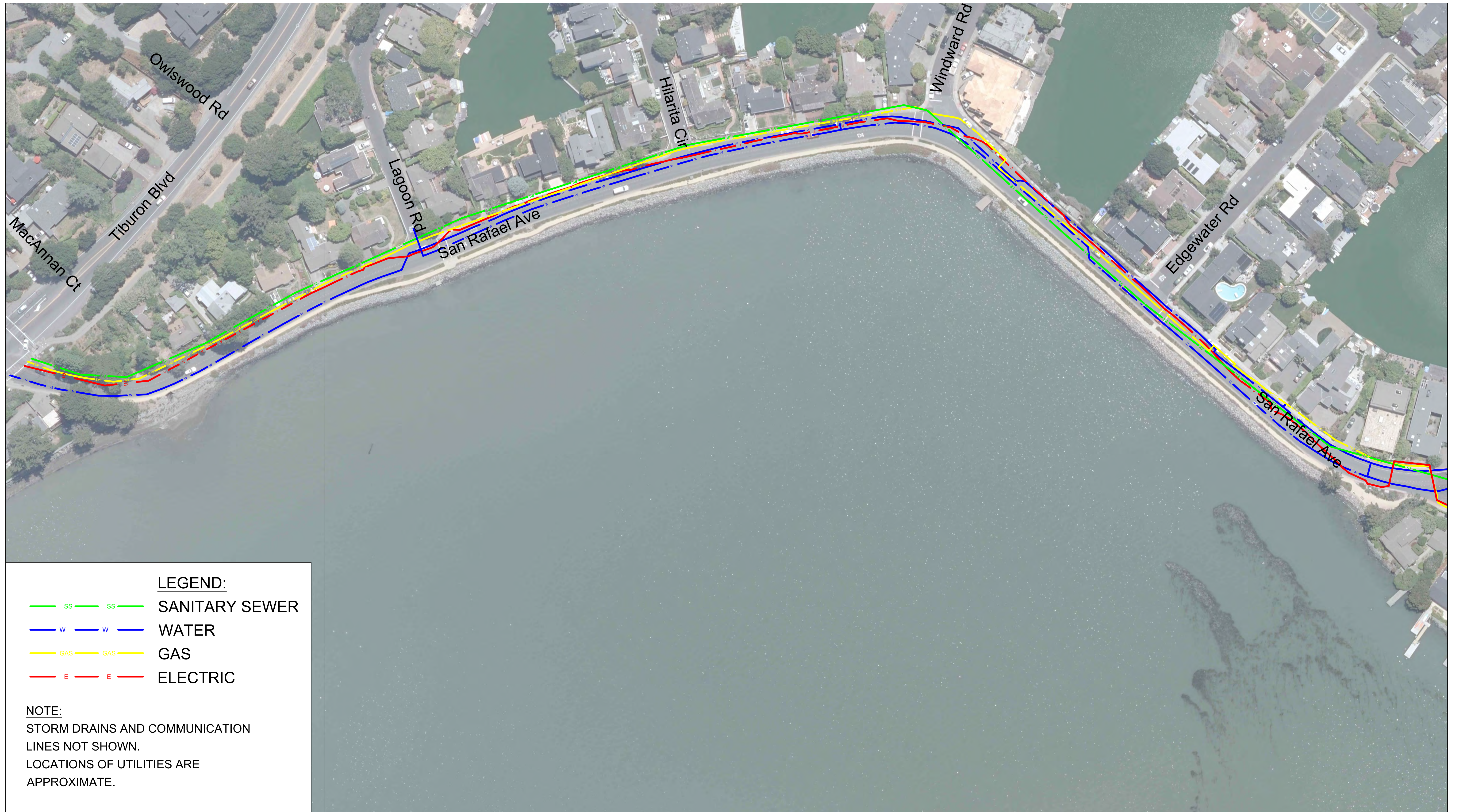
DRAFT

BELVEDERE LAGOON
COASTAL LEVEE IMPROVEMENT PROJECT
BELVEDERE, CA

BEACH RD.
TYPICAL CROSS SECTIONS

DWG NO.

SHEET NO.
11 of 11

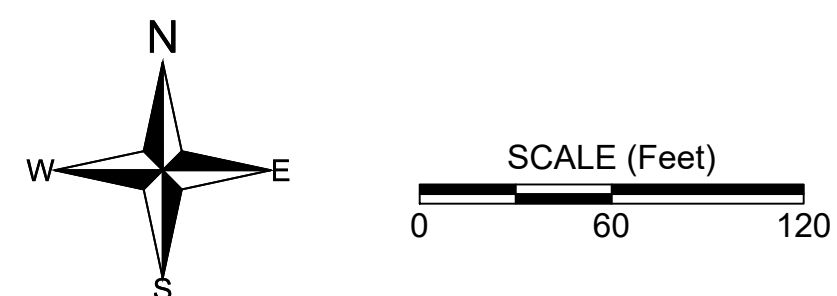


LEGEND:

- SS — SS — SANITARY SEWER
- W — W — WATER
- GAS — GAS — GAS
- E — E — ELECTRIC

NOTE:
 STORM DRAINS AND COMMUNICATION
 LINES NOT SHOWN.
 LOCATIONS OF UTILITIES ARE
 APPROXIMATE.

SOURCE: SUBTRONICS, 2019



DATE: JULY 23, 2020

JN: 2364

FIGURE 4A
SAN RAFAEL AVE
EXISTING UTILITY MAINLINES
PLAN VIEW



LEGEND:

	SS		SANITARY SEWER
	W		WATER
	GAS		GAS
	E		ELECTRIC

NOTE:
 STORM DRAINS AND COMMUNICATION LINES NOT SHOWN.
 LOCATIONS OF UTILITIES ARE APPROXIMATE.

SOURCE: SUBTRONICS, 2019

N
 W —+— E
 S

SCALE (Feet)
 0 — 40 — 80



DATE: JULY 23, 2020 | JN: 2364

**FIGURE 4B
 BEACH ROAD
 EXISTING UTILITY MAINLINES
 PLAN VIEW**





Alt 1.

WALL 11.9 TOP



Alt 1 - 11.9 Top of Wall

- Maintains approximate current street grade
- 2% slope from clubhouse door to sidewalk
- Moves ramp to west to allow access to service gates
- Relocates drop-off located at base of ramp

