North Base Building 200 Replacement & North Base Sea Level Rise Protection Project Updates

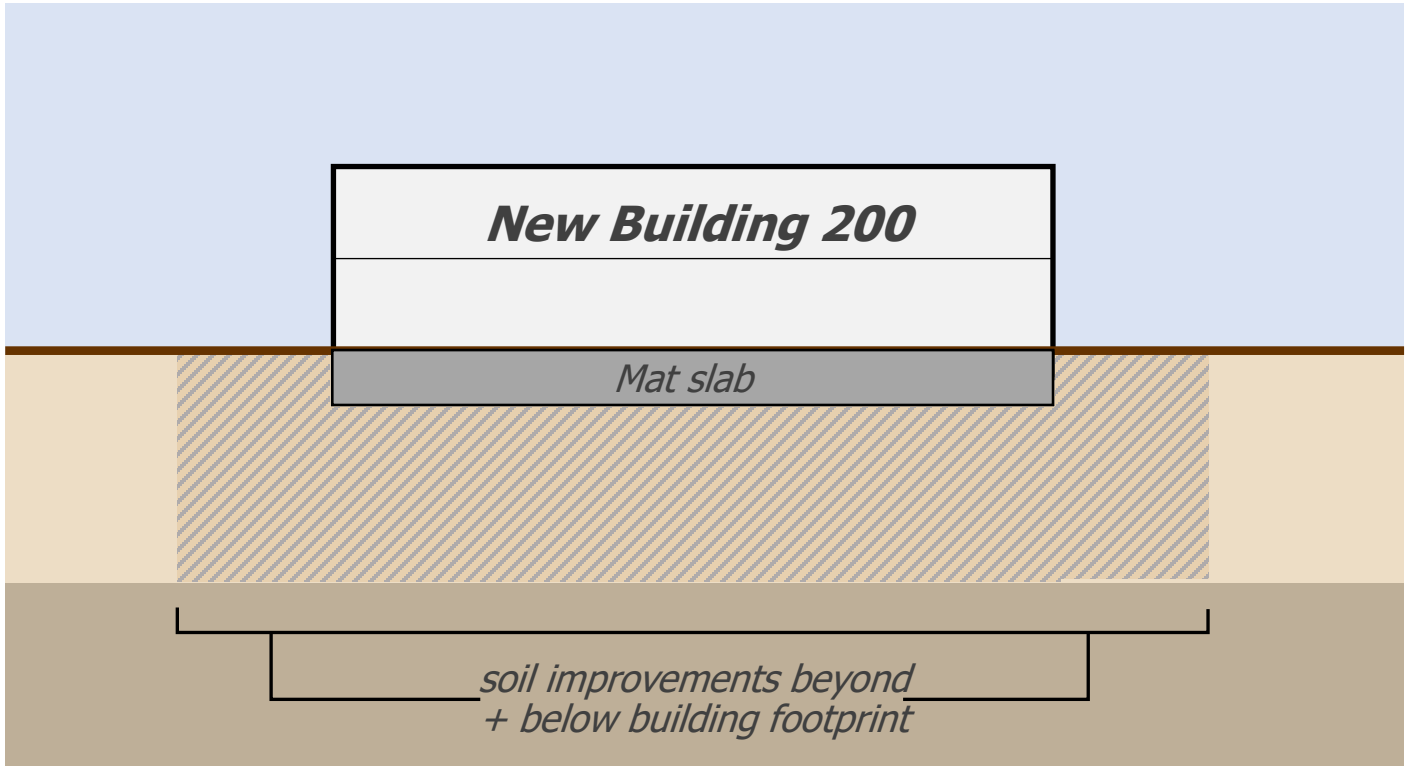
Board of Directors | December 4, 2024

NB Bldg. 200 Replacement Project Update

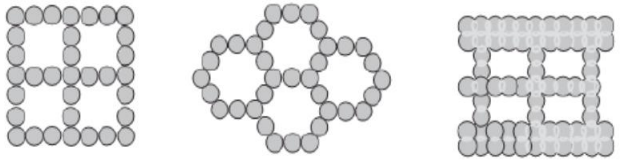
Building 200 Design

** SCHEMATIC DESIGN RENDERING, Value Engineering could change some design features*

Foundation & Soil Improvements*



- Floor Elevation: Raised by approx. 1 foot (13.5 feet above sea level)
- Foundation: 2-foot Mat Slab
- Soil Improvements: Soil columns in cellular patterns formed by Deep Soil Mixing

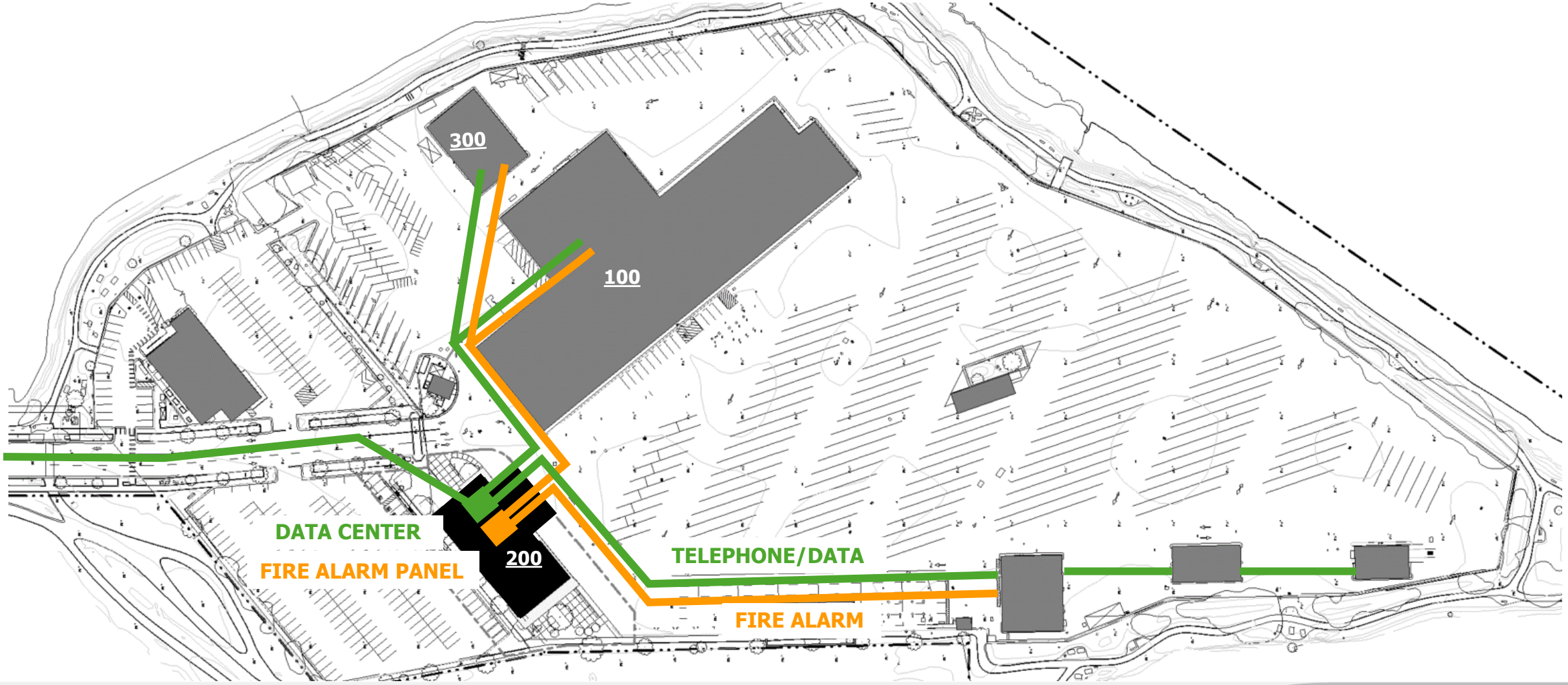


* Design was reviewed and validated by a Third-Party Engineer

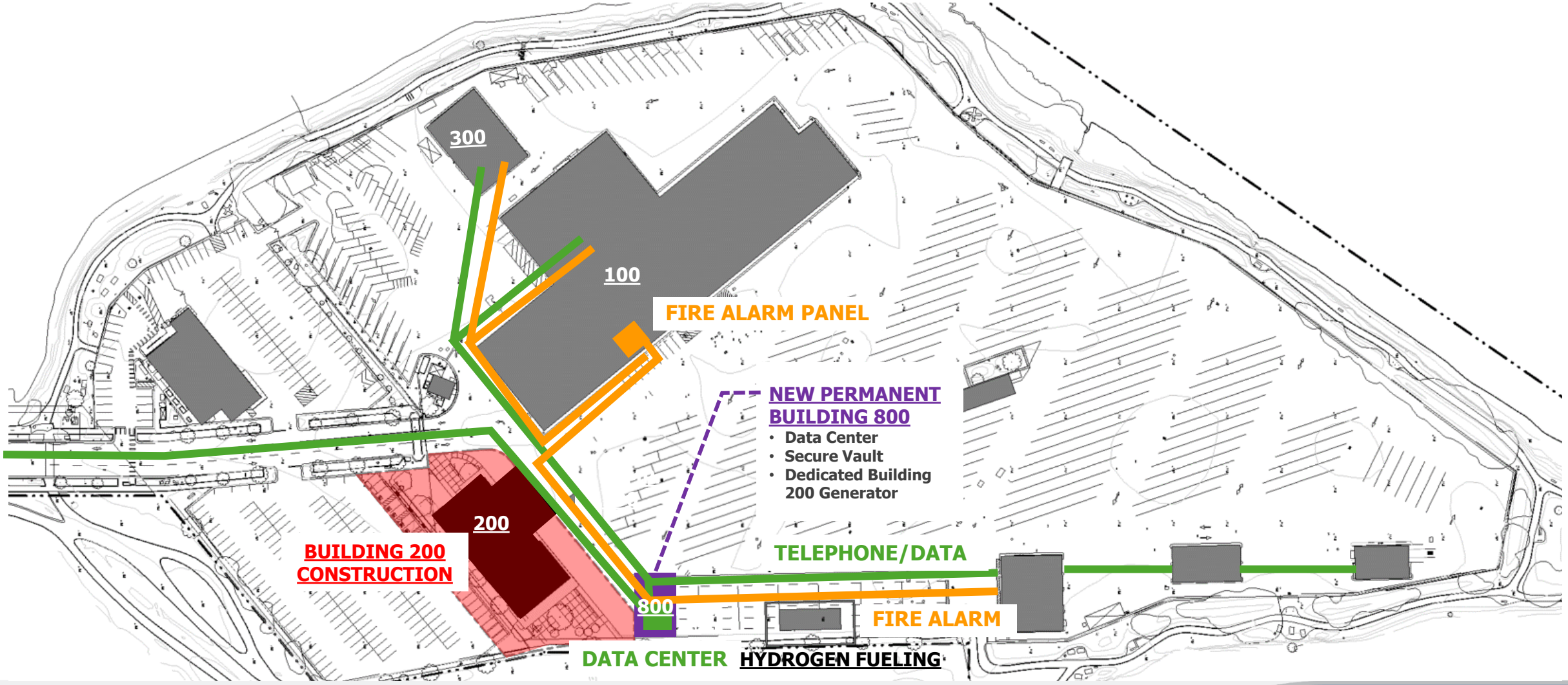
Updated Project Scope

- New Bldg. 800 (approx. ~1,500 sf)
  - Data Center (Upgraded to accommodate expanded service)
  - Electrical & Mechanical Rooms
  - Generator
  - Vault
- Temporary Accommodations: Trailers & Existing Facilities

Existing Data Network

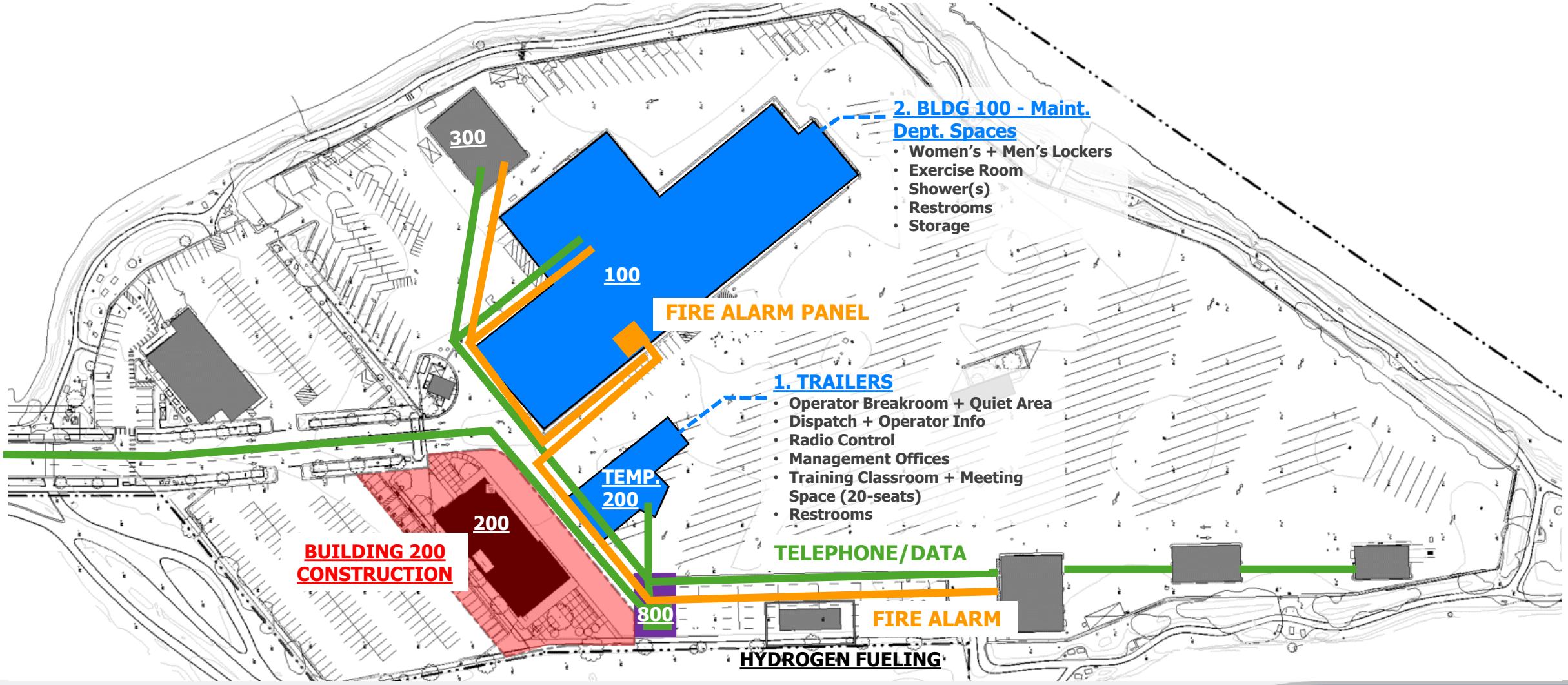


New Bldg. 800 - Proposed Network

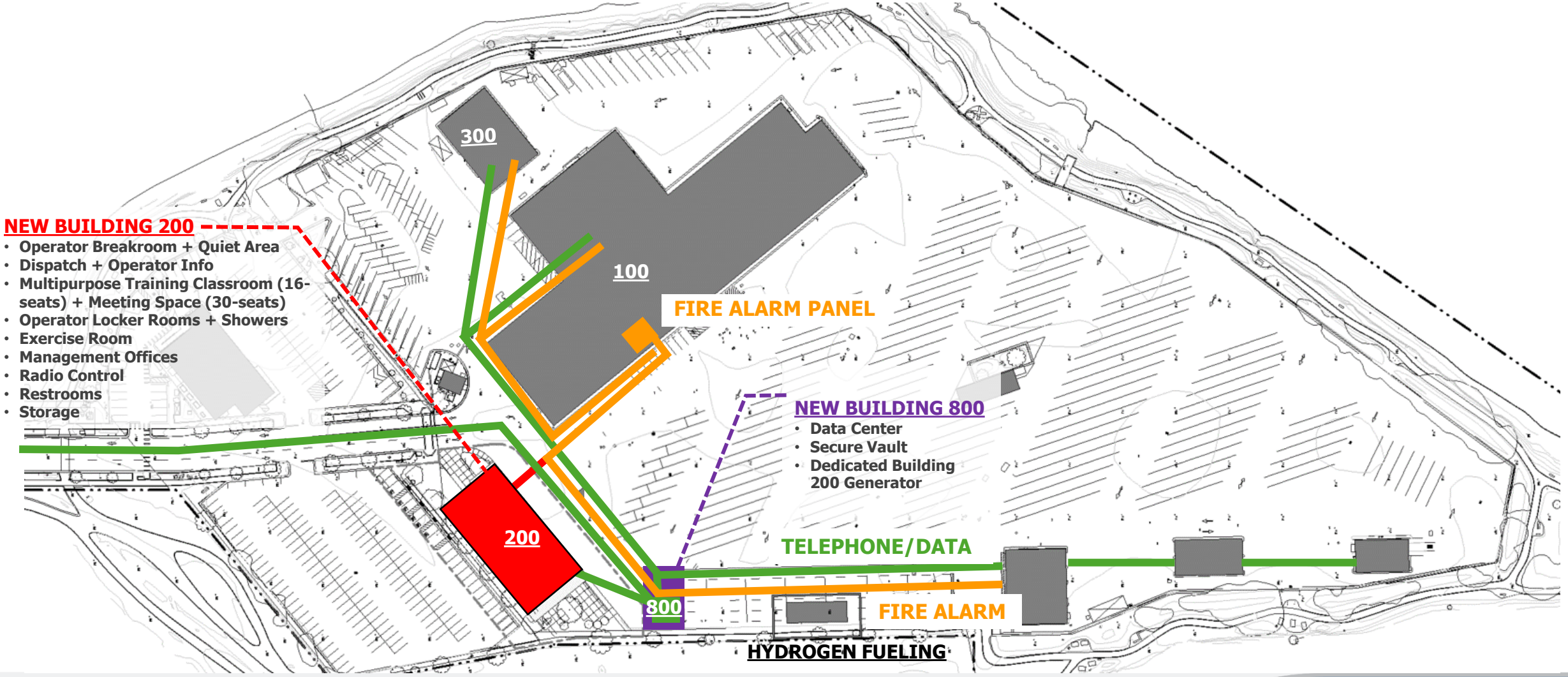


samTrans

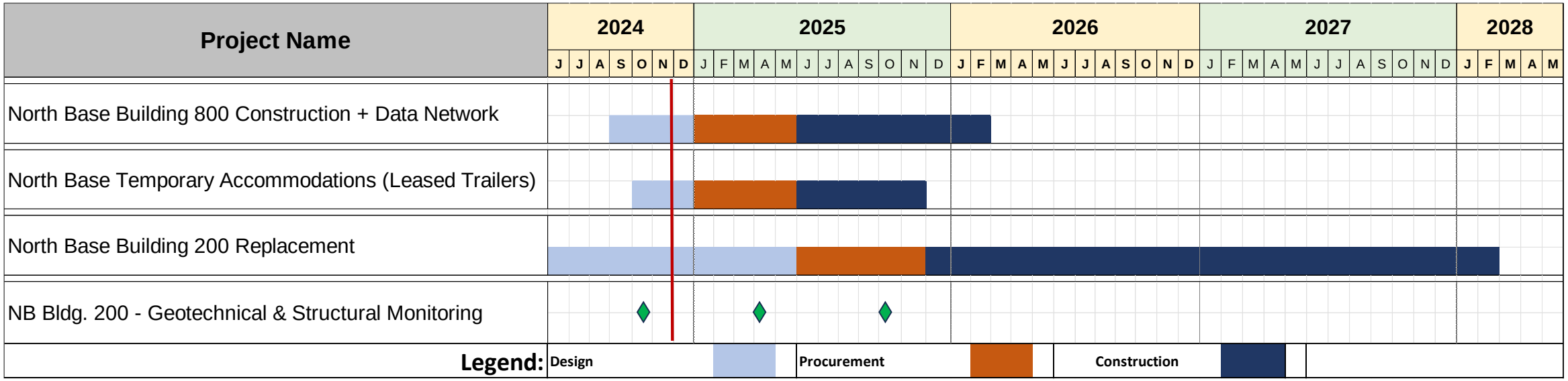
Temporary Accommodations



Bldg. 200 Project – Final Buildout



Project Schedule



Project Cost Estimate & Funding

Cost Estimate:	$51 million
Funding:	District Sales Tax & Alternative Funding Sources

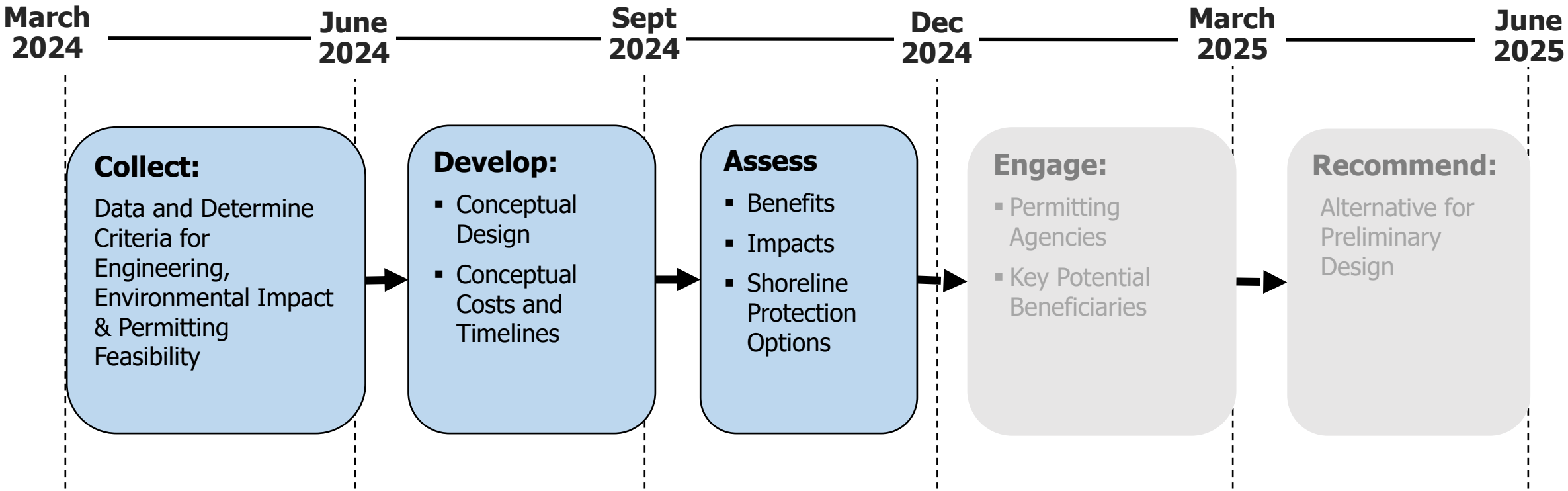
NB Sea Level Rise Protection Project Update

Background

- 2021 SamTrans Adaptation and Resilience Study recommended a solution that protects the perimeter of North Base

- South San Francisco and OneShoreline recommended a regional solution

Feasibility Assessment - Completed



Sea Level Rise Protection Alternatives

Levee

Tide Gate

Alternative 1
Regional Protection

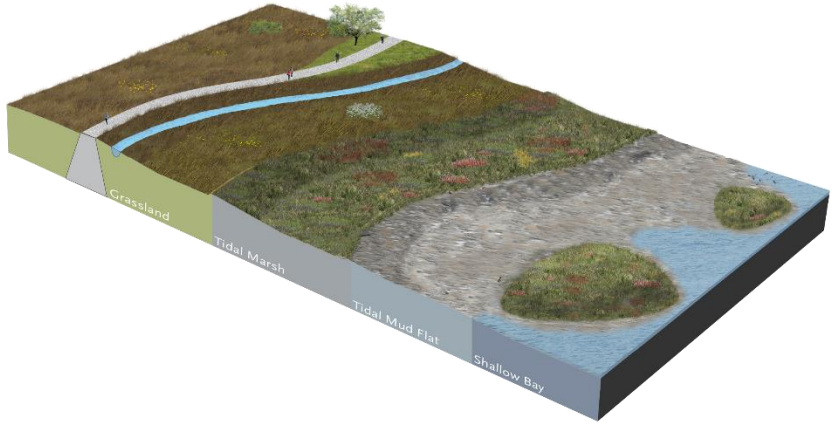
Alternative 2
Perimeter Protection

Levee

Seawall

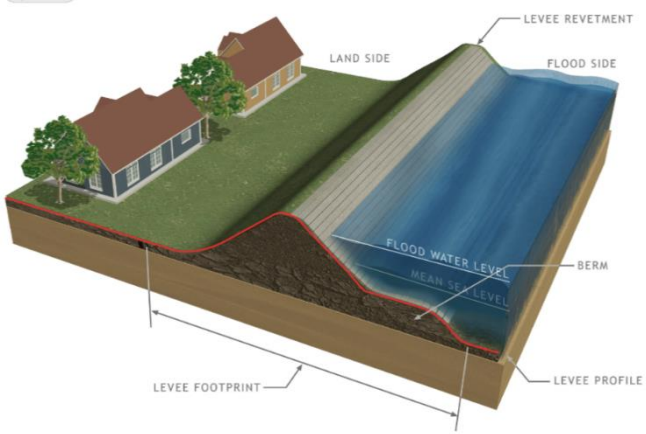
Shoreline Protection Options

Option A
Ecotone Levee



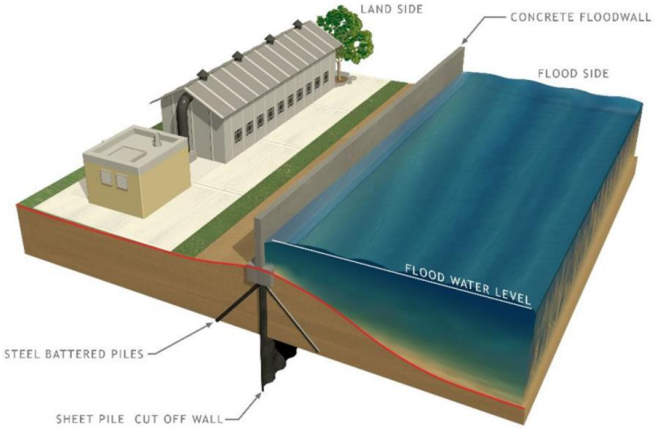
- Gradual (gentle) horizontal slope (10:1 grade)
- Vegetated horizontal edge can dampen wave energy, reducing erosion
- Nature-base solution - Plant growth supports native habitat restoration
- High construction cost

Option B
Traditional Levee



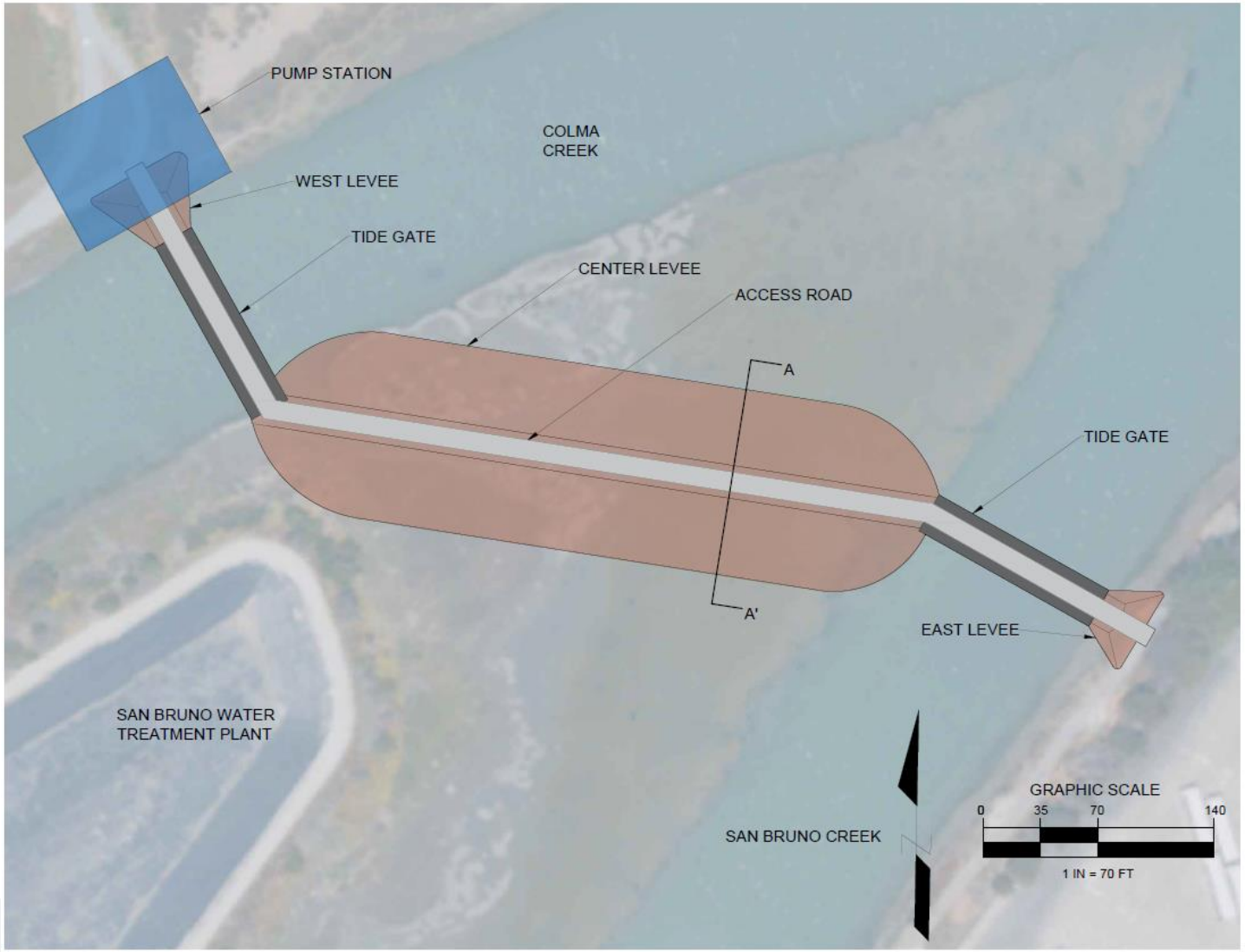
- Harden slope (3:1 grade)
- Moderate construction cost compared to ecotone levee because it requires less filling of the Bay

Option C
Seawall



- Vertical structure
- Hardened (grey) structures
- Moderate construction cost

Regional Barrier Components



Tide Gates - Two separate tide gate structures to prevent elevated flood waters from flooding upstream.

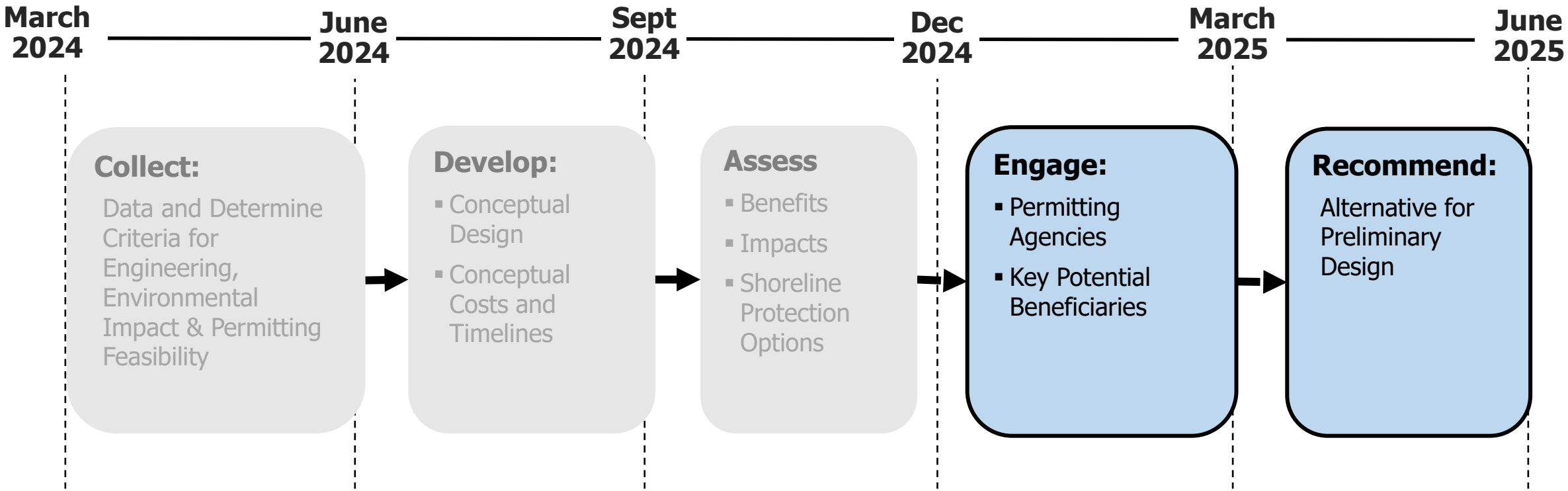
Earthen Levee - Earthen levee connects the two tide gates, as well as connects the tide gate structure to the land.

Pump Station - Pumps riverine discharge from San Bruno Creek and Colma Creek to Bay in the event the tide gates are closed during a riverine event.

Overall Comparison of Alternatives

		Alt 1: Regional Protection	Alt 2: Perimeter Protection
Regional Benefits		High	Low
Total Project Cost (Includes Escalation to Time of Construction)		$250M - $500M *cost sharing potential	$125M - $275M
Timeline	Design	2 years	1.5 years
	Permitting	9 – 11 years	4 – 6 years
	Construction	3 – 4 years	2 – 3 years
Environmental Impact	During Construction	High	Medium
	Post-Construction	High	Low
Sea Level Rise Adaptability (Ability to Increase Height in Future Phases)		Low	High
Maintenance		High	Low

Feasibility Assessment – Next Steps



Questions