City of Del Mar
Agenda Report

TO: Honorable Mayor and City Council Members

FROM: Clem Brown, Assistant City Manager
Via Ashley Jones, City Manager

DATE: April 17, 2023

SUBJECT: Coastal Connections Conceptual Planning Study Final Report, Public Feedback on Draft Design Concepts, and Recommendations for Further Evaluation

REQUESTED ACTION/RECOMMENDATION:
Receive the Final Coastal Connections Conceptual Planning Study (Attachment A) and a presentation from the San Diego Association of Governments (SANDAG) on the public comment period for the draft design concepts and provide feedback regarding SANDAG's proposal to advance the top three (3) concept designs for further evaluation.

BACKGROUND
In January 2021, the City Council executed a Memorandum of Understanding (MOU) with SANDAG and North County Transit District (NCTD) to implement a feasibility study of potential pedestrian access improvements in the coastal railroad corridor along the Del Mar Bluffs.

The Coastal Connections Conceptual Planning Study (Planning Study) began in June 2021 and was led by SANDAG and lead consultant WSP in close coordination with the City of Del Mar, NCTD and the California Coastal Commission (Coastal Commission). The purpose of the study is to assess the opportunities and constraints of potential pedestrian access improvements between Coast Boulevard and Torrey Pines State Beach, a 1.6-mile section of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor situated among the coastal bluffs.

The Planning Study objectively evaluates the opportunities and constraints of a range of potential pedestrian access improvements including lateral trails, rail crossings, and beach access points at several possible locations.

On December 5, 2022, the City Council received a detailed briefing from SANDAG and lead consultant WSP on a draft of the Planning Study (Attachment B). The presentation included information on the study's stakeholder engagement efforts, mitigation requirements for the Del Mar Bluffs Stabilization Project 5, SANDAG's long-term plan to relocate the railroad off

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City Council Action:

IT WAS MOVED BY COUNCILMEMBER GAASTERLAND, SECONDED BY COUNCILMEMBER DRUKER TO MOVE FORWARD WITH THE FOLLOWING CONCEPT DESIGNS FOR FURTHER EVALUATION: 1) NORTH/SOUTH TRAIL WITH FENCING ONLY FOR FALL PROTECTION WITH NO CHAIN LINK FENCING ALONG THE TRAIL; 2) UNDERPASS (RAMPS/STEPS) AT 7TH/8TH STREET; AND 3) OVERPASS AT 10TH STREET IF FEASIBLE. (VOTE 4-1 WITH COUNCILMEMBER WORDEN OPPOSED)

the bluffs, and a comprehensive overview of seven (7) design concepts for potential pedestrian access improvements along the Del Mar bluffs. The seven candidate concepts included in the Planning Study that were advanced to conceptual designed based on multiple evaluation criteria include:

1. North-South Trail (east of railroad)
2. At-Grade Crossing at 11th Street with Ramps and Stairs to Beach
3. At-Grade Crossing at 11th Street with Stairs to Beach
4. At-Grade Crossing at 7th-8th Street with Ramps to Beach
5. At-Grade Crossing at 7th-8th Street with Stairs to Beach
6. Undercrossing at 7th-8th Street with Ramps to Beach
7. Undercrossing at 7th-8th Street with Stairs to Beach

The December 2022 presentation and publication of the draft Planning Study and initial design concepts kicked off an extensive public comment period. In addition to the Council briefing on December 5, 2022, the project team hosted a community open house at the Del Mar Town Hall on December 7, 2022, to receive comments and feedback from the public. The draft Planning Study was made available on the SANDAG and City of Del Mar websites for a written comment period through January 31, 2023. The project team also presented the initial design concepts to SANDAG's Social Services Transportation Advisory Council (SSTAC) on January 17, 2023, to receive focused input on the accessibility features of the potential pedestrian access improvements. Finally, SANDAG hosted a booth at the Del Mar Farmers Market on January 28, 2023, to get more input on the concepts and answer questions about the study.

DISCUSSION/ANALYSIS:

Now that the public comment period is over and the grant-funded consultant task order exhausted, SANDAG and lead consultant WSP have finalized the Coastal Connections Conceptual Planning Study. A copy of the final report is included as Attachment A. Because the report does not recommend one or more solutions as the preferred options for potential pedestrian access improvements, no significant changes were made to the report based on the public comment period. Instead, the final Planning Study presents seven feasible concepts, including the expected benefits, costs, and potential tradeoffs of each.

Representatives from SANDAG will provide a detailed briefing on the results of the public comment period for the Planning Study at the April 17, 2023, City Council meeting, and will document any input from the Council or the public. The presentation slides summarizing the Planning Study and the public's feedback on the initial concept designs will be made available as a staff red dot communication after the agenda packet is distributed.

The results of the public comment period indicated strong support for the North-South Trail design concept. This concept is also supported by the Coastal Commission, and is a conditional mitigation requirement for SANDAG's Del Mar Bluffs Stabilization Project 5 Project; therefore, it is SANDAG's recommendation to advance this concept for further evaluation and discussions with the City of Del Mar and NCTD.

During the beginning of the public comment period there was initial support and a preference for the At-Grade Crossing at 11th Street design concept. However, support for this concept declined throughout the comment period due to noise concerns associated with the design's required audible warning devices and train horns. According to feedback received, the noise concerns associated with an at-grade crossing shifted public preference to the Undercrossing at 7th-8th Street design concept. While this design concept would result in significant physical impacts to the bluffs, and is the costliest to construct, it would not require audible warning devices or the requirement for trains to sound their horns when passing. Furthermore, the proposed location for the undercrossing concept is in a portion of the bluff that has been previously disturbed and is not in a natural condition, which somewhat mitigates the potential physical impacts associated with the design's heavily engineered infrastructure.

Based on these findings, SANDAG recommends the North-South Trail, Undercrossing at 7th-8th Street, and At-Grade Crossing at 11th Street design concepts be advanced for further analysis and discussions with the City of Del Mar and NCTD. Ultimately, agreement will be needed between all three agencies on which of these concepts to bring forward for environmental clearance and preliminary engineering. Per the Coastal Commissions' consistency certification for the Del Mar Bluffs Stabilization Project 5, SANDAG is required to construct a north-south trial from Seagrove Park to 4th Street, a California Public Utilities Commission-approved railroad crossing near 7th Street or 11th Street, and one accessway to the beach. The three (3) design concepts SANDAG is recommending for further evaluation are supported by City staff, and will ultimately led to a project to satisfy the mitigation requirements.

FISCAL IMPACT:
There is no fiscal impact or action to be taken by the City Council related to this agenda item.

ENVIRONMENTAL IMPACT:
The proposed City Council action does not constitute a "project" under the definition set forth in California Environmental Quality Act (CEQA) Guidelines Section 15378 because it will not have a potential to result in a direct or indirect physical change in the environment and is, therefore, not subject to CEQA. No further action under CEQA is required.

NEXUS TO CITY COUNCIL GOALS AND PRIORITIES:
This item is a Tier 1 special project on the City Council's list of goals and priorities for Fiscal Year 2022-2023.

ATTACHMENTS:
Attachment A – Final Coastal Connection Conceptual Planning Study
Attachment B – December 5, 2022, Presentation on Initial Design Concepts

Coastal Connections Conceptual Planning Study

SAN DIEGO ASSOCIATION OF GOVERNMENTS
CITY OF DEL MAR
NORTH COUNTY TRANSIT DISTRICT
CALIFORNIA COASTAL COMMISSION

March 7, 2023

CONTENTS

1. STUDY PURPOSE & OVERVIEW

This Coastal Connections Conceptual Planning Study assesses the opportunities and constraints of potential pedestrian access improvements for a 1.6-mile section of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) Railroad Corridor in the cities of Del Mar and San Diego.

This study followed the three-phase process shown in Figure 1-1 and described throughout this report, which is organized into five sections:

- Section 1 summarizes the study's purpose, background, study area, and stakeholder engagement activities.
- Section 2 reviews the study area's existing conditions and context.
- Section 3 establishes evaluation criteria and screens a wide range of potential access improvements.
- Section 4 describes and evaluates seven selected design concepts including a north-south trail and railroad crossings, with draft conceptual plans and summaries of expected benefits, costs, and potential tradeoffs of each concept.
- Section 5 discusses implementation considerations and next steps.

Figure 1-1: Study Process

BACKGROUND

Developed jointly by the San Diego Association of Governments (SANDAG), the City of Del Mar, the North County Transit District (NCTD), and the California Coastal Commission (CCC), this study identifies potential formal pedestrian connectivity improvements in and around the railroad corridor. It was initiated as a condition of the 2019 CCC approval of SANDAG's Del Mar Bluffs Stabilization 4 project. CCC then approved the Del Mar Bluffs Stabilization 5 project in 2022 with a condition requiring construction of a north-south trail, a railroad crossing approved by the California Public Utilities Commission (CPUC), and a beach accessway with the consensus of the partner agencies above. Appendix A contains both CCC staff reports containing additional details.

Currently, many pedestrians enter railroad property in the study area, both to cross the railroad and to walk along the bluffs. This creates safety concerns for pedestrians and risks impacting passenger and freight rail services. This study seeks to improve public safety, minimize potential conflicts between railroad operations and pedestrian access, and minimize impacts to existing coastal resources including coastal bluffs. The results are intended to help inform the selection of specific projects, their design elements, and a regulatory strategy for successful implementation.

As described in Section 2, a related SANDAG study is focused on the long-term relocation of the railroad outside the study area, which would create additional opportunities for pedestrian access.

STUDY AREA

Shown in Figure 1-2 and Figure 1-3, the study area consists of about 1.6 miles of high coastal bluff along the southwestern edge of the City of Del Mar. It is bounded by two existing roadway crossings that provide both vehicular and pedestrian access:

- **Coast Boulevard (Mile Post 244.1):** Roadway at-grade crossing near Seagrove Park and Powerhouse Park. Contains a wayside horn as part of a train quiet zone.
- **North Torrey Pines Road (MP 245.7):** Roadway overcrossing near Torrey Pines State Beach and Los Peñasquitos Lagoon.

Figure 1-2: Study Area Map

Figure 1-3: Study Area Photo

STAKEHOLDER ENGAGEMENT

Appendix B contains the study outreach plan, containing key messages and further details on the activities summarized below. It was developed in collaboration with SANDAG's Public Information Office.

Project Development Team (PDT)

The core project team consisted of SANDAG and consultants WSP and Villa Civil. To help monitor and guide the core project team, the project also included a Project Development Team (PDT) that met, generally monthly, throughout the entire study. The PDT included staff from SANDAG, the City of Del Mar, NCTD, and CCC.

Additional Stakeholders

The project team also met with the following stakeholder agencies and groups to receive additional input and feedback on potential mobility needs and design concept reviews:

- City of San Diego
- California Public Utilities Commission (CPUC)
- California State Parks
- Los Peñasquitos Lagoon Foundation

Del Mar City Council

The project team briefed the Del Mar City Council on October 4, 2021, and December 5, 2022, to receive input from the City Council and the public.

Community Open House & Public Comment Period

The project team and the City of Del Mar hosted a community open house event on December 7, 2022. An accompanying “virtual” open house was available online at the SANDAG and City of Del Mar websites for an eight-week comment period through January 31, 2023, featuring the same materials presented at the in-person open house.

Appendix B contains the comments received during the public comment period, including summary charts, the full comment database, and initial responses from the project team.

SANDAG Social Services Transportation Advisory Council (SSTAC)

The project team presented to the SSTAC on January 17, 2023, to receive feedback on the accessibility features of the potential conceptual designs.

2. EXISTING CONDITIONS ASSESSMENT

The existing conditions assessment is organized into the following sections:

- Physical conditions
- Community mobility
- Railroad operations
- Related projects in study area
- Prior recommendations for pedestrian access and bluff preservation

In addition to the maps contained in this report, the project also includes an online basemap showing the features described in this report and recent aerial imagery. Table 2-1 lists the key documents consulted by the project team during the study.

Table 2-1: Literature Review List

Author	Document	Year
CCC	Staff Report, Del Mar Bluffs Stabilization Project 5 Consistency Certification *(Appendix A)*	2022
CCC	Staff Report, Del Mar Bluffs Stabilization Project 4 Consistency Certification *(Appendix A)*	2019
CCC	Sea Level Rise Coastal Adaptation Planning Guidance for Critical Infrastructure	2021
CCC	Sea Level Rise Policy Guidance	2018
CPUC	General Order 75-D: Standards for Warning Devices for At-Grade Highway-Rail Crossings	2006
CPUC	General Order 164-E: State Safety Oversight of Rail Fixed Guideway Systems	2018
City of Del Mar/CCC	Local Coastal Program (LCP) Land Use Plan	1993-2022
City of Del Mar/CCC	LCP Implementing Ordinances	2001-2022
City of Del Mar/TRAC	The Railroad Advisory Committee (TRAC) Study	1995
City of Del Mar	Community Plan (General Plan) incl. 2019 Safety Element addressing bluffs & railroad	1976-2021
City of Del Mar	Climate Action Plan & 2020 Monitoring Report	2016-2020
City of Del Mar	Sea Level Rise Adaptation Plan *(not part of certified LCP)*	2018
City of Del Mar	Vulnerability & Risk Assessment incl. Addendum *(not part of certified LCP)*	2016-2018
City of Del Mar	Landscape Development Guidelines	1988
City of Del Mar	Parking Master Plan	2000
City of Del Mar	Vision 2020	2003

Author	Document	Year
City of Del Mar	Downtown Parking Management Plan	2015
City of Del Mar	Design Guidelines	2017
City of Del Mar	Complete Streets Policy	2017
City of Del Mar	Public Paths and Trails Map	2020
City of Encinitas	Montgomery Avenue Noise Study Wayside Horn Demonstration Acoustic Monitoring Report *(Appendix F)*	2017
Federal Railroad Administration	Train Horn Rule (49 CFR Part 222)	2005
LOSSAN Working Group	Final Report from the LOSSAN San Diego Regional Rail Corridor Working Group	2021
NCTD	Trespasser Risk Reduction Study & Conceptual Fencing Plan (WSP)	2021
NCTD	Geotechnical Review of Proposed Security Fencing – Del Mar Bluffs (Leighton)	2021
NCTD	Right-of-Way Fencing at Del Mar Draft Plans	2021
NCTD	Fence & Signage Layout (KTUA)	2021
NCTD	Board Policy No. 11: Real Estate	2012-2021
NCTD	Board Policy No. 18: Railroad Crossing Quiet Zones and Wayside Horn Systems	2021-2022
NCTD/SANDAG	Design Criteria for the LOSSAN Corridor in San Diego County	2017
SANDAG	Del Mar Bluffs Geotechnical Study (Leighton)	2001
SANDAG	Geotechnical Design Report for DMB4 (Leighton)	2018
SANDAG	Geotechnical Design Report for DMB5 (Leighton)	2020-2021
SANDAG	Del Mar Bluffs Stabilization 5 Project Study Report & 100% Plans	2020-2022
SANDAG	Del Mar Bluffs Stabilization 6 Project Study Report & 30% Plans	2020-2022
SANDAG	Infrastructure Development Plan for LOSSAN Rail Corridor in SD County	2018
SANDAG	San Diego Forward: The Regional Plan	2021
SANDAG/Caltrans	North Coast Corridor PWP/TREP	2014-2016
U.S. Access Board	ADA and ABA Accessibility Standards	2010-2014
U.S. Army Corps of Engineers	Encinitas-Solana Beach Coastal Storm Damage Reduction Project Integrated Feasibility Study	2012

PHYSICAL CONDITIONS

As shown in Figure 2-1, the study area is located primarily in the “South Beach” area of the City of Del Mar characterized by tall bluffs along the coast. The railroad right-of-way is a relatively flat, graded area mid-bluff between the western coastal bluffs and the eastern upper bluffs. The area contains a mix of natural bluff landforms and physical infrastructure of varying ages.

Figure 2-1: Study Area Context

Environmental & Geotechnical

The study area's western coastal bluffs are subject to wave action and experience routine erosion—typically through sudden, episodic events rather than continuously—at an average retreat rate of about 0.4-0.6 feet per year. The surface is underlain by a combination of fill soils and a sequence of sedimentary formational units:

- **Bay Point Formation (Quaternary):** This upper formation is reddish-brown, weakly indurated, highly erodible, soft sandstone and siltstone with moderate permeability.
- **Del Mar Formation (Eocene):** This lower formation is light gray to olive green, slightly fissile, cemented siltstone and claystone with very low permeability.
- **Torrey Sandstone Formation (Eocene):** Limited exposures along the southern portion of the study area.

Figure 2-2 shows a typical bluff face on which both the Bay Point and Del Mar formations are visible. In general, the Bay Point Formation is potentially more erodible than the Del Mar Formation. However, the Del Mar Formation has greater exposure to adverse wave attack and groundwater seepage.

Fronting the lower western bluffs is beach sand covering a wide, wave-cut platform in the Del Mar and Torrey Sandstone formations. The beach sand rises to an elevation of about +10 feet at the bluff toe. However, dynamic coastal shoreline processes greatly influence beach elevation and width on a seasonal basis. The bluff materials also are subject to weathering and erosional processes.

A more comprehensive description of the site surface conditions, geologic materials and groundwater conditions are available in the 2001 and 2018 geotechnical studies published by SANDAG and developed by Leighton (details in Table 2-1).

Figure 2-2: Bay Point Formation (Reddish) atop Del Mar Formation (Grayish-Green)

Landslides & Existing Infrastructure

The bluffs have been altered by a combination of landslides and built infrastructure. These activities have both exacerbated and controlled ground surface erosion as summarized below.

Landslides: Numerous landslides of widely variable sizes are located along the lower bluffs west of the railway tracks. These landslides have mainly been triggered by natural processes, primarily erosional forces from direct high wave attack, precipitation runoff, and groundwater seepage through the bluff face.

Seawalls: Several unstable landslide areas or filled zones along the coastal bluff toe have been mitigated with the use of engineered seawalls of various types, heights, and effectiveness. Recent railroad-related stabilization projects (see “Related Projects in Study Area” below) have installed heavy-duty galvanized steel soldier beams with drilled-shaft concrete foundations socketed into the competent Del Mar Formation, with pressure-treated wood lagging between the beams (Figure 2-3). Some older seawalls in the study area use reinforced concrete. The seawalls have been backfilled with both conventional compacted fill soils and soil-cement treated materials, with variable performance in these backfill areas.

Drainage: Numerous drilled horizontal drains of varying size and effectiveness have been installed within various landslide masses and just above the horizontally bedded contact of the Bay Point and Del Mar formations. Other relevant site features include networks of surface and subsurface drainage improvements such as stormwater inlets, conveyance pipes, concrete-lined channels, and discharge outlets at beach level.

Coastal Bluff Stabilization: As described in “Related Projects in Study Area” below, coastal bluff stabilization features include long intermittent series of deep, narrowly spaced, large diameter reinforced concrete drilled shafts along the west side of the railroad, with and without long tieback anchors. Additional, localized retention systems exist throughout the study area.

Figure 2-3: Drainage Infrastructure and Newly Installed Soldier Pile Wall

COMMUNITY MOBILITY

Outside the railroad right-of-way, the bluffs are designated as an open space location that is used by pedestrians for passive recreation and access to the adjacent beach and coastline. These unique coastal resources are a major attraction for both residents and visitors. Any new coastal access points in the community will attract that demand, drawing from the adjacent coastal access areas shown in Figure 2-1.

This section is organized into the following sub-sections:

- Pedestrian and roadway network
- Bluff usage: north-south movement
- Bluff usage: east-west movement
- Parking

Pedestrian & Roadway Network

As shown in the maps in Figure 1-2 and Figure 2-1, the study area is characterized by a grid-like roadway network east of the railroad corridor, with local roads carrying relatively low traffic volumes west of Camino Del Mar. Most of these local roads lack sidewalks, with pedestrian traffic typically using the sides of the roadways and sharing with low-speed, low-volume vehicular traffic.

The study area is largely comprised of the “South Beach” section of the Del Mar coast, with the railroad corridor and surrounding bluffs presenting greater challenges to coastal access than other nearby beaches. The adjacent coastal areas—"North Beach” and “Main Beach” in Del Mar, and Torrey Pines State Beach in San Diego—are both characterized by relatively low elevations and ample beach access points.

Bluff Usage: North-South Movement

North-south informal pedestrian activity in the study area is characterized by several common behaviors, as described below and mapped in Figure 2-5 through Figure 2-8 on the following pages and in the study’s online basemap.

East of the railroad, popular movement patterns include:

- **11th Street to 10th Street:** Concrete drainage channel
- **10th Street to 8th Street:** Unimproved trail
- **8th Street to 7th Street:** Unimproved trail
- **7th Street to Sea Cliff Way:** Decomposed granite area alongside concrete drainage channel, used by pedestrians as an informal trail (Figure 2-4)
- **Sea Cliff Way to 4th Street:** Unimproved trail alongside concrete drainage channel
- **4th Street to ~700 feet South of 4th Street:** Unimproved trail extending to southern bluff edge

West of the railroad, popular movement patterns include:

- **Powerhouse Park to ~15th Street:** Unimproved trail along bluff edge
- **~15th Street to 11th Street:** Some pedestrian movement along rail bed
- **11th Street to 8th Street:** Unimproved trail along bluff edge
- **8th Street to 7th Street:** Some pedestrian movement along rail bed
- **7th Street to North Torrey Pines Road:** Unimproved trail along bluff edge

Figure 2-4: Decomposed Granite Adjacent to Drainage Facility, South of 7th Street

Bluff Usage: East-West Movement

East-west pedestrian activity in the study area is characterized by several common behaviors, as described below and mapped in Figure 2-5 through Figure 2-8 on the following pages and in the study's interactive online basemap:

- **East of Railroad:** Numerous streets and alleys end at the railroad right-of-way, providing multiple potential access points for pedestrians attempting to cross the corridor. The most common access points include 11th Street and 8th Street.
- **West of Railroad:** Steep bluffs prevent much east-west movement west of the railroad. However, over time pedestrians have made informal trails to access the beach near 11th Street, 8th Street/7th Street, and North Torrey Pines Road.

Parking

The study area contains the following parking resources:

- **On-Street Parking:**
  - On-street parking on most public roadways, including all numbered streets ending at the railroad right-of-way
  - No parking in alleys, which include all studied locations with "Lane" or "Way" suffixes (Sea Orbit Lane, Melanie Way, etc.)
- **Off-Street Parking:** The City of Del Mar has identified existing off-street parking areas available to the public at the following locations, mapped in in Figure 2-5 and Figure 2-6:
  - **Civic Center:** 1-2 blocks from 10th Street and 11th Street
  - **Del Mar Shores Park:** 1-2 blocks from 7th Street and 8th Street


Coastal Connections Conceptual Planning Study
Nov 2022
1 of 4
Figure 2-5
Coast Blvd Study Area Boundary
0 100 200 Feet
Powerhouse Park
Sea Grove Park
Camino del Mar
15th St
Parrish Ln
Sundancer
Maiden Ln
14th St
Stratford Ct
Pacific Ln
Ocean Ave
12th St
Lois Ln
Sea Orbit Ln
11th St
Civic Center
Penny Ln
San Diego Northern Railway
Pacific Ocean
Key Features
Railroad Study Area
Existing Roadway Crossing & Study Area Boundary
Potential New Pedestrian Crossing
Common Pedestrian Movement
City Boundary
Land Ownership
Railroad
City of Del Mar
State of California
Street Right-of-Way
Private


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2 of 4
Figure 2-6
0 100 200 Feet
11th St
Penny Ln
Stratford Ct
10th St
Civic Center
Melanie Way
9th St
Camino del Mar
Del Mar Shores Park
Shippey Ln
8th St
8th St
Little Orphan Aly
Hotel Indigo-San Diego
7th St
7th St
Sherrie Ln
Hotel Indigo-San Diego del Mar
6th St
Pacific Ocean
Key Features
Railroad Study Area
Existing Roadway Crossing & Study Area Boundary
Potential New Pedestrian Crossing
Common Pedestrian Movement
City Boundary
Land Ownership
Railroad
City of Del Mar
State of California
Street Right-of-Way
Private


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Figure 2-7
0 100 200 Feet
Stratford Ct
4th St
4th St
Sea Forest Ct
San Diego Northern Railway
Stratford Ct
Camino del Mar
Dolphin Cove Ct
Del Mar Canyon Preserve
Pacific Ocean
Key Features
Railroad Study Area
Existing Roadway Crossing & Study Area Boundary
Potential New Pedestrian Crossing
Common Pedestrian Movement
City Boundary
Land Ownership
Railroad
City of Del Mar
State of California
Street Right-of-Way
Private

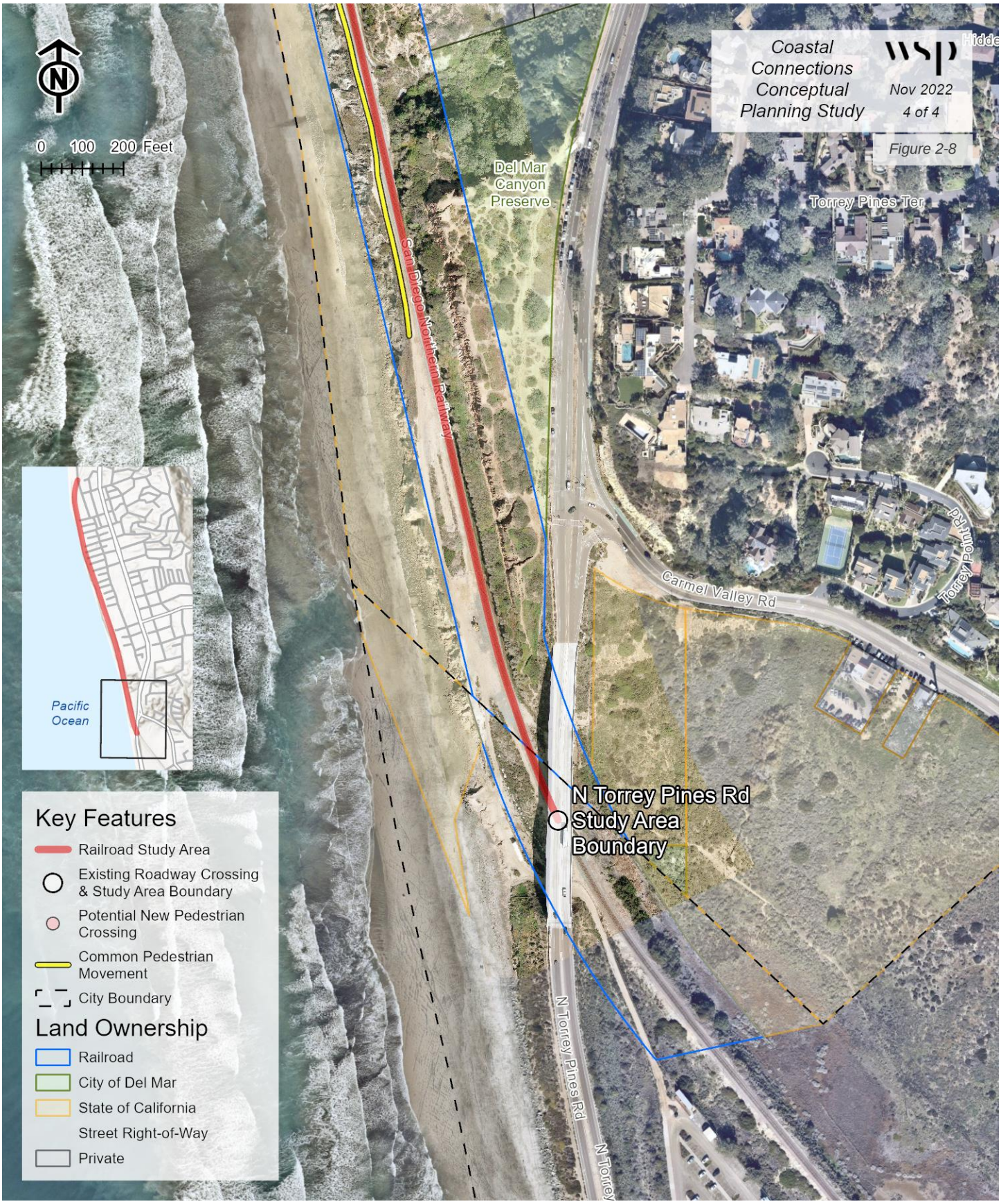
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Figure 2-8
0 100 200 Feet
Del Mar Canyon Preserve
San Diego Northern Railway
Torrey Pines Ter
Carmel Valley Rd
Torrey Pointe Pl
N Torrey Pines Rd
Study Area Boundary
N Torrey Pines Rd
N Torrey
Pacific Ocean
Key Features
Railroad Study Area
Existing Roadway Crossing & Study Area Boundary
Potential New Pedestrian Crossing
Common Pedestrian Movement
City Boundary
Land Ownership
Railroad
City of Del Mar
State of California
Street Right-of-Way
Private

RAILROAD OPERATIONS

The LOSSAN corridor is the nation's second-busiest intercity passenger railroad corridor and is rapidly growing. The study area's 1.6-mile section is served by the following operators:

- **Intercity Passenger Service:** Amtrak Pacific Surfliner connecting San Luis Obispo, Los Angeles, and San Diego.
- **Commuter Rail Passenger Service:** NCTD COASTER connecting Oceanside and San Diego (Figure 2-9).
- **Freight Service:** BNSF and subcontractor Pacific Sun, mostly operating in the overnight hours when passenger services are not running.

The study area's 1.6-mile section is single-tracked, with maximum authorized speeds of 50 mph (north of MP 244.6) and 80 mph (south of MP 244.6). No double-tracking is planned in this section due to physical constraints. The nearest passenger stations are Solana Beach Station (2.3 miles north) and Sorrento Valley Station (3.5 miles south).

As shown in Table 2-2, the corridor is expected to accommodate a significant increase in passenger trains in the future, with service frequencies improving over time as capacity-enhancing capital projects are completed throughout the corridor.

Table 2-2: Passenger Service Frequency (Minutes) in Peak (PK) & Off-Peak (OP) Periods

	Existing	LOSSAN Optimization Study Goals		
Service	2022	Near Term	Mid Term	Long Term
Intercity (Amtrak)	60 PK / 60 OP	60 PK / 60 OP	60 PK / 60 OP	60 PK / 60 OP
Commuter (NCTD)	40 PK / 60 OP	20 PK / 60 OP	20 PK / 20 OP	15 PK / 20 OP

Source: SANDAG; LOSSAN Rail Corridor Optimization Study (LOSSAN Rail Corridor Agency, 2021)

Figure 2-9: COASTER Train Passing Seagrove Park (NCTD)

RELATED PROJECTS IN STUDY AREA

The study area is the site of several concurrent multi-agency projects described below:

- SANDAG Del Mar Bluffs (DMB) stabilization projects
- NCTD proposed corridor fencing
- Long-term relocation of railroad

SANDAG Del Mar Bluffs (DMB) Stabilization Projects

This ongoing series of projects led by SANDAG seeks to stabilize the bluffs and protect against erosion. DMB Phase 4 was completed in 2020, and this study was initiated as mitigation for the project. Additional emergency stabilization work is currently underway south of 4th Street. DMB Phase 5 has been permitted and is expected to begin construction in 2023, and includes a condition from CCC requiring construction of a north-south trail, a railroad crossing approved by the California Public Utilities Commission (CPUC), and a beach accessway with the consensus of the relevant stakeholder agencies.

SANDAG is planning to include additional bluff stabilization elements in DMB Phase 6 which is currently in the design stage. To minimize potential conflicts with all planned bluff projects, the concepts developed in this study primarily considered the expected ultimate condition that would result following completion of DMB Phase 6.

East of the railroad, the proposed DMB Phases 5-6 contain the following key elements:

- **Seagrove Park to 10th Street:** Drainage channel and intermittent walls

West of the railroad, the proposed DMB Phases 5-6 contain the following key elements:

- **Seagrove Park to 11th Street:** Soldier pile-anchored seawall below 1.5:1 graded slope
- **8th Street to 7th Street:** Soldier pile-anchored seawall; some portions of 1.5:1 graded slope
- **4th Street to ~900 feet North of North Torrey Pines Road:** Soldier pile-anchored seawall

NCTD Proposed Corridor Fencing

NCTD is proposing to install right-of-way fencing in this section of the corridor to reduce pedestrian trespassing and associated safety incidents. The current proposed plan, dated October 2021, is available on NCTD's website. The project is currently on hold due to related litigation filed in state court and with the federal Surface Transportation Board.

Long-Term Relocation of Railroad

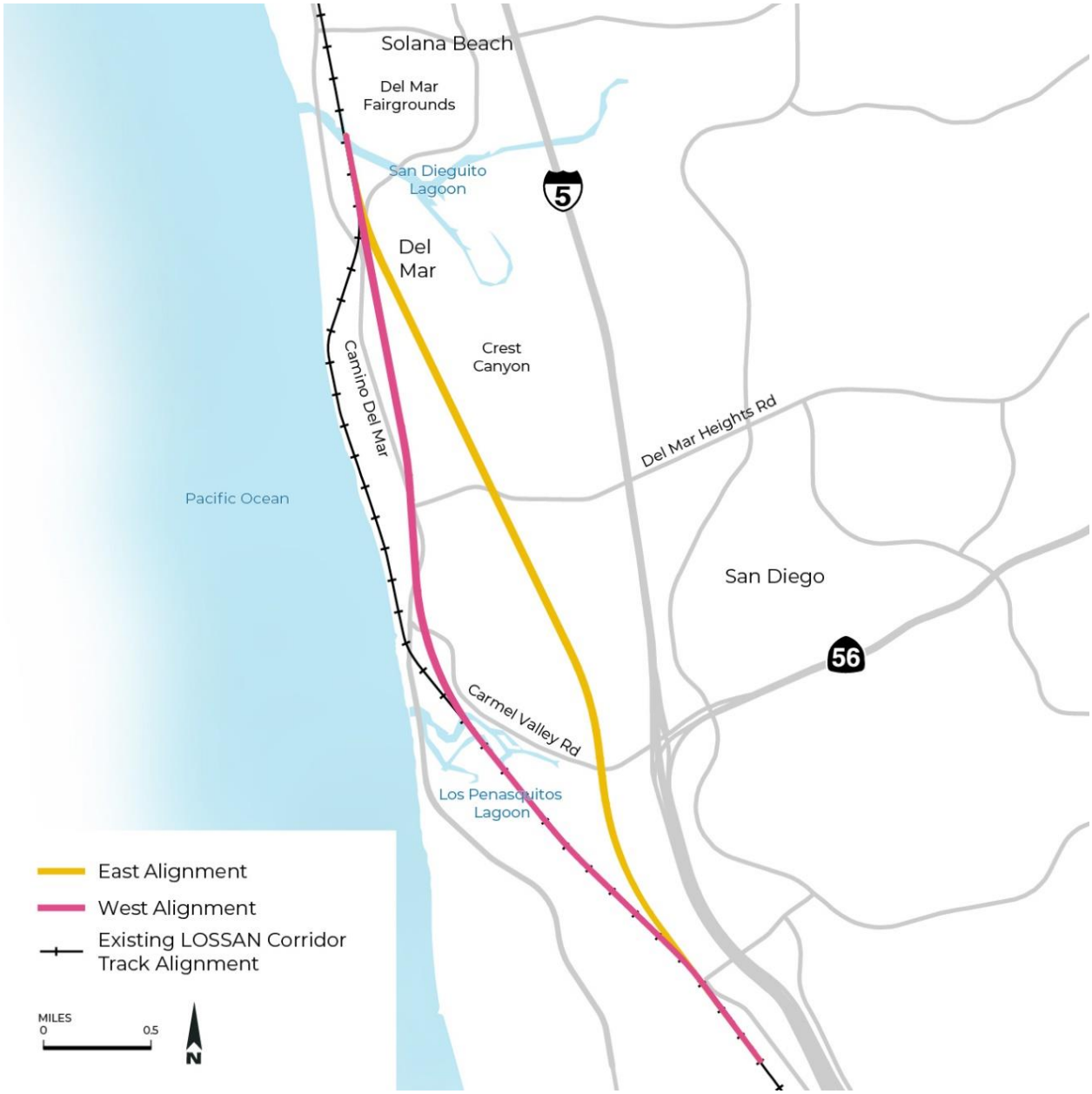
SANDAG is currently preparing the San Diego Regional Rail Alignment Study, a feasibility study for the long-term relocation of the LOSSAN corridor away from the Del Mar Bluffs. The study is expected to be completed in 2022 and is currently studying the two potential alignments shown in Figure 2-10. Additional portal locations for the proposed alignments will be examined further during the environmental phase of the rail realignment project.

The rail realignment project is included in SANDAG's *Regional Plan* for implementation by 2035. In the state budget for Fiscal Year 2022-2023, the State of California approved $300 million in new funding for the project. SANDAG expects to use the funding to complete preliminary planning and design work and then begin environmental review.

Once the railroad is relocated off the bluffs, stakeholder agencies will assess the study area's physical conditions and evaluate whether infrastructure on the bluffs may need to be removed to ensure public safety and return the bluffs to a more natural state.

The City of Del Mar's analyses of sea level rise, discussed below, recommends participation in regional efforts to relocate and remove railroad operations from the bluffs due to projected effects of sea level rise on the bluffs and existing railroad operations.

Figure 2-10: Alignment Alternatives, San Diego Regional Rail Alignment Study (SANDAG)



POLICIES & PRIOR RECOMMENDATIONS FOR PEDESTRIAN ACCESS & BLUFF PRESERVATION

The study area has been the subject of many prior plans, studies, and projects to improve pedestrian access and preserve the coastal bluffs.

City of Del Mar Community Plan (General Plan)

The City of Del Mar Community Plan, originally adopted in 1976, is the primary policy framework applicable the study area. The document identifies the "south bluff" and adjacent beach as one of five major open space areas in Del Mar and includes a goal to preserve these features intact wherever possible. The plan also contains a policy to preserve open space areas that are too hazardous to justify permanent construction.

Balancing these goals, the Community Plan also recommends improving pedestrian access to coastal resources, including via new crossings at 11th Street and 4th Street:

> *Bluffs to Beach Access – It is recommended that rights-of-way be obtained and that steps and paved paths be developed down the bluffs to the beach near Seagrove Park, 11th Street, Fourth Street, and on both sides of the mouth of the San Dieguito River.*

City of Del Mar Local Coastal Program (LCP)

As mapped in the preceding figures and the study's online basemap, most of the coastal bluffs are in parcels owned by the City of Del Mar. These areas are covered by Del Mar's Local Coastal Program (LCP) which has been certified by CCC. The LCP contains policies to preserve and enhance natural resources while also prioritizing increased pedestrian access. Key policies include guidance to:

- Protect and preserve open space areas.
- Conserve the natural character of land, water, vegetative, and wildlife resources by ensuring future development minimizes the disturbance of existing or natural terrain and vegetation.
- Preserve fragile coastal bluffs as a visual resource and avoid risks to life and property associated with bluff failure and shoreline erosion.

Notably, the LCP generally prohibits grading, construction, and shoreline protection activities along coastal bluffs. The shoreline protection currently being constructed along the south bluff was permitted by CCC through a separate federal consistency certification process focused on protecting existing railroad operations along the bluffs. This is discussed further in Section 5.

Sea Level Rise Adaptation Planning

The City of Del Mar's Sea Level Rise Adaptation Plan (2018) identifies a range of adaptation options to help property owners, including the City, to plan to minimize coastal bluff erosion and associated risks to people, property, and coastal resources. The City's Coastal Hazards, Vulnerability and Risk Assessment (2016) and Addendum (2018) identified that the south bluff—including existing railroad operations on the bluff—is vulnerable to the effects of projected sea level rise.

The Railroad Advisory Committee (TRAC) Study

This 1995 study recommended rail corridor crossings at the following locations in the study area, based on a review of multiple criteria including potential environmental impacts, connectivity benefits, historic usage, and the favorability of existing grades:

— 11th Street
— 8th Street (added by City Council)
— Torrey Pines State Beach

11th Street

City staff noted the existence, in the late 1800s or early 1900s, of a rugged trail to the beach near 11th Street that was navigable by horse-drawn buggy.

10th Street

As shown in Figure 2-12 and Figure 2-13 from the San Diego Historical Society, a variety of pedestrian infrastructure has been constructed along the coastal bluffs for over a century, including a wooden trestle overcrossing at 10th Street. Remnants of the trestle crossing are still visible today at the end of 10th Street (Figure 2-13).

Figure 2-11: Historic Coastal Access Facilities (San Diego Historical Society)

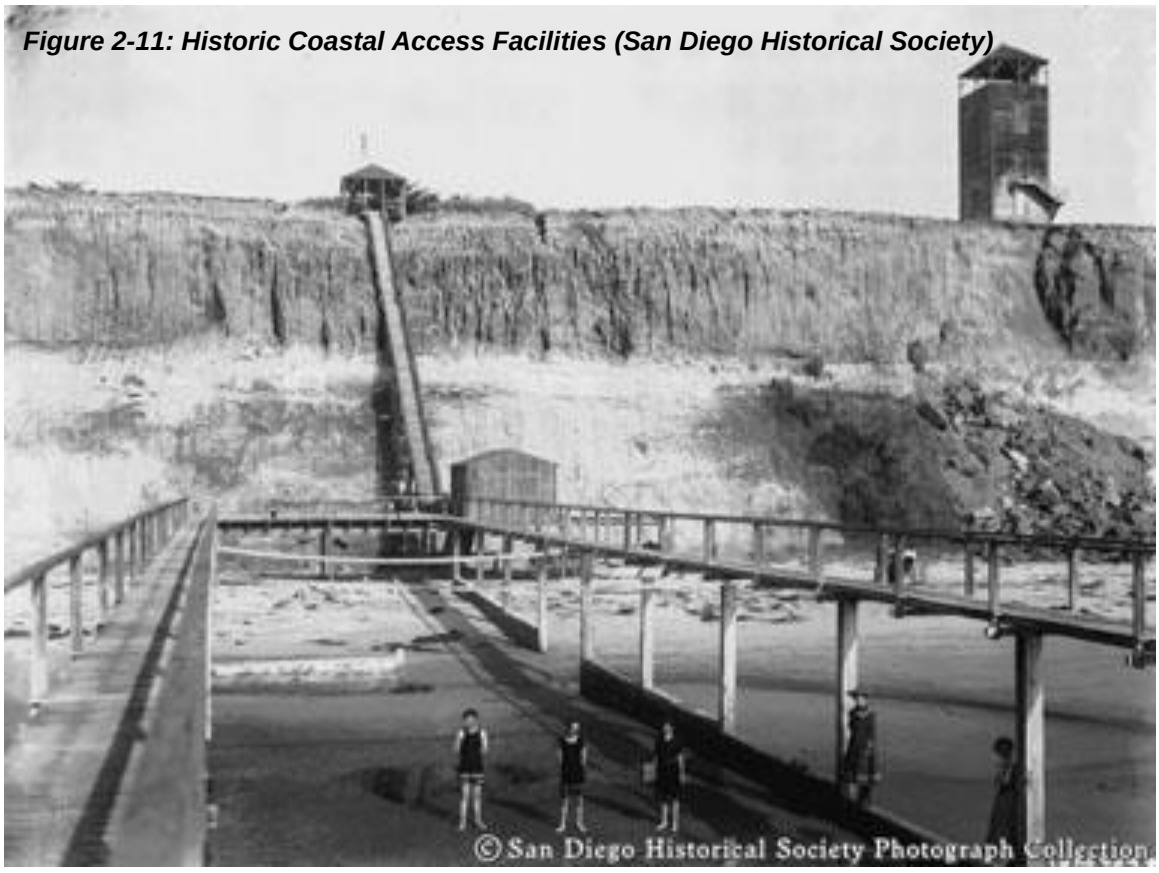


Figure 2-12: 10th Street Crossing (San Diego Historical Society)

Figure 2-13: Existing Remnants of 10th Street Crossing

3. IDENTIFICATION & SCREENING OF POTENTIAL CONCEPTS

Following the review of existing conditions, the project team worked with stakeholder agencies to identify and screen potential pedestrian improvements.

CANDIDATE CONCEPTS

The project team conducted extensive literature reviews and outreach to stakeholder agencies to identify a wide range of potential improvements in the study area. The proposed improvements fit into three broad categories: north-south trails, railroad crossings, and the Torrey Pines area.

North-South Trails

An important initial finding was that pedestrian movement in the study area includes not only east-west beach access, but also substantial north-south travel—in which pedestrians use the railroad corridor and adjacent bluffs as north-south accessways parallel to the beach. This finding led the project team to identify and screen potential concepts for north-south trails on both sides of the railroad.

Railroad Crossings

The project team assessed the feasibility of potential east-west railroad crossings at all street ends and alleys in the study area, as well as parts of the southern study area including Anderson Canyon and the vicinity of Torrey Pines State Beach. All potential crossings would include connections from the adjacent street end/alley to the beach.

The assessment of railroad crossings examined potential at-grade crossings, undercrossings, and overcrossings, with key findings summarized below.

- **At-Grade Crossings:** The CPUC generally prohibits new at-grade railroad crossings per General Order 75-D. However, in several meetings with the project team, CPUC staff indicated that new at-grade crossings could receive discretionary approvals from CPUC on a case-by-case basis, as described in Section 5.
- **Undercrossings:** The project team found undercrossings may be feasible from an engineering perspective with prefabricated, rectangular concrete box culverts positioned just below the railroad ballast and bedding, similar to nearby crossings at Oceanside Harbor and San Elijo Lagoon. These generally would be supported by the competent Bay Point Formation atop a bed of leveling gravel, using construction methods summarized in Section 5. This process also would pose greater impacts to the bluffs than other types of railroad crossings, potentially creating conflicts with the City of Del Mar Community Plan, described further in Section 2.
- **Overcrossings:** While the project team found overcrossings may be feasible from an engineering perspective, they would pose substantial visual impacts, with railroad regulations requiring at least 26 feet of vertical clearance. The structural foundations would require heavily reinforced drilled concrete shafts. To minimize the structure height and associated visual impacts, ideal locations for overcrossings would be near 6th and 7th Streets, where the railroad is approximately 25-30 feet below the eastern bluffs.

Torrey Pines Area

To ensure a thorough understanding of pedestrian needs south of Del Mar, the project team conducted additional focused meetings with stakeholders representing the southern study area near Torrey Pines State Beach. These meetings included staff from the City of San Diego, California State Parks, and the Los Peñasquitos Lagoon Foundation. Appendix C contains a summary of potential projects in Torrey Pines area.

EVALUATION CRITERIA

Table 3-1 describes the evaluation criteria used in the screening of candidate concepts.

Table 3-1: Evaluation Criteria for Initial Screening

Criterion	Description
Engineering Feasibility, Bluffs & Right-of-Way (West Side)	West of the railroad, preliminary assessment of engineering feasibility; bluff conditions including erosion and sea level rise; potential development impacts from grading, walls, hardscape, and other project features; and the ability of the project footprint to remain within the public right-of-way.
Engineering Feasibility, Bluffs & Right-of-Way (East Side)	East of the railroad, preliminary assessment of engineering feasibility; bluff conditions; potential development impacts from grading, walls, hardscape, and other project features; and the ability of the project footprint to remain within the public right-of-way.
Pedestrian Connectivity & Coastal Access	The degree to which each concept would create connectivity benefits by creating new links and nodes in the pedestrian network, including neighborhood connectivity as well as coastal access.
Consistency with Existing Movement Patterns	Concepts should reflect and enhance existing movement patterns to the greatest degree possible within feasibility constraints, as these existing patterns generally reflect the most desired and direct paths of travel.
Consistency with Prior Facilities, Studies & Recommendations	Concepts should be informed by the prior facilities, studies, and recommendations for pedestrian access that have been developed in the past (see Section 2).
Parking Impacts	All concepts may draw additional visitors, particularly railroad crossings providing accessible routes to the beach. The study area contains on-street and off-street parking areas (see Section 2) which are closer to some concepts than others.
Regulatory Feasibility	All concepts will require consultation and/or approval from a wide range of regulatory and stakeholder agencies including the City of Del Mar, NCTD, SANDAG, CCC, and CPUC.
Visual Impacts	Potential visual impacts include pedestrian paths and associated structures, walls, grading, stairways, ramps, handrails, and shoreline protection. At-grade crossings also include fencing, gates, lights, and signal houses.

Criterion	Description
Noise Impacts	Short-term impacts during construction of all concepts; long-term noise impacts from at-grade crossings, which require audible warning systems at the crossing and are likely to require the routine sounding of train horns (see Section 5); and noise impacts associated with public use of the new accessways
Planning-Level Cost	Preliminary, rough-order-of-magnitude cost estimates for each concept in accordance with SANDAG format and assumptions for recent capital projects. (See Appendix D.)

INTIAL SCREENING & SELECTION OF CONCEPTS

The project team screened a wide range of potential concepts across the evaluation criteria described above to determine which concepts to advance to conceptual design. The results of the screening are summarized below. Appendix C contains the full screening matrix.

Advanced to Conceptual Design

In collaboration with stakeholder agencies, the project team selected seven candidate concepts to advance to conceptual design. These seven design concepts are further described and evaluated in Section 4:

- **Concept 1:** North-South Trail (East Side)
- **Concept 2:** At-Grade Crossing at 11th Street, Ramps & Stairs to Beach
- **Concept 3:** At-Grade Crossing at 11th Street, Stairs to Beach
- **Concept 4:** At-Grade Crossing at 7th-8th Streets, Ramps to Beach
- **Concept 5:** At-Grade Crossing at 7th-8th Streets, Stairs to Beach
- **Concept 6:** Undercrossing at 7th-8th Streets, Ramps to Beach
- **Concept 7:** Undercrossing at 7th-8th Streets, Stairs to Beach

Not Advanced to Conceptual Design

The initial screening found that the types of potential improvements listed below, while providing benefits, fulfilled fewer evaluation criteria than the seven concepts selected for advancement. Appendix C contains the full screening matrix and other information on these candidate concepts that were not advanced to conceptual design:

- **North-South Trail (West Side):** The varying widths and ongoing erosion of the western bluffs prohibit a continuous north-south trail, including some unstable sections that could pose safety concerns.
- **Railroad Overcrossings:** Any overcrossing concept would pose substantial visual impacts, with a required vertical clearance of 27 feet above the railroad, plus another 6-10 feet to the top of the crossing structure. West of the railroad, pedestrians would need to descend approximately 27 feet from the crossing to reach the bluff top, before descending another 60-65 feet to the beach—a total elevation change of approximately 90 feet that would require substantial switchback-style ramps and/or stairs to traverse. Given these impacts, the project team and stakeholder agencies agreed not to advance overcrossing concepts to conceptual design.

- **Railroad Crossings Connecting to Alleys:** Alleys are narrower than street ends and generally intended only to serve adjacent residential properties. As such, the project team determined street ends are the preferred connection points for any new railroad crossings.
- **Torrey Pines Area:** While stakeholder agencies suggested many beneficial concepts near Torrey Pines (summarized in Appendix C), there was broad agreement among stakeholder agencies that the selected concepts should focus on addressing the more critical mobility and safety issues in the northern study area along the Del Mar bluffs.

4. DESIGN CONCEPTS

This section describes the development and evaluation of the selected design concepts. It includes a summary of each concept with preliminary plans, cross-sections, cost estimates, and sample 3D renderings.

The design concepts are:

- **Concept 1:** North-South Trail
- **Concept 2:** At-Grade Crossing at 11th Street, Ramps & Stairs to Beach
- **Concept 3:** At-Grade Crossing at 11th Street, Stairs to Beach
- **Concept 4:** At-Grade Crossing at 7th-8th Streets, Ramps to Beach
- **Concept 5:** At-Grade Crossing at 7th-8th Streets, Stairs to Beach
- **Concept 6:** Undercrossing at 7th-8th Streets, Ramps to Beach
- **Concept 7:** Undercrossing at 7th-8th Streets, Stairs to Beach

DEVELOPMENT OF SELECTED DESIGN CONCEPTS

Upon selection of the seven concepts to advance, the development process began with initial conceptual engineering and planning activities to determine each concept's potential footprint and geometric requirements. This was an iterative process, supported by workshop-style design meetings with stakeholder agencies and multiple iterations of each concept. The results of this conceptual process are the preliminary plans and cross-sections shown in the following pages.

Upon completion of the initial plans, the project team developed rough-order-of-magnitude cost estimates for each design concept. These estimates, summarized in the following pages and detailed in Appendix D, use SANDAG's standard template and assumptions from similar capital projects.

The final step in the concept development process was development of sample 3D renderings that show what each design concept could look like if constructed. These 3D renderings focus on the western bluffs and were built from SANDAG's existing 3D model created for the Del Mar Bluffs Stabilization project.

EVALUATION OF DESIGN CONCEPTS

Following the development of each design concept, the project team evaluated the concepts to understand their relative benefits and costs.

Universal Benefits Shared by Selected Design Concepts

The seven design concepts that were advanced to conceptual design have the following common project features—which were evaluated as screening criteria during the initial selection of concepts described in Section 3—that will deliver benefits and improvements to existing conditions:

- **Pedestrian Connectivity & Coastal Access:** All concepts would improve pedestrian connectivity and access to coastal resources compared to existing conditions. As discussed in Section 5, CCC determined that the proposed improvements also would serve as mitigation for the expected impacts of the SANDAG Del Mar Bluffs Stabilization projects.
- **Consistency with Existing Movement Patterns:** All concepts are consistent with existing pedestrian movement patterns, including historic patterns of north-south travel parallel to the

railroad as well as common east-west beach access via unimproved trails near 11th, 8th, and 7th Streets described in Section 2.

- **Consistency with Prior Facilities, Studies & Recommendations:** All concepts are broadly consistent with the prior facilities, studies, and recommendations described in Section 2, including historic crossings, the 1995 TRAC study, and 2022 CCC approvals.
- **Safety:** All concepts would improve safety over existing conditions via the addition of legal crossings, accessways, and channelization fencing. All concepts will be designed to meet applicable safety standards, with the specific details to be determined in future phases by many regulatory and stakeholder agencies, as detailed in the implementation discussion in Section 5.

The project team's evaluation of these additional criteria found no meaningful difference among the seven design concepts:

- **Beach/Sand/Tide Conditions:** All railroad crossing concepts would be bound on the west side by previously approved seawalls and would provide beach access through planned gaps in those seawalls, posing little or no new impacts to beach areas. To the extent that any crossing concepts would pose impacts, the expected impacts would be substantially similar across all crossing concepts. The north-south trail is east of the railroad and would have no impact to beach conditions.
- **Railroad Operations:** No long-term impacts to railroad operations are expected from any proposed concepts. For at-grade crossings, trains would have precedence and trigger the activation of pedestrian gates and warning systems when approaching.

Final Evaluation Criteria

Table 4-1 on the following page is an evaluation matrix that summarizes the project team's evaluation of all seven design concepts. These final evaluation criteria, which were originally introduced in Section 3 during the initial screening process, capture the meaningful differences, benefits, and tradeoffs of the design concepts relative to each other:

- Development impacts: Western bluffs
- Development impacts: Railroad & east side
- Regulatory feasibility: Consistency with coastal & local policies
- Regulatory feasibility: CPUC requirements
- Regulatory feasibility: Accessibility design
- Parking impacts
- Visual impacts
- Noise impacts
- Planning-level cost

EVALUATION OF DESIGN CONCEPTS

Table 4-1: Evaluation of Design Concepts

Criterion	1: North-South Trail	2: At-Grade Crossing at 11th St, Ramps & Stairs	3: At-Grade Crossing at 11th St, Stairs	4: At-Grade Crossing at 7th-8th St, Ramps	5: At-Grade Crossing at 7th-8th St, Stairs	6: Undercrossing at 7th-8th St, Ramps	7: Undercrossing at 7th-8th St, Stairs
Development Impacts: Western Bluffs	N/A	Ramps & stairs more impactful together vs. either facility alone.	Stairs minimize impacts vs. ramps.	Ramps impactful vs. stairs.	Stairs minimize impacts vs. ramps.	Major excavation but shortens beach access trail vs. at-grade. Ramps impactful vs. stairs.	Major excavation but shortens beach access trail vs. at-grade. Stairs minimize impacts vs. ramps.
Development Impacts: Railroad & East Side	Minor impacts south of 8th St. More grading & walls north of 8th St.	At-grade minimizes impacts. Short, direct connection to 11th St.	At-grade minimizes impacts. Short, direct connection to 11th St.	At-grade minimizes impacts. Some impacts to connect to 7th-8th St.	At-grade minimizes impacts. Some impacts to connect to 7th-8th St.	Undercrossing & eastern access ramps pose largest impacts.	Undercrossing & eastern access ramps pose largest impacts.
Regulatory Feasibility: Consistency with Coastal & Local Policies	Improves community connectivity. Some impacts to eastern bluffs. No impacts to western bluffs.	Improves coastal access. At-grade crossing minimizes development. Western ramps & stairs impactful.	Improves coastal access. At-grade crossing & western stairs minimize development.	Improves coastal access. At-grade crossing minimizes development. Western ramps impactful.	Improves coastal access. At-grade crossing & western stairs minimize development.	Improves coastal access. Substantial development vs. at-grade crossing.	Improves coastal access. Substantial development vs. at-grade. Western stairs minimize impact vs. ramps.
Regulatory Feasibility: CPUC Requirements	CPUC coordination required.	CPUC must approve new at-grade crossings.	CPUC must approve new at-grade crossings.	CPUC must approve new at-grade crossings.	CPUC must approve new at-grade crossings.	CPUC coordination required.	CPUC coordination required.
Regulatory Feasibility: Accessibility Design	Meets ADA/CBC standards.	Meets ADA/CBC standards.	Meets ADA/CBC standards from street end to western bluff top.	Meets ADA/CBC standards.	Meets ADA/CBC standards from street end to western bluff top.	Meets ADA/CBC standards.	Meets ADA/CBC standards from street end to western bluff top.
Parking Impacts	Accessible path would attract automobile trips, with impacts spread across entire alignment.	Accessible ramps to beach may attract more automobile trips than concepts with stairs only.	Stairs to beach may attract fewer automobile trips than accessible ramps.	Accessible ramps to beach may attract more automobile trips than concepts with stairs only.	Stairs to beach may attract fewer automobile trips than accessible ramps.	Accessible ramps to beach may attract more automobile trips than concepts with stairs only.	Stairs to beach may attract fewer automobile trips than accessible ramps.
Visual Impacts	Low impacts south of 8th St. Some impacts from grading & walls north of 8th St.	Short connection to 11th St minimizes eastern impacts. Ramps & stairs impact western bluffs.	Short connection to 11th St minimizes eastern impacts. Stairs minimize impact to western bluffs.	Connections to 7th-8th St create eastern impacts. Ramps impact western bluffs vs. stairs.	Connections to 7th-8th St create eastern impacts. Stairs minimize impact to western bluffs.	Undercrossing ramps impact east side. Beach access ramps impact western bluffs, but shorter than at-grade.	Undercrossing ramps impact east side. Stairs minimize impact to western bluffs vs. ramps & shorter than at-grade.
Noise Impacts	Does not require audible warning systems or train horns.	At-grade crossings require audible warning systems and/or train horns.	At-grade crossings require audible warning systems and/or train horns.	At-grade crossings require audible warning systems and/or train horns.	At-grade crossings require audible warning systems and/or train horns.	Grade-separated crossings do not require audible warning systems or train horns.	Grade-separated crossings do not require audible warning systems or train horns.
Planning-Level Cost *(See Section 4 & Appendix D)*	$9.6 million	$10.2 million	$5.7 million	$9.2 million	$5.7 million	$12.8 million	$7.0 million

CONCEPT 1: NORTH-SOUTH TRAIL

This 0.8-mile trail along the east side of the railroad provides an accessible route from Seagrove Park to 4th Street. Notable concept features include:

- **Accessible Paths:** All paths are designed to be six feet wide, feature ADA-compliant grades, and can utilize a special form of stabilized decomposed granite for an accessible surface. Some areas, especially north 8th Street, may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **Accessible Connections to All Street Ends:** Accessible connections to Seagrove Park and all numbered streets from 13th Street to 4th Street. These also may include optional connections to the railroad crossings proposed in Concepts 2-7, if implemented together.
- **8th Street Drainage Culvert with Fill:** As shown in the sample rendering in Figure 4-1, a relatively low-impact way to traverse the drainage infrastructure just north of 8th Street is to place the trail atop parts of the drainage culvert, supported by a wall that is partially covered by fill and landscaping.
- **9th Street Plaza:** This optional feature, shown in the sample rendering in Figure 4-2, could be added to street ends such as 9th Street to provide an additional amenity for public views.

Figure 4-3 through Figure 4-8 on the following pages are the full conceptual plans. Table 4-2 summarizes the cost estimate for the full trail, and Table 4-3 breaks the estimate into three segments to account for potential phased implementation. The full planning-level cost estimates are in Appendix D.

Figure 4-1: Sample Rendering, 8th Street Drainage Culvert with Fill, Concept 1

Table 4-2: Planning-Level Cost Estimate, Concept 1 Full (Full Estimate in Appendix D)

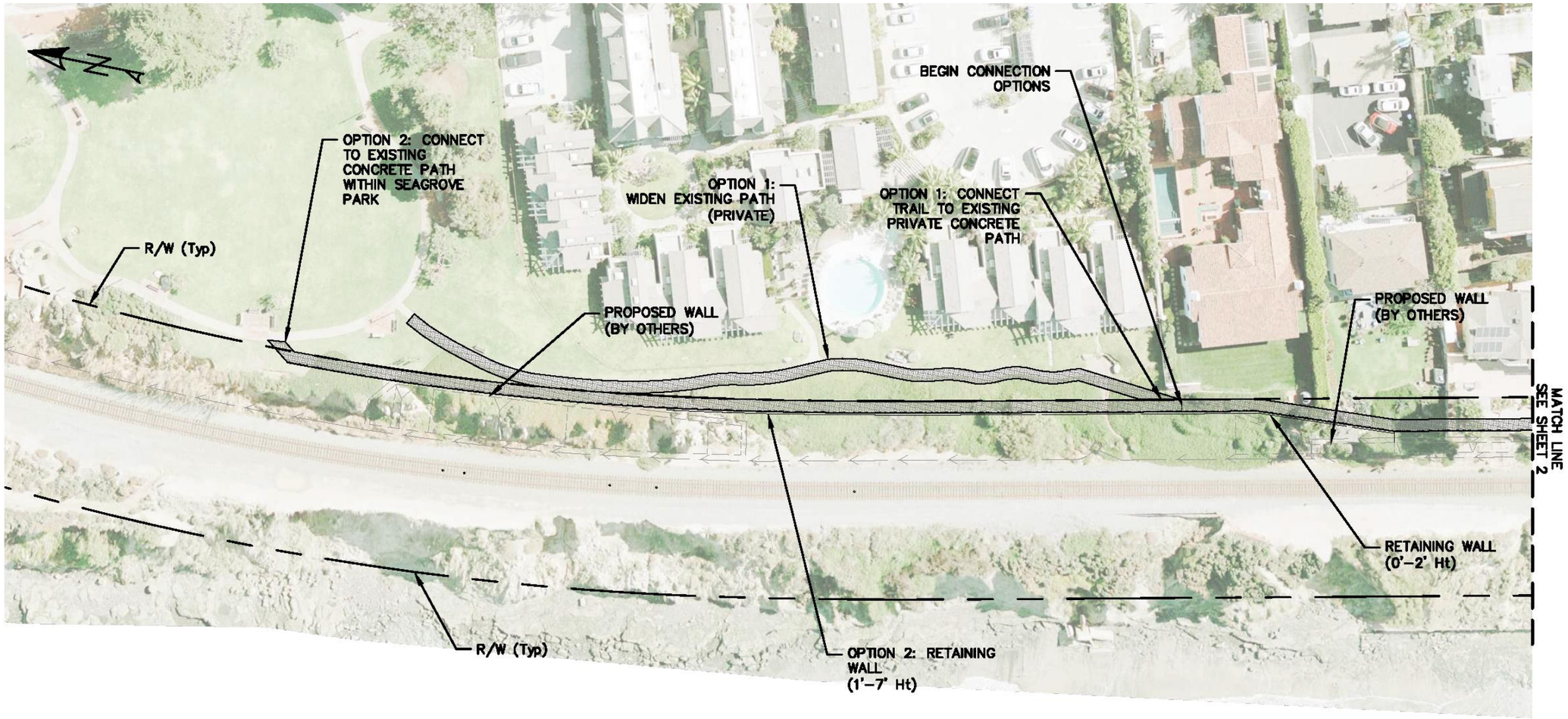
Cost Category	Full Trail: Seagrove Park to 4th Street
Construction Contract Estimate	$5.1 million
Design, Environmental & Support Costs	$3.7 million
Total Project Cost Estimate (2022 Dollars)	**$8.8 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.8 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$9.6 million**

Table 4-3: Planning-Level Cost Estimate, Concept 1 by Segment (Full Estimate in Appendix D)

Cost Category	Segment A: Seagrove Park to 11th Street	Segment B: 11th Street to 8th Street	Segment C: 8th Street to 4th Street
Construction Contract Estimate	$2.3 million	$2.0 million	$1.6 million
Design, Environmental & Support Costs	$1.7 million	$1.5 million	$1.2 million
Total Project Cost Estimate (2022 Dollars)	**$4.0 million**	**$3.5 million**	**$2.8 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.4 million	$0.3 million	$0.3 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$4.4 million**	**$3.9 million**	**$3.1 million**

Figure 4-2: Sample Rendering, 9th Street Plaza, Concept 1

Figure 4-3



NOTES:

1. FULL EXTENT OF RAILWAY CORRIDOR FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.
2. IMPROVEMENTS FOR DRAINAGE AND FOR ELEVATED WALKWAY OVER DRAINAGE CHANNEL TO BE ANALYZED, DESIGNED AND DETAILS DETERMINED IN A FUTURE PHASE.
3. RETAINING WALL TYPES TO BE DETERMINED IN A FUTURE PHASE.

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	CHECKED BY			N–S TRAIL SHEET 1 OF 6	DRAWING NO. / SHEET NO.
	SANDAG				

Figure 4-4

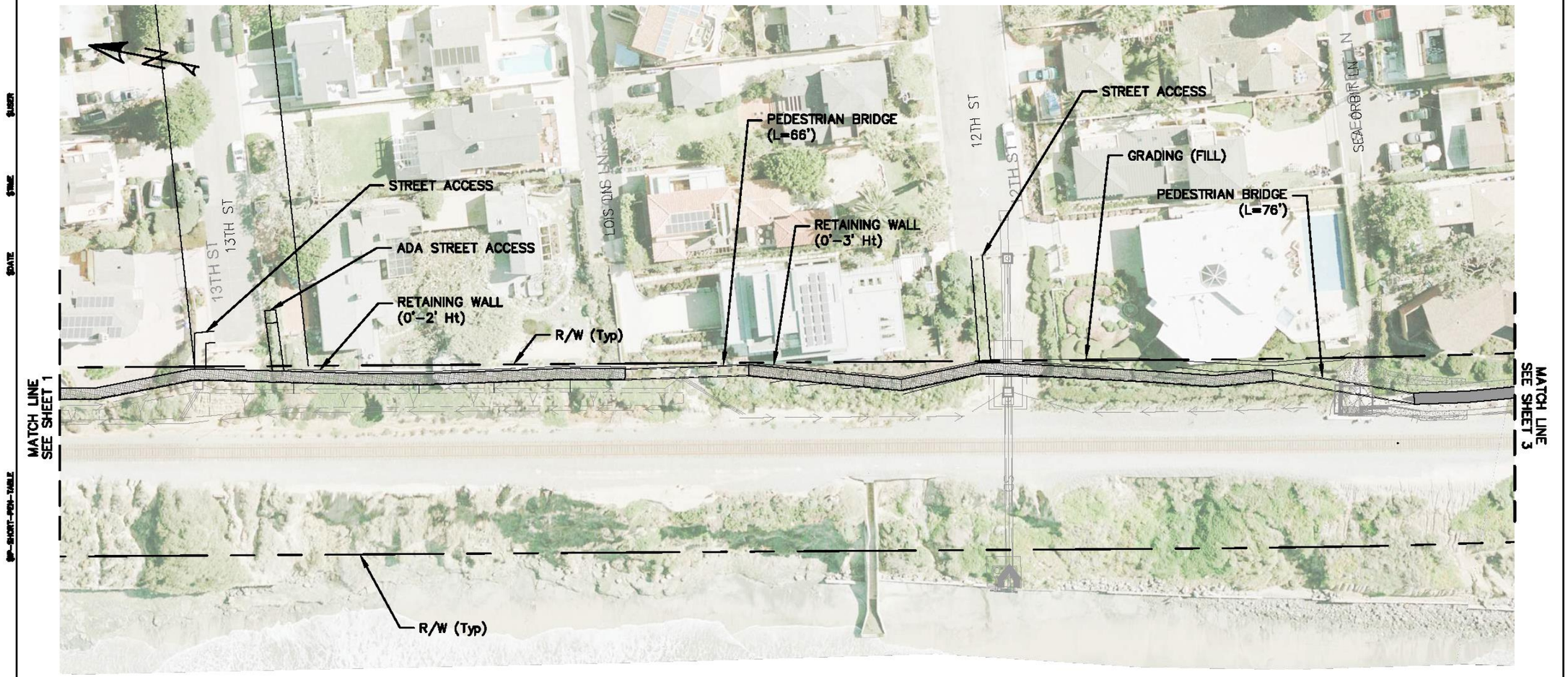

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Figure 4-5

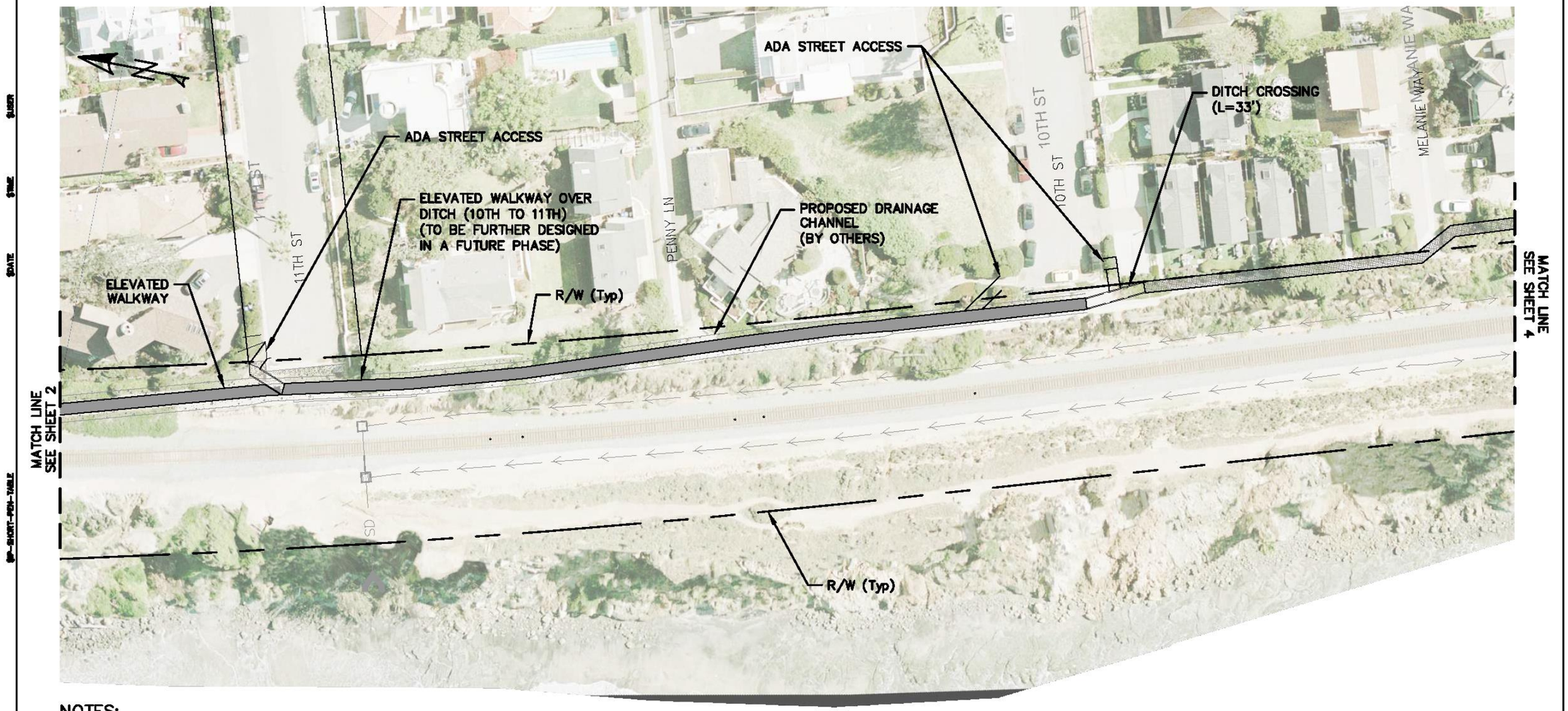

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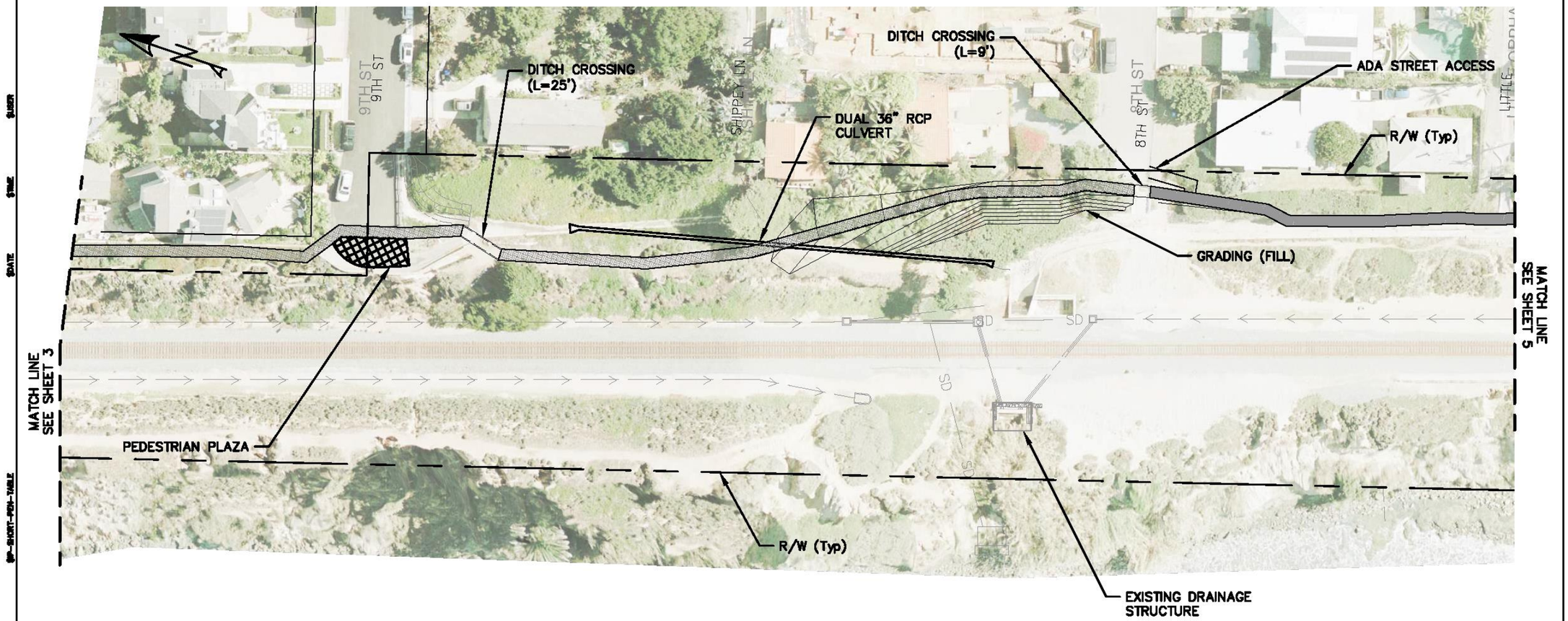
Figure 4-6



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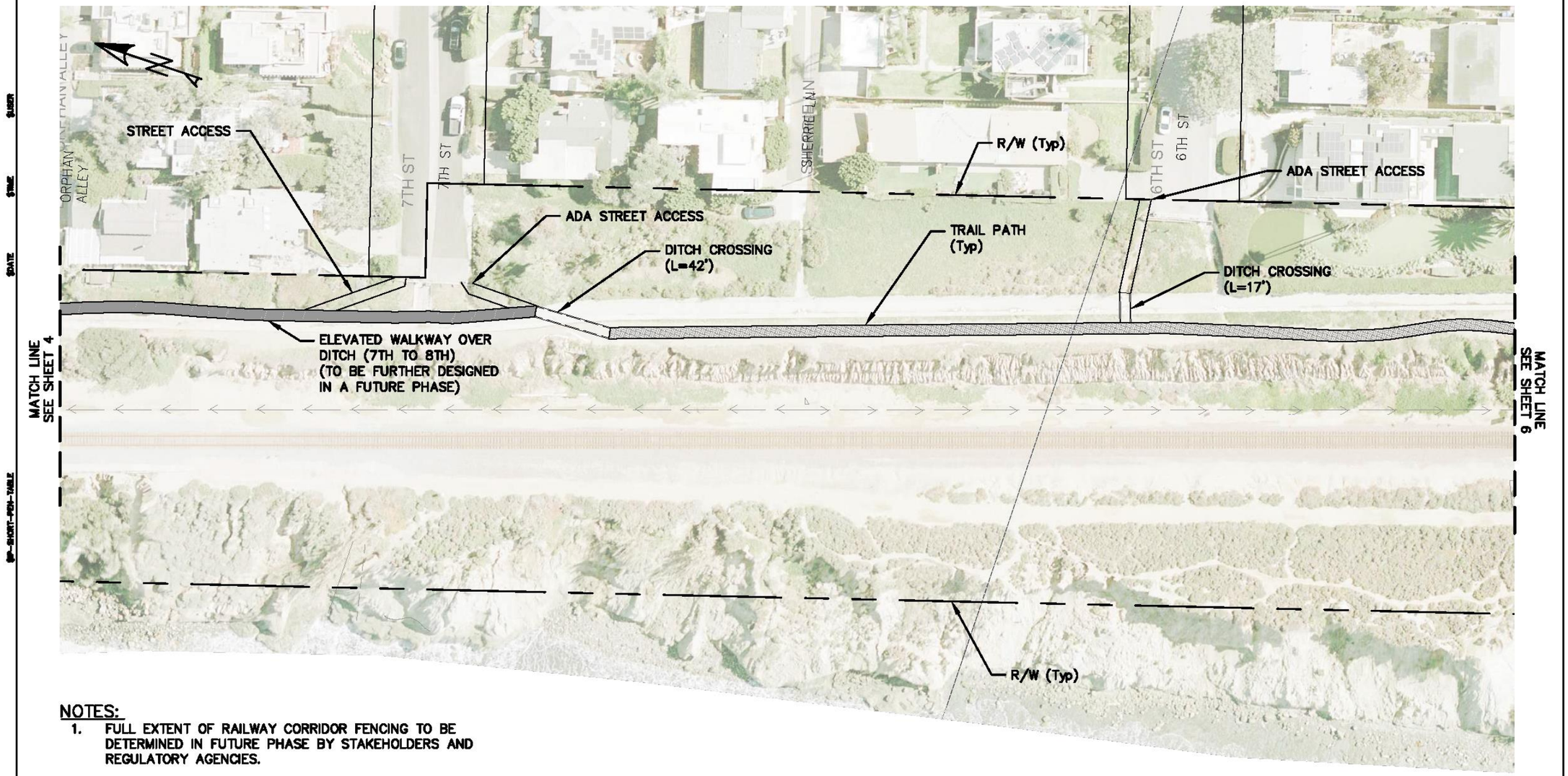
	SANDAG				

Figure 4-7



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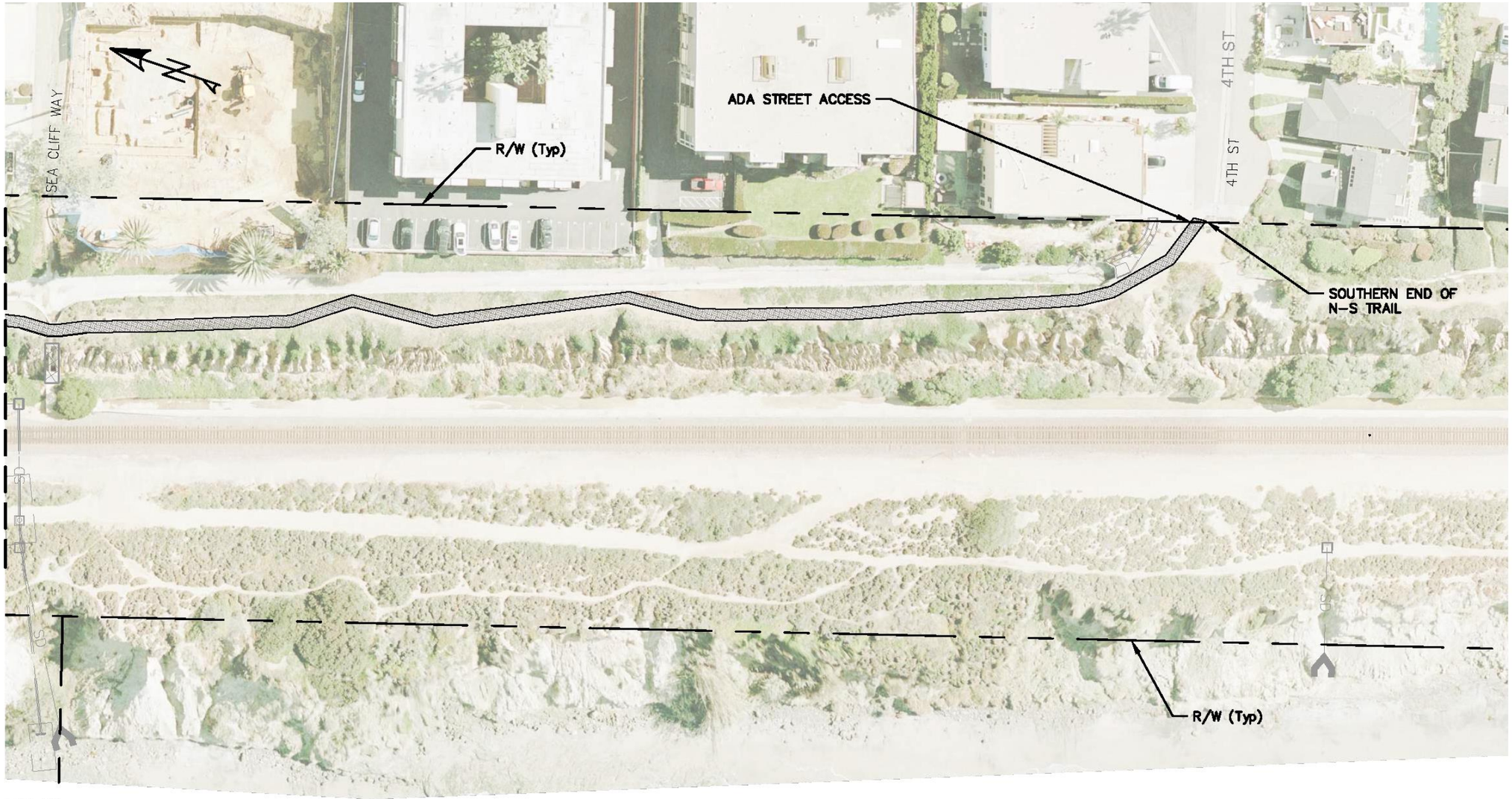
	DRAWN BY				
	CHECKED BY				
	SANDAG				

Figure 4-8



NOTES:

1. FULL EXTENT OF RAILWAY CORRIDOR FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.
2. IMPROVEMENTS FOR DRAINAGE AND FOR ELEVATED WALKWAY OVER DRAINAGE CHANNEL TO BE ANALYZED, DESIGNED AND DETAILS DETERMINED IN A FUTURE PHASE.
3. RETAINING WALL TYPES TO BE DETERMINED IN A FUTURE PHASE.

WSP USA Inc. 401 B STREET, SUITE 1600 SAN DIEGO, CA 92101 TEL +1 619.338.9378 FAX +1 619.338.6123	DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG	DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101-4231 (619) 699-1900	DEL MAR COASTAL CONNECTION EXHIBIT N-S TRAIL SHEET 6 OF 6	SCALE 1" = 50' SANDAG CONTRACT NO. DRAWING NO. / SHEET NO.

CONCEPT 2: AT-GRADE CROSSING AT 11TH STREET, RAMPS & STAIRS TO BEACH

This at-grade railroad crossing takes advantage of existing east-west movement patterns and a large area of artificial fill on the western bluffs north of 11th Street. Notable features include:

- **Natural Stairs:** Designed to match the existing informal paths along the bluffs, natural stairs are graded into the terrain using timber or stone, as pictured in the sample photos in Figure 4-11. Steeper portions may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **Accessible Paths & Ramps:** All paths except natural stairs, including the ramps on the western bluffs, feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface.
- **View Overlook:** On the western bluff top, a view overlook is a new amenity that would be accessible from 11th Street and optionally Concept 1, North-South Trail.
- **At-Grade Railroad Crossing:** Located near the end of 11th Street and includes:
  - **Gates, Lights & Bells:** Standard safety features per CPUC requirements.
  - **Safety Fencing:** Full extent to be determined in collaboration with CPUC, CCC, NCTD, and City of Del Mar.
  - **Signal House:** Requires NCTD access and parking from the end of 11th Street.
- **Connection to 11th Street:** Accessible path from 11th Street connects to the existing network. This also features an optional connection to Concept 1, North-South Trail.

Figure 4-9 is a sample rendering, Figure 4-10 shows a typical cross-section looking north, and Figure 4-12 on the following page is the full conceptual plan. Table 4-4 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

Table 4-4: Planning-Level Cost Estimate, Concept 2 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$5.4 million
Design, Environmental & Support Costs	$3.9 million
Total Project Cost Estimate (2022 Dollars)	**$9.3 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.9 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$10.2 million**

Figure 4-11: Sample Photos of Natural Stairs

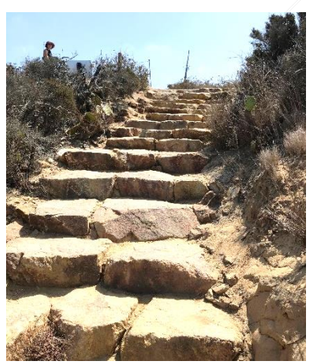
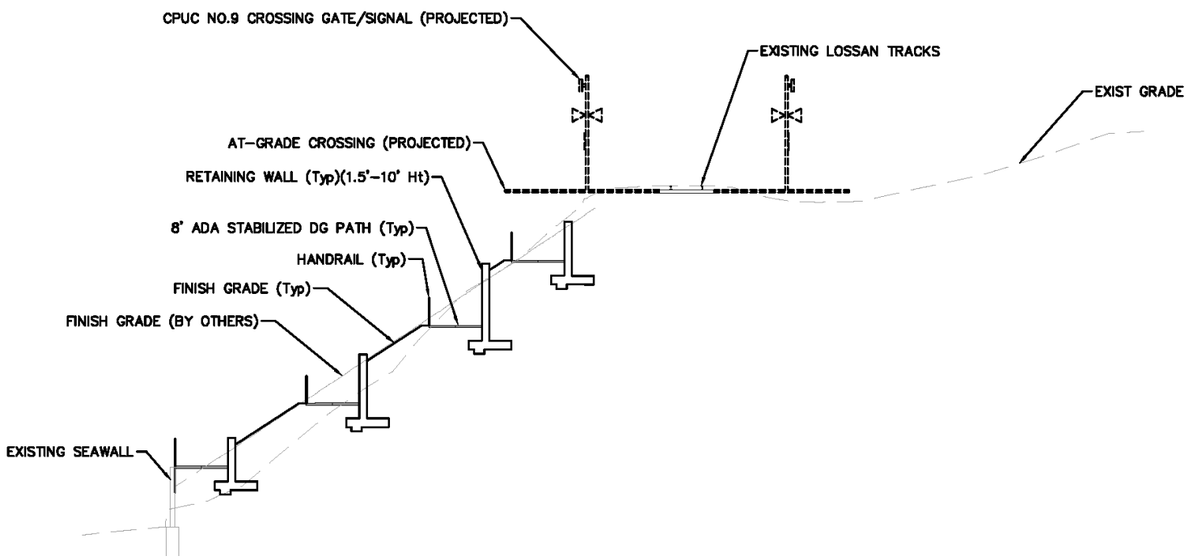
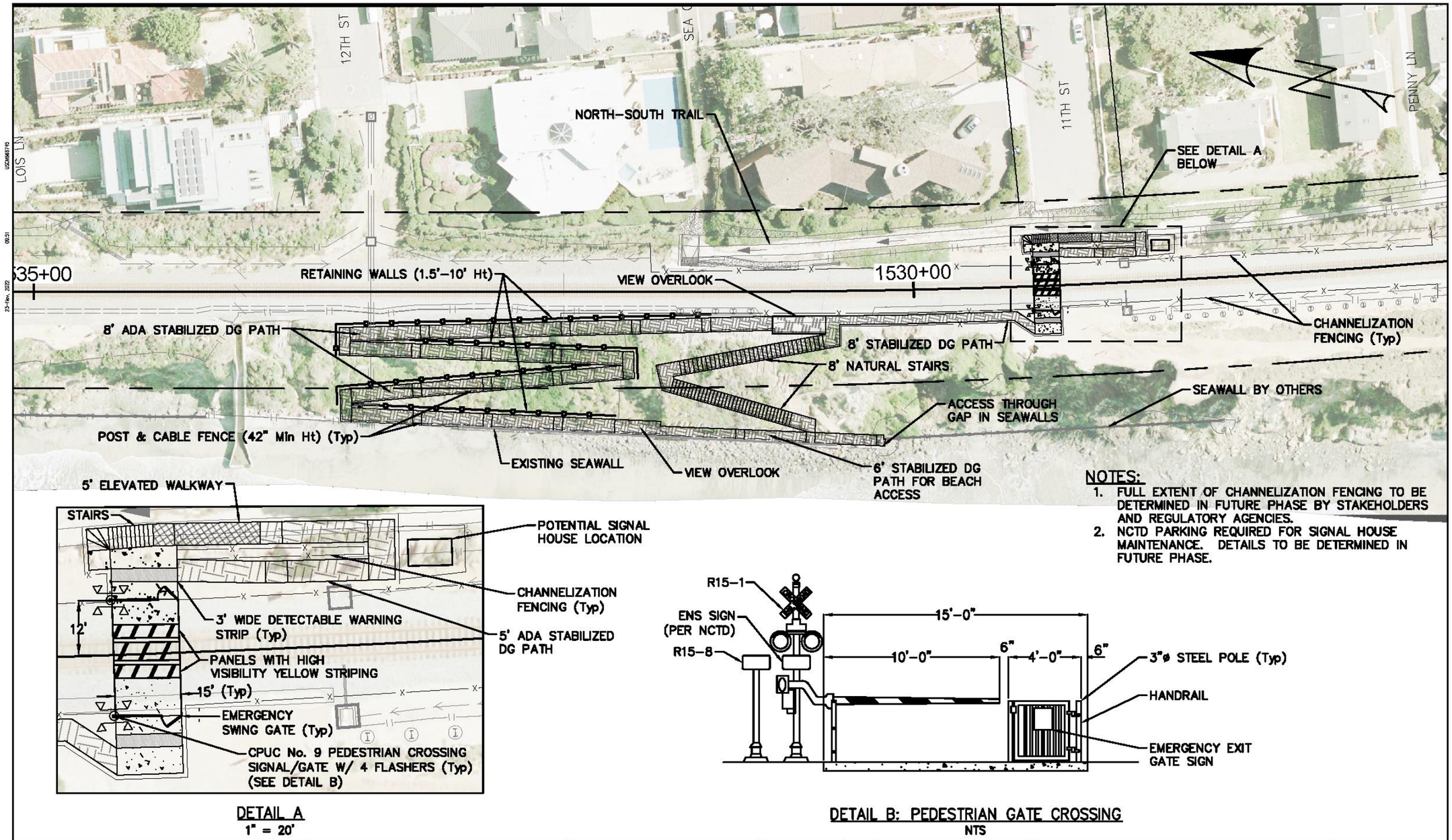


Figure 4-9: Sample Rendering, Concept 2

Figure 4-10: Typical Cross-Section Looking North, Concept 2





DETAIL A
1" = 20'

DETAIL B: PEDESTRIAN GATE CROSSING
NTS

	wsp 401 B STREET, SUITE 1650 SAN DIEGO, CA 92101		DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG	DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101–4231 (619) 699–1900	DEL MAR COASTAL CONNECTION EXHIBIT CONCEPT 2: AT–GRADE CROSSING 11TH ST RAMPS & STAIRS TO BEACH	SCALE 1"=50' SANDAG CONTRACT NO. DRAWING NO. 1 SHEET NO. 1

RELATIVE BORDER SCALE IS IN INCHES 0 1 2

Figure 4-12

CONCEPT 3: AT-GRADE CROSSING AT 11TH STREET, STAIRS TO BEACH

This at-grade railroad crossing takes advantage of existing east-west movement patterns and a large area of artificial fill on the western bluffs north of 11th Street. Notable features include:

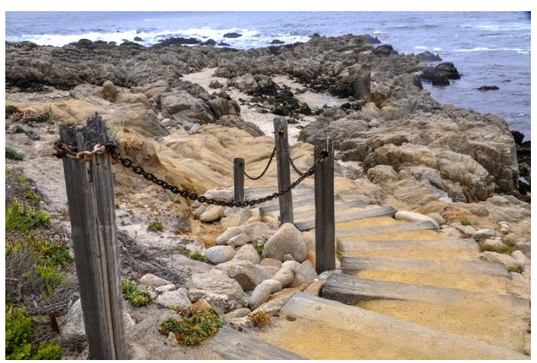
- **Natural Stairs:** Designed to match the existing informal paths along the bluffs, natural stairs are graded into the terrain using timber or stone, as pictured in the sample photos in Figure 4-15. Steeper portions may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **Accessible Paths:** All paths except the natural stairs feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface.
- **View Overlook:** On the western bluff top, a view overlook is a new amenity that would be accessible from 11th Street and optionally Concept 1, North-South Trail.
- **At-Grade Railroad Crossing:** Located near the end of 11th Street and includes:
  - **Gates, Lights & Bells:** Standard safety features per CPUC requirements.
  - **Safety Fencing:** Full extent to be determined in collaboration with CPUC, CCC, NCTD, and City of Del Mar.
  - **Signal House:** Requires NCTD access and parking from the end of 11th Street.
- **Connection to 11th Street:** Accessible path from 11th Street connects to the existing network. This also features an optional connection to Concept 1, North-South Trail.

Figure 4-13 is a sample rendering, Figure 4-14 shows a typical cross-section looking north, and Figure 4-16 on the following page is the full conceptual plan. Table 4-5 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

Table 4-5: Planning-Level Cost Estimate, Concept 3 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$3.0 million
Design, Environmental & Support Costs	$2.2 million
Total Project Cost Estimate (2022 Dollars)	**$5.2 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.5 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$5.7 million**

Figure 4-15: Sample Photos of Natural Stairs



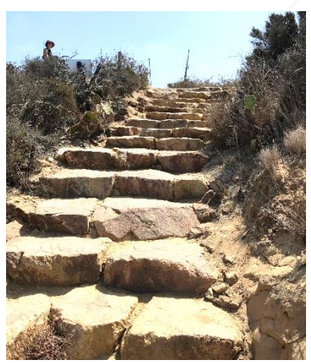
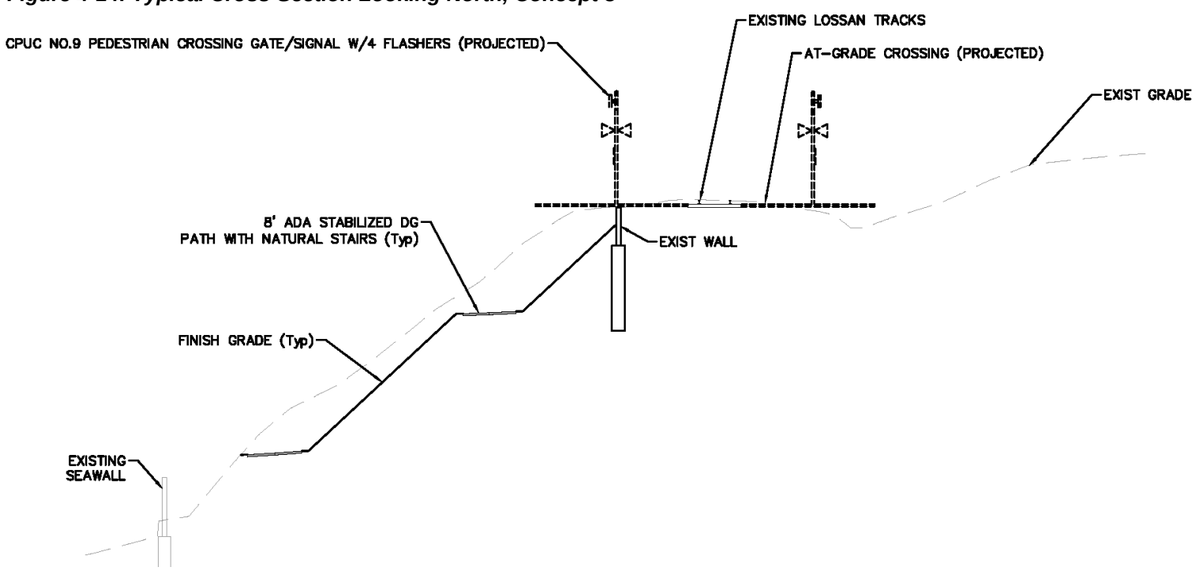
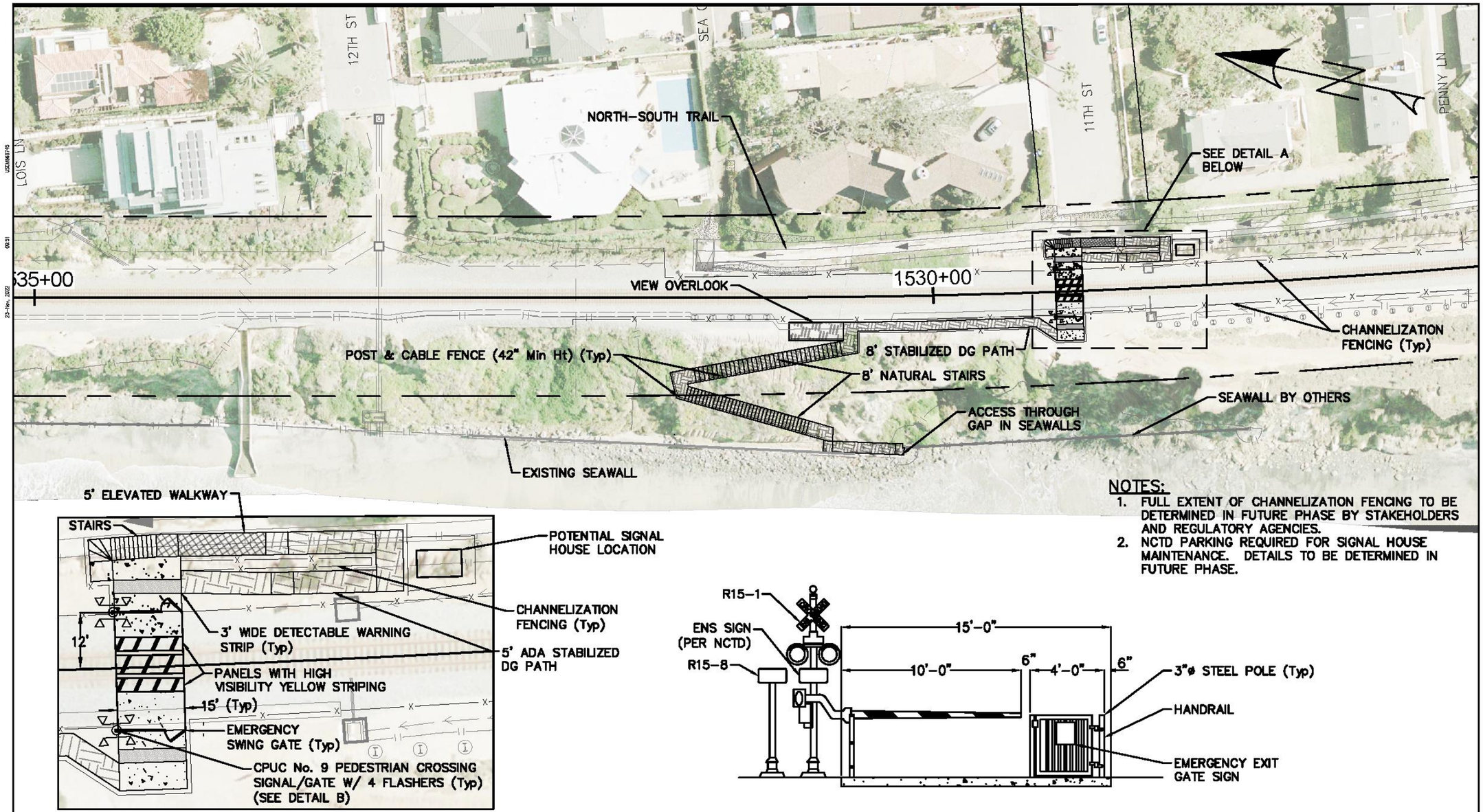


Figure 4-13: Sample Rendering, Concept 3

Figure 4-14: Typical Cross-Section Looking North, Concept 3





DETAIL A
1" = 20'

DETAIL B: PEDESTRIAN GATE CROSSING
NTS

	wsp 401 B STREET, SUITE 1650 SAN DIEGO, CA 92101		DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG	DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101–4231 (619) 699–1900	DEL MAR COASTAL CONNECTION EXHIBIT CONCEPT 3: AT–GRADE CROSSING 11TH ST STAIRS TO BEACH	SCALE 1"=50' SANDAG CONTRACT NO. DRAWING NO. 1 / SHEET NO. 1

RELATIVE BORDER SCALE IS IN INCHES 0 1 2

Figure 4-16

CONCEPT 4: AT-GRADE CROSSING AT 7TH-8TH STREETS, RAMPS TO BEACH

This at-grade railroad crossing takes advantage of existing east-west movement patterns near 7th and 8th Streets. Notable features include:

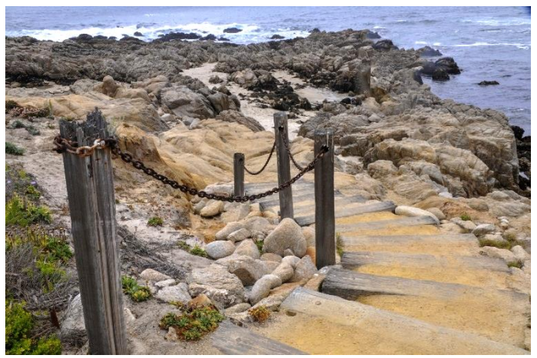
- **Accessible Paths & Ramps:** All paths except natural stairs, including the ramps on the western bluffs, feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface. Ramps on the bluffs may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **View Overlook:** On the western bluff top, a view overlook is a new amenity that would be accessible from 7th Street and optionally Concept 1, North-South Trail).
- **At-Grade Railroad Crossing:** Located near the end of 7th Street and includes:
  - **Gates, Lights & Bells:** Standard safety features per CPUC requirements.
  - **Safety Fencing:** Full extent to be determined in collaboration with CPUC, CCC, NCTD, and City of Del Mar.
  - **Signal House:** Requires NCTD access and parking from the end of 7th Street.
- **Connections to 7th & 8th Streets:** Accessible path from 8th Street and natural stairs near 7th Street (sample photos in Figure 4-19) connect to the existing network. These also feature optional connections to Concept 1, North-South Trail.

Figure 4-17 is a sample rendering, Figure 4-18 shows a typical cross-section looking north, and Figure 4-20 on the following page is the full conceptual plan. Table 4-6 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

Table 4-6: Planning-Level Cost Estimate, Concept 4 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$4.9 million
Design, Environmental & Support Costs	$3.5 million
Total Project Cost Estimate (2022 Dollars)	**$8.4 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.8 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$9.2 million**

Figure 4-19: Sample Photos of Natural Stairs



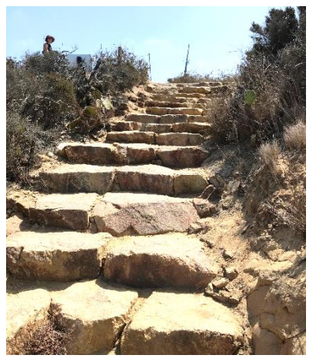
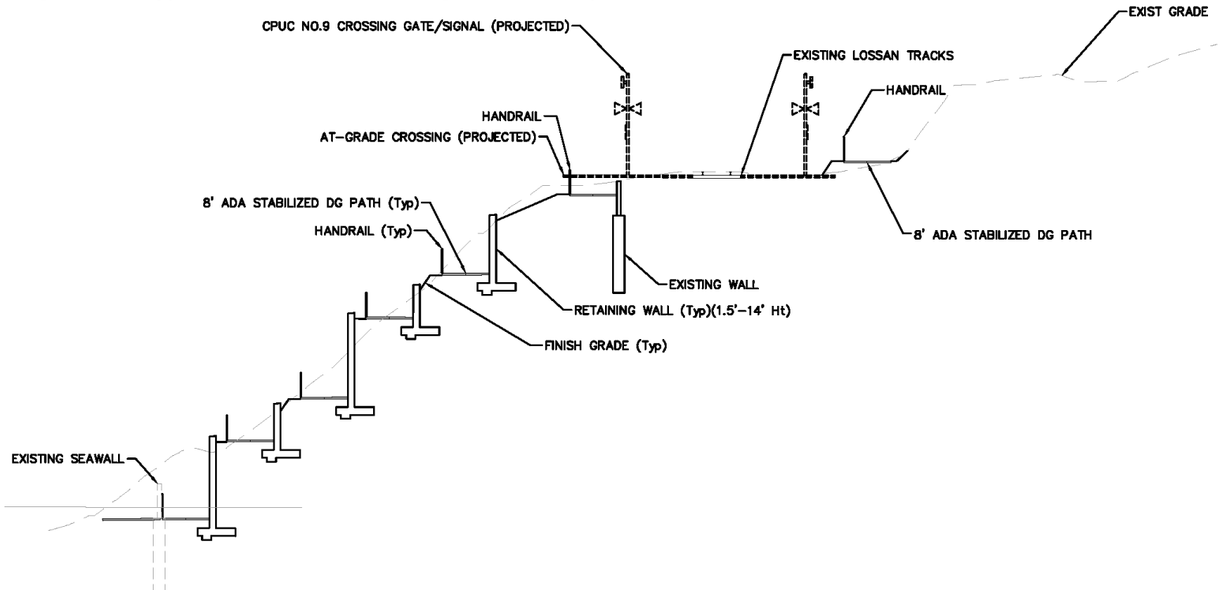
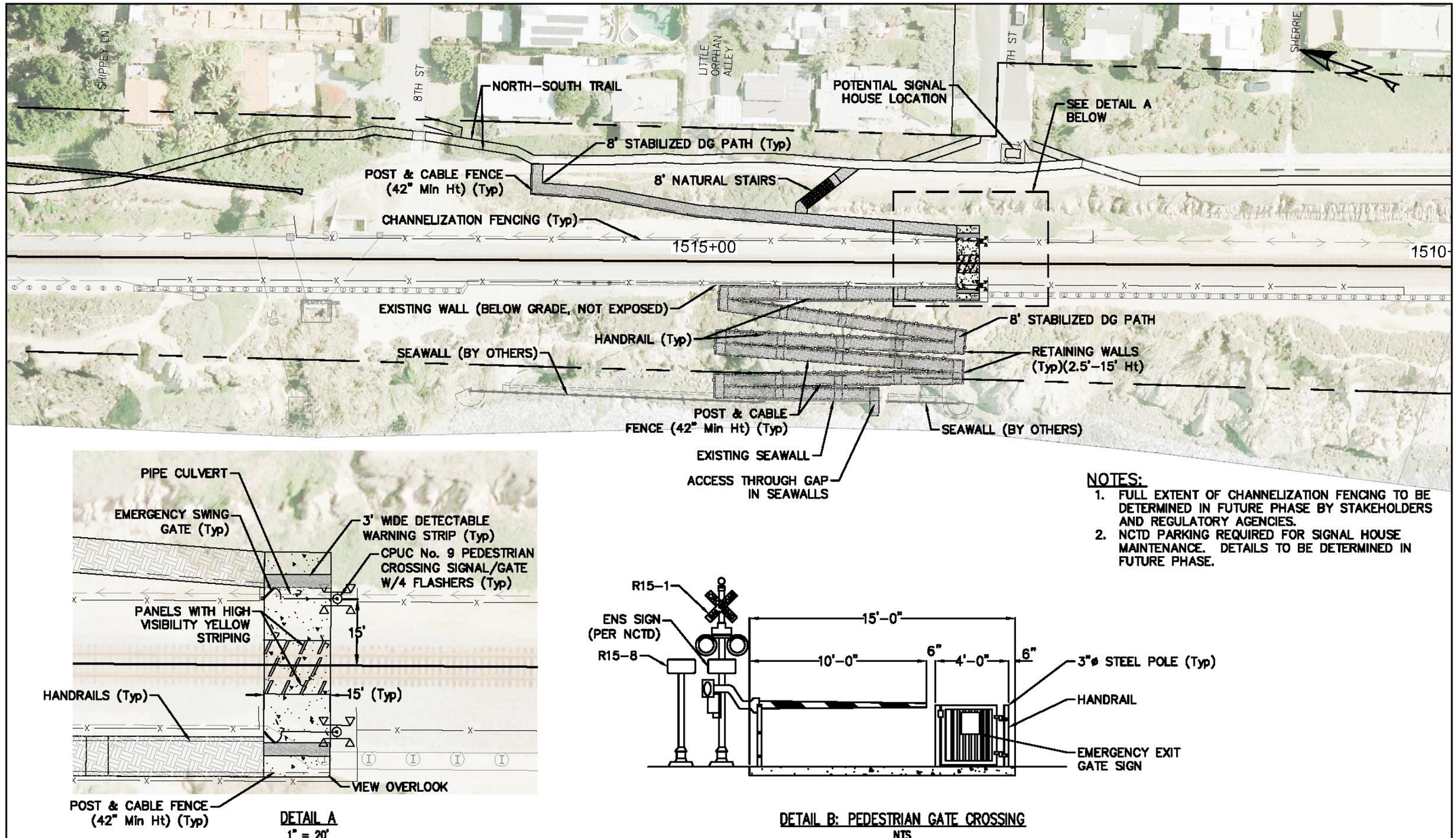


Figure 4-17: Sample Rendering, Concept 4

Figure 4-18: Typical Cross-Section Looking North, Concept 4





DETAIL A
1" = 20'

DETAIL B: PEDESTRIAN GATE CROSSING
NTS

NOTES:
1. FULL EXTENT OF CHANNELIZATION FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.
2. NCTD PARKING REQUIRED FOR SIGNAL HOUSE MAINTENANCE. DETAILS TO BE DETERMINED IN FUTURE PHASE.

Figure 4-20

wsp
401 B STREET, SUITE 1650 SAN DIEGO, CA 92101
RELATIVE BORDER SCALE IS IN INCHES 0 1 2

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
SANDAG	

SANDAG
401 B STREET, SUITE 800
SAN DIEGO, CA 92101–4231
(619) 699–1900

DEL MAR COASTAL CONNECTION EXHIBIT

CONCEPT 4:
AT–GRADE CROSSING 7TH AND 8TH ST
RAMPS TO BEACH

SCALE	1"=60'
SANDAG CONTRACT NO.	
DRAWING NO.	SHEET NO.
1	1

CONCEPT 5: AT-GRADE CROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH

This at-grade railroad crossing takes advantage of existing east-west movement patterns near 7th and 8th Streets. Notable features include:

- **Natural Stairs:** Designed to match the existing informal paths along the bluffs, natural stairs are graded into the terrain using timber or stone, as pictured in the sample photos in Figure 4-23. Steeper portions may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **Accessible Paths:** All paths except the natural stairs feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface.
- **View Overlook:** On the western bluff top, a view overlook is a new amenity that would be accessible from 7th Street and optionally Concept 1, North-South Trail.
- **At-Grade Railroad Crossing:** Located near the end of 7th Street and includes:
  - **Gates, Lights & Bells:** Standard safety features per CPUC requirements.
  - **Safety Fencing:** Full extent to be determined in collaboration with CPUC, CCC, NCTD, and City of Del Mar.
  - **Signal House:** Requires NCTD access and parking from the end of 7th Street.
- **Connections to 7th & 8th Streets:** Accessible path from 8th Street and natural stairs near 7th Street connect to the existing network. These also feature optional connections to Concept 1, North-South Trail.

Figure 4-21 is a sample rendering, Figure 4-22 shows a typical cross-section looking north, and Figure 4-24 on the following page is the full conceptual plan. Table 4-7 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

Table 4-7: Planning-Level Cost Estimate, Concept 5 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$3.0 million
Design, Environmental & Support Costs	$2.2 million
Total Project Cost Estimate (2022 Dollars)	**$5.2 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.5 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$5.7 million**

Figure 4-23: Sample Photos of Natural Stairs

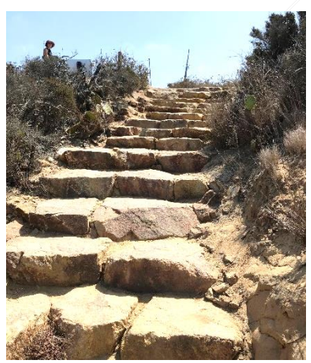
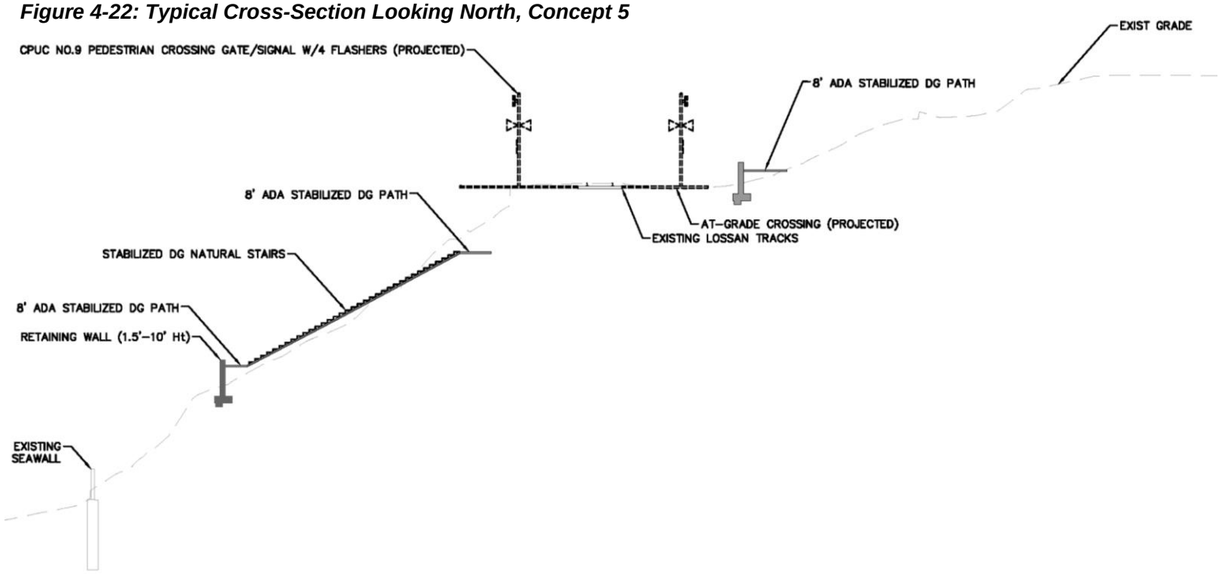
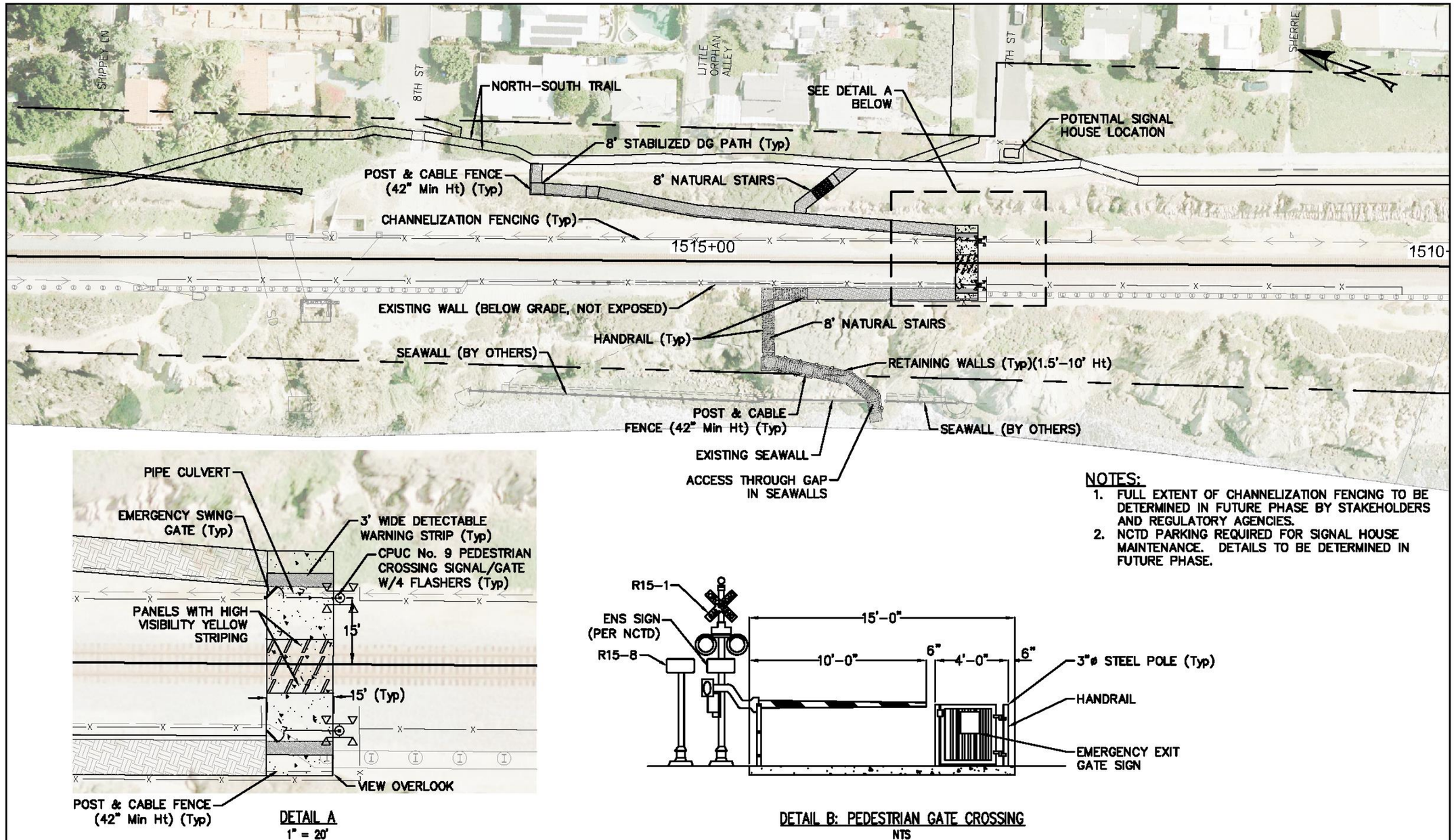


Figure 4-21: Sample Rendering, Concept 5

Figure 4-22: Typical Cross-Section Looking North, Concept 5





DETAIL A
1" = 20'

NOTES:
1. FULL EXTENT OF CHANNELIZATION FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.
2. NCTD PARKING REQUIRED FOR SIGNAL HOUSE MAINTENANCE. DETAILS TO BE DETERMINED IN FUTURE PHASE.

DETAIL B: PEDESTRIAN GATE CROSSING
NTS

Figure 4-24

wsp 401 B STREET, SUITE 1650 SAN DIEGO, CA 92101 RELATIVE BORDER SCALE IS IN INCHES 0 1 2	DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG — DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101–4231 (619) 699–1900	DEL MAR COASTAL CONNECTION EXHIBIT CONCEPT 5: AT–GRADE CROSSING 7TH AND 8TH ST STAIRS TO BEACH	SCALE 1"=60' SANDAG CONTRACT NO. DRAWING NO. 1 SHEET NO. 1	

CONCEPT 6: UNDERCROSSING AT 7TH-8TH STREETS, RAMPS TO BEACH

This railroad undercrossing takes advantage of existing east-west movement patterns near 7th and 8th Streets, while reducing or eliminating some of the most impactful features of at-grade crossings including CPUC special approval, safety fencing, and noise impacts (described in Section 5). Notable features include:

- **Accessible Paths & Ramps:** All paths, including the ramps on the western bluffs, feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface. Ramps on the bluffs may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **View Overlook:** Located at the western end of the undercrossing, a view overlook is a new amenity that would be accessible from 7th Street and optionally Concept 1, North-South Trail.
- **Railroad Undercrossing:** A prefabricated, 8-foot by 10-foot rectangular concrete tunnel would be positioned just below the railroad ballast and bedding.
- **Connection to 8th Street:** Accessible path from 8th Street connects to the existing network. This also features an optional connection to Concept 1, North-South Trail.

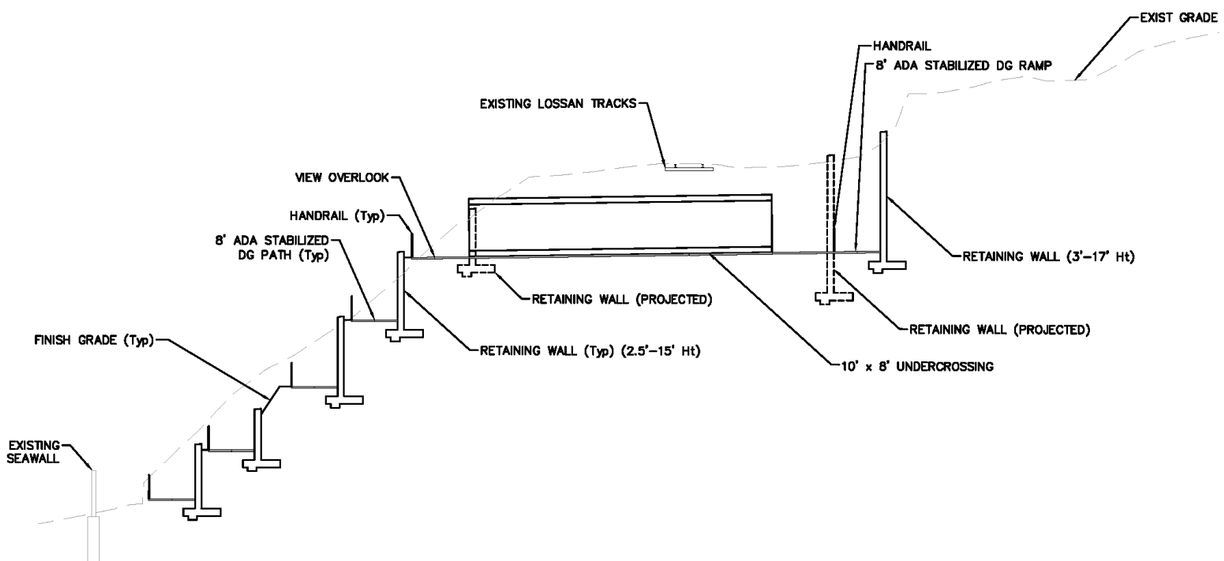
Figure 4-25 is a sample rendering, Figure 4-26 shows a typical cross-section looking north, and Figure 4-27 on the following page is the full conceptual plan. Table 4-8 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

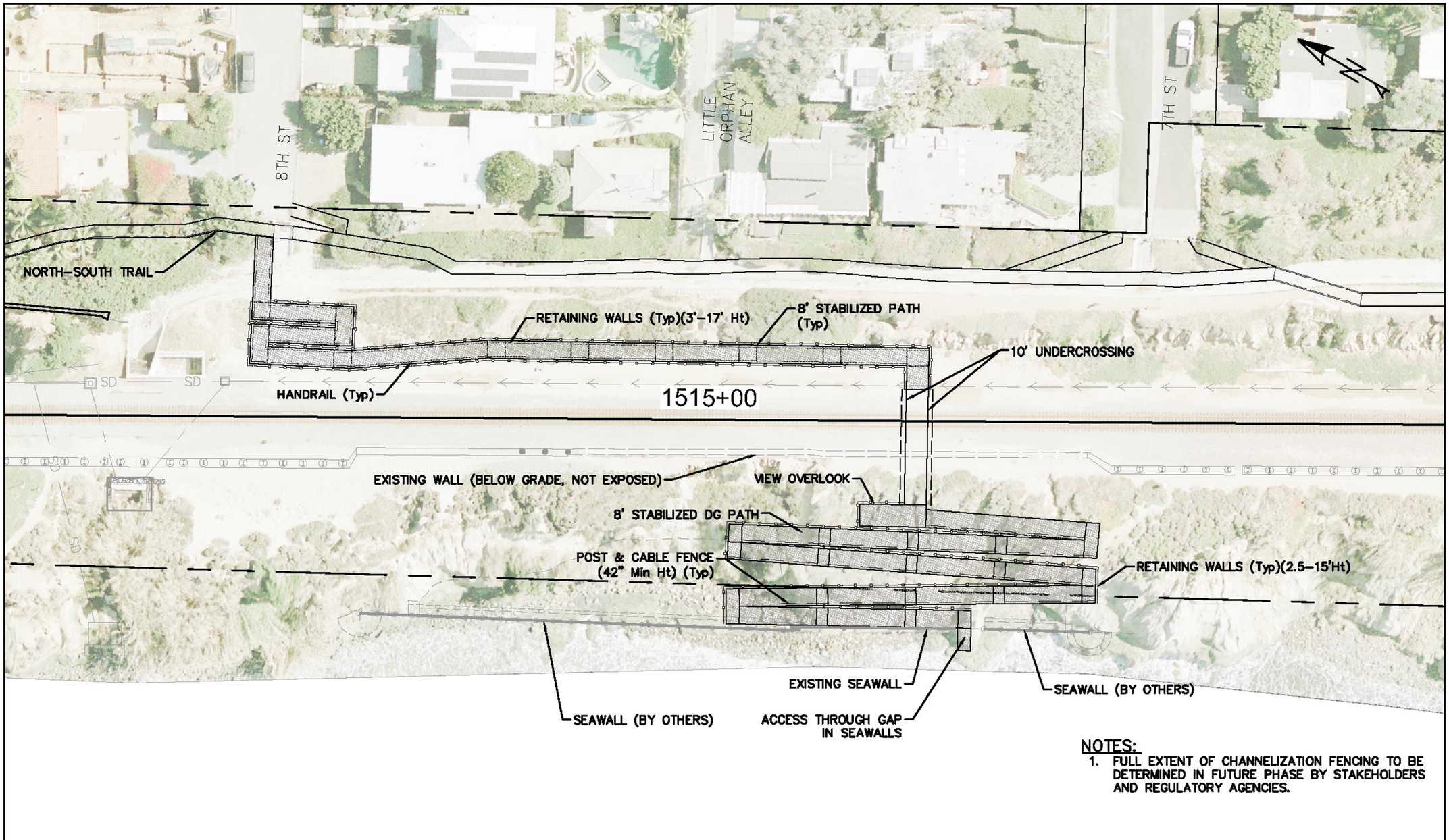
Table 4-8: Planning-Level Cost Estimate, Concept 6 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$6.8 million
Design, Environmental & Support Costs	$4.9 million
Total Project Cost Estimate (2022 Dollars)	**$11.7 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$1.1 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$12.8 million**

Figure 4-25: Sample Rendering, Concept 6

Figure 4-26: Typical Cross-Section Looking North, Concept 6





NOTES:
1. FULL EXTENT OF CHANNELIZATION FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.

Figure 4-27	wsp 401 B STREET, SUITE 1650 SAN DIEGO, CA 92101 RELATIVE BORDER SCALE IS IN INCHES 0 1 2		DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG — DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101–4231 (619) 699–1900	DEL MAR COASTAL CONNECTION EXHIBIT CONCEPT 6: UNDERCROSSING 7TH AND 8TH ST RAMPS TO BEACH	SCALE 1"=40' SANDAG CONTRACT NO. DRAWING NO. 1 / SHEET NO. 1

CONCEPT 7: UNDERCROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH

This railroad undercrossing takes advantage of existing east-west movement patterns near 7th and 8th Streets, while reducing or eliminating some of the most impactful features of at-grade crossings including CPUC special approval, safety fencing, and noise impacts (described in Section 5). Notable features include:

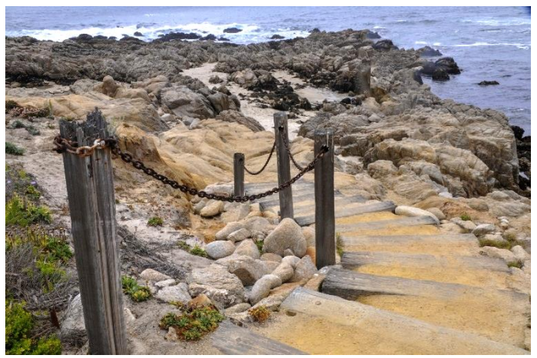
- **Natural Stairs:** Designed to match the existing informal paths along the bluffs, natural stairs are graded into the terrain using timber or stone, as pictured in the sample photos in Figure 4-30. Steeper portions may require retaining walls, some of which may be below grade and/or covered with fill and landscaping to reduce visual impacts.
- **Accessible Paths:** All paths except the natural stairs feature ADA-compliant grades and can utilize a special form of stabilized decomposed granite for an accessible surface.
- **View Overlook:** Located at the western end of the undercrossing, a view overlook is a new amenity that would be accessible from 7th Street and optionally Concept 1, North-South Trail.
- **Railroad Undercrossing:** A prefabricated, 8-foot by 10-foot rectangular concrete tunnel would be positioned just below the railroad ballast and bedding.
- **Connection to 8th Street:** Accessible path from 8th Street connects to the existing network. This also features an optional connection to Concept 1, North-South Trail.

Figure 4-28 is a sample rendering, Figure 4-29 shows a typical cross-section looking north, and Figure 4-31 on the following page is the full conceptual plan. Table 4-9 summarizes the cost estimate, with the full planning-level estimate in Appendix D.

Table 4-9: Planning-Level Cost Estimate, Concept 7 (Full Estimate in Appendix D)

Category	Estimated Cost
Construction Contract Estimate	$3.7 million
Design, Environmental & Support Costs	$2.7 million
Total Project Cost Estimate (2022 Dollars)	**$6.4 million**
Estimated Cost Escalation to 2023-2027 Years of Expenditure	$0.6 million
Total Project Cost Estimate (Year of Expenditure Dollars)	**$7.0 million**

Figure 4-30: Sample Photos of Natural Stairs



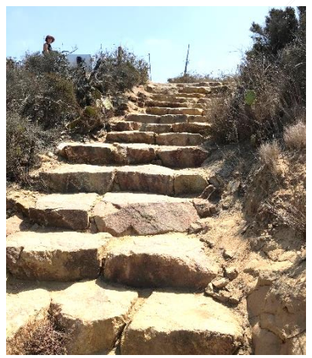
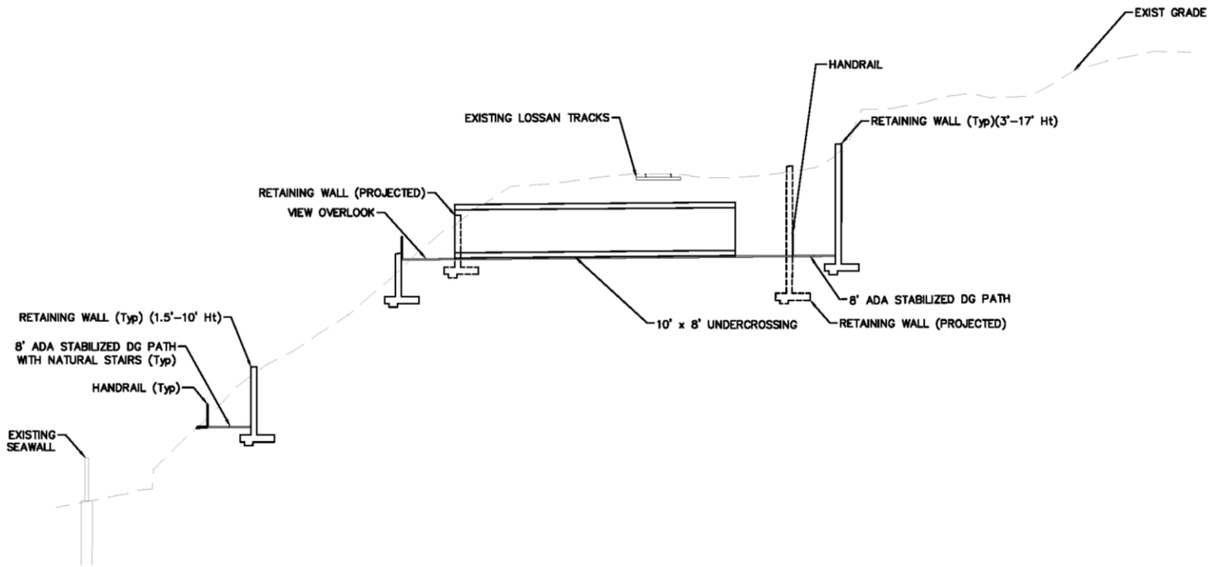


Figure 4-28: Sample Rendering, Concept 7

Figure 4-29: Typical Cross-Section Looking North, Concept 7



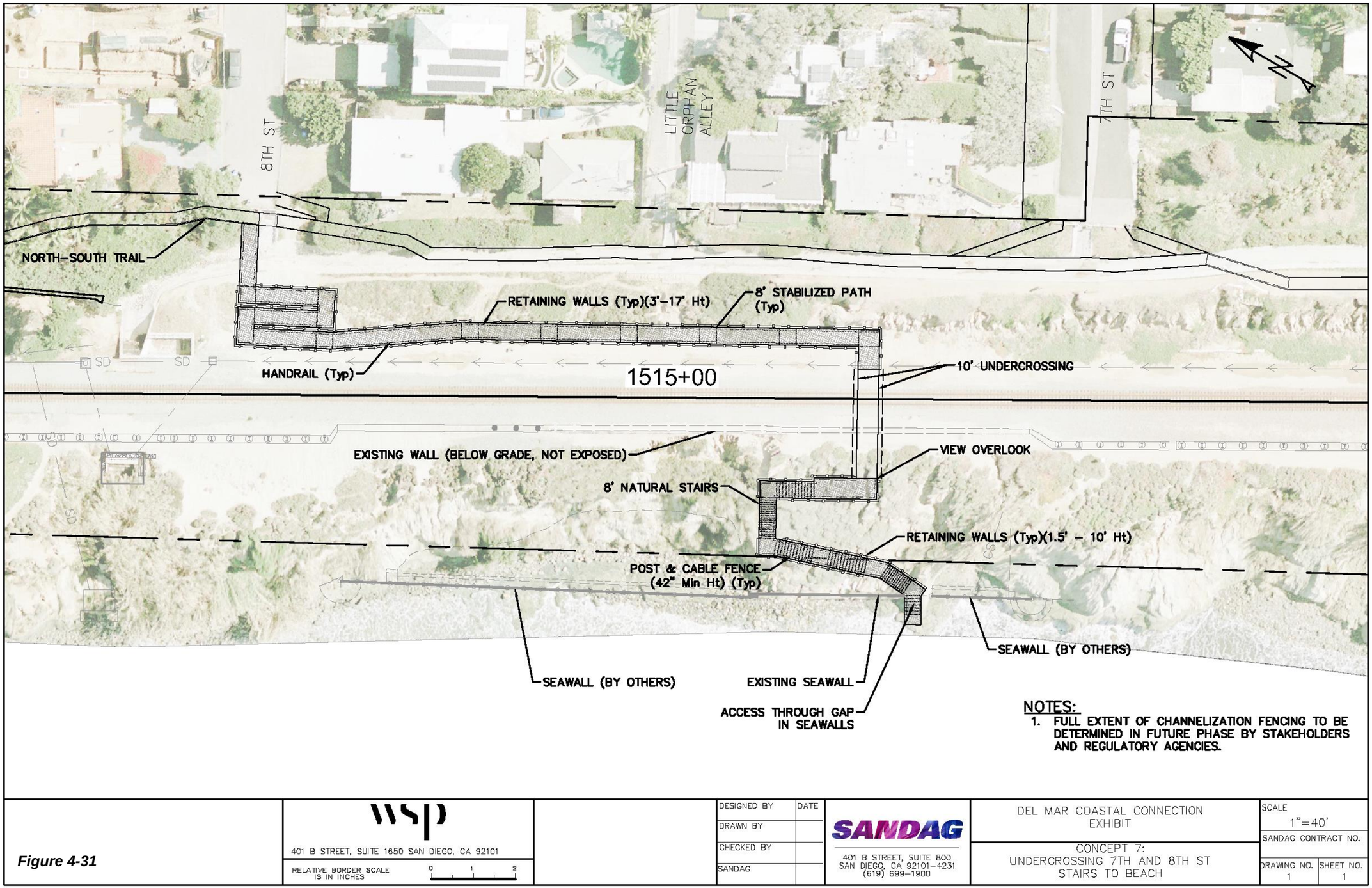


Figure 4-31	wsp 401 B STREET, SUITE 1650 SAN DIEGO, CA 92101 RELATIVE BORDER SCALE IS IN INCHES 0 1 2		DESIGNED BY / DRAWN BY / CHECKED BY / SANDAG — DATE	SANDAG 401 B STREET, SUITE 800 SAN DIEGO, CA 92101–4231 (619) 699–1900	DEL MAR COASTAL CONNECTION EXHIBIT CONCEPT 7: UNDERCROSSING 7TH AND 8TH ST STAIRS TO BEACH	SCALE 1"=40' SANDAG CONTRACT NO. DRAWING NO. 1 SHEET NO. 1

5. IMPLEMENTATION STRATEGY

This section discusses a wide range of implementation considerations for the design concepts developed in this study. It is organized into the following categories:

- Right-of-way, NCTD approval, maintenance, and liability
- California Coastal Commission (CCC) approval
- California Public Utilities Commission (CPUC) approval
- Environmental reviews
- Audible safety systems for at-grade crossings
- Accessibility design
- Constructability
- Next steps and funding

RIGHT-OF-WAY, NCTD APPROVAL, MAINTENANCE & LIABILITY

The seven design concepts recommended for advancement are mostly located within public rights-of-way and do not require the use of any private property. The northern terminus of the north-south trail reaches Seagrove Park through a public access easement located on private property.

As mapped in Figure 2-5 through Figure 2-8 and in the study's online basemap, the public parcels in the study area are divided among several agency owners:

- Street rights-of-way owned by the City of Del Mar
- Railroad parcels owned by NCTD
- Western bluffs owned by the City of Del Mar

NCTD Right-of-Way Approval

NCTD approval is required for any construction or other work in its right-of-way. This is governed by NCTD Board Policies No. 11 (Real Estate) and No. 18 (Railroad Safety and Community Enhancement Projects) as well as the scope of work for the SANDAG DMB Phase 5 project.

The NCTD railroad right-of-way contains some private encroachments in which adjacent property owners have installed landscaping or small structures on NCTD property, most notably in the areas between Seagrove Park and 9th Street. With the concurrence of NCTD, the project team presumed that any private encroachments in the NCTD right-of-way would be removed if needed to construct the design concepts developed in this study.

Maintenance & Liability Agreements

Any projects located within the railroad right-of-way will require future agreements with NCTD for the City of Del Mar to assume responsibility for ongoing maintenance. NCTD Board Policy No. 18 and the scope of work for the SANDAG DMB Phase 5 project recommend that liability and maintenance for any coastal access or recreational improvements in the NCTD right-of-way should be the responsibility of the City of Del Mar. These details will require additional collaboration and consensus among the stakeholder agencies.

Some elements of railroad crossings will require specific maintenance activities to be conducted by NCTD. This includes the need for NCTD parking, most likely at adjacent street ends, to facilitate inspection activities. This will require further coordination with the City of Del Mar for use of the street right-of-way.

- **At-Grade Crossings:** Monthly inspections of signal house and at-grade crossing facilities such as gates, lighting, and other safety systems.
- **Undercrossings:** Annual inspections of undercrossing infrastructure and supporting structural elements.

CALIFORNIA COASTAL COMMISSION (CCC) APPROVAL

Approval of Proposed Concepts via Federal Consistency Certification

As noted in the study background in Section 1, the proposed design concepts were included as conditions of the SANDAG DMB Phase 5 project, which CCC approved in June 2022 under the federal consistency certification process. The CCC staff report, available in Appendix A, provides additional details on the review of proposed concepts.

At the time of CCC's approval action in June 2022, the proposed concepts in this study were still under development in preliminary draft form. While some of the more complex concepts (such as the ADA-compliant ramp system) were not advanced or refined enough to allow for a full analysis at the time, CCC approved a concept for a north-south trail, a concept for an at-grade crossing at the end of 7th or 11th Street, and stairs at 11th Street as part of the federal consistency certification. To account for potential modifications or refinements to the design concepts as they proceed through development process, the staff report explains:

> *As established through Commission review of past projects under Section 930.65 that involved modifications to previously reviewed consistency certifications, the Commission would consider if the change would cause the project to have an effect on any coastal use or resource substantially different than originally described and, as a result, would no longer be consistent with the Coastal Act. If the change is determined to not be substantially different and is still consistent with the Coastal Act, the project and proposed change could proceed. If the change is determined to be substantially different and no longer consistent with the Coastal Act, Commission staff would work with SANDAG to identify modifications or alternatives that could be implemented to achieve consistency and then bring them to the Commission for its consideration.*

North Coast Corridor Public Works Plan/Transportation & Resource Enhancement Program (PWP/TREP)

The North Coast Corridor PWP/TREP is a 40-year plan for the entire transportation corridor between Oceanside and San Diego that includes railroad double-tracking, infrastructure improvements on Interstate 5, and bicycle and pedestrian projects. It was developed jointly by SANDAG and Caltrans, approved unanimously by CCC in 2014, and updated in 2016.

The PWP/TREP acts as a programmatic CCC permitting document for a suite of corridor projects including railroad and freeway improvements, bicycle and pedestrian projects, and environmental mitigation and preservation. While the pedestrian improvements proposed in this study were not specifically included in the PWP/TREP, they also pose no conflicts to any planned PWP/TREP improvements.

This study and the PWP/TREP both share a similar goal to improve multimodal mobility in the corridor in an environmentally sensitive manner. The PWP/TREP also provides general guidance from CCC on multimodal improvements in the corridor including policies, design/development strategies, and implementation measures that could inform future permitting and implementation of the concepts developed in this study.

CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC) APPROVAL

The CPUC regulates the safety and operations of railroads statewide, including review and approval of most physical and operational modifications. The project team met with CPUC staff three times throughout the study to review design and implementation requirements and will continue consultation through future project development activities.

All seven design concepts developed in this study will require consultation and approval by CPUC due to their proximity to the railroad, with the proposed at-grade crossings undergoing the highest level of review as detailed below.

Approval of At-Grade Crossings

The CPUC generally prohibits new at-grade crossings. General Order 75-D explains that "the Commission's policy is to reduce the number of at-grade crossings on freight or passenger railroad mainlines in California." Approval of new at-grade crossings therefore will require approval by CPUC as part of a discretionary decision process, with commissioners basing their review on site-specific factors, including an assessment of CPUC's at-grade crossing fencing requirements.

General Order 164-E provides additional guidance, including completion of a safety evaluation called a Rail Crossing Hazard Analysis Report (RCHAR) to assess the benefits and risks of proposed railroad crossings. CPUC staff reported that the critical questions in evaluating any proposed crossing projects include:

- What are the actual safety issues in the project area?
- Will the proposed condition be safer than the existing condition?
- Are there other special considerations such as engineering or environmental constraints?

CPUC staff have cited several specific concerns for at-grade crossings in nearby sections of the railroad corridor, including the high frequency and speed of trains, the curvature of the railroad tracks limiting visibility, and the history of safety incidents in the corridor.

Potential Precedent: Santa Claus Lane At-Grade Crossing

While CPUC policy generally prohibits new at-grade crossings, CPUC staff identified a recently approved at-grade crossing at Santa Claus Lane in Santa Barbara County that could serve as a model for potential at-grade crossing approvals in Del Mar. Located on the LOSSAN Rail Corridor near Carpinteria, the project has been permitted but is not yet constructed. Figure 5-1 shows the project location and current conditions, and Figure 5-2 is an excerpt from the approved concept plan. The proposed project includes fencing around the crossing on both sides of the railroad to control and channel pedestrian access.

Figure 5-1: Location of Planned Santa Claus Lane At-Grade Crossing (Nearmap)

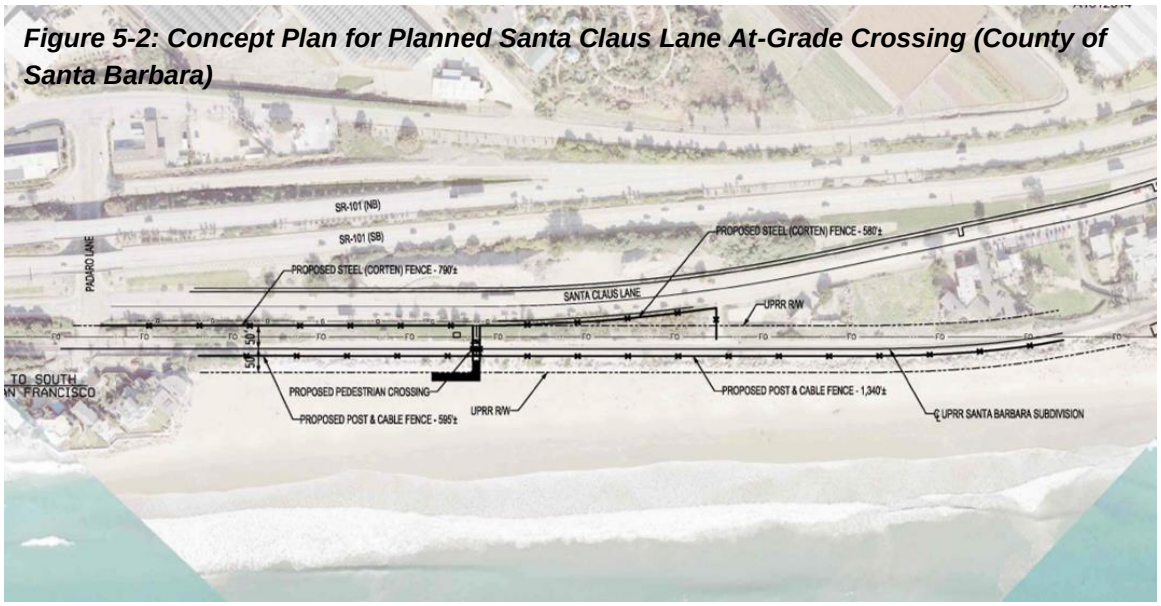


Figure 5-2: Concept Plan for Planned Santa Claus Lane At-Grade Crossing (County of Santa Barbara)

As described by CPUC staff, factors in the Santa Claus Lane approval included:

- Grade separation study concluding that overcrossing and undercrossing options were infeasible (discussed below)
- Inclusion of channelization fencing on both sides of the railroad to control access
- Support from the railroad owner

CPUC staff also noted that the railroad in Santa Barbara County may have lower train volumes than Del Mar, which could be considered in the discretionary decision by commissioners. CPUC could also consider the temporary nature of the crossing in light of the plans to relocate the railroad off the bluffs, as discussed in Section 2 of this report.

Grade Separation & Safety Study for At-Grade Crossings

A major factor in CPUC approval of the Santa Claus Lane at-grade crossing was a grade separation study that evaluated options for potential overcrossings and undercrossings. CPUC staff specifically requested in its letter to applicants: “As part of considering and approving the construction of new at-grade crossing, the CPUC staff requires applicants to conduct a thorough study of a grade separation, exploring all practicable designs of pathways crossing under and over the railroad mainline track.”

The grade separation study for Santa Claus Lane is available in Appendix E and included the following elements:

- Landward and seaward field investigation/geotechnical studies data
- Concept geometrics
- Policy analysis
- Mean high tide study data
- CCC staff reports or other reviews
- Projected number of users
- Traffic data

The study concluded that an overcrossing was infeasible for several reasons, including CCC concerns about shoreline protective devices and visual impacts, and that an undercrossing was infeasible due to flooding concerns.

Many of the elements listed above have been fulfilled by this study, including preliminary field investigation, geotechnical review, concept geometrics, and policy analysis. To maximize efficiency, the information in this study could be supplemented with the additional technical items listed above, plus the CPUC-prescribed RCHAR safety evaluation described earlier, into a single “grade separation and safety study” that would occur at the beginning of the design process.

ENVIRONMENTAL REVIEWS

The access improvement project would be reviewed under the California Environmental Quality Act (CEQA), and potentially also the National Environmental Policy Act (NEPA) if federal funds are used. This process would include an initial review of potential environmental impacts under a variety of topic areas and may require technical studies where needed to substantiate those findings. The results of the environmental analyses also may prompt supporting mitigation measures.

The recently approved at-grade crossing at Santa Claus Lane received a Mitigated Negative Declaration under CEQA (available in Appendix E). This environmental review identified some potential impacts and sufficient mitigations to reduce those impacts below significant levels. The type of environmental document, determination of significance of impacts to resources and potential mitigation will be made by the appropriate CEQA and NEPA lead agencies.

AUDIBLE SAFETY SYSTEMS FOR AT-GRADE CROSSINGS

At-grade crossings require audible safety systems that would create noise impacts in the surrounding community. Per the federal Train Horn Rule, a new at-grade crossing typically requires warning bells at the crossing itself, plus the sounding of train horns when trains approach the crossing from either direction, beginning one-quarter mile away.

One potential alternative to the routine sounding of train horns may be a wayside horn, which simulates the sound of train horns from a stationary location at the at-grade crossing itself. This would require one of the following additional regulatory approvals, either of which could be pursued separately, but are not requirements for the implementation of at-grade crossings:

- **Quiet Zone:** The Federal Railroad Administration (FRA) allows the creation of quiet zones that allow wayside horns in lieu of routine train horns. However, FRA regulations require quiet zones to be "bookended" on each side by vehicular crossings with quiet zone status. Attaining quiet zone status for pedestrian at-grade crossings in Del Mar therefore would require attaining quiet zone status for the roadway at-grade crossing at Sorrento Valley Road, located south of the study area in the City of San Diego.
- **Wayside Horn Waiver:** CPUC staff reported that the existing at-grade pedestrian crossings in San Clemente—one of which is pictured in Figure 5-3—received waivers from the Federal Railroad Administration (FRA) to implement wayside horns at the crossings in lieu of train horns, which are required by state law. However, CPUC staff also reported that FRA has made it clear that further waivers are highly unlikely, and that changing state law to allow wayside horns at pedestrian crossings would be the only way to remove the need for the FRA waiver. SANDAG or other stakeholder agencies may choose to pursue this option via the state legislature.

A recent study in Encinitas—the Montgomery Avenue Noise Study Wayside Horn Demonstration Acoustic Monitoring Report (2017), included as Appendix F—showed that wayside horns could reduce community noise impacts compared to train horns, with the sound from train horns traveling farther into the community and at a higher intensity. The study examined both 92-decibel and 80-decibel types of wayside horns, noting: "The current standards for wayside horns are applicable to roadway crossings and consist of 92 decibel horns. However, at similar pedestrian-only quiet zone crossings in San Clemente, the CPUC

Figure 5-3: At-Grade Crossing in San Clemente (SANDAG)

approved a modified wayside horn of 80 decibels." For context, standard train horns are 96-110 decibels per the federal Train Horn Rule. Other federal research estimates that motorcycles typically emit around 95 decibels, and gas-powered lawnmowers and leaf blowers typically emit around 80 decibels.

Regardless of the specific audible systems used, any new at-grade crossing in Del Mar could create new noise impacts in the community through warning bells, train horns, and/or wayside horns. Currently train horns are not sounded routinely in the area, with the nearby Coast Boulevard at-grade crossing using a wayside horn in lieu of routine train horns.

The at-grade crossing concepts developed in this study presume standard requirements for warning bells at the crossing and the routine sounding of train horns. The concepts do not include wayside horns or quiet zone elements because those elements are outside the scope of this study and are not requirements for the implementation of at-grade crossings. Additional approvals for wayside horns or other quiet zone elements could be pursued in the next phases of project development.

ACCESSIBILITY DESIGN

Design requirements for accessibility are governed by several laws and guidelines as summarized below. The design concepts advanced in this study include several accessibility options to help facilitate future design decisions by stakeholder agencies.

The Americans with Disabilities Act (ADA) requires new facilities to be designed to accommodate users with mobility impairments. Current ADA Accessibility Standards (2010) require new facilities to include ADA-compliant design unless it is "structurally impracticable," which is defined as "the unique characteristics of terrain prevent the incorporation of accessibility features." If full compliance with the 2010 ADA Accessibility Standards is determined to be structurally impracticable, compliance with the standards is required to the extent that it is not structurally impracticable. In that case, any portion of the facility that can be made accessible would be made accessible to the extent that it is not structurally impracticable.

While ADA does not make any explicit distinctions or exceptions for beach access trails or impacts to sensitive resources, a separate federal law, the Architectural Barriers Act (ABA) of 1967, does make these distinctions as detailed in Chapter 10 of the ABA Accessibility Standards (codified as Appendix D of 36 C.F.R. Part 1191). Use of ABA design standards typically is limited to federal projects on federal lands, or federally funded projects in which ABA standards are explicitly prescribed by the funding source. The U.S. Access Board's Accessibility Standards for Federal Outdoor Developed Areas explains:

> *The new provisions for trails, picnic and camping facilities, viewing areas, and beach access routes are not included in the Department of Justice's (DOJ) 2010 ADA Standards and have no legal effect on state and local governments and private entities subject to DOJ's ADA regulations. State and local governments and private entities may, however, use the provisions for guidance when designing trails, picnic and camping facilities, viewing areas, and beach access routes.*

Although not binding regulations, the ABA standards could provide guidance for outdoor trails and accessways sited in areas with steep terrain or where other environmental laws may preclude full compliance with accessibility standards.

In this conceptual study, the project team found that that the seven design concepts are physically feasible from an engineering perspective, although they may pose a variety of potential impacts and challenges. Of note is the fact that the segment of sandy beach below

the bluffs in the project area is narrow and can be inundated with water during certain times of the day and more consistently during certain times of the year. The timing of inundation in this section of the beach is projected to worsen over time with projected sea level rise. In addition, potential changes to the visual character of the bluffs—including associated grading (beyond the grading that will be performed as part of the DMB5 Stabilization Project), retaining walls, and the potential modification of the topography of the bluffs—could present conflicts with coastal policies and potential permitting issues. These issues will be further evaluated in the next phase of project development.

The project team plans to present the concepts for public feedback on accessibility design considerations, including a presentation to SANDAG's Social Services Transportation Advisory Council (SSTAC). The project team may consult the U.S. Department of Justice and/or any additional federal or state funding entities for additional guidance during future project development activities.

CONSTRUCTABILITY

The pedestrian improvements developed in this study present a range of constructability considerations, with a major factor being the degree to which construction requires access to the NCTD railroad right-of-way. This is summarized below, followed by a discussion of constructability considerations for the north-south trail and railroad crossings.

Railroad Access

As shown in the conceptual plans in Section 4, all proposed facilities have at least some elements in the NCTD railroad right-of-way, which at minimum will require a right-of-entry permit from NCTD to construct, as well as NCTD-approved flagging protection staff during construction activities. Additionally, all workers in the right-of-way will be required to complete NCTD's federally mandated roadway worker protection (RWP) program.

NCTD requires that work in the railroad right-of-way be performed in a manner that limits impacts to train operations to the extent practicable. The railroad "foul zone" is defined by NCTD as within 25 feet of the nearest running rail. Any work in the foul zone should be performed such that it can be stopped and cleared of the tracks prior to a train entering the work limits. Equipment and workers may not be able to clear the foul zone in all cases when trains pass, but they must be cleared of the tracks and secured to prohibit movement.

As described in the following pages, most construction activities for the improvements developed in this study will fit into two categories with respect to railroad access:

- Some construction activities may require suspending railroad operations. This typically would occur during nighttime work periods or multi-day absolute work windows (AWWs) which are typically scheduled several times per year.
- Some project elements may be constructed primarily from adjacent street ends or beaches, with little or no entry into the railroad foul zone. All work in the NCTD right-of-way still will require a right-of-entry permit, flagging protection, and RWP.

NCTD provides additional guidance in the Working Around the Rails section of its website.

Constructability Considerations for North-South Trail

The north-south trail has varying constructability considerations depending on its surrounding context, which is shown in the conceptual plans in Section 4. For construction purposes, the 0.8-mile trail is divided into three potential construction areas described below.

Seagrove Park to 8th Street

The northern section of the north-south trail is highly constrained by the railroad and adjacent residential development. While the adjacent street ends and alleys will provide some access, construction of the full trail will require entry into the railroad corridor. This will require a right-of-entry permit, flagging protection, and RWP as described above.

Notable construction activities for the section from Seagrove Park to 8th Street will include materials delivery via street ends/alleys, materials staging—which is likely to require storage space within the railroad right-of-way—clearing vegetation, excavation, grading, constructing the path and supporting retaining walls, placing pedestrian bridges at Sea Orbit Lane and Lois Lane, and placing ditch crossings near 10th and 9th Streets. The walls, bridges, and ditch crossings likely will require construction via the railroad corridor and should be completed together, potentially during nighttime work periods or an AWW. Those elements also should be comprised of prefabricated, modular materials to the greatest degree possible.

8th Street Culvert Area

Just north of 8th Street, the north-south trail includes a proposed drainage culvert below graded fill, as shown in the conceptual plans and renderings in Section 4. This will require entry into the railroad corridor including right-of-entry permit, flagging protection, and RWP as described above. Mid-size equipment will be required to excavate and install the culvert, and these activities may enter the railroad "foul zone" resulting in operational impacts to the railroad.

Notable construction activities for the 8th Street culvert area will include materials delivery via street ends/alleys, materials staging—which is likely to require storage space within the right-of-way near 8th Street—clearing vegetation, excavating, placing the precast culvert, grading and fill, and constructing the path. The culvert should be comprised of prefabricated materials to the greatest degree possible.

8th Street to 4th Street

This southern section of the north-south trail is in a wider part of the NCTD railroad right-of-way, located farther east of the railroad tracks than the section north of 8th Street and situated along bluffs that ascend to the south. While construction will require right of entry, flagging protection, and RWP, it is sufficiently far from the railroad "foul zone" to avoid operational impacts.

Notable construction activities for the section from 8th Street to 4th Street will include materials delivery via street ends/alleys, materials staging—which is likely to require storage space within the right-of-way—clearing vegetation, grading, constructing the path, placing a timber walkway over the drainage facility between 7th and 8th Streets, and placing ditch crossings near 7th and 6th Streets. The ditch crossings should be comprised of prefabricated materials to the greatest degree possible. Compared to the section north of 8th Street, this southern section will require substantially less excavation and use of heavy equipment.

Constructability Considerations for Railroad Crossings

The proposed railroad crossings have distinct constructability considerations across three areas as described below, all of which are shown in the conceptual plans in Section 4.

Western Bluffs (All Crossings)

The proposed ramps, natural stairs, and retaining walls will require construction access from the beach side, similar to recent work conducted for SANDAG's Del Mar Bluffs Stabilization projects. Substantial portions of the western bluffs are within the NCTD railroad right-of-way,

requiring at minimum a right of entry permit and RWP, with flagging protection required for initial construction along the bluff top. However, once the planned channelization fencing along the bluff top is installed, future work along the bluffs is not likely to require flagging protection given the access control provided by the fencing and the overall distance from the railroad "foul zone."

Notable construction activities for the western bluffs will include materials delivery via beach; materials staging (which also is likely to require storage space on the beach); clearing vegetation; grading; constructing the path and supporting retaining walls; and constructing a beach access point at a planned seawall opening. The walls should be comprised of prefabricated, modular materials to the greatest degree possible. The natural stairs proposed in some concepts entail largely manual work, requiring less heavy equipment than other elements once the supporting retaining walls and grading activities are complete.

At-Grade Crossings & East Side Paths (11th Street & 7th-8th Streets)

Construction of the at-grade crossings will pose operational impacts to the railroad and should be done during nighttime work periods or an AWW. Construction of the east side paths will require a right-of-entry permit, flagging protection, and RWP as described above. Materials and equipment required to construct both the crossing and east side paths can be delivered via street ends or alleys.

Notable construction activities for the at-grade crossings and east side paths will include materials delivery via street ends/alleys; materials staging (which is likely to require storage space within the right-of-way); clearing vegetation; grading; constructing the east side path; constructing the signal house; installing channelization fencing; and constructing the crossing itself including required gates and warning devices.

Undercrossing & East Side Path (7th-8th Streets)

Construction of the undercrossing will pose operational impacts to the railroad and should be done during an AWW. Construction the east side path will require a right-of-entry permit, flagging protection, and RWP as described above. Both the undercrossing and east side path will require large equipment due to substantial excavation and construction activities. Materials and equipment can be delivered via street ends or alleys.

Notable construction activities for the undercrossing and east side path at 7th-8th Streets will include materials delivery via street ends/alleys; materials staging (which also is likely to require storage space within the right-of-way near 8th Street); clearing vegetation; substantial excavation (for both the undercrossing and east side path); grading; constructing the east side path and supporting walls; removing a section of railroad track; placing the precast box culvert via crane from 7th or 8th Streets atop a bed of leveling gravel; waterproofing the culvert walls; backfilling the area; and finally restoring, balancing, and welding the railroad tracks. The walls and box culvert should be comprised of prefabricated, modular materials to the greatest degree possible.

Potential Removal of Pedestrian Facilities After Railroad Realignment

As discussed in Section 2, SANDAG is currently studying options to realign the railroad away from the coastal bluffs as part of its San Diego Regional Rail Alignment Study. Once the railroad is relocated off the bluffs, stakeholder agencies will assess the study area's physical conditions and evaluate whether infrastructure on the bluffs may need to be removed to ensure public safety and return the bluffs to a more natural state.

NEXT STEPS & FUNDING

This final section summarizes the next steps required to advance the proposed concepts toward implementation. It concludes with a summary of potential funding sources for which the proposed improvements may be eligible.

Next Steps

Table 5-1 is a sample timeline of the expected milestones and next steps in the project development process. The preceding parts of Section 5 discuss many of the details associated with these implementation milestones.

Table 5-1: Sample Timeline of Next Steps

Milestone	Estimated Timeline & Notes
Conceptual Planning Study	*Complete (this study)*
Preliminary Design	
Identification of Project Funding	*In progress*
Selection of Preferred Projects	*In progress*
Grade Separation & Safety Study	3-6 months
Accessibility Decisions	3-6 months
Preliminary Design (30%)	6-12 months
Community & Stakeholder Outreach	6-12 months, concurrent with preliminary design activities
Environmental & Agency Reviews	
CEQA/NEPA Review	6-12 months, concurrent with preliminary design activities. NEPA required with federal funding
CCC Approval of Draft Design	Concurrent with CEQA/NEPA, plus 3-6 months
CPUC Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews. *(Formal CPUC process typically begins at around 60% design.)*
City of Del Mar Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews. Includes maintenance & liability agreements
NCTD Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews. Includes maintenance & liability agreements
Final Design	6-12 months following preliminary design, environmental & agency reviews
Permit Issuance	3-6 months
Construction	2-3 years following final design & permits. *(Per CCC permit, construction should be 2 years and begin within 36 months of the DMB Phase 5 construction start, unless extended by CCC.)*

Potential Funding Sources

To help identify the approximate funding need, Section 4 summarizes the estimated cost of each design concept and Appendix D contains full rough-order-of-magnitude cost estimates. Table 5-2 summarizes several federal and state funding programs for which these projects may be eligible. In general, these funding programs tend to emphasize the following goals which align with current federal and state policy goals:

- Transportation infrastructure (active transportation and railroad)
- Transportation safety
- Climate resiliency and adaptation

Table 5-2: Potential Funding Sources

Program	Agencies	Coastal Connections Eligibility
Active Transportation Program (link)	California Transportation Commission & Caltrans	**High**. The proposed improvements would create new pedestrian facilities and increase access to coastal recreation opportunities, consistent with program goals.
Railroad Crossing Elimination Grant Program (link)	US DOT	**Medium**. While not strictly eliminating any existing railroad crossings, the proposed improvements would reduce hazards and increase safety in the railroad corridor, consistent with program goals.
Rebuilding American Infrastructure with Sustainability & Equity (RAISE) (link)	US DOT	**Medium.** While the proposed improvements are broadly consistent with RAISE goals, these competitive grants typically require cost-benefit analyses showing substantial benefits in quantifiable metrics such as time savings or emissions reduction, which are difficult to establish for small-scale pedestrian improvements. However, the potential safety benefits of the proposed improvements may be an opportunity to demonstrate grant competitiveness.
Clean California Local Grant Program (link)	Caltrans	**Medium**. The proposed improvements are consistent with one of the program's key goals, to "enhance public health, cultural connection and community placemaking by improving public spaces for walking and recreation."
Urban Greening (link)	California Natural Resources Agency	**Low**. The proposed improvements include native vegetation and beautification treatments which may be consistent with some program goals. Program is currently closed to new applications but should be monitored for potential additional rounds.

Program	Agencies	Coastal Connections Eligibility
Consolidated Rail Infrastructure & Safety Improvements (CRISI) (link)	Federal Railroad Administration (FRA)	**Low**. Similar to RAISE, these competitive grants typically require cost-benefit analyses showing substantial benefits in quantifiable metrics such as time savings or emissions reduction. However, the potential safety benefits of the proposed improvements may be an opportunity to demonstrate grant competitiveness. The program is currently closed to new applications but should be monitored for potential additional rounds.
Climate Resiliency & Adaptation Programs	**Low.** These funding programs focus primarily on fortifying and adapting infrastructure against the effects of climate change. While this may be outside the scope of the proposed improvements by themselves, their eligibility may increase if the improvements are packaged with other LOSSAN corridor improvements aimed at addressing climate change impacts. These programs include: — **Climate Adaptation Planning Grants (link):** California Governor's Office of Planning & Research (OPR) — **Promoting Resilient Operations for Transformative, Efficient & Cost-Saving Transportation (PROTECT) (link):** US DOT & Federal Highway Administration (FHWA) — **Building Resilient Infrastructure & Communities (link):** Federal Emergency Management Agency (FEMA)	

Coastal Connections Conceptual Planning Study

Del Mar City Council

December 5, 2022

Agenda

- Study purpose & overview
- Initial screening of potential concepts
- Design concepts
- Implementation considerations
- Next steps *(in this study & for future project development)*

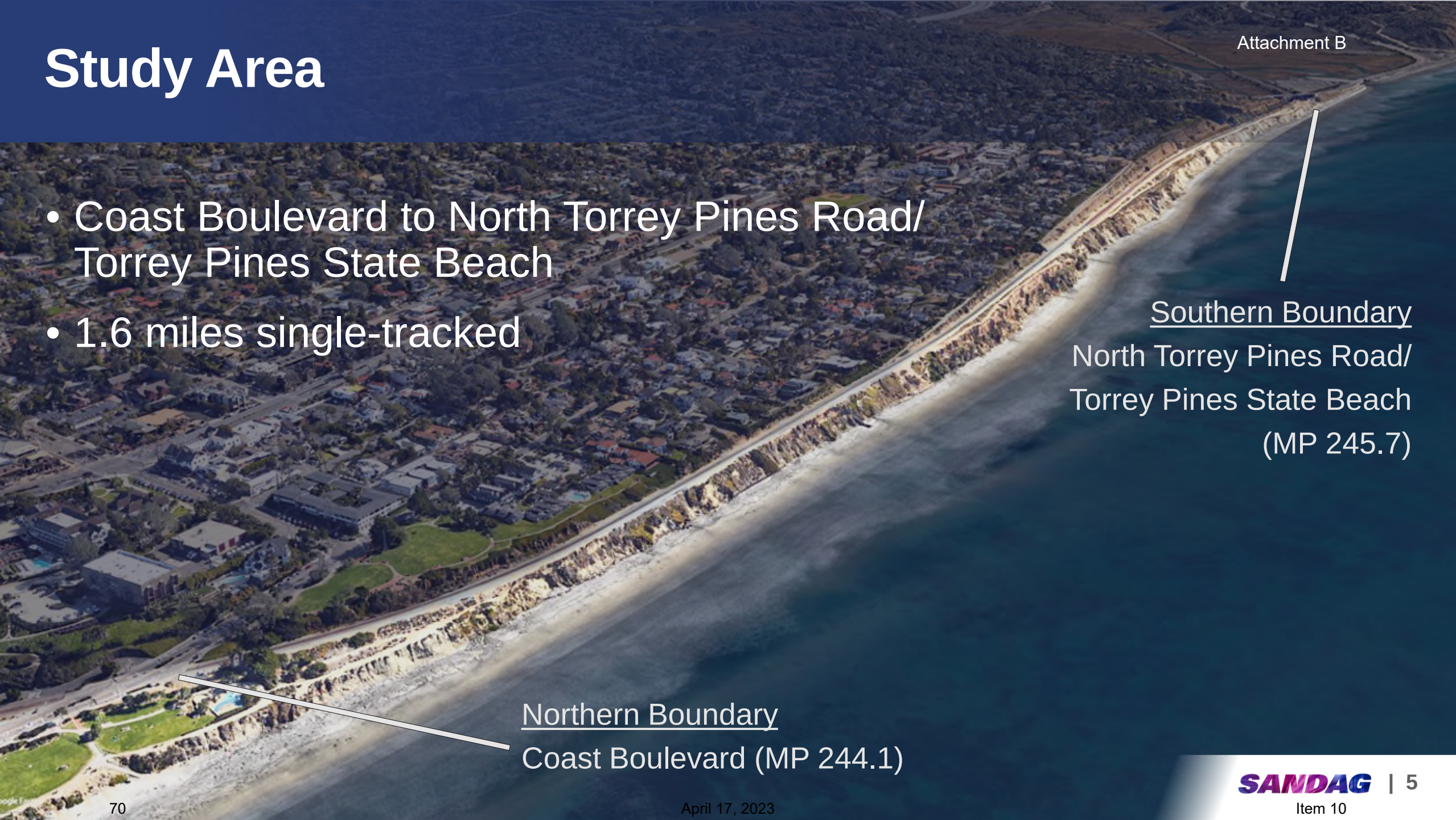
Study Purpose & Overview

Study Purpose & Overview

- Goal: Evaluate opportunities & constraints of potential pedestrian access improvements in the Del Mar coastal rail corridor
- Collaborative study with MOU between SANDAG, Del Mar & NCTD
- Funded by Caltrans planning grant
- Approx. 20 months: June 2021 – January 2023
- Concepts identified as mitigation in CCC Del Mar Bluffs Stabilization Phase 5 approval
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input & public feedback

Study Area

- Coast Boulevard to North Torrey Pines Road/ Torrey Pines State Beach
- 1.6 miles single-tracked



Project Development Team (PDT)

- SANDAG
- City of Del Mar
- NCTD
- California Coastal Commission (CCC)
- Additional meetings with California Public Utilities Commission (CPUC)
- Initiated conversations for regulatory issues including CCC & CPUC

Study Process

Jul 2021 – Dec 2021

Existing Conditions & Feasibility Assessments

Jan 2022 – Jun 2022

Identification & Screening of Potential Improvements

Jul 2022 – Jan 2023

Selection of 7 Draft Concepts for Development & Evaluation

Initial Screening of Potential Concepts

Findings from Initial Screening

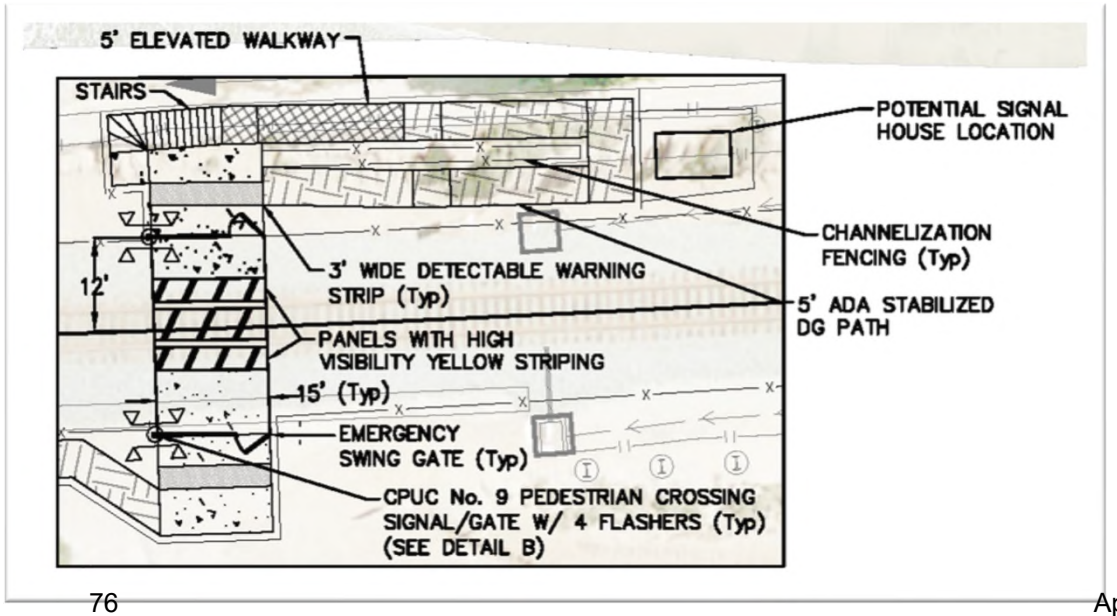
- Initial evaluation of entire corridor
- North–South trails:
  - *West Side:* Continuous facility infeasible
  - *East Side:* Seagrove Park to 4th Street
- Most feasible beach access locations:
  - 11th Street/Sea Orbit Lane
  - 7th/8th Streets
  - Torrey Pines State Beach area
- Good alignment among several criteria, including engineering, existing movements & consistency with earlier findings including *TRAC* study

Screening of Railroad Crossing Types

- At-grade crossings
- Undercrossings
- Overcrossings

Screening of Crossing Types: At-Grade Crossings

- Requires discretionary approval by CPUC
- Noise impacts from audible warning systems &/or train horns
- Safety fencing & signal house
- *Advanced for further concept development*



Screening of Crossing Types: Undercrossings

- Feasible from engineering perspective
- More development, walls & grading than other crossing types
- Eliminates noise impacts vs. at-grade crossings
- Least impact is 10’ x 8’ undercrossing
- *Advanced for further concept development*

Screening of Crossing Types: Overcrossings

- Substantial visual impacts
  (>30ft above railroad plus >60ft bluff height)
- Larger structural elements than other crossings
- *Eliminated in initial screening due to visual impacts. Focus instead on at-grade & undercrossings*

Design Concepts

Design Concepts Selected for Advancement

11th Street:

- *Concept 2:* At-grade crossing, ramps & stairs to beach
- *Concept 3:* At-grade crossing, stairs to beach

Seagrove Park to 4th Street:

- *Concept 1:* North–south trail (0.8 miles)

7th–8th Streets:

- *Concept 4:* At-grade crossing, ramps to beach
- *Concept 5:* At-grade crossing, stairs to beach
- *Concept 6:* Undercrossing, ramps to beach
- *Concept 7:* Undercrossing, stairs to beach

Notable Concept Features

- Accessible connections to street ends
- Natural stairs: Graded with timber or rock; follow existing paths of travel
- Stabilized decomposed granite: Accessibility-compliant surfaces for ramps & paths

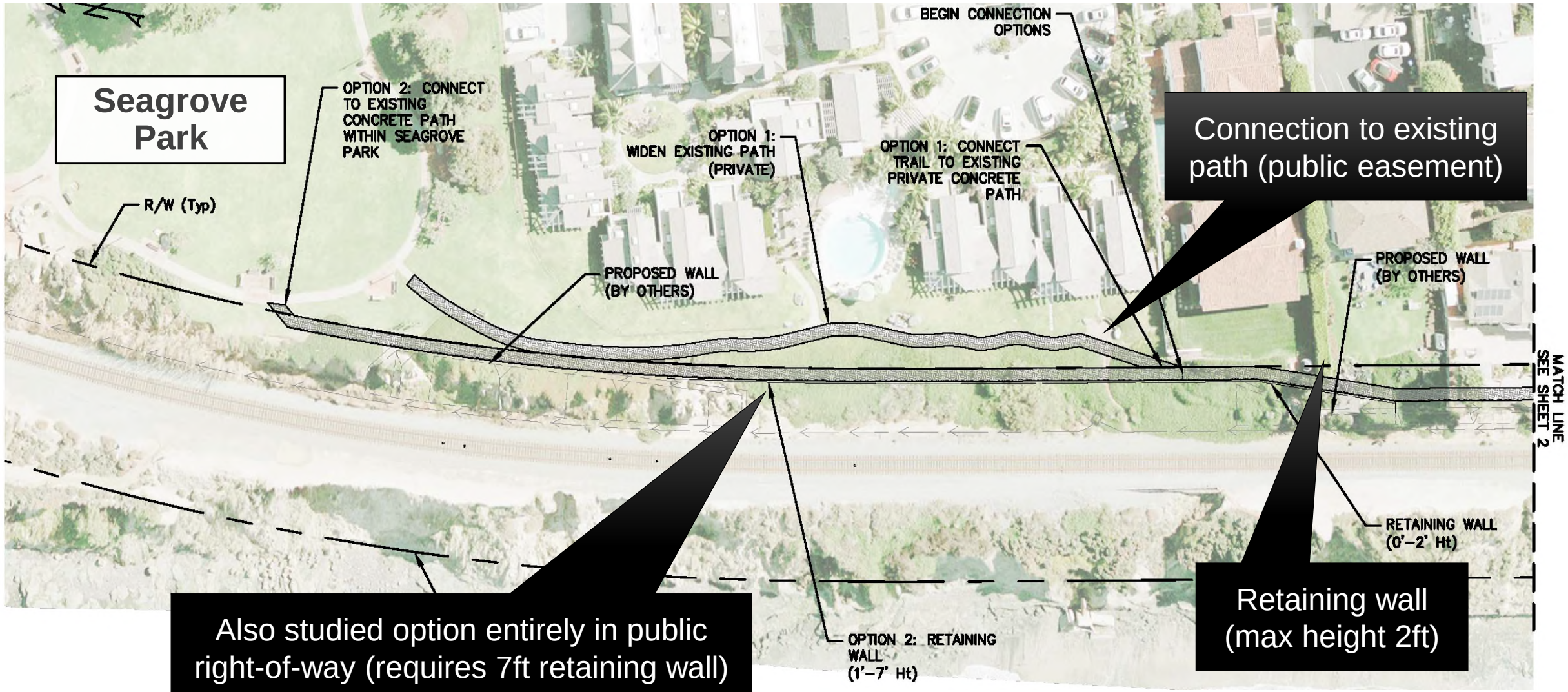
Universal Benefits Provided by All Design Concepts

- All concepts reviewed to ensure benefits over existing conditions:
  - Pedestrian connectivity & coastal access
  - New accessible paths & view overlooks
  - Consistency with existing movement patterns
  - Consistency with prior facilities, studies & recommendations
  - Safety of railroad & bluffs
- Railroad crossings integrated with SANDAG planned seawalls
- All footprints within public right-of-way (NCTD & City of Del Mar)
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input & public feedback

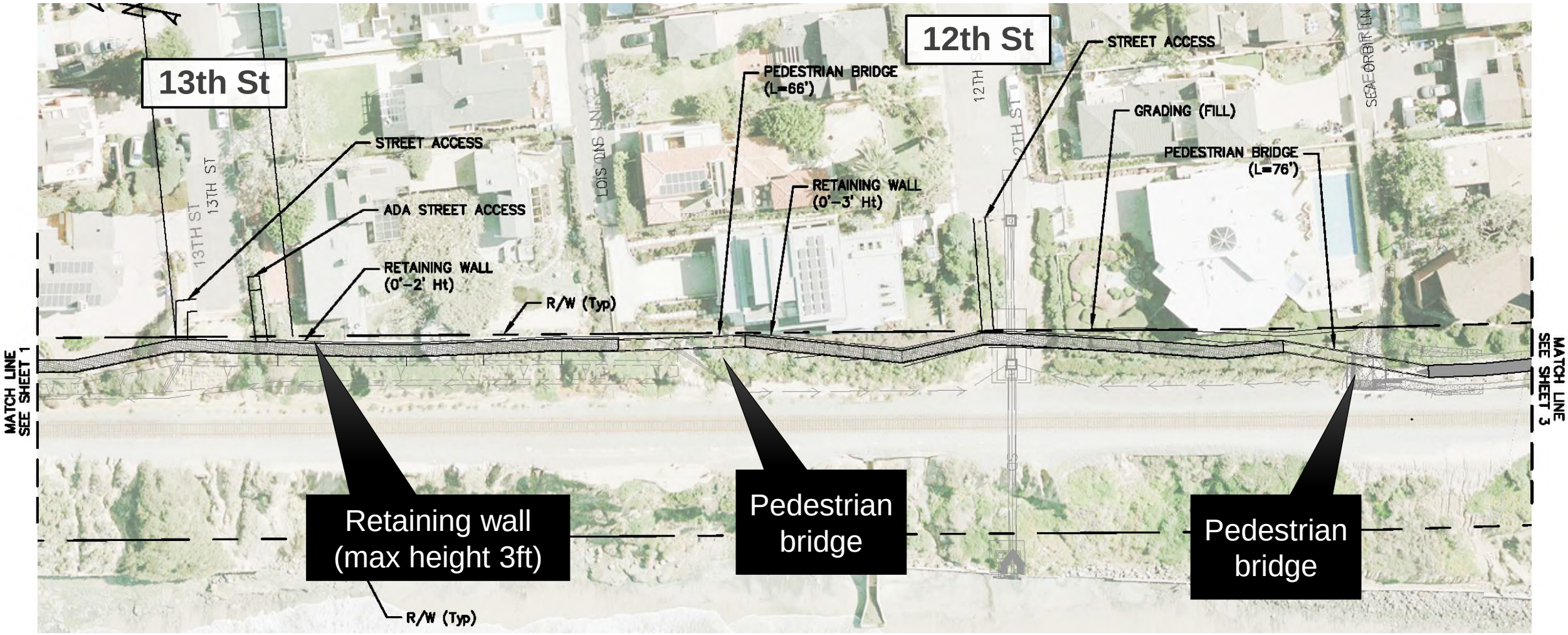
Concept 1: North–South Trail

- Seagrove Park to 4th St (0.8 miles)
- Accessible
- Connections to every street end (no alleys)

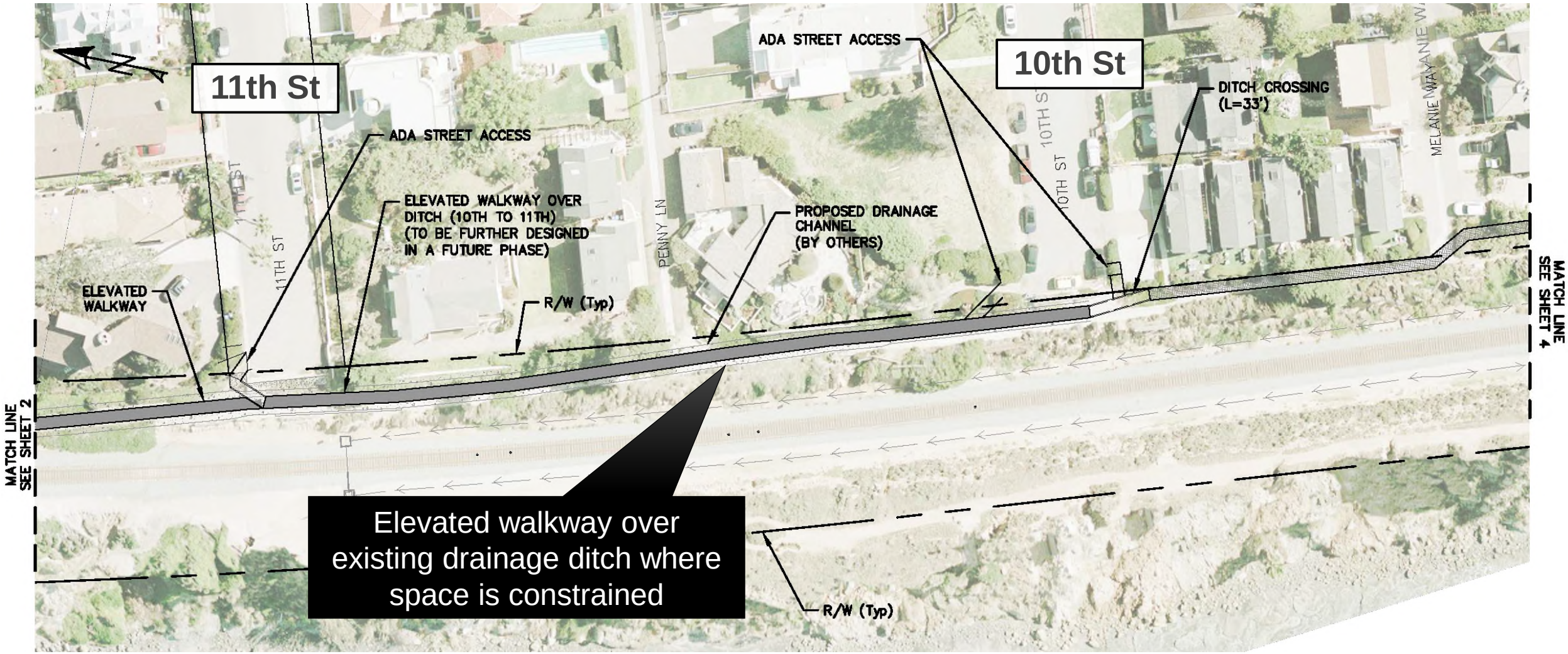
Concept 1: North–South Trail



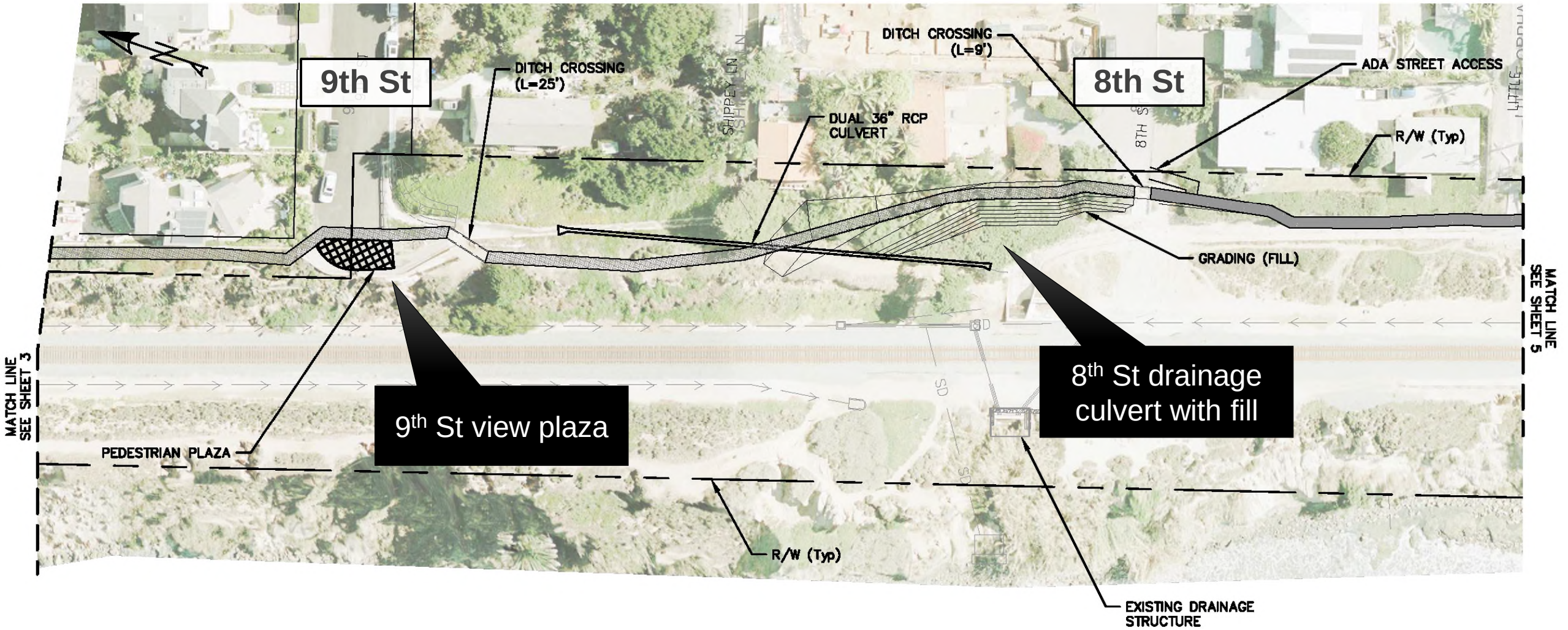
Concept 1: North–South Trail



Concept 1: North–South Trail



Concept 1: North–South Trail

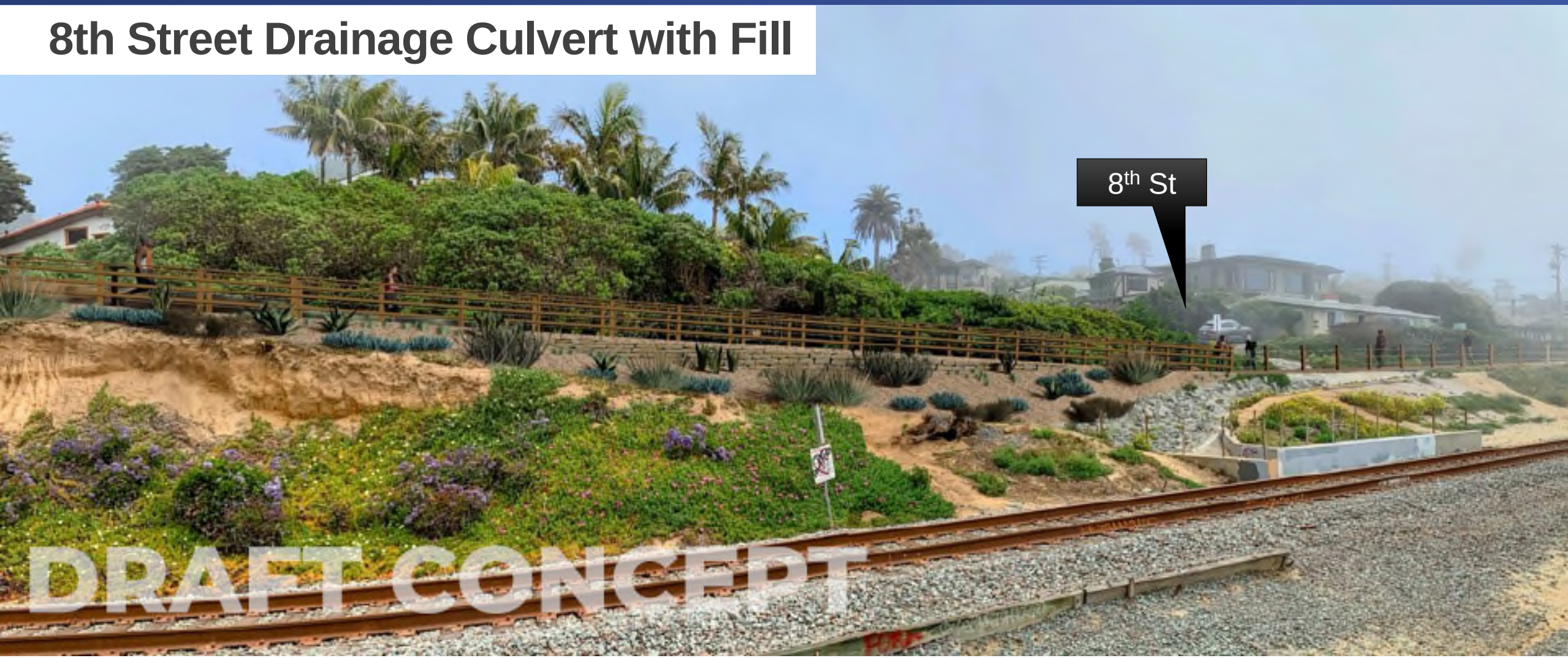


Concept 1: North–South Trail

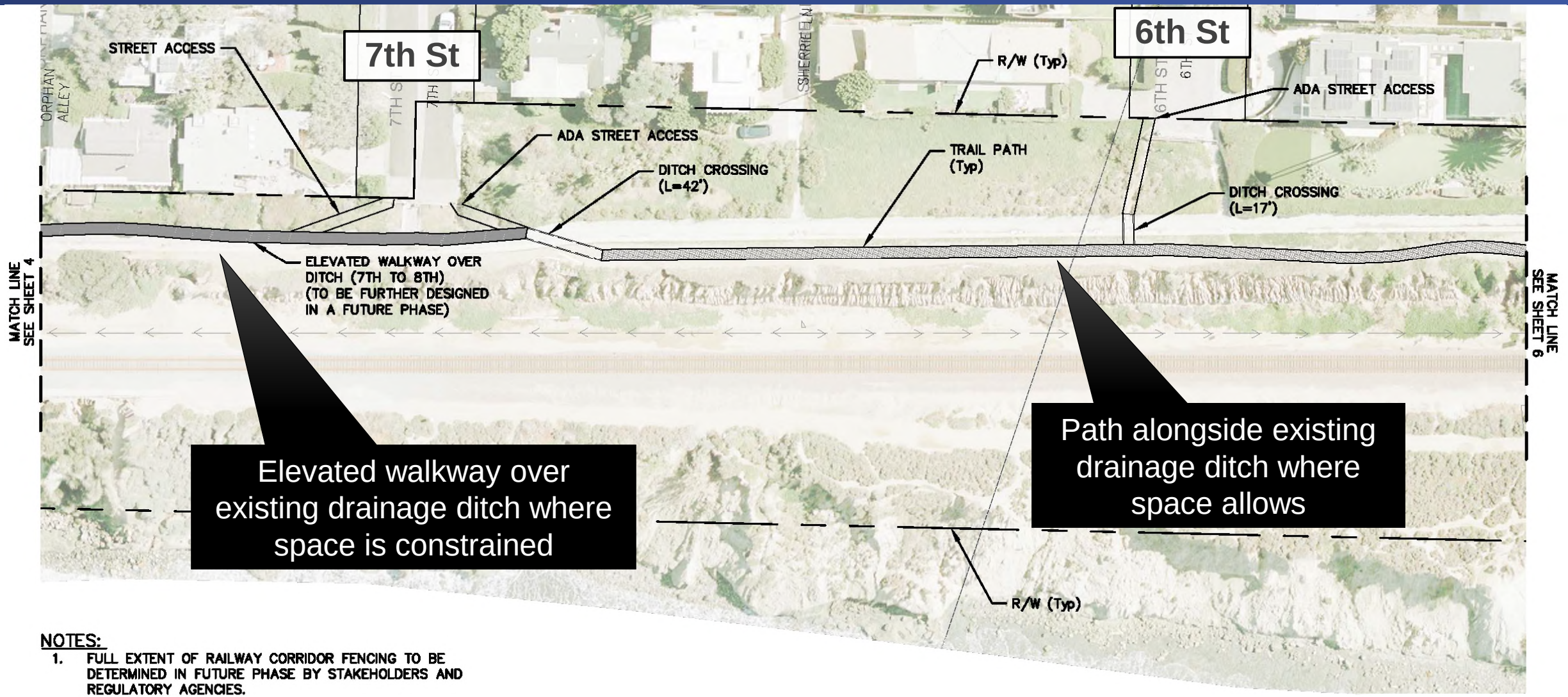
9th Street View Plaza

Concept 1: North–South Trail

8th Street Drainage Culvert with Fill



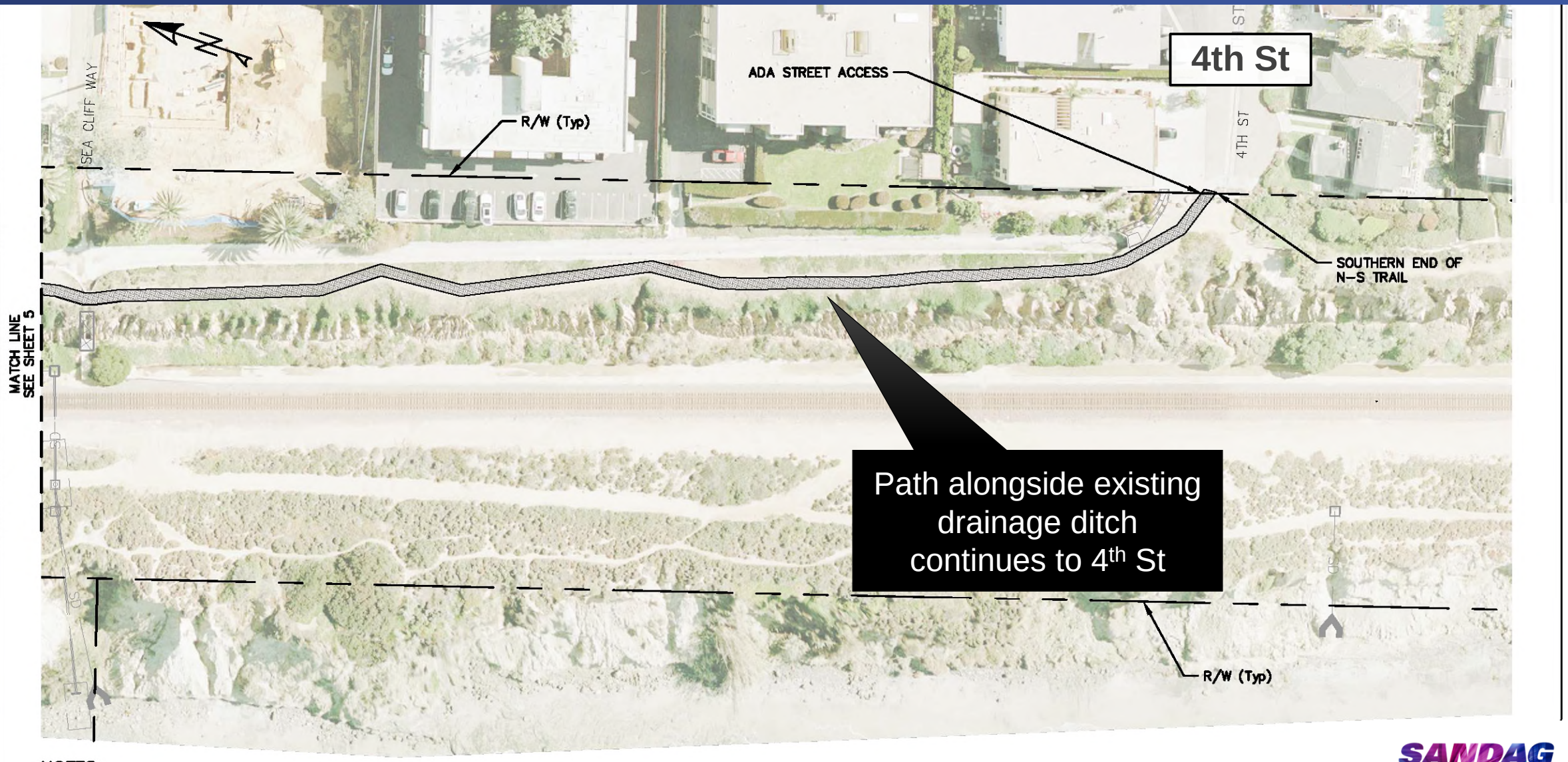
Concept 1: North–South Trail



NOTES:

1. FULL EXTENT OF RAILWAY CORRIDOR FENCING TO BE DETERMINED IN FUTURE PHASE BY STAKEHOLDERS AND REGULATORY AGENCIES.
2. IMPROVEMENTS FOR DRAINAGE AND FOR ELEVATED WALKWAY OVER DRAINAGE CHANNEL TO BE ANALYZED, DESIGNED AND DETAILS DETERMINED IN A FUTURE PHASE.

Concept 1: North–South Trail



NOTES:

1. FULL EXTENT OF RAILWAY CORRIDOR FENCING TO BE DETERMINED IN FUTURE

Concepts 2 & 3: At-Grade Crossings at 11th Street

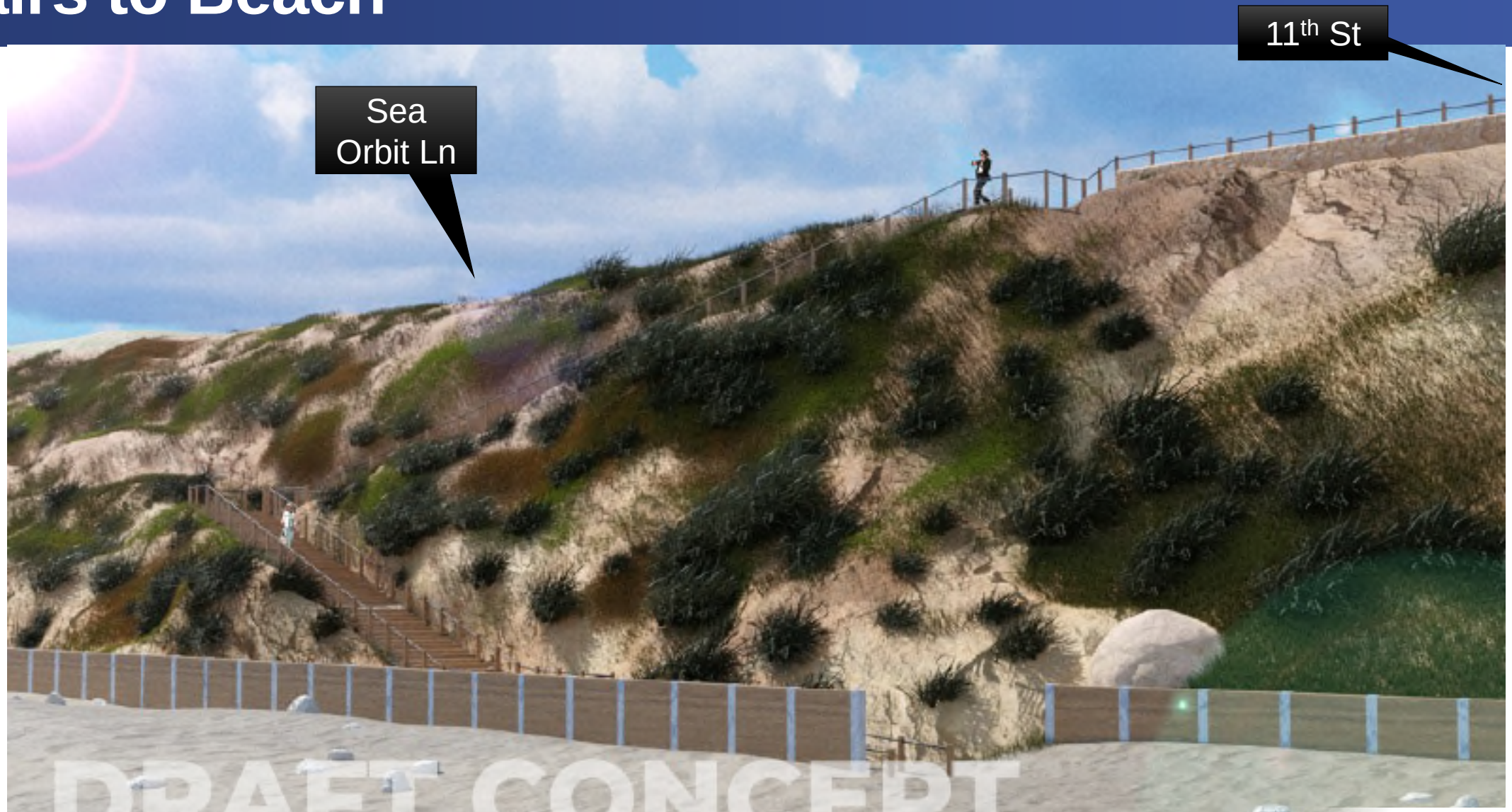
Concept 2: At-grade crossing at 11th St, ramps & stairs to beach

Concept 3: At-grade crossing at 11th St, stairs to beach

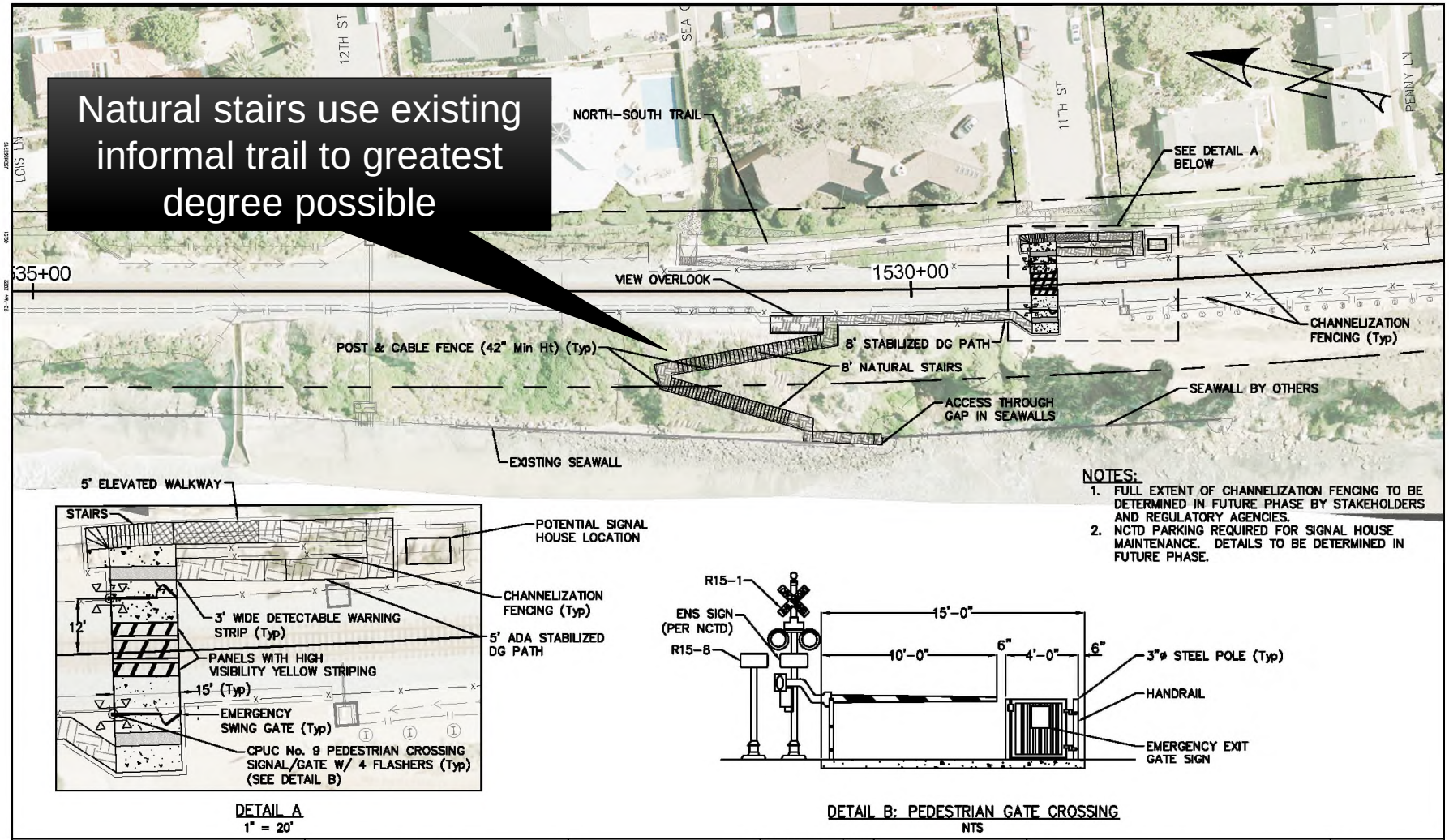
- Artificial fill on western bluffs north of 11th St provides ample space for stairs and/or ramps
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls
- Noise impacts from audible warning systems and train horns

Concept 3: At-Grade Crossing at 11th Street, Stairs to Beach

Attachment B

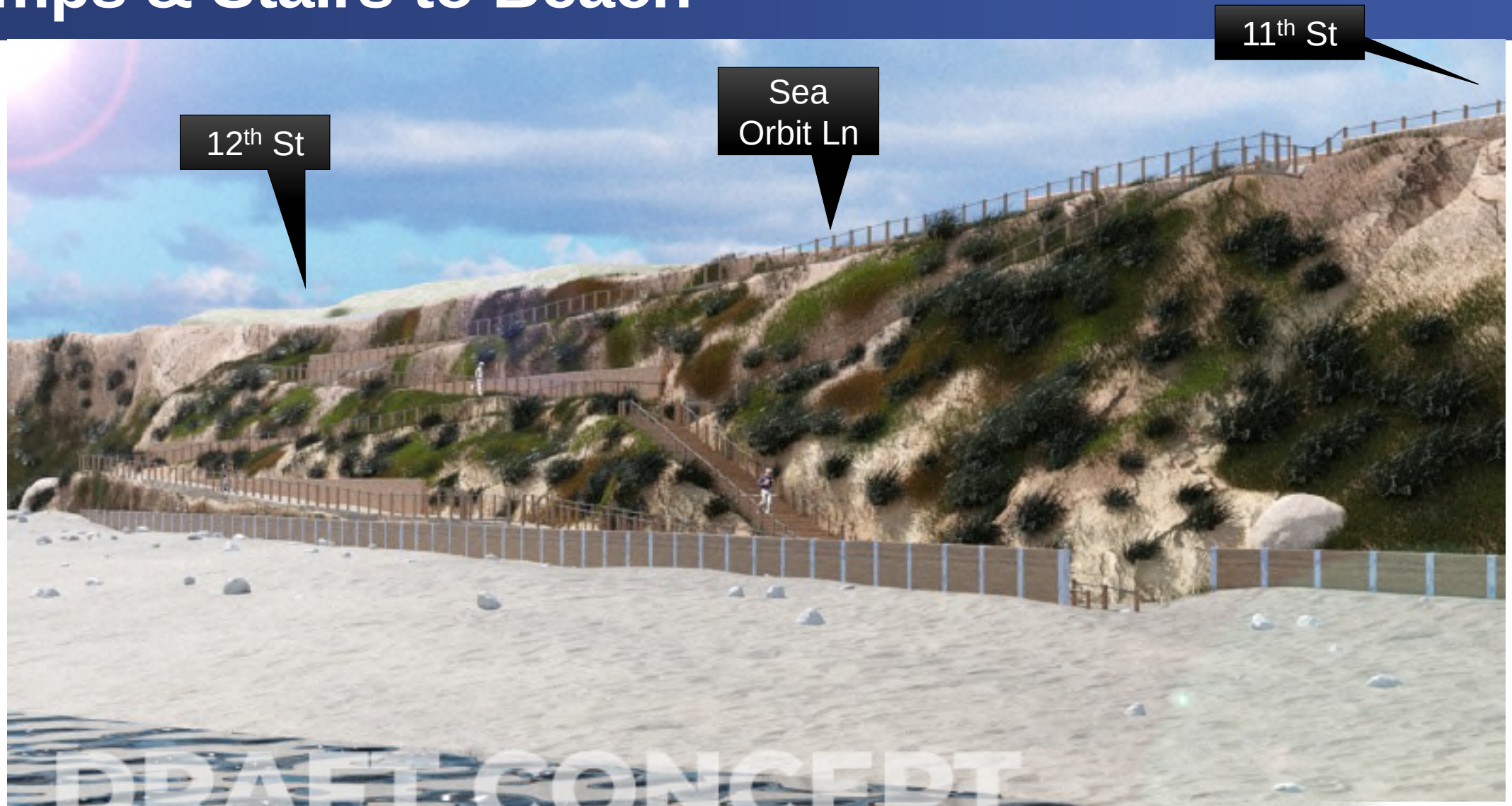


Concept 3: At-Grade Crossing at 11th Street, Stairs to Beach



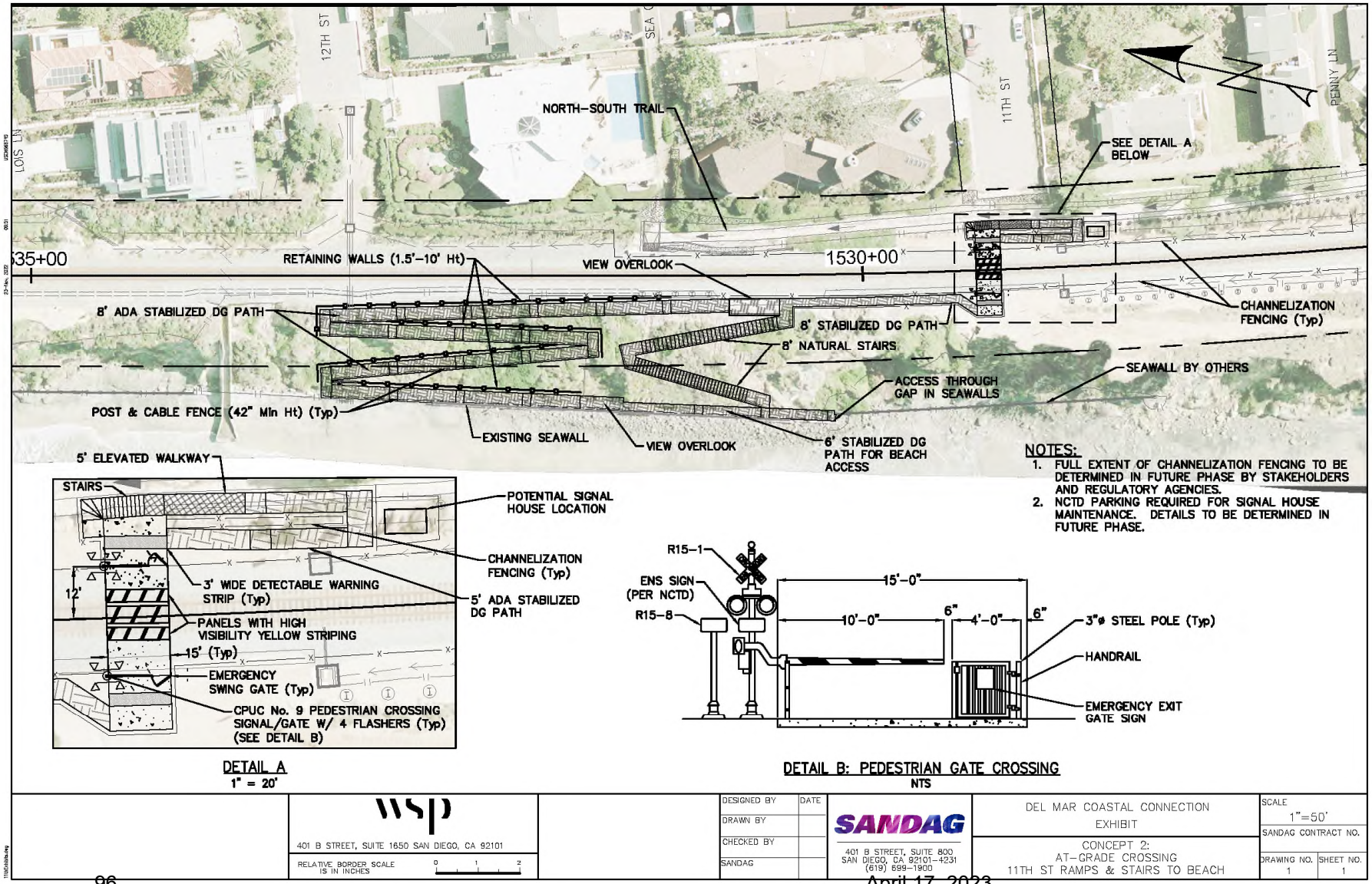
Concept 2: At-Grade Crossing at 11th Street, Ramps & Stairs to Beach

Attachment B

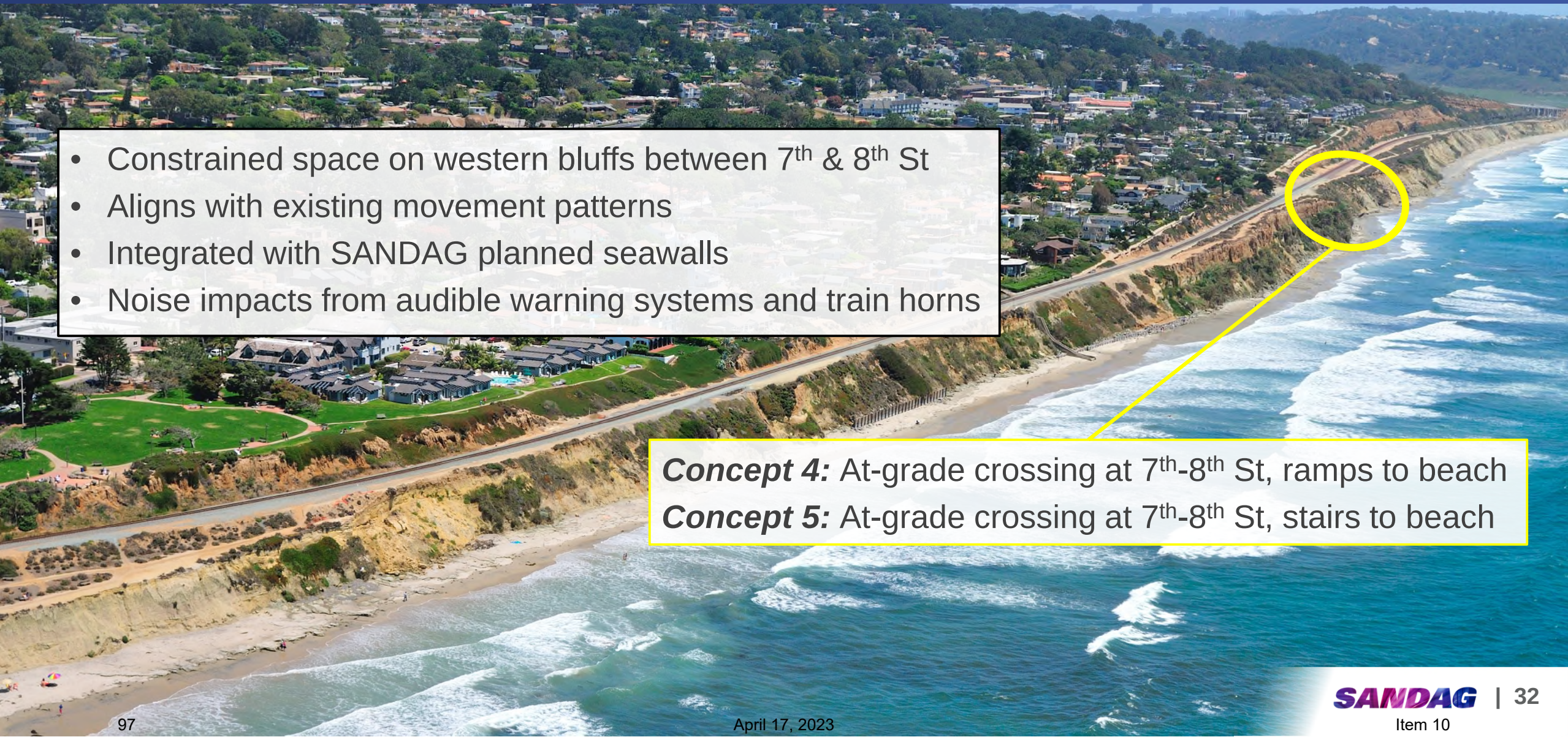


Concept 2: At-Grade Crossing at 11th Street, Ramps & Stairs to Beach

Attachment B



Concepts 4 & 5: At-Grade Crossings at 7th–8th Streets



- Constrained space on western bluffs between 7th & 8th St
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls
- Noise impacts from audible warning systems and train horns

Concept 4: At-grade crossing at 7th-8th St, ramps to beach

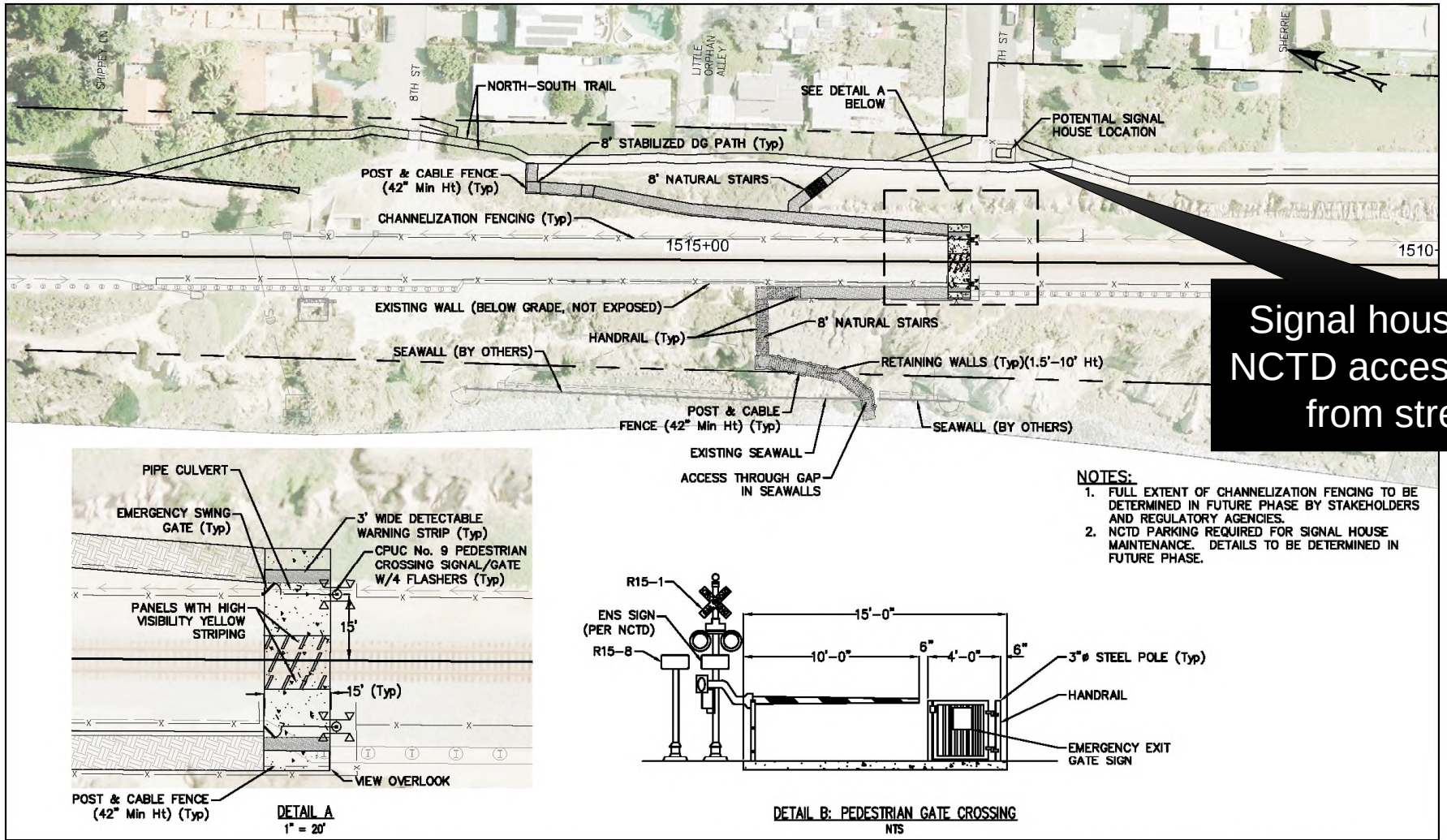
Concept 5: At-grade crossing at 7th-8th St, stairs to beach

Concept 5: At-Grade Crossing at 7th–8th Streets, Stairs to Beach

Attachment B

Concept 5: At-Grade Crossing at 7th–8th Streets, Stairs to Beach

Attachment B



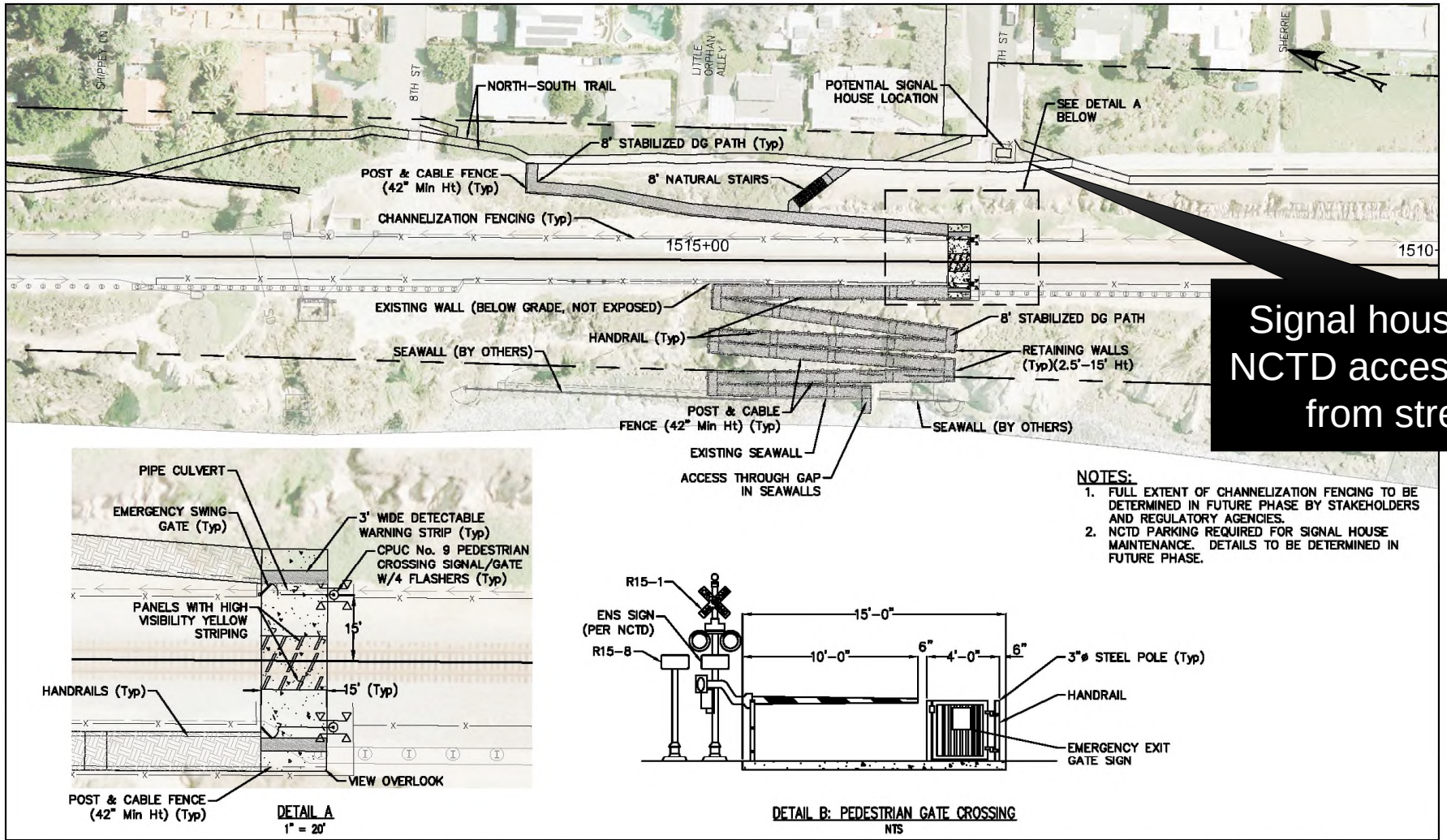
Signal house requires NCTD access & parking from street end

Concept 4: At-Grade Crossing at 7th–8th Streets, Ramps to Beach

Attachment B

Concept 5: At-Grade Crossing at 7th–8th Streets, Ramps to Beach

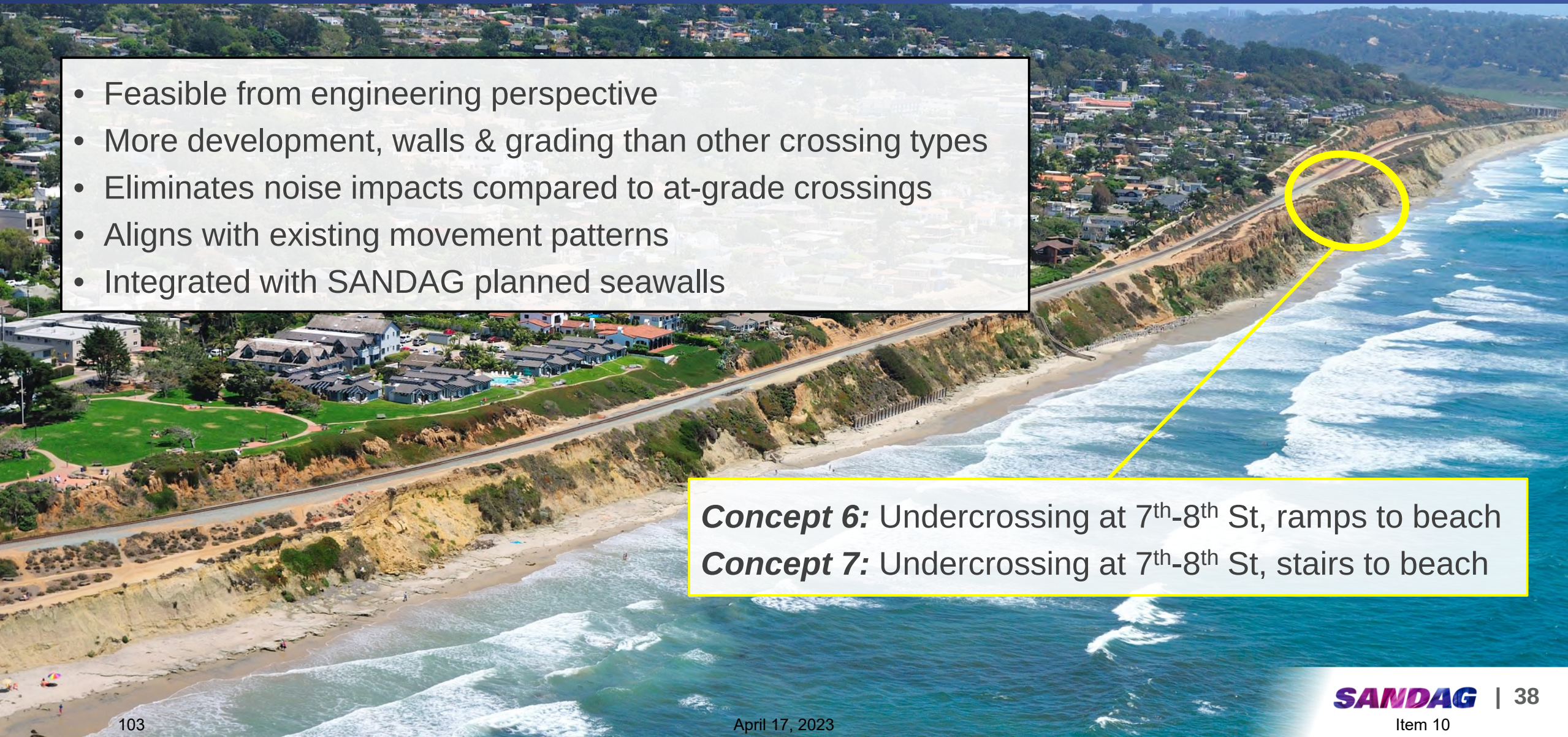
Attachment B



Signal house requires NCTD access & parking from street end

Leveraging Existing Wall to Minimize Bluff Impacts

Concepts 6 & 7: Undercrossings at 7th-8th Streets



- Feasible from engineering perspective
- More development, walls & grading than other crossing types
- Eliminates noise impacts compared to at-grade crossings
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls

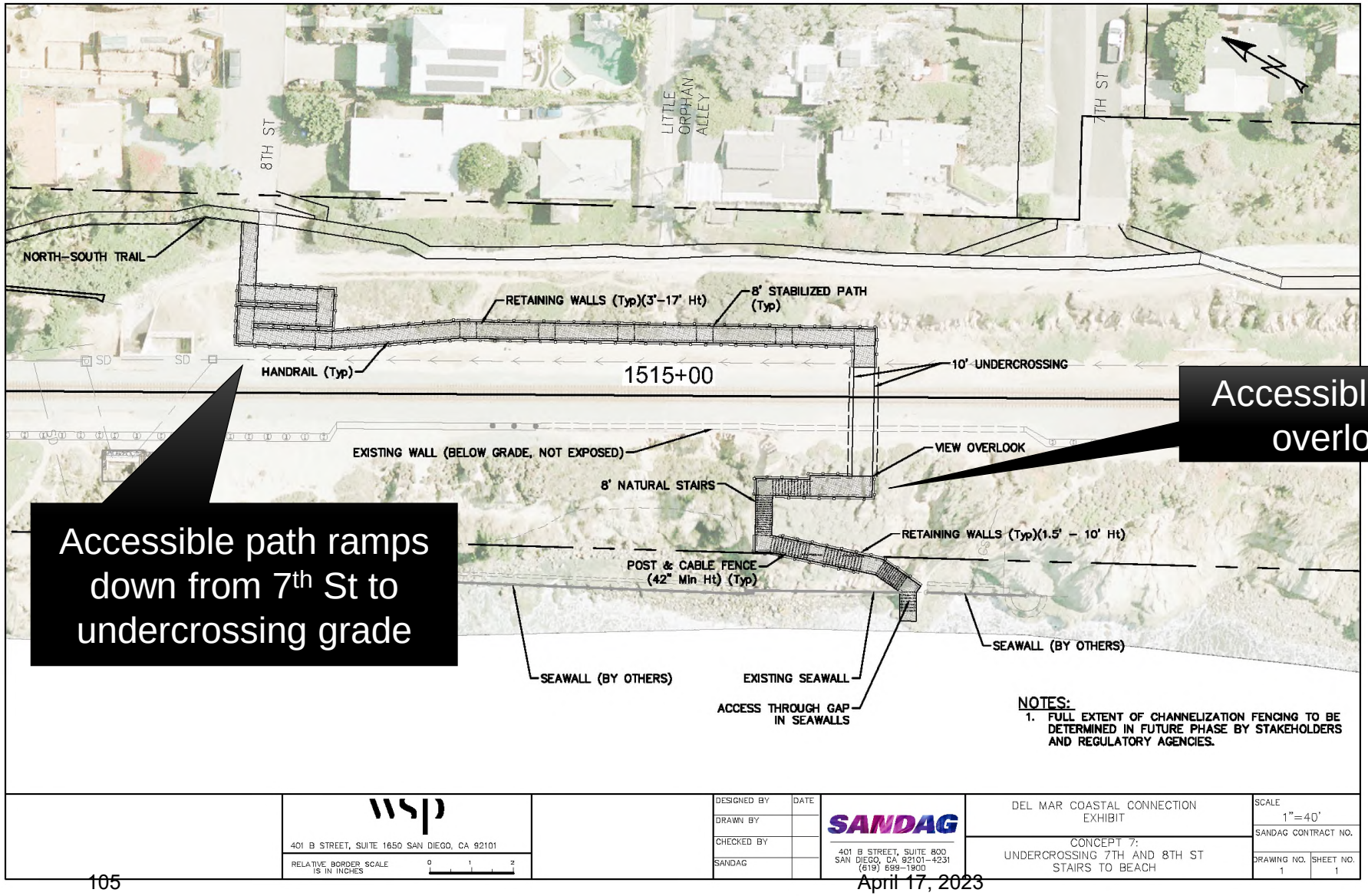
Concept 6: Undercrossing at 7th-8th St, ramps to beach

Concept 7: Undercrossing at 7th-8th St, stairs to beach

Concept 7: Undercrossing at 7th-8th Streets, Stairs to Beach

Attachment B

Concept 7: Undercrossing at 7th-8th Streets, Stairs to Beach



Accessible path ramps down from 7th St to undercrossing grade

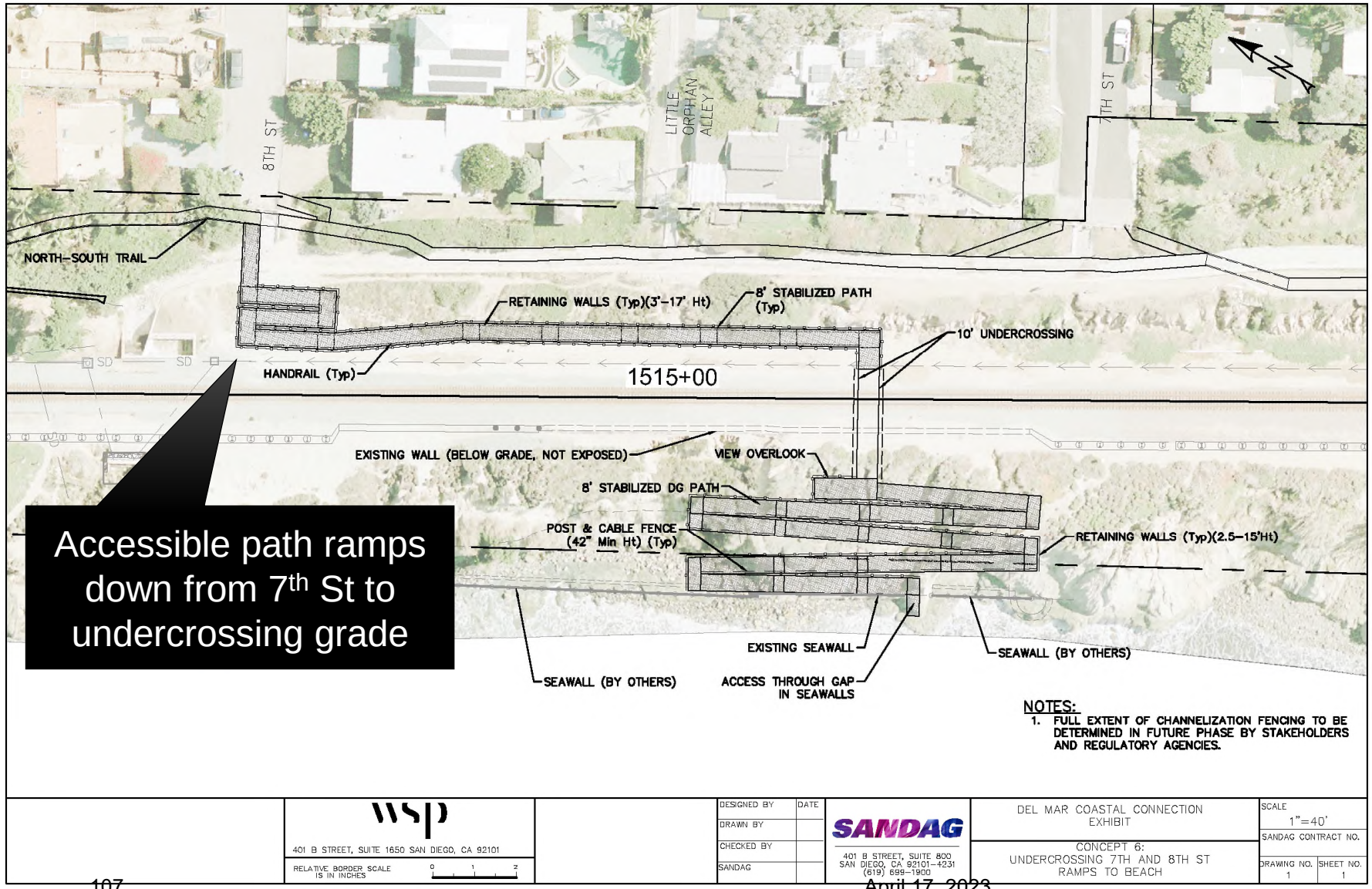
Accessible view overlook

Concept 6: Undercrossing at 7th-8th Streets, Ramps to Beach

Attachment B

Concept 6: Undercrossing at 7th-8th Streets, Ramps to Beach

Attachment B



Accessible path ramps down from 7th St to undercrossing grade

Implementation Considerations

Right-of-Way & Maintenance Considerations

- All concepts require approval from NCTD & City of Del Mar to utilize rights-of-way
- Liability – to be agreed upon by all parties
- Ongoing maintenance – to be agreed upon by all parties

CPUC Approval Requirements

- New at-grade crossings
  - Generally prohibited by CPUC General Order 75
  - Requires discretionary approval by CPUC
  - Recent approval in Santa Barbara County (Santa Claus Lane) could serve as model for Del Mar. Required grade separation study & concurrence of agencies including CCC & railroad
- CPUC safety fencing
  - Required near at-grade crossings to control access to railroad & direct pedestrians to at-grade crossings
  - Specific extent of fencing to be determined in future phase by stakeholders & regulatory agencies

FRA Audible Safety Systems for At-Grade Crossings

- At-grade crossings FRA requires:
  - Audible warning systems at the crossing (lights & bells)
  - Train horns to be sounded at ¼ mile when approaching
- Quiet zone:
  - May allow wayside horn at crossing instead of routine sounding of train horns – lessens potential noise impacts
  - Not strictly required for at-grade crossing approval
  - Can be pursued together with at-grade crossing (adds time & complexity to approval) or after implementation

Accessibility Design Considerations

- All concepts provide substantial benefits over existing conditions:
  - Accessible north-south trail
  - Accessible connections to street ends
  - Accessible view overlooks at western bluff tops in all railroad crossings
- Multiple options for all crossing concepts (e.g. ramps & stairs)
- Balance accessibility with minimization of impacts to sensitive bluffs
- Project team to visit SANDAG Social Services Technical Advisory Council (SSTAC) in January 2023 for additional input
- Multi-agency collaboration to continue moving forward
- Some funding sources may require certain accessible design elements

Next Steps

Next Steps & Ways to Provide Feedback on This Study

Del Mar City Council	Monday, December 5, 4:30 p.m. *Del Mar Civic Center & Online*
Community Open House	Wednesday, December 7, 6:00–8:00 p.m. *Del Mar Civic Center*
Online Comment Period	December 5, 2022 – January 31, 2023 *KeepSanDiegoMoving.com/CoastalConnections*
SANDAG Social Services Technical Advisory Council (SSTAC)	Tuesday, January 17, 2023 *SANDAG Board Room & Online*
Final Study Report	February 2023

Next Steps Following Coastal Connections Study

- Allocation of funding & grant applications
- Design:
  - Final concept selection
  - Grade separation study
  - Accessibility decisions
- Environmental review
- CCC approval
- CPUC approval of new crossings
- City & NCTD right-of-way approvals, including maintenance & liability agreements
- Construction

Connect with Us:

Allie DeVaux, Senior Engineer & Study Project Manager

Website: KeepSanDiegoMoving.com/CoastalConnections
Follow us on social media: @SANDAGregion @SANDAG
Email: LOSSANRail@KeepSanDiegoMoving.com
Hotline: (858) 549-Rail

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Attachment A

Coastal Connections Conceptual Planning Study

Del Mar City Council
April 17, 2023

Agenda

- Study Purpose & Overview
- Design Concepts
- Public Outreach Summary
- Next Steps

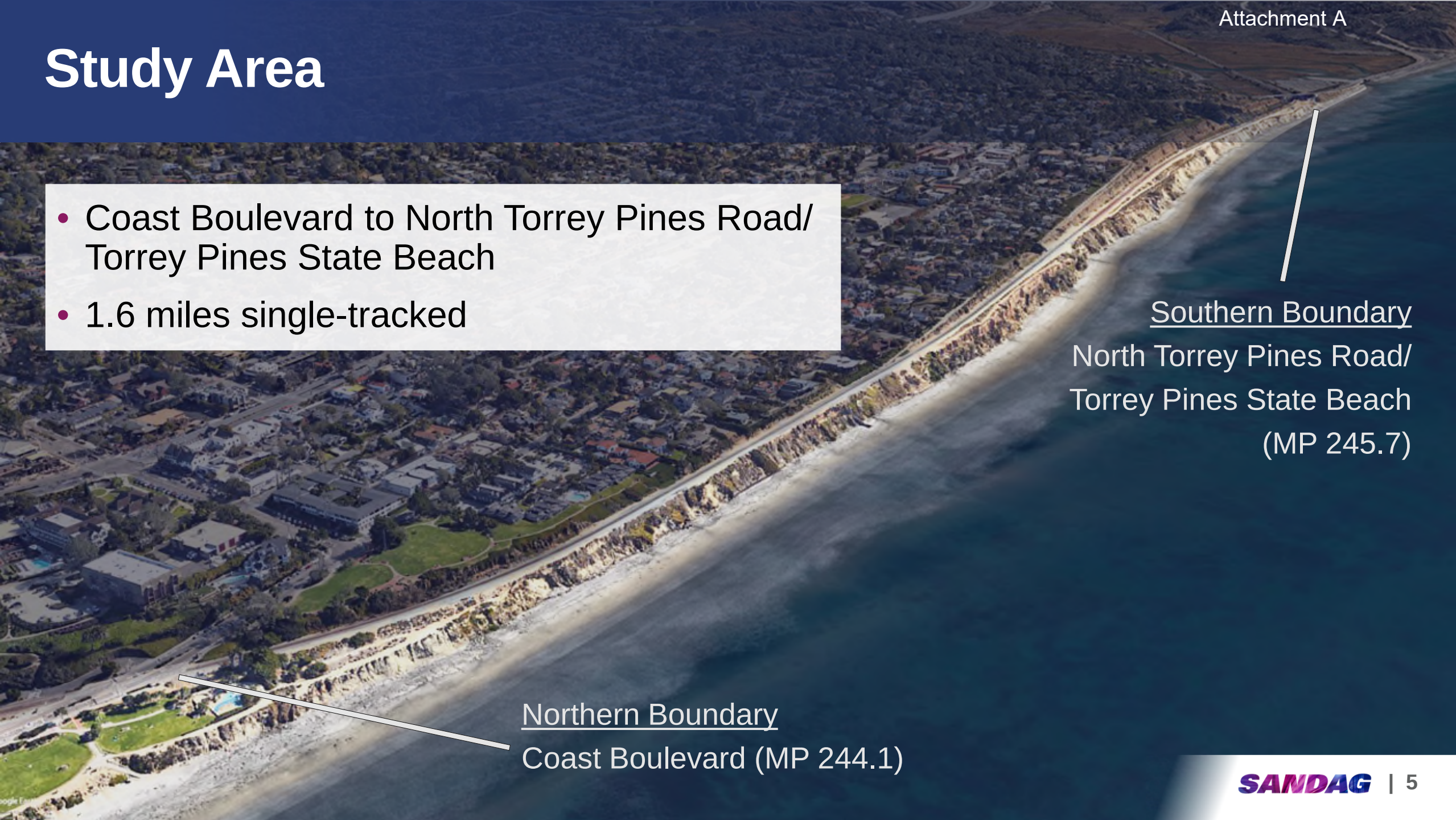
Study Purpose & Overview

Coastal Connections Study Purpose & Overview

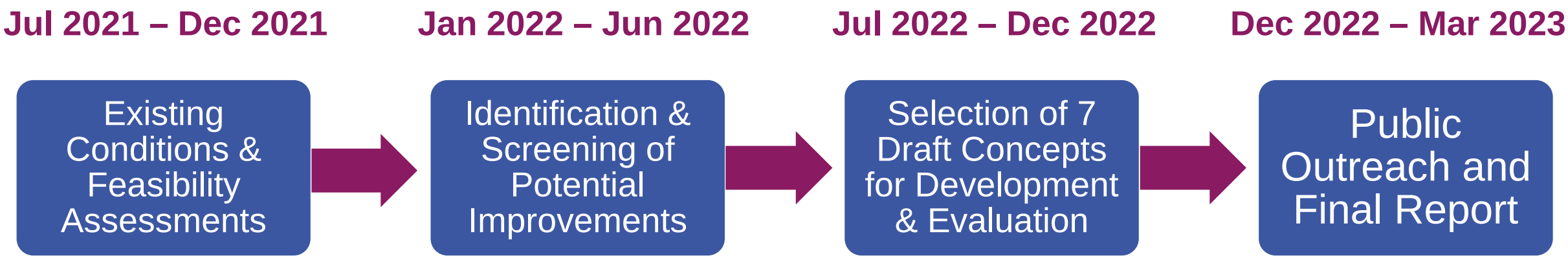
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input and public feedback
- Goal: Evaluate opportunities and constraints of potential pedestrian access improvements in the Del Mar coastal rail corridor
- Collaborative study with MOU between SANDAG, Del Mar, and NCTD
- Funded by Caltrans planning grant
- Approx. 20 months: June 2021 – March 2023
- Concepts identified as mitigation in CCC Del Mar Bluffs Stabilization Phase 5 approval

Study Area

- Coast Boulevard to North Torrey Pines Road/ Torrey Pines State Beach
- 1.6 miles single-tracked



Coastal Connections Study Process



Findings from Initial Screening

- Initial evaluation of entire project area
- North–South trails:
  - *West Side:* Continuous facility infeasible
  - *East Side:* Seagrove Park to 4th Street feasible
- Most feasible beach access locations:
  - 11th Street/Sea Orbit Lane
  - 7th/8th Streets
  - Torrey Pines State Beach area
- Good alignment among several criteria, including engineering, existing movements and consistency with earlier findings including *TRAC* study

Universal Benefits Provided by All Design Concepts

- All concepts reviewed to ensure benefits over existing conditions:
  - Pedestrian connectivity and coastal access
  - New accessible paths and view overlooks
  - Consistency with existing movement patterns
  - Consistency with prior facilities, studies, and recommendations
  - Safety of railroad and bluffs
- Railroad crossings integrated with SANDAG planned seawalls
- All footprints within public right-of-way (NCTD and City of Del Mar)
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input & public feedback

Design Concepts

Design Concepts Studied

11th Street:

- *Concept 2:* At-grade crossing, ramps & stairs to beach
- *Concept 3:* At-grade crossing, stairs to beach

Seagrove Park to 4th Street:

- *Concept 1:* North – South Trail (0.8 miles)

7th – 8th Streets:

- *Concept 4:* At-grade crossing, ramps to beach
- *Concept 5:* At-grade crossing, stairs to beach
- *Concept 6:* Undercrossing, ramps to beach
- *Concept 7:* Undercrossing, stairs to beach

Public Outreach Summary

Public Outreach Timeline

City Council Update – Public Comment Period Kickoff
Dec 5, 2022

Community Open House
Dec 7, 2022

Social Services Transportation Advisory Council
Jan 17, 2023

End of Public Comment Period
February 1, 2023

Final Report
April 2023

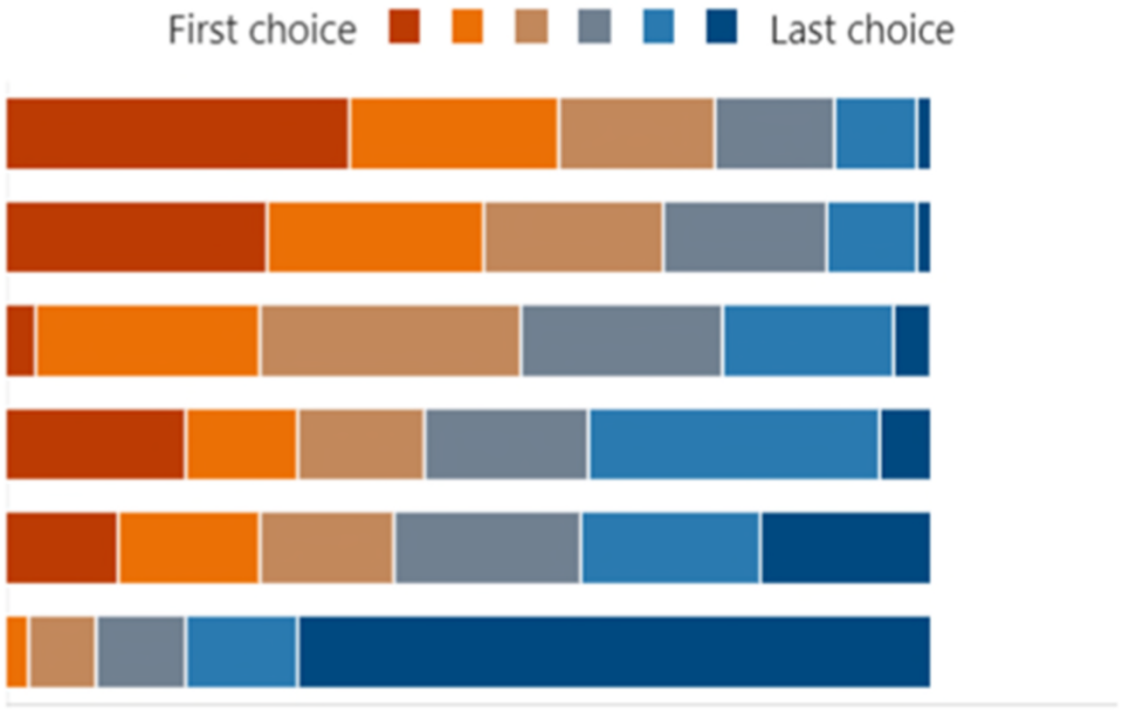
Summary of Outreach Results

- 135 total responses
- Comments collected online and in person
- Key Topics Mentioned:

Summary of Outreach Results

Rankings – Components of Design

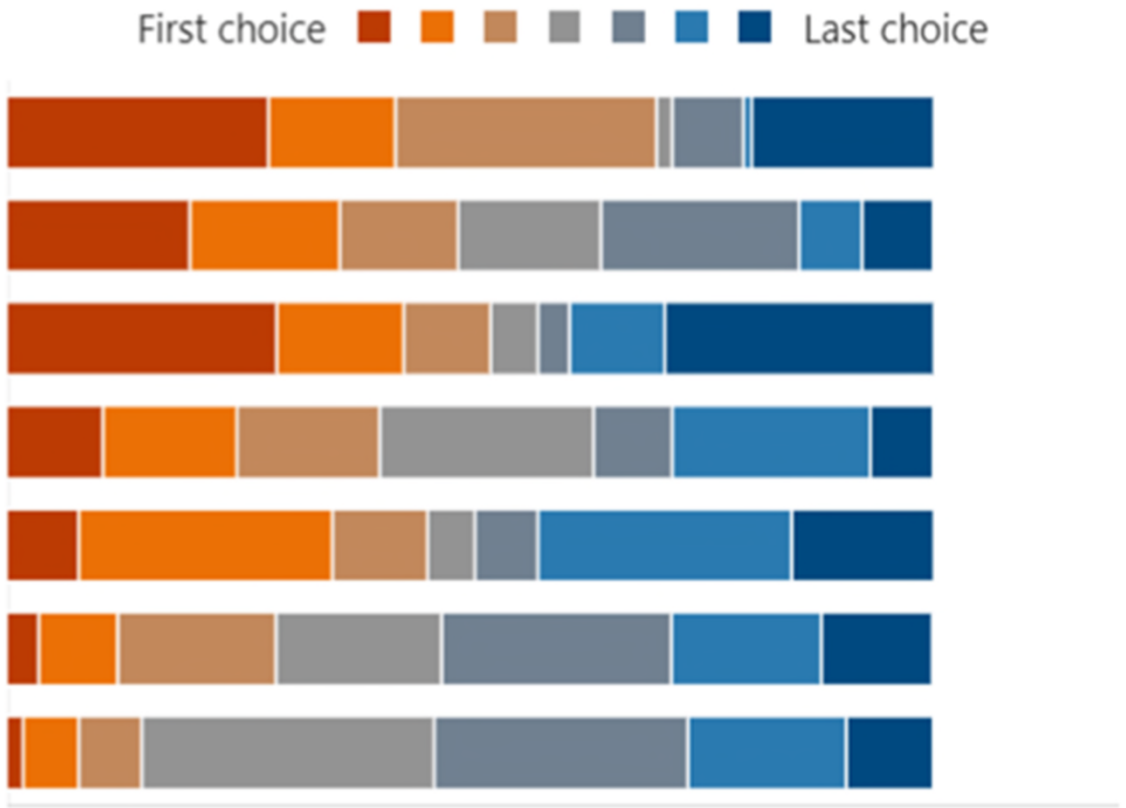
Rank	Options
1	Improved pedestrian access
2	Preservation of bluffs
3	Minimization of visual impacts
4	Minimization of noise impacts
5	Railroad corridor safety
6	Minimization of cost



Summary of Outreach Results

Rankings – Draft Concepts

Rank	Options
1	North-South Trail (1)
2	11th At-Grade, Stairs (3)
3	7th-8th Undercrossing, Stairs (7)
4	11th At-Grade, Ramps & Stairs (2)
5	7th-8th Undercrossing, Ramps (6)
6	7th-8th At-Grade, Stairs (5)
7	7th-8th At-Grade, Ramps (4)



Key Topics and Themes

- Support for North – South Trail was consistent throughout
- Initial support for at-grade crossings
  - Throughout the outreach period we heard growing concerns for potential impacts of at-grade alternatives including noise
  - Support for the undercrossing alternative grew throughout the comment period
- Alternate ideas and proposals received during comment period
  - North – South Trail alignments
  - Overcrossing near 10th Street
  - At-grade crossing with gate system

Next Steps

Preferred Concepts Based on Community Input

- Agreement needed between City of Del Mar, NCTD, and SANDAG on alternatives to bring forward to environmental clearance and preliminary engineering
- Preferred concepts need to include (per DMB5 Coastal Commission Certification):
  - A North/South trail from Seagrove Park to 4th Street
  - One CPUC approved railroad crossing near 7th Street or 11th Street
  - One accessway to the beach
- All concepts will require approval from NCTD & City of Del Mar to utilize rights-of-way

Concept 1:
North – South Trail

- Seagrove Park to 4th St (0.8 miles)
- Accessible
- Connections to every street end (no alleys)

Concept 2:
At-Grade Crossings at 11th Street

- Artificial fill on western bluffs north of 11th St provides ample space for stairs and/or ramps
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls
- Noise impacts from audible warning systems and train horns

Concept 6:
Undercrossing at 7th – 8th Streets

- Feasible from engineering perspective
- More development, walls & grading than other crossing types
- Eliminates noise impacts compared to at-grade crossings
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Concept 6: Undercrossing at 7th-8th St, ramps to beach

Accessibility Design Considerations

- All concepts provide substantial benefits over existing conditions:
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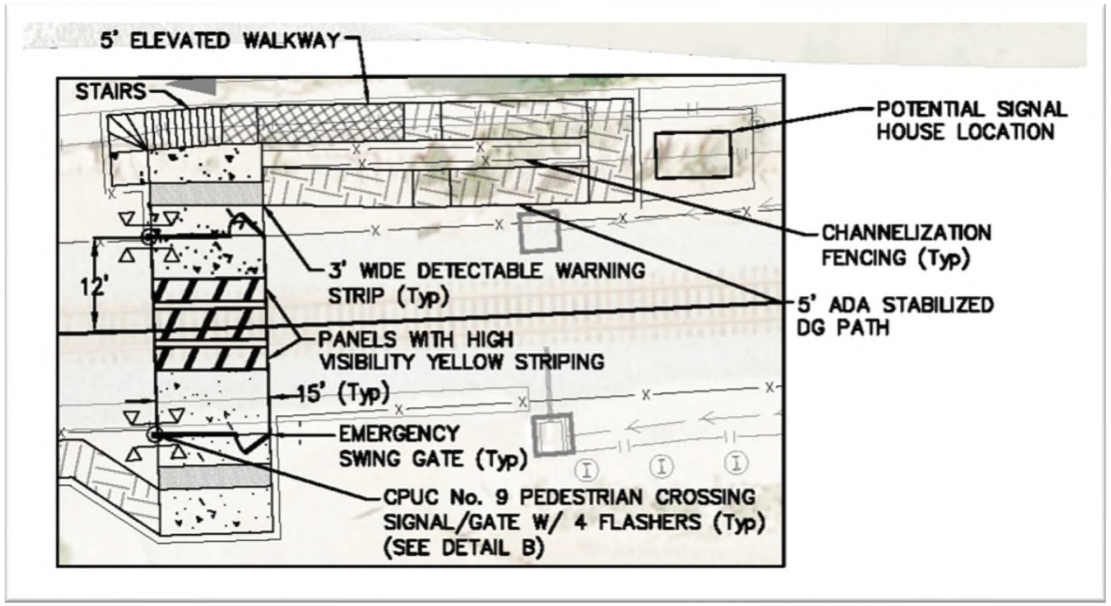
  - Accessible view overlooks at western bluff tops in all railroad crossings
- Multiple options for all crossing concepts (e.g., ramps & stairs)
- Balance accessibility with minimization of impacts to sensitive bluffs
- Project team visited the SANDAG Social Services Technical Advisory Council (SSTAC) in January 2023 for additional input
- Multi-agency collaboration to continue moving forward
- Some funding sources may require certain accessible design elements

At-Grade Crossings

- Requires discretionary approval by CPUC
- Noise impacts from audible warning systems and/or train horns
- Safety fencing and signal house



Next Steps Following Coastal Connections Study

- Allocation of funding and grant applications
- Design:
  - Final concept selection
  - Grade separation and safety study
  - Accessibility decisions
- Environmental review
- CCC approval
- CPUC approval of new crossings
- City & NCTD right-of-way approvals, including maintenance & liability agreements
- Construction

Next Steps Following Coastal Connections Study

Milestone	Estimated Timeline & Notes
Conceptual Planning Study	Complete
Preliminary Design	
Identification of Project Funding	In Progress
Selection of Preferred Projects	In Progress
Grade Separation and Safety Study	3-6 Months
Accessibility Decision	3-6 Months
Preliminary Design (30%)	6-12 Months
Community & Stakeholder Outreach	6-12 Months (concurrent with PE activities)

Next Steps Following Coastal Connections Study
(Continued)

Milestone	Estimated Timeline & Notes
Environmental and Agency Reviews	
CEQA/NEPA Reviews	6-12 months, concurrent with PE activities
CCC Approval of Draft Design	Concurrent with CEQA/NEPA, plus 3-6 months
CPUC Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews (Formal CPUC process at 60% design)
City of Del Mar Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews Includes maintenance and liability agreements
NCTD Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews Includes maintenance and liability agreements
Final Design	6-12 Months following PE, environmental & agency reviews
Permit Issuance	3-6 months, concurrent with Final Design
Construction	2-3 years following final design and permits

Connect with Us:

Allie DeVaux, Senior Engineer & Study Project Manager

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Hotline: (858) 549-Rail

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CITY COUNCIL AGENDA QUESTIONS/ANSWERS
APRIL 17, 2023

Item 5 – List of Demands

1. Is the $190,000 on the list of the demands the total for the San Dieguito Drive slope collapse/road failure and the repair is complete?

Staff Response: Southland was the as-needed emergency services contractor for both the San Dieguito Drive Road Failure Repair Project ($107,000) and the San Dieguito Drive Pipeline Repair Project ($83,000), together totaling $190,000. Both projects are complete.

Item 9 – Annual Comprehensive Financial Report for Fiscal Year Ended June 30, 2022 and Audited Financial Results

1. The table on page 175 of the packet indicates that the number of housing units in Del Mar changed by 7.73%. Why is that number shown in () which seems to indicate a decline?

Staff Response: The 7.73% decline is in Del Mar population. In 2021, the City of Del Mar population was reported at 4,258, and in 2022 it was reported at 3,929, which is a 7.73% decline.

2. The table on page 176 shows the Del Mar labor force and the "employed" both at 2,200. Is this for 2022? Does it include the fairgrounds employees? From the table on the next page, 177, it seems it does include the thoroughbred employees but not the fairgrounds staff? Does it include part time employment? I want to understand these numbers as we have had so much controversy about how to calculate Del Mar's employment numbers.

Staff Response: The employment figures in this table are provided by the State of California Employment Development Department (EDD). It is our understanding from the EDD that the employment numbers provided include both part-time and full-time employees within the City of Del Mar jurisdictional boundary, which includes employees at the Fairgrounds. The City is in the process of obtaining more detailed EDD data from 2018-2022, which will be helpful in better understanding these numbers.

3. Can the $34,267 in the tree reserve be used toward funding a comprehensive tree review?

Staff Response: The tree reserve is designated to be used for the planting of new trees throughout the City, especially in open space areas like parks and medians.

4. What is the $86,388 in the Open Space Acquisition fund--is this Quimby Act monies? What can it be used for?

Staff Response: Staff does not know the history for creation of this fund, which would need to be further researched. However, these funds can be used for any cost related to acquiring open space for parks.

5. $262,410 is shown in the AB 939 fund at the end of June 2022, and the number climbs to $335,320 in 2023. Do we really have this much from 939? Is this state funded through the 939 program?

Staff Response: A small portion of the revenues received in this fund are from the State. The remaining large portion is related to the program revenues received from EDCO. At the end of the current year, or beginning of the next year, some of the funds will be used to implement the 3-bin system at City facilities, as required by EDCO. The upcoming two-year budget will also include other related expenditures that will reduce the balance in this fund.

6. Am I right that the table on page 202 shows we project a contingency reserve of 29.60% over revenues of $19,637,485? Would we have an "additional" $903,000+ to spend if we reduced the contingency to 25%?

Staff Response: The contingency reserve of 29.60% represents the ending GF contingency balance ($4.8M) over GF expenditures of $13.9M, plus other GF subsidies and City Hall Debt. If the contingency were reduced to 25%, there would be approximately $750,000 available for spending.

Item 10 - Coastal Connections Conceptual Planning Study Final Report, Public Feedback on Draft Design Concepts, and Recommendations for Further Evaluation

Please note that the following questions were provided to SANDAG by City staff to be addressed at the City Council meeting this evening.

1. Table 2-2 shows decreases in travel time for trains. Is this assuming relocation to a tunnel? Or, are the decreases due to other improvements?

2. Page 22 references that the relocation feasibility study is expected to be completed in 2022.--is it done? Or is this a typo and it should be 2023?

3. Page 22 states: "*..evaluate whether infrastructure on the bluffs may need to be removed to ensure public safety and return the bluffs to a more natural state*. And, also page 57/60 "*Once the railroad is relocated off the bluffs, stakeholder agencies will assess the study area's physical conditions and evaluate whether infrastructure on the bluffs may need to be removed to ensure public safety and return the bluffs to a more natural state*." Didn't the CCC conditions require removal of the seawalls and restoration of the bluffs and beach?

4. Page 19/60 reviews the Del Mar Community Plan and LCP. It should reference that the BPI is part of the city's certified LCP and has specific recommendations related to the RR.

5. Page 48/60 says: "*Any projects located within the railroad right-of-way will require future agreements with NCTD for the City of Del Mar to assume responsibility for ongoing maintenance."* This should state that *future agreements with NCTD for ongoing maintenance will be required with an appropriate government or NGO.* This could be Del Mar, but it could also be a number of other entities, including NCTD or SANDAG.

6. Page 54/60 states: "*The at-grade crossing concepts developed in this study presume standard requirements for warning bells at the crossing and the routine sounding of train horns."* Likewise the SANDAG slides state*: "At-grade crossings FRA requires: – Audible warning systems at the crossing (lights & bells) – Train horns to be sounded at ¼ mile when approaching."* A detailed proposal was submitted for a pilot program for an at grade crossing with locking gates or turnstiles that would NOT require bells and lights at an at grade crossing. It cited CPUC authorities for a pilot program. The proposers worked with SANDAG staff in preparing their analysis. SANDAG staff indicated it had potential merit. If there is a reason SANDAG rejected it they should state the reason. One bullet in the updated slide deck isn't adequate: –" *At-grade crossing with gate system."*

7. SANDAG Slides Att. B*: One says: "Specific extent of fencing to be determined in future phase by stakeholders & regulatory agencies*" Do we know if the fencing for the crossing if it is at grade and safety fencing for the north-south trail will alleviate the need for the NCTD proposed safety fencing?

8. SANDAG Slides Att. B: One says: "*Project team to visit SANDAG Social Services Technical Advisory Council (SSTAC) in January 2023 for additional input"* Has this happened, and what was learned?

Melinda Gould

From: Camilla Rang <camillarang@yahoo.com>
Sent: Thursday, April 13, 2023 3:57 AM
To: City Clerk Mail Box
Subject: Item 10 "Coastal Connections Planning Study Final Report", City Council meeting 04.17.23

Follow Up Flag: Follow up
Flag Status: Flagged

Dear City Council,

I have read through the SANDAG Planning Study and results. I whole heartedly support the City Council in approving going forward with the North-South trail and also the underpass at 8th Street. However, I do not support including an at-grade at 11th street as we now know that any at-grade crossing will come with horns and bells. As much as I for selfish reason would love to have a crossing at 11th street, the houses at that location are simply too close to the rail road. All the alarms would destroy the lives of the people living there and I cannot support doing that to my fellow neighbors. If an at-grade were to be, it would only be possible at 8th street, where the houses are slightly more distanced from the rail road, but even then it may be too loud.

I think most of us had an at-grade in mind when this project first started to become reality, but we were not at that time aware of the strict alarm regulations for incoming trains. Especially not since one clearly can hear the bells from 15th street while at 11th street. If there is no way around the alarms for an at-grade, my personal opinion is that we will have to abandon the at-grade plan and instead, reluctantly, go for the underpass.

In regards to ramp or stairs, I feel that ramps are an excessive burden on the slope of the bluff. Stairs or steps are enough.

SANDAG has done an excellent job illustrating all the options.

Sincerely,

Camilla Rang

Melinda Gould

From: greg lippert <glippert40@gmail.com>
Sent: Thursday, April 13, 2023 9:36 AM
To: City Clerk Mail Box
Subject: Item 10 "Coastal Connections Planning Study Final Report"

Follow Up Flag: Follow up
Flag Status: Flagged

Hello,

With regards to Item 10 of the Coastal Connections Planning Report, I submit for consideration my preference for a North South Trail.

Thank you and please reach out if you have any questions.

Sincerely,

Greg Lippert
757 Hoska Drive

Melinda Gould

From: Gwynn Thomas <gwynn.thomas@outlook.com>
Sent: Thursday, April 13, 2023 10:29 AM
To: City Clerk Mail Box
Subject: Del Mar Track Cross Study along Bluffs
Attachments: Item10-TRACK-CROSSING-STUDY-from-DMC-packet-2023-04-17-sm.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear City Manager,
I have owned the homes at 149 6th Street and 151 6th Street in Del Mar since the early 1990's.
Before that my father owned 149 6th Street starting in 1973.

After reviewing the Coastal Connections Conceptual Planning Study what became very evident is that the tracks should have been moved inland 40 years ago.

What makes this particularly clear is the photo on Page 21 Figure 2-9: Coaster Train Passing Seagrove Park (NCTD).
It is absolutely irresponsible environmentally and for public safety of persons on the train and pedestrians, that these trains are transiting on a narrow, precarious bluff.
What are we doing here.

Instead of wasting everyone's time, efforts and money on figuring out ways for pedestrians to cross the tracks, focus on moving the tracks inland now.
Gwynn Thomas
803 Amiford Dr, SD 92107
Owner 149 & 151 6th St, Del Mar

[redacted]
619 997-5219

City of Del Mar
Memorandum

TO: Honorable Mayor and City Council Members

FROM: Clem Brown, Assistant City Manager

DATE: April 14, 2023

SUBJECT: Red Dot Item 10: Coastal Connections Conceptual Planning Study Final Report, Public Feedback on Draft Design Concepts, and Recommendations for Further Evaluation

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Item 10 on the City Council's April 17, 2023, agenda includes a presentation from the San Diego Association of Governments (SANDAG) on the results of the public comment period for the Coastal Connections Conceptual Planning Study. At the time of the publication of the agenda packet, SANDAG's presentation was not available to include in staff's agenda report. Staff is submitting this red dot communication with a copy of the presentation that will be given to the City Council on April 17, 2023.

Attachment A – Presentation on Public Feedback on Coastal Connections Conceptual Planning Study

Coastal Connections Conceptual Planning Study

Del Mar City Council
April 17, 2023

Agenda

- Study Purpose & Overview
- Design Concepts
- Public Outreach Summary
- Next Steps

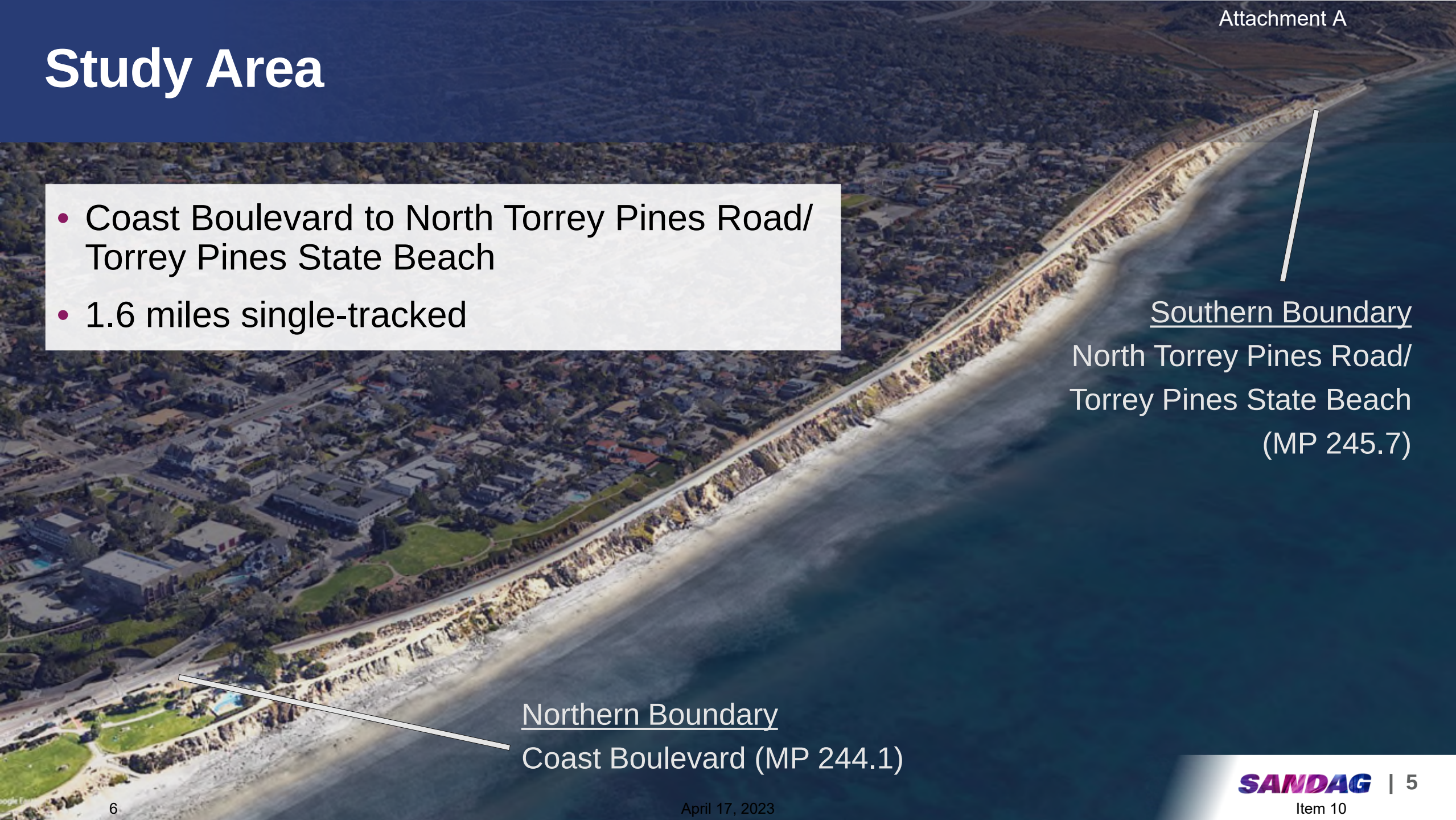
Study Purpose & Overview

Coastal Connections Study Purpose & Overview

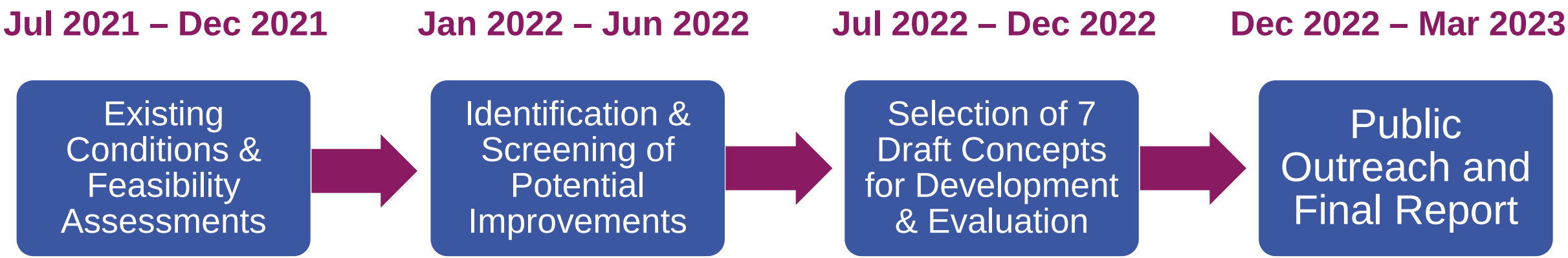
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input and public feedback
- Goal: Evaluate opportunities and constraints of potential pedestrian access improvements in the Del Mar coastal rail corridor
- Collaborative study with MOU between SANDAG, Del Mar, and NCTD
- Funded by Caltrans planning grant
- Approx. 20 months: June 2021 – March 2023
- Concepts identified as mitigation in CCC Del Mar Bluffs Stabilization Phase 5 approval

Study Area

- Coast Boulevard to North Torrey Pines Road/ Torrey Pines State Beach
- 1.6 miles single-tracked



Coastal Connections Study Process



Findings from Initial Screening

- Initial evaluation of entire project area
- North–South trails:
  - *West Side:* Continuous facility infeasible
  - *East Side:* Seagrove Park to 4th Street feasible
- Most feasible beach access locations:
  - 11th Street/Sea Orbit Lane
  - 7th/8th Streets
  - Torrey Pines State Beach area
- Good alignment among several criteria, including engineering, existing movements and consistency with earlier findings including *TRAC* study

Universal Benefits Provided by All Design Concepts

- All concepts reviewed to ensure benefits over existing conditions:
  - Pedestrian connectivity and coastal access
  - New accessible paths and view overlooks
  - Consistency with existing movement patterns
  - Consistency with prior facilities, studies, and recommendations
  - Safety of railroad and bluffs
- Railroad crossings integrated with SANDAG planned seawalls
- All footprints within public right-of-way (NCTD and City of Del Mar)
- ***Conceptual planning only:*** Selection of specific design elements will depend on a variety of factors to be resolved collaboratively moving forward – including regulatory agency input & public feedback

Design Concepts

Design Concepts Studied

11th Street:

- *Concept 2:* At-grade crossing, ramps & stairs to beach
- *Concept 3:* At-grade crossing, stairs to beach

Seagrove Park to 4th Street:

- *Concept 1:* North – South Trail (0.8 miles)

7th – 8th Streets:

- *Concept 4:* At-grade crossing, ramps to beach
- *Concept 5:* At-grade crossing, stairs to beach
- *Concept 6:* Undercrossing, ramps to beach
- *Concept 7:* Undercrossing, stairs to beach

Public Outreach Summary

Public Outreach Timeline

City Council Update – Public Comment Period Kickoff
Dec 5, 2022

Community Open House
Dec 7, 2022

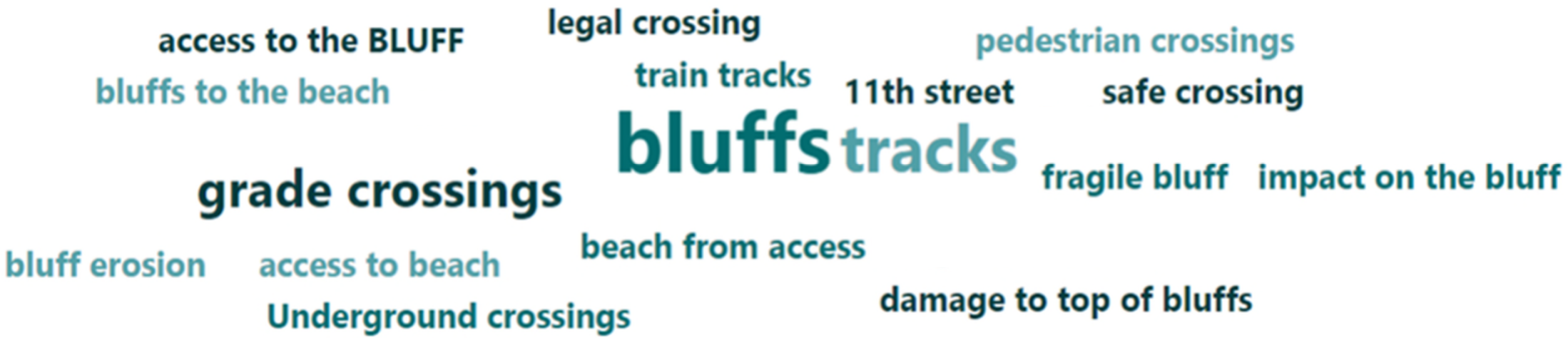
Social Services Transportation Advisory Council
Jan 17, 2023

End of Public Comment Period
February 1, 2023

Final Report
April 2023

Summary of Outreach Results

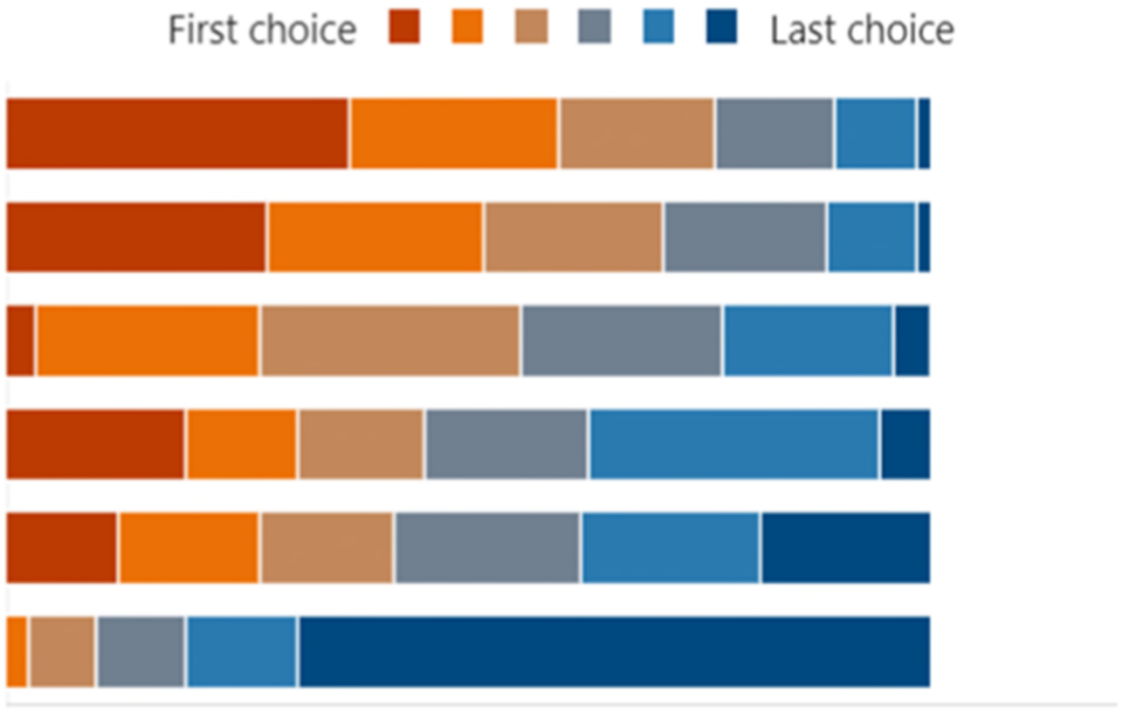
- 135 total responses
- Comments collected online and in person
- Key Topics Mentioned:



Summary of Outreach Results

Rankings – Components of Design

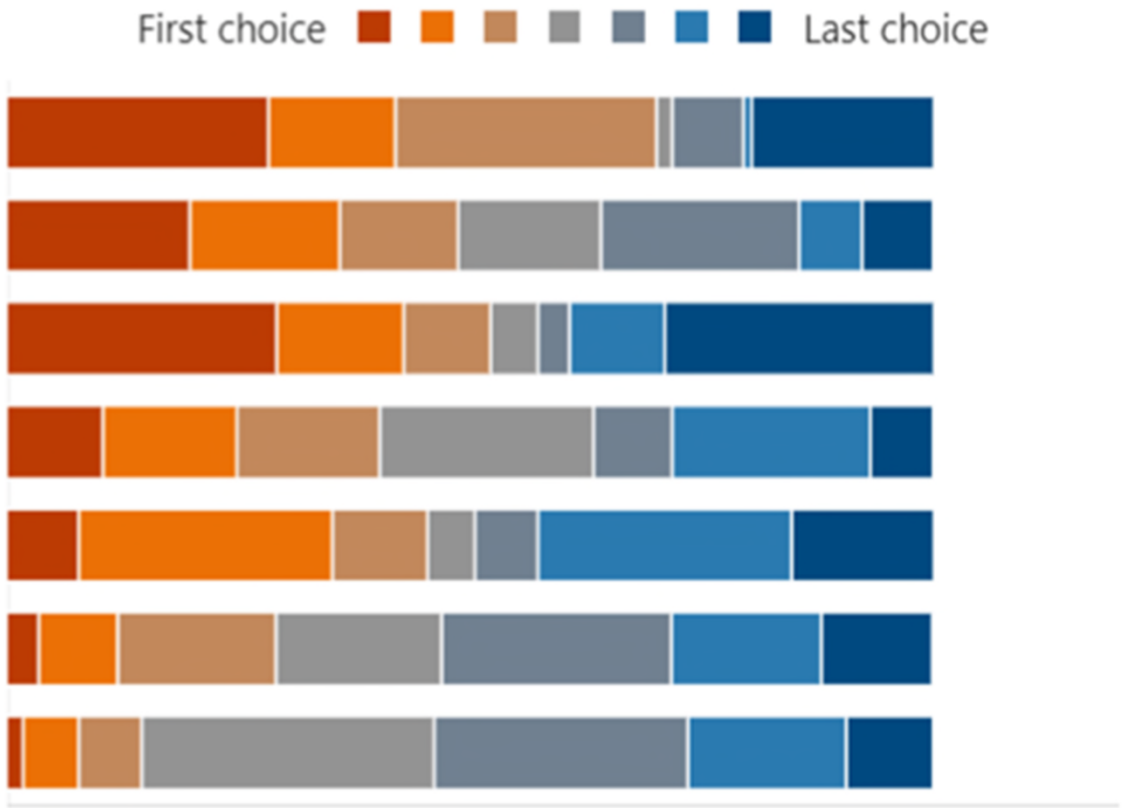
Rank	Options
1	Improved pedestrian access
2	Preservation of bluffs
3	Minimization of visual impacts
4	Minimization of noise impacts
5	Railroad corridor safety
6	Minimization of cost



Summary of Outreach Results

Rankings – Draft Concepts

Rank	Options
1	North-South Trail (1)
2	11th At-Grade, Stairs (3)
3	7th-8th Undercrossing, Stairs (7)
4	11th At-Grade, Ramps & Stairs (2)
5	7th-8th Undercrossing, Ramps (6)
6	7th-8th At-Grade, Stairs (5)
7	7th-8th At-Grade, Ramps (4)



Key Topics and Themes

- Support for North – South Trail was consistent throughout
- Initial support for at-grade crossings
  - Throughout the outreach period we heard growing concerns for potential impacts of at-grade alternatives including noise
  - Support for the undercrossing alternative grew throughout the comment period
- Alternate ideas and proposals received during comment period
  - North – South Trail alignments
  - Overcrossing near 10th Street
  - At-grade crossing with gate system

Next Steps

Preferred Concepts Based on Community Input

- Agreement needed between City of Del Mar, NCTD, and SANDAG on alternatives to bring forward to environmental clearance and preliminary engineering
- Preferred concepts need to include (per DMB5 Coastal Commission Certification):
  - A North/South trail from Seagrove Park to 4th Street
  - One CPUC approved railroad crossing near 7th Street or 11th Street
  - One accessway to the beach
- All concepts will require approval from NCTD & City of Del Mar to utilize rights-of-way

Concept 1:
North – South Trail

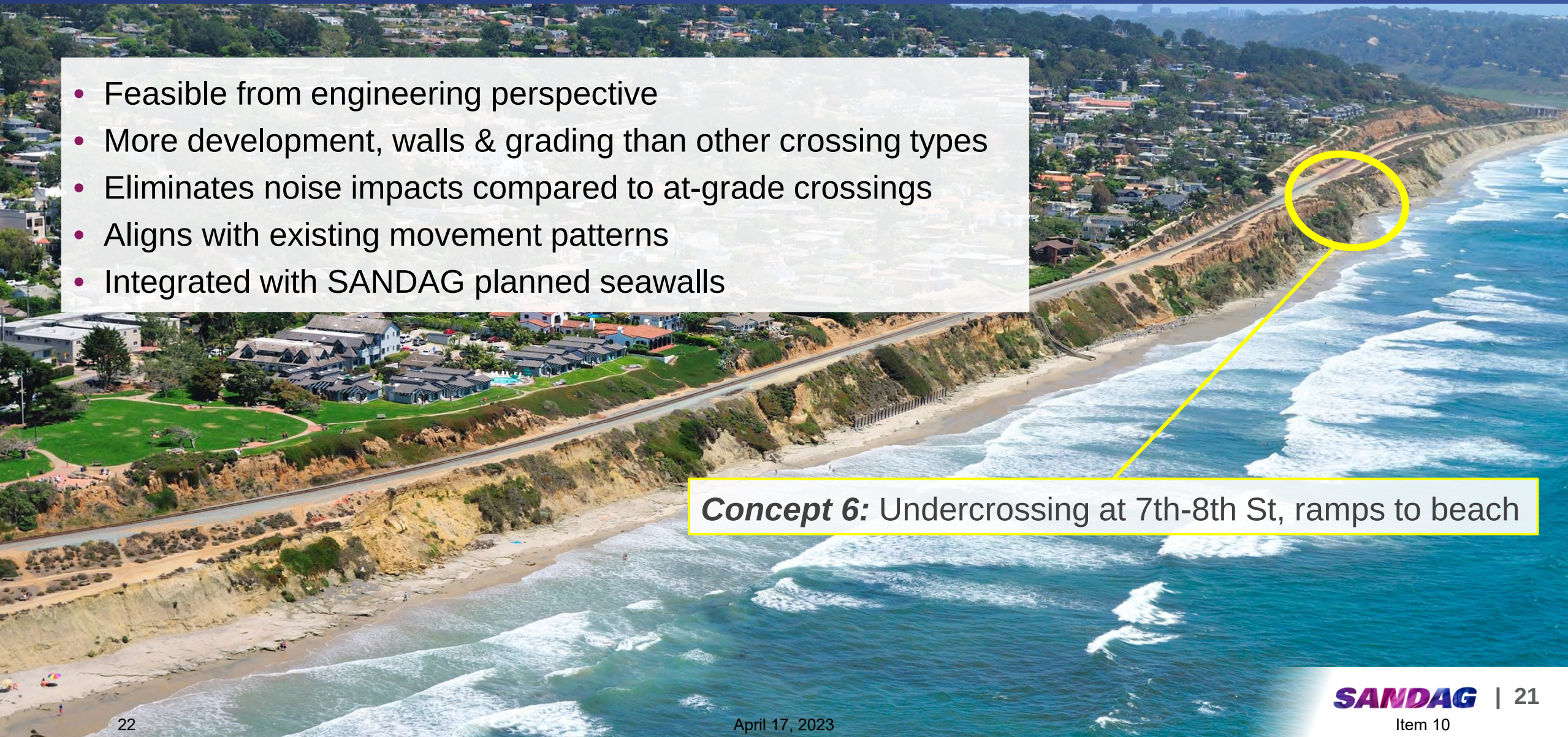
- Seagrove Park to 4th St (0.8 miles)
- Accessible
- Connections to every street end (no alleys)

Concept 2:
At-Grade Crossings at 11th Street

- Artificial fill on western bluffs north of 11th St provides ample space for stairs and/or ramps
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls
- Noise impacts from audible warning systems and train horns

Concept 6:
Undercrossing at 7th – 8th Streets

- Feasible from engineering perspective
- More development, walls & grading than other crossing types
- Eliminates noise impacts compared to at-grade crossings
- Aligns with existing movement patterns
- Integrated with SANDAG planned seawalls

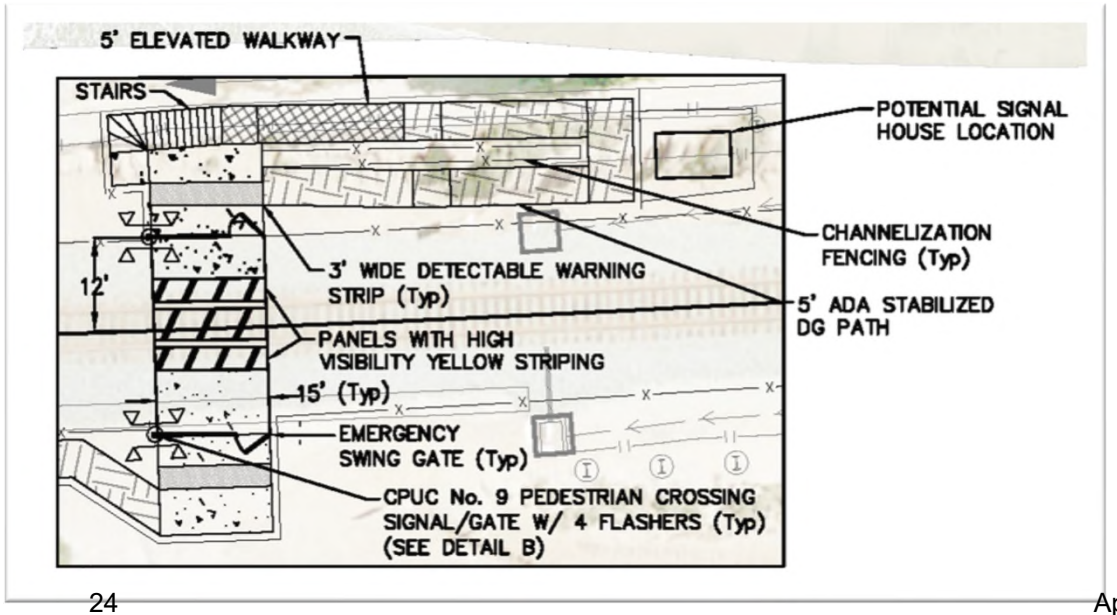


Accessibility Design Considerations

- All concepts provide substantial benefits over existing conditions:
  - Accessible North – South Trail
  - Accessible connections to street ends
  - Accessible view overlooks at western bluff tops in all railroad crossings
- Multiple options for all crossing concepts (e.g., ramps & stairs)
- Balance accessibility with minimization of impacts to sensitive bluffs
- Project team visited the SANDAG Social Services Technical Advisory Council (SSTAC) in January 2023 for additional input
- Multi-agency collaboration to continue moving forward
- Some funding sources may require certain accessible design elements

At-Grade Crossings

- Requires discretionary approval by CPUC
- Noise impacts from audible warning systems and/or train horns
- Safety fencing and signal house



Next Steps Following Coastal Connections Study

- Allocation of funding and grant applications
- Design:
  - Final concept selection
  - Grade separation and safety study
  - Accessibility decisions
- Environmental review
- CCC approval
- CPUC approval of new crossings
- City & NCTD right-of-way approvals, including maintenance & liability agreements
- Construction

Next Steps Following Coastal Connections Study

Milestone	Estimated Timeline & Notes
Conceptual Planning Study	Complete
Preliminary Design	
Identification of Project Funding	In Progress
Selection of Preferred Projects	In Progress
Grade Separation and Safety Study	3-6 Months
Accessibility Decision	3-6 Months
Preliminary Design (30%)	6-12 Months
Community & Stakeholder Outreach	6-12 Months (concurrent with PE activities)

Next Steps Following Coastal Connections Study
(Continued)

Milestone	Estimated Timeline & Notes
Environmental and Agency Reviews	
CEQA/NEPA Reviews	6-12 months, concurrent with PE activities
CCC Approval of Draft Design	Concurrent with CEQA/NEPA, plus 3-6 months
CPUC Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews (Formal CPUC process at 60% design)
City of Del Mar Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews Includes maintenance and liability agreements
NCTD Approval of Draft Design	6-12 months, concurrent with environmental & agency reviews Includes maintenance and liability agreements
Final Design	6-12 Months following PE, environmental & agency reviews
Permit Issuance	3-6 months, concurrent with Final Design
Construction	2-3 years following final design and permits

Connect with Us:

Allie DeVaux, Senior Engineer & Study Project Manager

Website: KeepSanDiegoMoving.com/CoastalConnections
Follow us on social media: @SANDAGregion @SANDAG
Email: LOSSANRail@KeepSanDiegoMoving.com
Hotline: (858) 549-Rail

SANDAG

Melinda Gould

From: Mark Handzel <markhandzel@yahoo.com>
Sent: Friday, April 14, 2023 12:02 PM
To: City Clerk Mail Box
Subject: Red Dot - Item 10. The Agenda Report says that SANDAG's public-outreach survey results did not lead to any of the seven options being particularly re-ranked.

Dear City Council Members,

Before you decide on moving forward with the choices that SANDAG has presented, the City Council should demand the actual results of the survey from SANDAG and make them public. Surveys are a primary source of information -- that is, the public was directly asked for a response to a set of questions. The people of Del Mar took the time to provide input to the survey and should be presented with participation results and top and bottom survey results. The detailed survey results will give a snapshot of the public's attitudes and behaviors – including thoughts, opinions, and comments, which is the purpose of the survey. I believe the people of Del Mar will be keen to hear about the survey's detailed findings and observations. The detailed survey results are valuable feedback to measure and establish the public's interest and issues in the various choices. It will also give you a better gauge of the choices' public ranking, which will help drive greater engagement and collaboration. SANDAG needs to provide detailed survey results so the City Council can discuss survey results and get a consensus with the public on the next steps before moving forward. The detailed results are best done in a format that encourages open dialogue. The detailed survey results will also help the City Council take the most appropriate actions transparently.

Mark Handzel

100 12th Street

Melinda Gould

From: Udo Wahn <caboandcoral@gmail.com>
Sent: Friday, April 14, 2023 4:10 PM
To: City Clerk Mail Box
Subject: Red Dot: SANDAG coastal presentation

Follow Up Flag: Follow up
Flag Status: Flagged

Dear City Council members:
As a 40 year resident of Del Mar I would like chime in about the options for projects on our bluffs.

I support the development of a North-South Path trail for pedestrians and also an undercrossing at 7-8th streets with stairs.

I would like to add, that it would be advisable to add access to the bluff top West of the tracks as one exits the underground tunnel. There are dirt trails there now that we should be able to continue accessing.

By allowing access northward one may be able to descend at 11th street on the existing trail without there being a needing to have any development there. That would require that NCTD not fence that area off.

Thank you!

Aloha!

Udo

Udo Wahn M.D.
Stratford Court

Melinda Gould

From: Bill Carpenter <bill@bcarpenter.com>
Sent: Saturday, April 15, 2023 7:45 AM
To: City Clerk Mail Box
Subject: City Council Meeting 4/17/23 Item 10: SANDAG's Coastal Connections - public comment

Follow Up Flag: Follow up
Flag Status: Flagged

Please choose Concepts 6,7,1 for future focus, especially the combination of 6 & 1 (undercrossing at 7th with stairs + trail).

Only a passive, quiet, safe undercrossing makes sense and only 7-8th street location accommodates that. Plus, that's a halfway location between 1st and 15th street, and is closest to the 8th Street surfing reef.

Fences and bells for at-grade crossings are dangerous, noisy, require maintenance and a longer approval path. Have you noticed that in the last couple of months there have been two pedestrian fatalities in Leucadia with at-grade crossings – despite fences and bells that are ugly and expensive to maintain?

Thanks,

Bill Carpenter
Luneta Dr

Melinda Gould

From: Will Grant <will.grant@gmail.com>
Sent: Saturday, April 15, 2023 10:41 AM
To: City Clerk Mail Box
Cc: Meghan
Subject: Train Track Crossing Options

Follow Up Flag: Follow up
Flag Status: Flagged

Hello,

My wife and I live at 300 7th St, Del Mar, CA 92014.

Our vote for top 3 options are as follows:

#1

- CONCEPT 5: AT-GRADE CROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH

#2

- CONCEPT 7: UNDERCROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH

#3

- CONCEPT 4: AT-GRADE CROSSING AT 7TH-8TH STREETS, RAMPS TO BEACH

Thank you for your consideration.

Best,
Will and Meghan Grant

Melinda Gould

From: James Mccullough <jamesleonmccullough@icloud.com>
Sent: Saturday, April 15, 2023 8:47 PM
To: City Clerk Mail Box
Cc: Megan McCullough
Subject: Beach access options

Follow Up Flag: Follow up
Flag Status: Flagged

To whom it may concern,
My wife and I are home owners in Del Mar west of Stratford. We feel the 11TH street location makes the most sense due to the following factors:
1)Considerably wider street than 7th or 8th thus able to handle increased congestion better.
2) More street parking than 7th or 8th.
3)Closer to existing public parking.
4) More central location in town.
5) 11TH street has been the traditional access to this part of the beach going back to the inception of the city.

Thank you for your consideration,
James & Megan McCullough

Sent from my iPad

Melinda Gould

From: S. Gallouzi <sgallouzi@gmail.com>
Sent: Sunday, April 16, 2023 8:15 AM
To: City Clerk Mail Box
Subject: Safe Railroad Crossing Options Are Being Decided

Follow Up Flag: Follow up
Flag Status: Flagged

My name is Sol Gallouzi, Del Mar resident at 711 Hoska Dr, Del Mar, CA 92014. I think Concepts 4-7 make more sense since access through 11th street is likely to be harder given traffic and accessibility.

Thanks
Sol

Melinda Gould

From: leila bousrih <leilab2010@gmail.com>
Sent: Sunday, April 16, 2023 6:39 PM
To: City Clerk Mail Box
Cc: leila bousrih
Subject: Railroad Crossing Options Are Being Decided

Follow Up Flag: Follow up
Flag Status: Flagged

My name is Leila Bousrih, Del Mar resident at 711 Hoska Dr, Del Mar, CA 92014. I think Concepts 4-7 make more sense since access through 11th Street is likely to be harder given traffic and accessibility.

Thanks
Leila

Melinda Gould

From: Laura Schaefer <ls@boyce-schaefer.com>
Sent: Sunday, April 16, 2023 7:04 PM
To: City Clerk Mail Box
Subject: Red Dot item 10

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Honorable Mayor and City Council,

I would like to address the Coastal Connections Conceptual Planning Study and the various concepts advanced by SANDAG. I support an underpass between 7th and 8th Street because 1) an underpass provides a safer access than an at grade crossing; 2) it preserves the public's peaceful enjoyment of the bluffs while still affording the public access to the beach it has enjoyed for centuries; 3) it does not create a visual and noise nuisance to nearby residents; 4) it will be more accessible to all residents because it is at an equidistant point between 4th and 11th streets and; 5) CPUC approval of an at grade crossing is not a given and could result in the project - and beach access - being significantly delayed for months or years.

Second, I support the North South Trail concept, with a caveat. As the Council knows, in the past the NCTD attempted to strong arm the City into signing a licensing agreement with onerous terms in exchange for an attractive fence similar to what is currently proposed for the North South Trail concept. The Coastal Commission's agreement with SANDAG and NCTD calls for the creation of a formalized trail, and additionally anticipates that the City, SANDAG and NCTD will enter into a Memorandum of Understanding (MOU) governing the use of the trail and beach access. I support the North South Trail concept, but urge the City to be vigilant and not agree to the terms this Council previously rejected in the licensing agreement proposed by the NCTD.

The underpass is a safer alternative that will allow the public and residents to enjoy the bluffs in peace.

All rational stakeholders agree that the train should be moved off the Bluffs, but this relocation will take at least 10 years to accomplish. Given that the public has accessed the beach for centuries, and that access will effectively be cut off by seawalls and the new trail fence, this requires that a safe and legal access be afforded to the public in a timely manner. Of the concepts advanced by SANDAG, I support an underground pass-through at 8th Street as the most viable mitigation, pending the transfer of the tracks off the Bluffs.

There are compelling reasons to reject an at-grade crossing anywhere on the corridor. First, the Federal Railroad Administration and the CPUC require underpasses, not at grade crossings, for a reason -- they are safer. As this Council is aware, nearly all of the accidents occur at or near the 15th street crossing; there have been no accidents south of 9th Street for decades or longer. The Council should be especially reluctant to support a hazard where none currently exists south of 9th street. By choosing the underpass over an at grade crossing, the City sends a clear message that its citizens are concerned about safety, contrary to the baseless accusations levied against Del Mar citizens by the NCTD Board in its Surface Transportation Board (STB) litigation.

Second, the noise associated with at grade crossings is unacceptable; the residents and those who walk the bluff would be unable to enjoy the bluffs because of the noise from train horns. The residents along the bluff would bear the brunt of this noise disturbance, as well as the visual disturbance of flashing lights.

This leads to the third point. It is my understanding that the CPUC, in evaluating the application for an at grade crossing, takes into consideration the visual and noise impacts on nearby residents. The Santa Claus Lane project was in a "rural area" adjacent to a highway, where the visual impact of the project was negligible, only to be seen by "passing motorists" (see page 5 of Santa Claus lane application). The nearest residence to the Santa Claus Lane crossing was 650 feet to the north and 1100 feet to the south. All this is to say that CPUC approval is not assured and a denial would take us back to the drawing board. And it is also my understanding that these crossings are subject to monitoring and may be revisited if they present a hazard. I do not believe this is worth the risk when there is an alternative that is more readily attained.

Finally, if the goal of this project is to funnel people toward a safe and legal crossing, it makes no sense to put it at 11th or farther south than 8th. 8th Street is at least equidistant between 4th and 11th. While there will be disturbance to the bluff, it is my understanding that this is an area that has been artificially filled, and that SANDAG may use an existing concrete structure in constructing the underpass. I do believe that to minimize the disturbance to the bluff, only stairs should be considered. I understand this may cause it to be less accessible and result in the loss of certain sources of funding, but access can be had at Torrey Pines and 15th Streets. If this project can be realized without ramps, that would be preferred.

The City should carefully consider the terms of any MOU with NCTD and provide the residents with an opportunity to weigh in before the Council binds the City

I understand that the Coastal Commission's agreement with the NCTD and SANDAG anticipates that an MOU will be negotiated with respect to the beach access and north south trail. While I am not convinced that a trial or fencing is required south of 8th street where no train accidents have historically occurred, I understand that this is part of the agreement between SANDAG, the NCTD and the Coastal Commission. I support the trail and the less visually offensive fencing proposed by SANDAG; it is certainly preferable to the hog wire chain link spite fence the NCTD Board has voted to erect on the upper bluff. The more attractive fencing will obviate the need for NCTD's proposed ugly hog wire fencing. Obviously, the NCTD at one point must have believed that this would suffice to render the area safe, because it is similar in style to the one the NCTD proposed in 2021. With the approved plan for a continuous fence on the upper bluff agreed to by all major stakeholders, it will become apparent to the STB that the NCTD has some ulterior motive, and is not concerned about safety, as it has claimed.

I hope, however, that the City is vigilant regarding NCTD's motives in negotiating the MOU. It is important for the City to stand firm and not undertake any liability for train strikes; not cede control over the bluffs to NCTD (as contemplated by the licensing agreement proposed by NCTD that was rejected by the Council), and not relinquish any lawful rights in favor of NCTD. The City is not a party to the agreement between SANDAG, NCTD and the Coastal Commission. It is the California public, not just Del Mar residents, that will benefit from beach access and formalized trails. Del Mar has no obligation to cede any lawful rights it may have.

Additionally, I would expect that the City would allow the public adequate time to weigh in on any such agreement before the City binds the residents.

Those are my thoughts. I hope the City seriously considers these points in choosing a concept and in negotiating with NCTD on the MOU.

Sincerely,

Laura Schaefer
158 6th Street
Del Mar CA

Melinda Gould

From: ATT E-Mail <werc2011@hotmail.com>
Sent: Sunday, April 16, 2023 9:58 PM
To: City Clerk Mail Box
Subject: Train Track Crossing and Beach Access Options

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Del Mar City Council:

Please vote to implement Concept 3 (at-grade crossing at 11th Street with stairs to beach) or Concept 5 (at-grade crossing at 7th - 8th Streets with stairs to beach). These two concepts are best because they will be least destructive to the bluff that we want to preserve. Undercrossings and ramps in the other plans would drastically change the bluff. Perhaps a barrier or gate that locks when a train approaches would help minimize noise from alarms. I think we should remember that this is only a temporary crossing until the tunnel is completed in 2035.

If Concepts 3 or 5 cannot be implemented, my next choice would be Concept 1 (the North - South Trail).

Thank you for your assistance with this matter.

Sincerely yours,
Wendy Root Cate
615 Stratford Court #8
Del Mar, CA 92014

Melinda Gould

From: shirli.weiss@gmail.com
Sent: Sunday, April 16, 2023 10:15 PM
To: City Clerk Mail Box
Cc: Tracy Martinez; Dwight Worden; Dan Quirk; Terry Gaasterland; David Druker
Subject: April 17, 2023 City Council Meeting, Item 10

Follow Up Flag: Follow up
Flag Status: Flagged

Dear City Clerk,
Kindly submit the red dot communication below in the record for Item 10.

Dear Honorable Mayor Martinez and Member of the City Council:

I am a longtime resident and property owner in Del Mar. I have reviewed the Coastal Connections Conceptual Planning Study (Coastal Connections Study) dated March 7. 2023 that was commissioned in 2021, as well as SANDAG's Power Point Presentation published as part of the April 17, 2023 Del Mar City Council Public Meeting Agenda. I thank SANDAG for its analysis and thoughtful process. These are my thoughts:

BEACH ACCESS

As I wrote to SANDAG, I support an underground pass-through at 8th Street as the most viable mitigation option for access to the beach, pending the transfer of the tracks off the Bluffs.

At-grade crossings are too problematic. The Coastal Connections Study projects "a significant increase in passenger trains in the future…", (p.21). Given the planned further commercialization of our Bluffs through significant increase in freight and passenger train traffic and speed, the horn-sounding and clanging requirements for trains approaching any added at-grade crossings would result in **virtually constant noise pollution**. This would obliterate the ethereal experience provided to all who enjoy walking or running on the Bluffs as well as place a disproportionate burden and loss of property value caused by the increased commercialization of the Bluffs on homeowners who live next to the Bluffs. Instead, I believe an underground passage at 8th is the best solution proposed for access to the beach until the transfer of the tracks off the Bluffs.

NORTH SOUTH TRAIL AND THE MOU

I support the North/South trail as depicted by SANDAG and conditioned upon environmental review and permit issuance (as represented in SANDAG's PPT), to assure no geologic harm caused by the proposed fencing. I note that SANDAG has declined to take a public position on NCTD's proposal for heavy metal fencing on the Upper and Lower Bluffs. The Study acknowledges that litigation has placed NCTD fencing plans "on hold."

However, the SANDAG proposed North-South Trail (in response to Coastal Commission's mandate for mitigation) of course must be viewed along with NCTD's proposed fencing plans (which contradict

SANDAG's). At p. 22, The Coastal Connections Study cross-references NCTD's October, 2021 fence plans, but this reference is outdated. At its January 20, 2022 meeting, NCTD's Board (except for Del Mar's representative) voted to issue a job order to fence Del Mar's Bluffs with heavy black metal 6ft-high hogwire fencing. As you will recall, NCTD gave Del Mar an ultimatum: sign their proposed licensing and risk-shifting agreement or the 6ft. heavy metal fence goes up on the Upper Bluff starting in April, 2022. Litigation filed in California by the *Friends of Del Mar Bluffs* and later the Coastal Commission was the only thing that intercepted NCTD's plans. Meanwhile both the Coastal Commission and Del Mar continue to oppose NCTD's aggressive petition for an order nullifying California Law in an action it filed in Washington D.C. before the Surface Transportation Board.

NCTD's behavior thus far is a warning to the City to be vigilant because a Memorandum of Understanding is to be struck among NCTD, SANDAG and Del Mar after Environmental Approval and Coastal Commission acceptance of final concept selection of SANDAG's mitigation proposals. It became clear when Del Mar published NCTD's 2022 proposed agreement that the terms were designed by NCTD to shift too much risk to Del Mar. It would have given NCTD the right to remove or change the Upper Bluff at its discretion, forced Del Mar to waive numerous legal rights including the right to sue for damage from train vibration (NCTD plans to dramatically increase number, speed and frequency of trains on the Bluffs and wanted an advance release from liability). Del Mar would have had to pay NCTD's staff for various tasks and take on insurance, indemnification and maintenance exposure disproportionately benefiting NCTD. Wisely, the City Council rejected NCTD's 2022 proposed agreement after receiving robust public protest. NCTD continues to publicly understate and downplay the demands its proposed agreement made on Del Mar. We can't have history repeat itself with the MOU.

I support the SANDAG North/South Trail mitigation proposal, provided it is not conditioned on forcing Del Mar to agree to the same or similar disastrous terms as NCTD's 2022 proposed agreement. NCTD cannot use the MOU as a backdoor attempt to obtain terms the City rejected. SANDAG's agreement to implement the Coastal Commission's mitigation requirements do us no good if they come at the expense of Del Mar undertaking outsized risks that could bankrupt it, or relinquish important rights that a rogue local transit district has no right to ask Del Mar to relinquish.

I strongly urge the City Council to be vigilant against NCTD attempts to use the MOU to force the same terms on Del Mar that the City Council wisely rejected on February 28, 2022. I respectfully request that the City Council consider appointing a Citizens' Advisory Committee to help it think through any proposed MOU, so that the City Council may receive broader thoughtful and timely input on obligations that could bind the City for more than a decade. This would be in addition to input provided by the City Counsel. Thank you.

Respectfully submitted,
Shirli Weiss
551 Stratford Court
858.449.4850

Melinda Gould

From: Drew Keeling <drewkeeling@yahoo.com>
Sent: Monday, April 17, 2023 6:34 AM
To: City Clerk Mail Box
Subject: re Railroad Crossing Options (Agenda item #10, City Council meeting April 17, 2023)

Follow Up Flag: Follow up
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Dear City Clerk and City Council members:

Thank for you looking into possible ways to improve the safety and viability of railroad crossings for pedestrians accessing the beach from the bluffs (email of Mayor Martinez, April 14, 2023 below, re the April 17, 2023 Council meeting).

When I grew in Del Mar, in the 1960s and early ”70s, most people going to the beach in Del Mar also lived in Del Mar. That has, of course, changed significantly since then, with increased growth of both the North County population and tourism. I would, however, suggest that there are probably ways to make beach access safer (for locals and non-locals) without directly facilitating greater use of the beach and bluffs by visitors from out of town. My impression is that most non-local beach visitors drive to Del Mar, and it is thus encouraging to see that the Council (on the same meeting agenda) is also actively considering new parking policies and procedures, which I would hope might help keep residential streets from becoming frequently lined with parked cars.

Consistent with these observations, I would favor new railroad crossing concepts likely to improve the safety of beach access but without more traffic and cars coming into Del Mar as a result. It also seems to me that the defacto bluff paths of the past, between 4th and 11th streets, have been mostly traversed by local walkers and joggers, and by surfers (local and non-local). Non-local beach visitors, other than surfers, are evidently mainly concentrated near Seagrove Park and the lifeguard station there.

For safer track crossing without promoting increased visitors to the “south beach” area, “Concept 5: At-grade crossing at 7th-8th streets with stairs,” therefore looks to me like the best of the seven listed alternatives. It seems closer (to what we have had until now in that area) than undercrossings or ramps would be. An undercrossing (e.g. Concept 7) would be somewhat safer, and I guess avoid noisy horn sounds, but would cost more -perhaps including redesigning later if trains were rerouted off the bluffs- and more likely lead to increased visitors driving in from out of town and parking. Concept 5 also looks preferable to concepts 1-4 and 6, for those same reasons.

Thank you for addressing these matters and for seeking public input.

Drew Keeling
1158 Cuchara
Del Mar, CA

----- Forwarded Message -----
From: Mayor Tracy Martinez <tmartinezrn@lapbypass.com>
To: "drewkeeling@yahoo.com" <drewkeeling@yahoo.com>
Sent: April 14, 2023
Subject: Safe Railroad Crossing Options Are Being Decided

Tracy Martinez
Mayor of Del Mar

TRAIN TRACK CROSSING AND BEACH ACCESS OPTIONS BEING PRESENTED THIS MONDAY - NEED YOUR INPUT!

April 14, 2023

Dear Del Mar Residents and Friends;

During our next City Council meeting, scheduled for THIS coming Monday, April 17, at 4:30 pm, the City Council will receive the final version of SANDAG's "Coastal Connections" Conceptual Planning Study, which provides seven different options for safe railroad crossings and beach access at the south part of town.

Photo credit - Terry Gaasterland

THE TRAIN TRACK CROSSING OPTIONS INCLUDE:

- CONCEPT 1: NORTH-SOUTH TRAIL
- CONCEPT 2: AT-GRADE CROSSING AT 11TH STREET, RAMPS & STAIRS TO BEACH
- CONCEPT 3: AT-GRADE CROSSING AT 11TH STREET, STAIRS TO BEACH
- CONCEPT 4: AT-GRADE CROSSING AT 7TH-8TH STREETS, RAMPS TO BEACH
- CONCEPT 5: AT-GRADE CROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH
- CONCEPT 6: UNDERCROSSING AT 7TH-8TH STREETS, RAMPS TO BEACH

- CONCEPT 7: UNDERCROSSING AT 7TH-8TH STREETS, STAIRS TO BEACH

The costs range from $9.6 million to $12.8 million.

SANDAG will present a summary and is asking that Del Mar City Council choose the top three options for further evaluation. Your input is important to ensure that we, as your City Council representatives, choose the three options that best reflect our residents' views.

For more details and renderings of the seven options being presented, please access the City Council Agenda packet for Monday, April 17, 2023 - Item #10 "Coastal Connections Planning Study Final Report" beginning on page 354 of the packet.

https://www.delmar.ca.us/AgendaCenter/ViewFile/Agenda/_04172023-3191

You can make your voice heard and share your opinion in a number of ways:

1. By submitting a "Red Dot" letter by email **cityclerk@delmar.ca.us**
2. By attending and speaking at the City Council meeting at City Hall beginning at 4:30 pm
3. By attending the meeting by zoom:

Zoom Link: **https://us02web.zoom.us/j/84790910014**
Phone: (669) 900-6833
Meeting ID: 847 9091 0014

For more information about public comments, please visit:
https://www.delmar.ca.us/publiccomment

Mayor's Hours
I will be holding office hours next Wednesday, April 19th from 1:00 pm to 2:30 pm in the lobby of L'Auberge Del Mar, located at 1540 Camino Del Mar. I hope you will stop by to chat. Future office hours include: May 17; Jun. 21; July 19; (no Aug.); Sep. 20; October 18; Nov. 15; and Dec. 20.

You can also contact me directly if you would like to discuss these options or any other concerns. I am reachable by email at **tmartinez@delmar.ca.us** or by cell phone 619-823-6050.

Please visit my website **DelMarMayorTracyMartinez.com** for additional information about me and my priorities as mayor.

I also hope you will stay informed by signing up to receive the Del Mar Weekly e-newsletter **https://www.delmar.ca.us/352/Del-Mar-Weekly** published every Friday by Del Mar City Hall. It provides key city information.

I am proud to serve as your mayor this year. My goal is that we all work together to do what is right for Del Mar.

I hope you'll take the opportunity to make your voice heard on the train track crossing issue.

Sincerely,

Tracy

Tracy Martinez
Mayor of Del Mar

Visit My Website

Contact Me

Melinda Gould

From: karen lare <karen.lare@yahoo.com>
Sent: Monday, April 17, 2023 6:54 AM
To: City Clerk Mail Box
Cc: Tracy Martinez; Terry TG. Gaasterland; Dwight Worden; Dan Quirk; Dave Druker
Subject: SANDAG Study results Item #10 on Council Agenda

Follow Up Flag: Follow up
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Dear Honorable Mayor and Council Members,
We read with interest the results from SANDAGs study of options on the track crossing for Del Mar. We have also read the input from residents and interested parties. It was surprising that there was not a clearer delineation in results but after consideration and discussion with many it seems that what we all really want is not feasible given the rules and restrictions. We all want an at grade simple crossing but with no lights and no bells. This would do the least damage to the bluffs and be the simplest for all. But with all of the discussions and research done by many, I believe we all understand that this is not possible. So then what is the right solution?

That seems to differ depending on your view of the situation and proximity to the tracks. We would put our vote in for the underground crossing at 8th street and the simplest path down the bluff to the beach. So this would be stairs and no ramps as handicap access is available at Torrey Pines and at 15th street. We would however request a connection between the underground crossing and the existing north south trail. This connection did not exist on any drawings and in discussion with the SANDAG team it is very feasible but not considered at the time of the concept was created. If this connection is not created we will still have people trying to cross the tracks to get to the trail on the west side.

We would also support the north south trail as long as all appropriate studies were done and permits acquired but would request that fencing along this trail be minimal and allow the views to be considered for all using the path and those living along it.

Thank you for all the work you do for our community,

Karen and Eddie Lare
161 Sea Cliff Way
Del Mar CA

Melinda Gould

From: Bruce Watson <bdub2@icloud.com>
Sent: Monday, April 17, 2023 7:39 AM
To: City Clerk Mail Box
Subject: Item # 10 City Council Agenda 041723

Follow Up Flag: Follow up
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Hi,
Having train track crossing bells and whistles installed anywhere in Del Mar, especially near 7th or 8th Street, is not an acceptable solution. Additionally, this entire exercise is a waste of time and $money. The tracks should be moved near I-5 or under Crest Canyon.
Sincerely,
Bruce and Sandy Watson
629 Nob Ave. Del Mar

Sent from my iPhone

Melinda Gould

From: Laura DeMarco <laurastanleydemarco@yahoo.com>
Sent: Monday, April 17, 2023 7:40 AM
To: Tracy Martinez; Terry Gaasterland; David Druker
Cc: City Clerk Mail Box; Ashley Jones; Amanda Lee
Subject: Red dot Item 10: Coastal Connections Access Panning Study feedback

Follow Up Flag: Follow up
Flag Status: Flagged

Dear City Council Members and Staff,

The best Coastal Connections project for Del Mar's Bluffs is to move speeding trains off these unstable bluffs, which is rightfully SANDAG's top priority in their approved Regional Transportation Plan. Unfortunately, this was not one of the options offered in the Planning Study.

Federal, state, and local tax dollars and staff time would best be spent on helping SANDAG to achieve its goal of moving speeding trains off Del Mar's bluffs by 2035. Why spend millions on the offered Coastal Connections Study projects made obsolete when the tracks are removed in 12 years?

The City of Del Mar cannot approve any Coastal Connections project that requires approval of NCTD's proposed 1.5 miles of 6 ft-high wire fencing on each side of the tracks so pedestrians can only access new legal rail crossing(s) on the bluffs since installation requires drilling over 1,400 fence post holes, 3ft deep x 1 ft wide every 10 feet, and creating new sources of destabilizing water intrusion that increases the catastrophic risk of bluff slides.

The best model for any Coastal Connections project on Del Mar's bluffs are the pathways at nearby Torrey Pines State Park where natural landforms are preserved with minimal fencing. Priority is given to reducing erosion and preserving the stability of the bluffs so no destabilizing excavation is allowed.

Paths down the bluffs to the beach use steps edged with railroad ties to maintain pedestrian footing and reduce erosion. There are no downward-sloping ramps of deconstructed granite which are very treacherous for pedestrians as they are slippery. Ramps were rejected for pedestrian access since they channel the destructive force and weight of torrential storm water on to the structurally weak bluff face that is already prone to dangerous slides.

The best and least destructive option of the offered Del Mar Bluff Coastal Connections Planning Study projects is the North-South trail (#1) BUT only if it does not require extensive destructive fencing and excavation into the upper bluff to widen pathways.

The best and most minimally invasive crossing of railroad tracks are at-grade at 11th and 7-8th St. (#3 & 5) BUT only if they do not require 1.5 miles of fencing on each side of the tracks or repeated horn blasts 50+ times daily. If that is not possible, the best option is the 7-8th St. underpass (#7) BUT

only where it is a filled-in canyon and not structurally part of the natural bluff. Steps should be used with rail ties, not slippery ramps.

The 7-8th St. rail crossing also offers the best public access to visitors who can park in one of the 100+ parking spaces, including handicapped-accessible spaces, at the nearby Winston School at the corner of 9th and Stratford. Unlike the civic center parking lot, Winston's is available during peak visitor times every weekend, weekday afternoons after 3 pm, and during the school's long summer and holiday breaks. The civic center's parking lot is full every Saturday afternoon during the Farmers Market.

The city of Del Mar should carefully consider the costs of assuming the unfunded liability from the proposed Coastal Connections projects. Del Mar's CIP budget is already underfunded and overburdened with the costs of maintaining badly deteriorating roads like San Dieguito Rd., Oribia Rd., Jimmy Durante Blvd., and many other residential streets; replacing two bridges over the San Dieguito Lagoon as well as the overpass above Jimmy Durante Blvd.; funding Del Mar's Sea Level Rose Adaptation Plan requiring $10 million for sand replenishment every 10 years; removing or covering the dangerous slippery deep drainage ditches on 9th St. by Shores Park, 11th and 15th St., maintaining the Torrey Pines bridge; etc.

Can the city of Del Mar and our 4,200 residents really afford adding tens of millions more in long-term costs for the Coastal Connection project's ongoing maintenance, removing and/or modifying the project when the tracks are relocated, and indemnifying NCTD and the railroads for their damage to the bluffs and any subsequent landslides like those which recently killed three women beachgoers whose families sued the city of Encinitas? A judge's recent ruling in the Encinitas case shows that the city of Del Mar and the Coastal Commission would not be shielded from liability for "natural condition immunity" under Government Code 831.2 by those killed or injured from landslides caused by the Coastal Connections Projects as well as from the cumulative damage from 100 years of heavy trains operating on the fragile bluffs.

Bottom line, the best Coastal Connections plan is to move the tracks off the bluff by 2035 in accordance with SANDAG's RTP. This would save the city of Del Mar tens of millions in long-term liability for Coastal Connections projects made obsolete when the tracks are removed in 12 years.

Thanks for your consideration,

Laura

Melinda Gould

From: City Clerk Mail Box
Subject: FW: Red Dot Letter re: SANDAG Coastal Connections Item 10, 04/17/2023 Council Meeting

-----Original Message-----
From: L Mike Maier <lmaier810@gmail.com>
Sent: Sunday, April 16, 2023 6:36 PM
To: City Clerk Mail Box <CityClerk@delmar.ca.us>
Subject: Red Dot Letter re: SANDAG Coastal Connections Item 10, 04/17/2023 Council Meeting

Dear City Council,

Of the 7 Concepts being considered, I would like to request the Council to support the following Concepts:

Concept 1 North-south trail
Concept 6 Undercrossing at 7th/8th street ramp to beach Concept 7 Undercrossing at 7th/8th street stairs to beach None of the "Overcrossing" plans (Concepts 2, 3, 4, & 5) , are viable options due to the severe noise level that would be created by the crossing alarms and train horns as the number of trains running through Del Mar continues to significantly increase each year. It's unreasonable and unacceptable to subject residents to this noise day in and day out.

Thank you.
Mike Maier
266 Surfview Ct

Melinda Gould

From: Karl Willert <karlwillert@gmail.com>
Sent: Monday, April 17, 2023 10:15 AM
To: City Clerk Mail Box
Subject: April 17 2023 City Council Meeting Agenda Item 10

Dear City Clerk,
I submit the following Red Dot letter concerning Item 10.

Dear Honorable Mayor Martinez and Members of City Council,

I have lived in Del Mar since 2003, and on a nearly daily basis, I cross the railroad tracks to access the beach below the bluffs at 7th Street. I have done so without difficulty and risk.

As you evaluate the top 3 concept designs for railroad crossings advanced by SANDAG, I would like for you to consider a 4th: do nothing. Here's the argument:

1. Crossing the tracks has been safe and uncomplicated for the past century. While tragedies have occurred, no one has ever been killed while crossing the tracks. Millions of people, residents and visitors, cross the tracks per year without incidents.

2. The railroad tracks will be moved off the bluffs in the next decade. With the continuously crumbling bluffs, this realignment is essential for continued train operations. It is only a matter of time that another bluff collapse will force termination of train operations.

3. In light of points 1 and 2, the proposed crossings are a waste of public funds. It would be wiser to focus our limited resources on accelerating the process to relocate the railroad tracks. These crossings will only serve to push the track realignment further into the future.

Given that the proposed crossings serve as mitigation for bluff reinforcement – leaving us with seawalls that we never wanted and crossings that are not needed – my request for status quo will likely fall on deaf ears. Be that as it may, I ask you to exercise extreme caution in advancing any one of these proposals and to oppose any additional construction on our beautiful bluffs, in particular, any type of fencing that will block access to the bluff top and the beach below.

Sincerely,
Karl Willert
131 Sea Cliff Way, Del Mar

Melinda Gould

From: Al Tarkington <atarkington@hotmail.com>
Sent: Monday, April 17, 2023 10:59 AM
To: City Clerk Mail Box
Subject: Red Dot Item #10

Dear Mayor Martinez and City Council Members.

I support an at grade crossing at either 11th Street or 7th Street, but only with the following conditions:

1. Automatic locking gates to prevent pedestrian access when trains approach.
2. No flashing lights.
3. No intersection horns or bells.

At-grade pedestrian crossings with locking gates are used effectively all over the world. Even the North County Transit District Sprinter Line uses gates for pedestrians at stops to direct them safely to trains.

I, along with Dwight Worden as an individual, presented a detailed Pedestrian At-Grade proposal to SANDAG earlier this year. The pedestrian crossings would be the safest at-grade crossings existence and safer than any North County Transit District now has.

Flashing lights and horns are inappropriate and unnecessary with proper pedestrian controls. The Del Mar Blufftop is not a highway intersection. It is simply individual people crossing the tracks at a walking pace.

Regarding the speed and frequency of trains, the speed along the bluffs is dictated by the curves and sight-line distance at 15th Street and the Torrey Pines curve. Top speeds are approximately 35-40 miles per hour compared with over 60 miles per hour in other locations.

The frequency of trains could double or triple, and the length of time gates would be closed to pedestrians would be insignificant.

I urge the City Council to ask SANDAG to take a second look at my and Dwight Worden's proposal for a safe at-grade pedestrian crossing for either 7th Street or 11th Street or possibly both.

Sincerely,

Al Tarkington

Melinda Gould

From: Kerridge, Carol <ckerridge@ucsd.edu>
Sent: Monday, April 17, 2023 11:20 AM
To: City Clerk Mail Box
Subject: Red Dot for Item #10

I would like to give thanks and acknowledgement to all
Native American Tribal Nations who were the First People in this region.
For a millennium, Native Americans have lived on this land while giving respect and wisdom to maintain its rich natural resources by nourishing, healing, restoring, protecting, and embracing these resources for many generations
in a relationship of balance and harmony.

Dear City Council Members,

As we have begun with the task of making very difficult decisions about the bluff in our town, I feel particularly sad about our accessibility of the beach being restricted. For years we took for granted that we could walk to the end of our street, climb down the hill and enjoy a swim, bogie board, surf, or just take a simple walk on the beach. It never crossed our minds that we would be the generation having to make these complicated decisions as global warming has reared its head much earlier than expected and has quickly made our bluffs more fragile.

Realizing that as the ocean storms have increased and the tidal waves have undermined the bluff structure at the beach level, there are many more frequent bluff failures. Along with the recent heavy rainfalls we have experienced, we are forced to make decisions to our accessibility to the beach safe and make this decision soon.

I think that of the options that we are presented with, the option that makes more sense to me...**I vote for Concept 3,** which avoids possible underground construction which could compromise the bluff even more. If financially possible, **Concept 5** could also be included.

Thanks much to you and for your time and energy devoted to resolving this difficult decision.

Warm regards,
Carol Kerridge

Melinda Gould

From: City Clerk Mail Box
Subject: FW: RR Crossings

On Mon, Apr 17, 2023 at 10:57 AM Kurt Snider <kurt@solanaproductions.com> wrote:

> Hi Terry,
> I just re-read the various options for crossing the tracks. I would like to make a comment about warning systems and train horns. As I'm sure you know, we can already hear the 15th street crossing at 4th street when the weather is right. Adding more crossings that include noise is not a good solution.
>
> The undercrossings seem like the best solution, but I hope the city will oppose ramps. During the summer there's hardly any parking at the bluff access points and there's enough handicapped beach access at Powerhouse Park and the Lifeguard HQ. Why spend the extra money? Also, if ramps are built will handicapped parking be required?
>
> Once there's an easy way down to the amazing uncrowded beach at the foot of those bluffs Stratford Court and the streets adjacent to any crossing will be very busy. But I'm not sure if there's any way to mitigate that.
>
> Good luck with a tough decision.
>
> Regards,
>
> Kurt Snider

Melinda Gould

From: James Hindman <jhindman2015@gmail.com>
Sent: Monday, April 17, 2023 2:53 PM
To: City Clerk Mail Box
Subject: Reference item 10

City Council Members,
I am in favor of the North/South trail and the underpass at 7th/8th street with related stairs to the beach. Under no circumstances are at grade crossings acceptable due to the noise that will be required to operate them. In addition, I believe there should be permit parking for residents on 7th and 8th streets due to the increased traffic/parking that will be caused by the underpass. Thank you for taking my input into consideration.
Jim Hindman
119 8th Street

Sent from my iPhone

Melinda Gould

From:	Camilla Rang <camillarang@yahoo.com>
Sent:	Monday, April 17, 2023 8:37 PM
To:	City Clerk Mail Box
Cc:	Mark STAC
Subject:	In regards to overpass at 10th Street (or anywhere along the bluff)
Attachments:	IMG_0735.jpg; IMG_0742.JPEG; IMG_0743.JPEG

Dear Del Mar City Council (and Mark Handzel),

The option of an overpass was dropped early in the study of how to get people across the rails on the bluff due to obstruction of views. A modern rail road overpass looks nothing like the sweet old wooden bridge that used to be at 10th street, neither does it look like the image Mark Handzel presented at the meeting (sorry, Mark), unless Mark knows something I don't. Solana Beach has several overpasses across the rail road and I am attaching pictures of one of them here. Because of safety issues so that people cannot jump off or throw thing down onto the train, these overpasses are humongous and ugly as h-ll. Please see attached images. No one wants these monsters outside their windows.

Best,
Camilla