

North Beach Drainage Improvements



Council Presentation
April 18, 2023

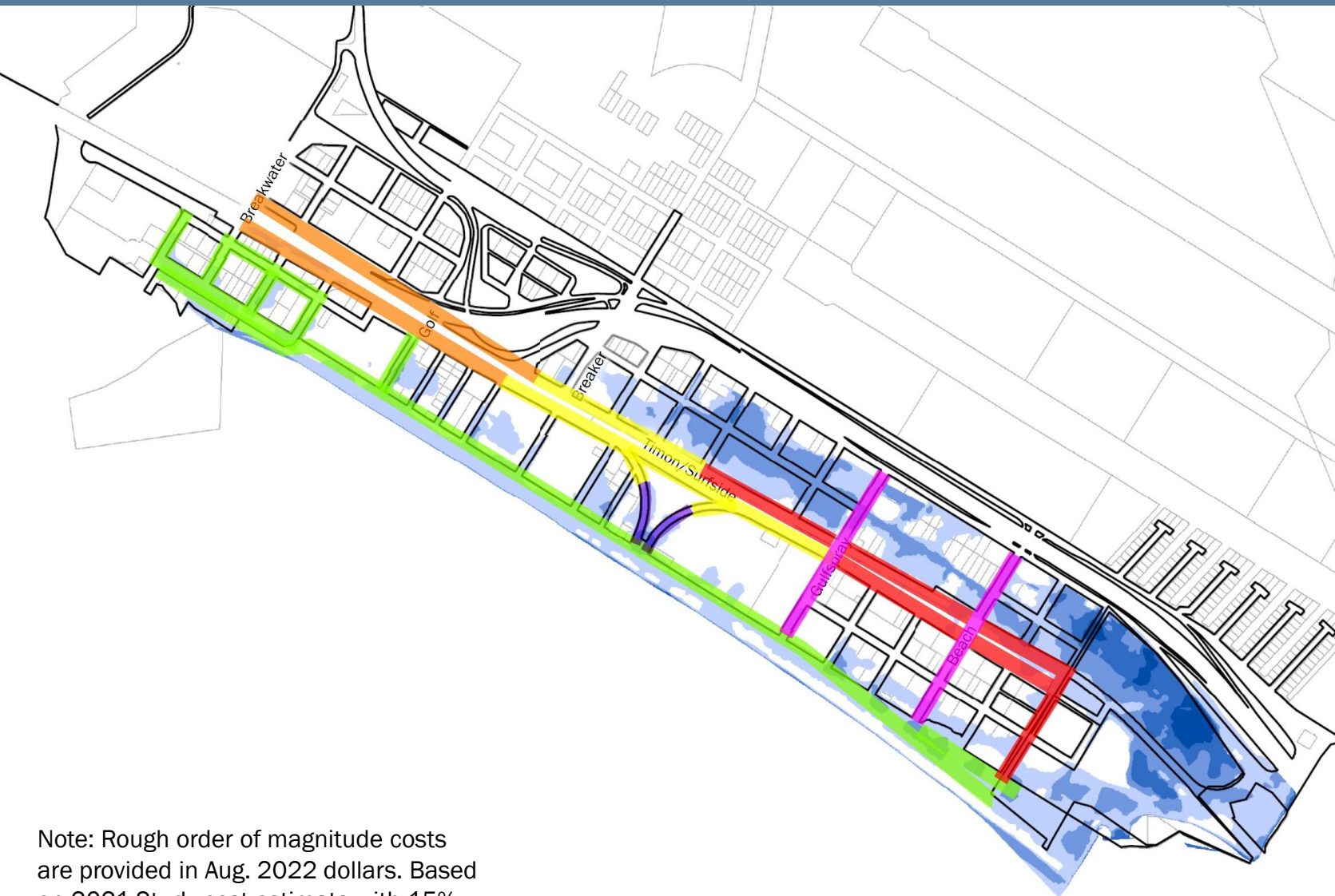
Linear Open Space + Open Channel



Emerging Design Guidelines

- Pedestrian connectivity to the beach
- Overall multi-modal connectivity
- Interest and attraction at varying tidal levels
- Accommodation for kayaking and paddle boats
- Areas that could allow future expansion into canal
- Water quality

Prioritization



- \$4.5M Elevate. In-progress.
- \$2.5M Elevate.
- \$5M Elevate and reconstruct. Limited conveyance improvements.
- \$10M Elevate. Major conveyance improvements, portion of linear open-space, new south-end outfall. Backflow prevention.
- \$5M Elevate. Connect linear open-space.
- \$16M Permanent or mobile pump station locations. Piped conveyance. Coastal barrier (dunes).
- Not Shown - Future Phases. Elevation and/or additional pump station locations.

Note: Rough order of magnitude costs are provided in Aug. 2022 dollars. Based on 2021 Study cost estimate with 15% cost escalation since Feb. 2021.

Funding Plan

Available Budget: \$9.55M (Bond 2018 + ARPA + FY23 General Fund)*

First Priority (Gulfstream and Beach)

- Elevate Beach Ave and Gulfstream.
Elevate beach access parking and provide pedestrian access to beachwalk.

Second Priority (Design and Partial Construction of Linear Open Space Channel)

- Elevate Timon and Surfside, Eco Park and Dolphin Park access (Sandbar Avenue).
- Limited conveyance improvements along elevated streets.
- Install new north-end outfall and portion of linear open-space open channel.
- Confirm compatibility with future linear open-space open channel.

*Available Budget:

ARPA	\$5.00M
Bond 2018 - Beach Avenue	\$1.00M
Bond 2018 - Gulfstream Pedestrian Access	\$0.30M
Bond 2018 - NB Primary Access Project	\$1.25M
FY 2023 General Fund	\$2.00M

MIG Recommendation

- Use a layered solution across the North Beach peninsula
- Approve Linear Park (Option 2) and Storm Drains w/o Elevation (Option 6)
- Install Coastal Barriers (Dunes)
- Elevate Key Access Routes
- Upgrade Stormwater Conveyance w/ Linear Park Canal
- Exercise Backflow Prevention
- Next Step: Hire an engineering firm to design the linear park and reconstruct North Beach roadways utilizing available funds