



2018 Port Everglades Master/Vision Plan Update

Cruise Charrette

April 30, 2019



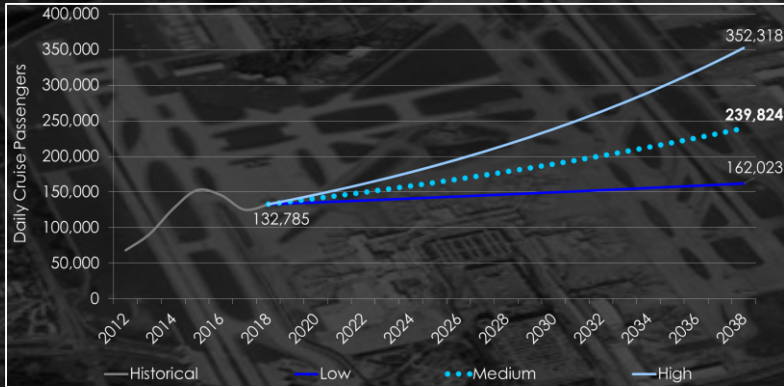
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An aerial photograph of an airport and surrounding urban area, overlaid with a dark, semi-transparent grid. The airport features a large terminal building, multiple runways, and taxiways. The surrounding area includes residential neighborhoods, commercial buildings, and a body of water in the foreground.

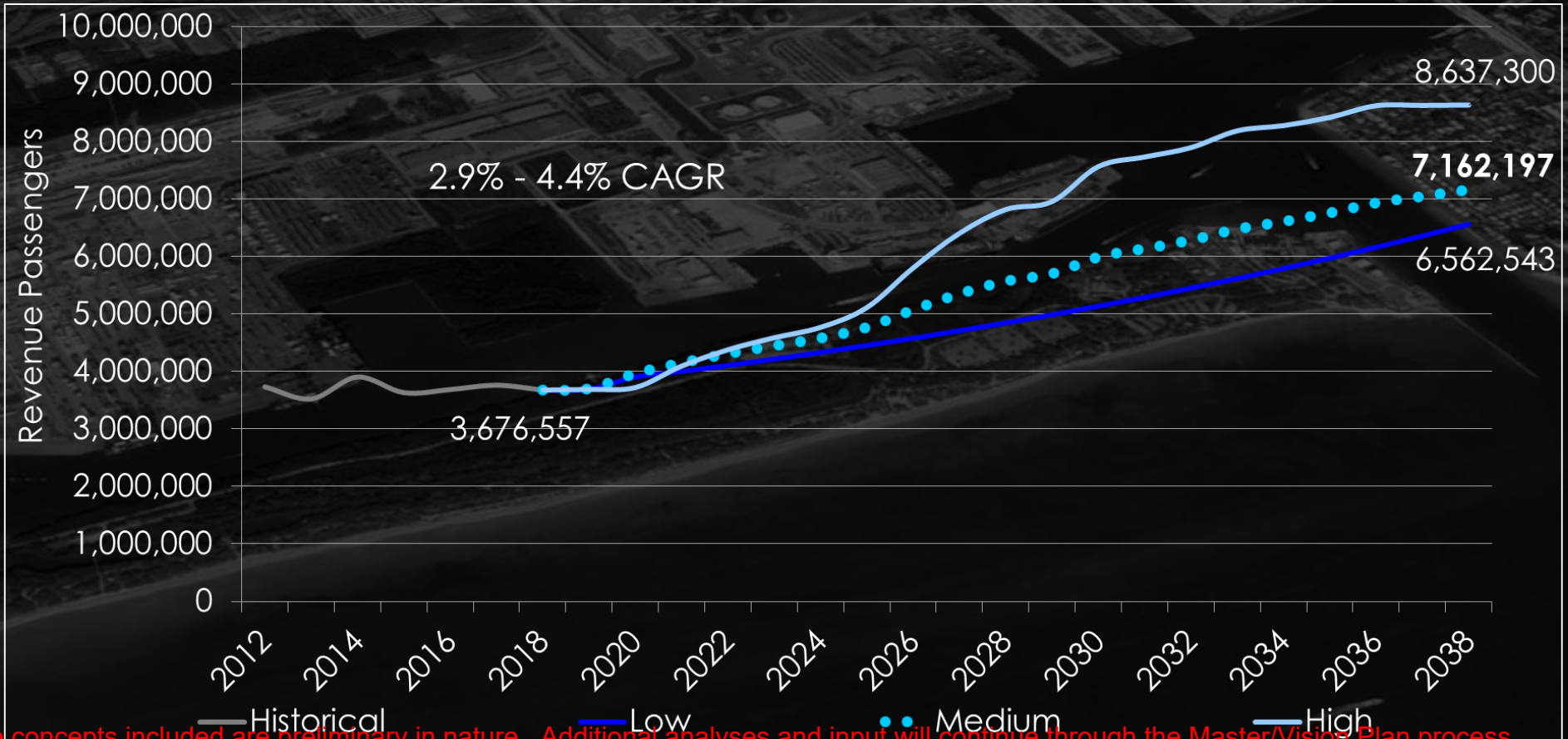
2018 Master/Vision Plan Update

Phase 1: Market Assessments

Daily



Multi-Day



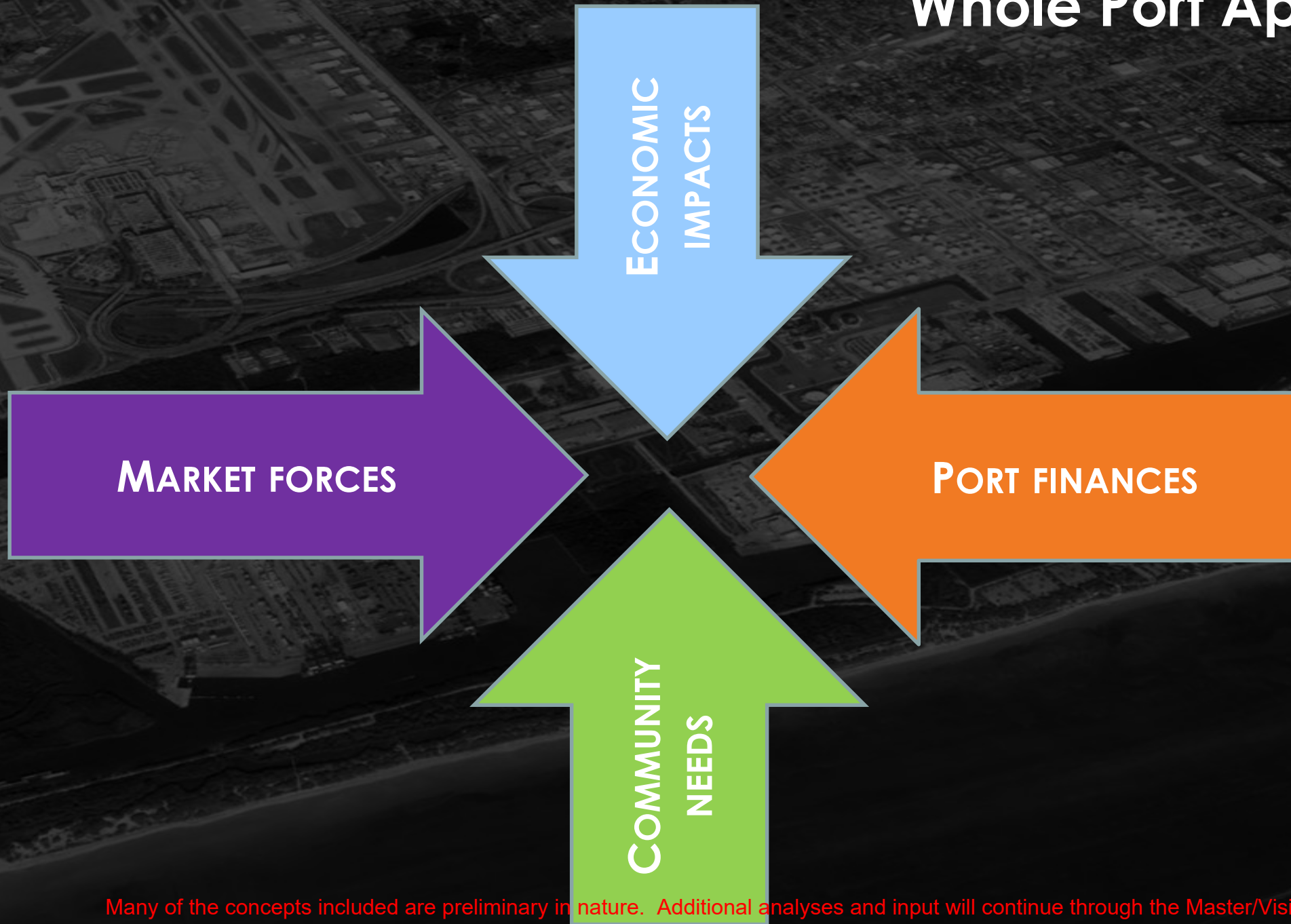
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2018 Master/Vision Plan Update

Phase 2: Plan Development

Whole Port Approach



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Major Future Development Considerations

- Market projections for each PEV line of business
- Vessel sizes (cruise, cargo, liquid bulk)
- On-port traffic
- Core trade lanes/source markets, trade policy and macro-economic conditions
- Ongoing PEV improvements (STNE, USACE deepening/widening, etc.)
- Cruise industry expansion and transition to LNG
- Competitive dynamics and developments at other Florida ports
- Technology, industry best practices and supply chain evolution
- Environmental and community impacts
- Return on investment and economic impacts
- Resiliency
- **Demand vs. Capacity**

Current vs. Future Demand/Capacity – LNG Preferred

		Berth Requirements (berths)		KPIs	Δ 2018-2038	Land Requirements (acres)		KPIs	Δ 2018-2038
		2018	2038			2018	2038		
Cruise (including parking)		9.0	10.0		1.0	88.0	109.0		21.0
	Multi-Day	8.0	10.0			84.0	109.0		
		467,676	716,220	PAX/berth		44,541	65,708	PAX/acre	
	Daily	1.0	0.0			4.0	0.0		
		128,934	n/a	PAX/berth		32,234	n/a	PAX/acre	
Liquid Bulk		3.0	3.0		0.0	23.0	15.0		-8.0
		112,698	118,280	BPD/berth		14,700	23,656	BPD/acre	
Containers		5.5	8.0		2.5	327.0	294.0		-33.0
	Southport (w/ cranes)	4.0	6.0			279.0	294.0		
		252,116	330,529	TEUs/berth		3,615	6,947	TEUs/acre	
		80,037	84,751	Moves/crane					
	Southport (w/o cranes)	0.0	2.0						
		n/a	29,600	TEUs/berth					
	Midport	1.5	0.0			48.0	0.0		
		66,667	n/a	TEUs/berth		2,083	n/a	TEUs/acre	
Break-bulk		0.9	0.5		-0.4	14.0	10.0		-4.0
		403,396	409,514	Tons/berth		25,933	20,476	Tons/acre	
Dry Bulk		3.6	1.0		-2.6	16.0	14.0		-2.0
		416,553	1,700,000	Tons/berth		93,724	121,429	Tons/acre	
Automobiles		1.0	0.5		-0.5	9.0	25.0		16.0
		107,208	72,954	CEUs/berth		3,219	1,459	CEUs/acre	
Commercial		n/a	n/a			20.0	13.0		-7.0
		n/a	n/a			n/a	n/a		
Warehousing/Logistics/Miscellaneous		n/a	n/a			46.0	78.0		32.0
		n/a	n/a			n/a	n/a		
Vacant/Other		n/a	n/a			99	52		-47.0
		n/a	n/a			n/a	n/a		
Total		23.0	23.0		0.0	642.0	610.0		-32.0

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Current vs. Future Demand/Capacity – LNG Alternative

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		n/a	n/a			n/a	n/a		
Total		23.0	23.0		0.0	642.0	606.0		-36.0

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Plan Development – Guiding Principles

- Increase Efficiency

- Increase effective capacity and minimize intra-port drayage and associated truck trips/costs through operational improvements
- Consolidate similar operations/operators
 - Southport = containers + logistics + commercial (office)
 - Midport = cruise + ro-ro + dry bulk
 - Northport = liquid bulk/break-bulk + cruise + logistics + CVB/commercial
- Separate modes of transportation to minimize truck and non-truck traffic

- Preserve Flexibility

- Meet projected future demand without precluding changes in market conditions over time
 - Berths are the primary asset of all ports
 - Land should be configured to support berth utilization
 - Technology will drive future operations in unexpected ways

Plan Development – Guiding Principles

- Facilitate Integration
 - Integration within the port
 - Cruise/Bulk/Liquid Bulk/Containers/ICTF/Parking/Logistics/Commercial
 - Traffic and transportation
 - Integration between the port and surrounding area
 - FLL-PEV-CVB synergies
 - Logistics (cargo and people)
 - Traffic and transportation
 - Integration across the broader supply chain
 - Cruise: PEV/PortMiami/Port Canaveral/Caribbean destinations
 - Containers: shippers/vessel operators/MTOs/3PLs/trucking community
 - Liquid bulk: critical regional and national energy infrastructure
 - Bulk/break-bulk: regional alternatives and business cycle dynamics

An aerial photograph of an airport and surrounding urban area, rendered in a dark, monochromatic style. The airport features a large terminal building, multiple runways, and taxiways. The surrounding urban area is densely packed with buildings and roads. The overall image has a high-contrast, almost black-and-white appearance with a dark overlay.

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Phase 2a: Port Projects

Port Projects by Area by Year

	0-5 Year Projects		5-10 Year Projects		10-20 Year Projects	
Northport	T2/T4 Parking Garage	2020	Port Access Road	2025		
	Slip 1 Expansion	2022	Slip 3 Expansion	2026		
	Maintenance Facility Consolidation	2022	LNG Bunkering + Storage Facility	2028		
	Break-bulk Yard	2023				
Midport	T21 Redevelopment	2021	Tracor Basin Fill	2024	Berth 19 Finger Pier	2029
	Ro-Ro Yard Relocation/Expansion	2023	T29	2027	T19/20	2030
			Ro-Ro Yard Expansion	2027	Berths 14/15 Realignment	2037
			T26	2028	Ro-Ro Yard Expansion	2033
					T14/15	2038
Southport	PEV ILC	2020	Phase 9C-1	2025	Phase 9C-2	2029
	3 SPP STS Cranes	2020	Phase 9A-2	2026		
	Phase 9A-1	2021	Griffin Road Extension	2026		
	STNE + 3 SPP STS Cranes	2023	McIntosh Road Realignment	2027		
			Berth 33 Alignment	2028		
			Container Terminal reconfiguration	2028		
Portwide/Other	USACE Deepening & Widening (USCG Relocation)	2022	Shaw Property Development	2024	APM	2035
	Shaw Property Acquisition	2022	USACE Deepening & Widening	2025		
	I-595 Flyover	2022	Commercial Consolidation	2025		
	Former Dynegy Logistics Development	2023				
	Auto Terminal West	2023				

STATUS QUO



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0-5 Year Projects (2019-2023)

Former Dynegy Property Logistics Development + Rail Extension
(2023)

Auto Terminal West
(2023)

PEV ILC
(2020)

I-595 Flyover
(2022)

Phase 9A
(2021)

STNE +3 SPP STS Cranes
(2023)

3 SPP STS Cranes
(2020)

New Ro-Ro Yard
(2023)

T21 Redevelopment
(2021)

New Break-bulk Yard
(2023)

Consolidated Maintenance Facility
(2022)

New T2/4 Parking Garage
(2020)

Slip 1
Expansion
(2022)

USACE Deepening & Widening (USCG Relocation)
(2022)

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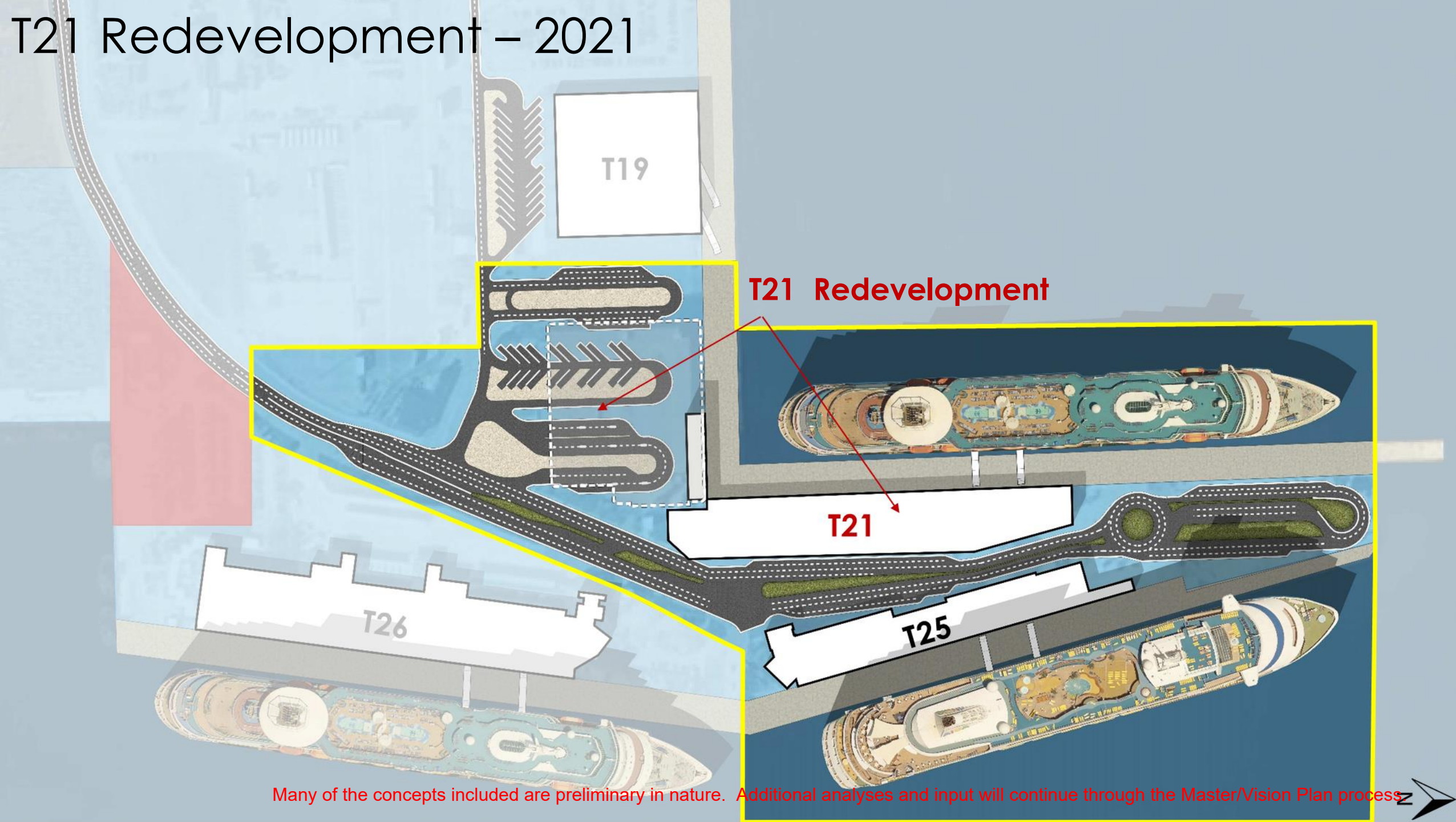
T2/T4 Parking Garage – 2020



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T21 Redevelopment – 2021



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2023 Land Use

The map illustrates the following land use zones and facilities:

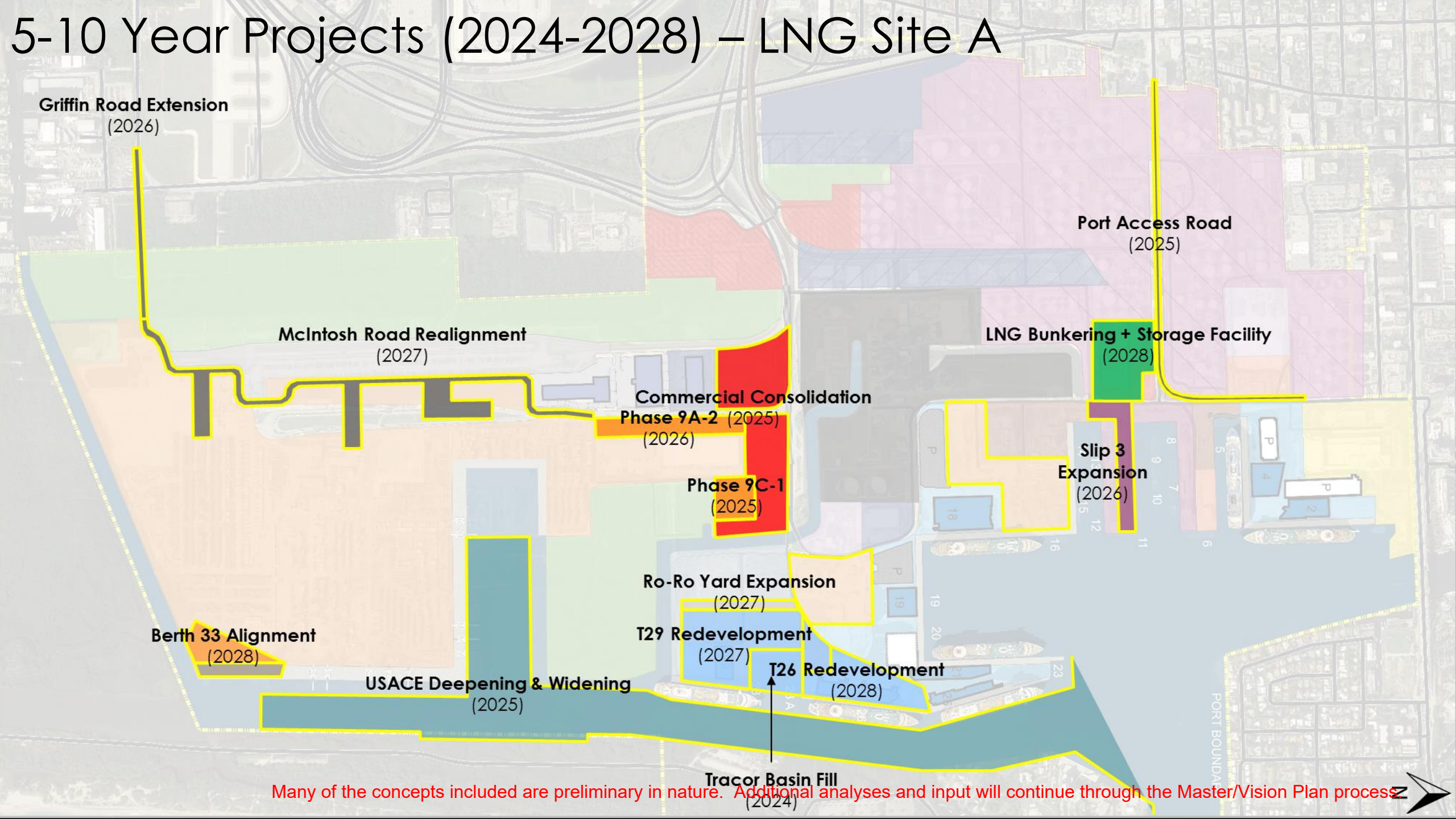
- Logistics (19 acres)**
- Private (Miscellaneous) Stormwater Storage (8 acres)**
- Wetland (2 acres)**
- Private (Petroroleum)**
- Private (Commercial)**
- Private (Miscellaneous)**
- Auto Terminal West (20 acres)**
- Wetland/Vacant/FPL Transmission Lines**
- Spoils (6 acres)**
- FEC ICTF (43 acres)**
- Containers (20 acres)**
- PEV ILC (16 acres)**
- Private (Commercial)**
- Logistics (7 acres)**
- Commercial (14 acres)**
- Vacant (4 acres)**
- Ro-Ro (15 acres)**
- Conservation Area**
- Cruise (65 acres, incl. parking)**
- Commercial (3 acres)**
- Dry Bulk (13 acres)**
- Containers (22 acres)**
- Liquid Bulk (19 acres)**
- Dry/Break-bulk (6 acres)**
- Break-bulk (7 acres)**
- Maintenance (11 acres)**
- CVB - County**
- Cruise (19 acres, incl. parking)**

Major roads shown include McIntosh Loop Rd, Spangler Blvd/SR 84, and Eisenhower Blvd.

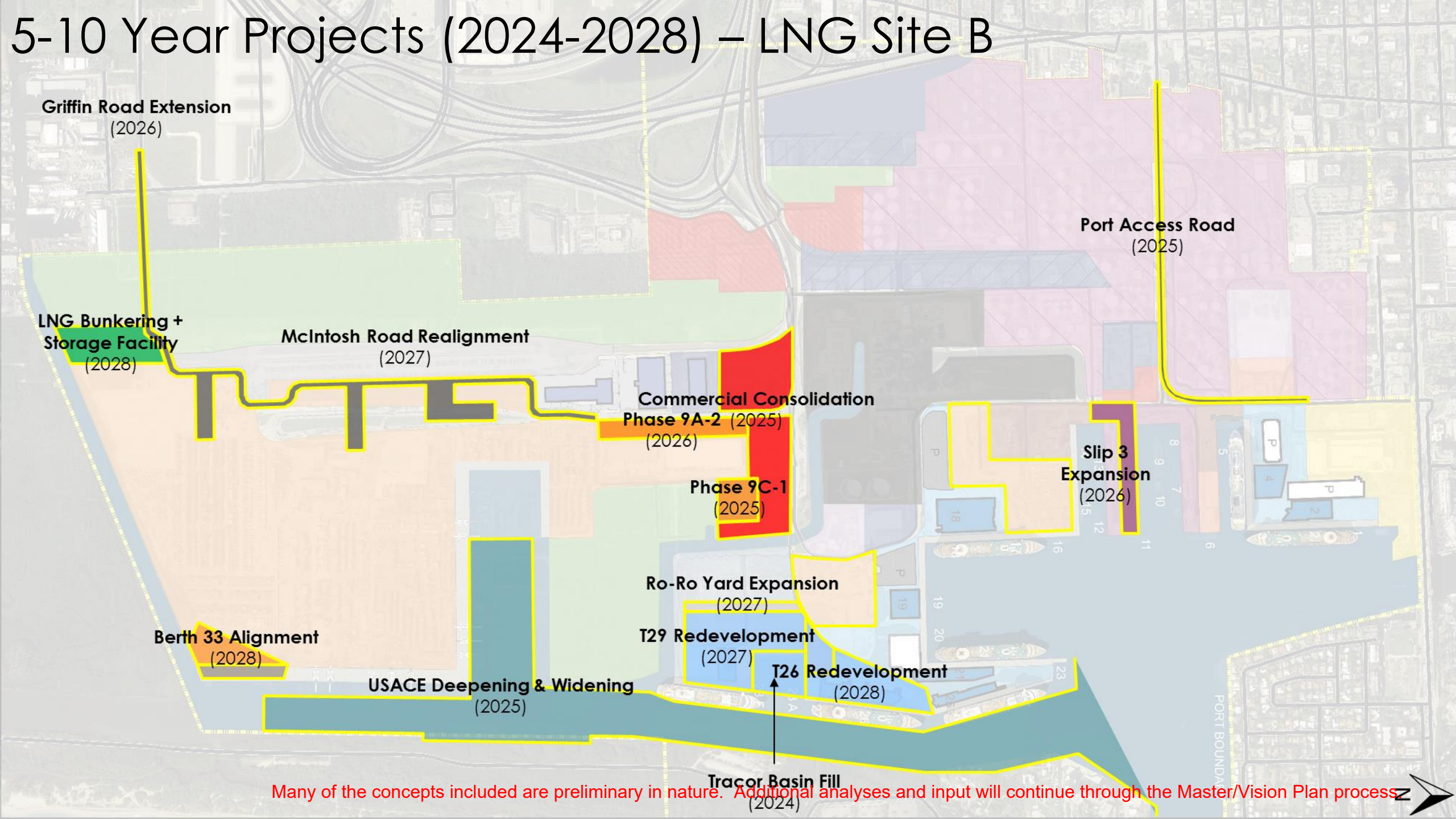
Water bodies and boundaries include Port Boundary and SE 17th St.

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5-10 Year Projects (2024-2028) – LNG Site A

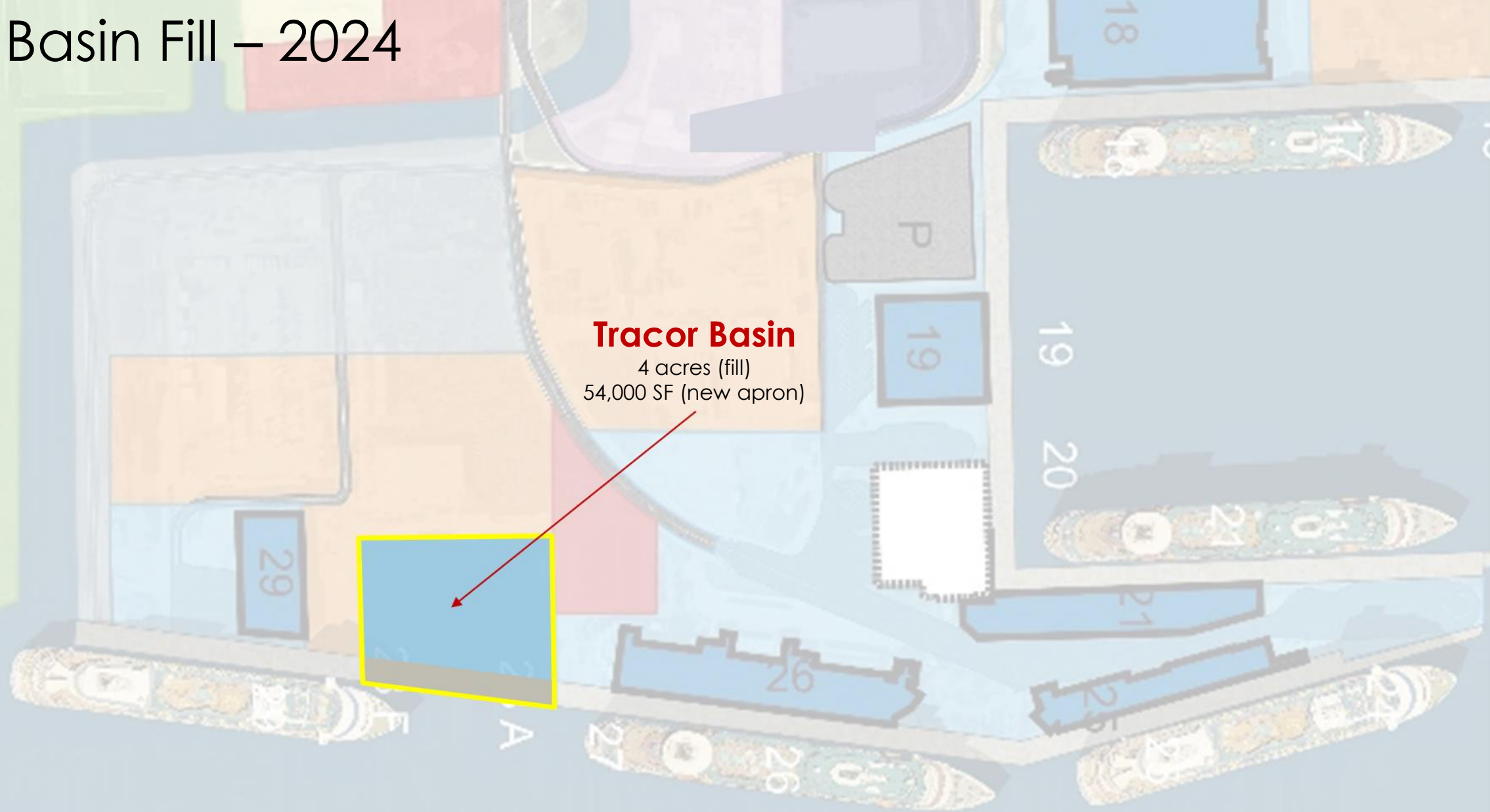


5-10 Year Projects (2024-2028) – LNG Site B



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Tracor Basin Fill – 2024



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Port Access Road – 2024

New County Road

Connects US1 northbound to SE 17th Street via partial grade separation over existing road (SR84/Spangler Blvd & Eisenhower Blvd)

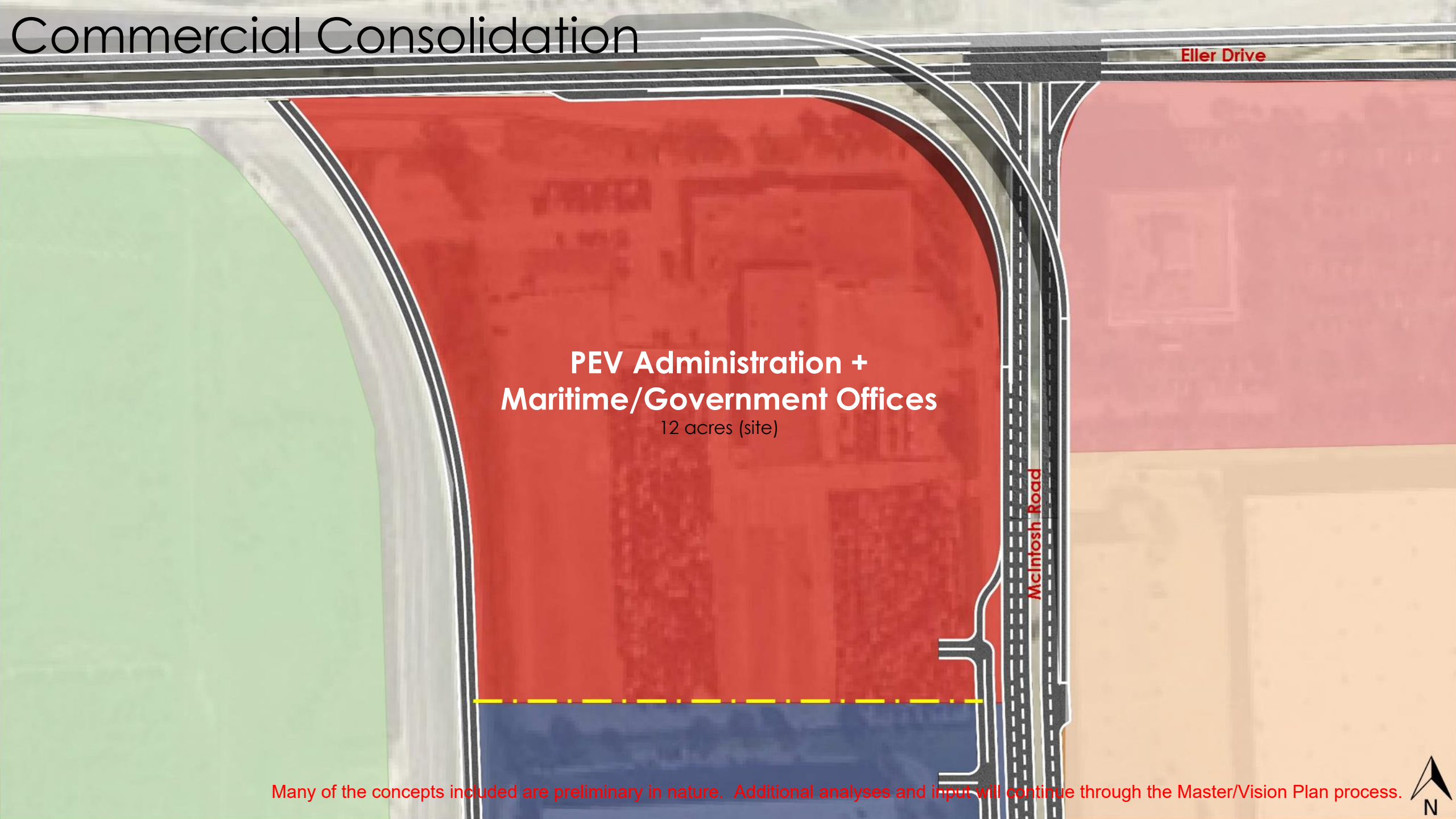
Spangler Blvd/SR 84

Eisenhower Blvd

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Commercial Consolidation



**PEV Administration +
Maritime/Government Offices**
12 acres (site)

Eller Drive

McIntosh Road

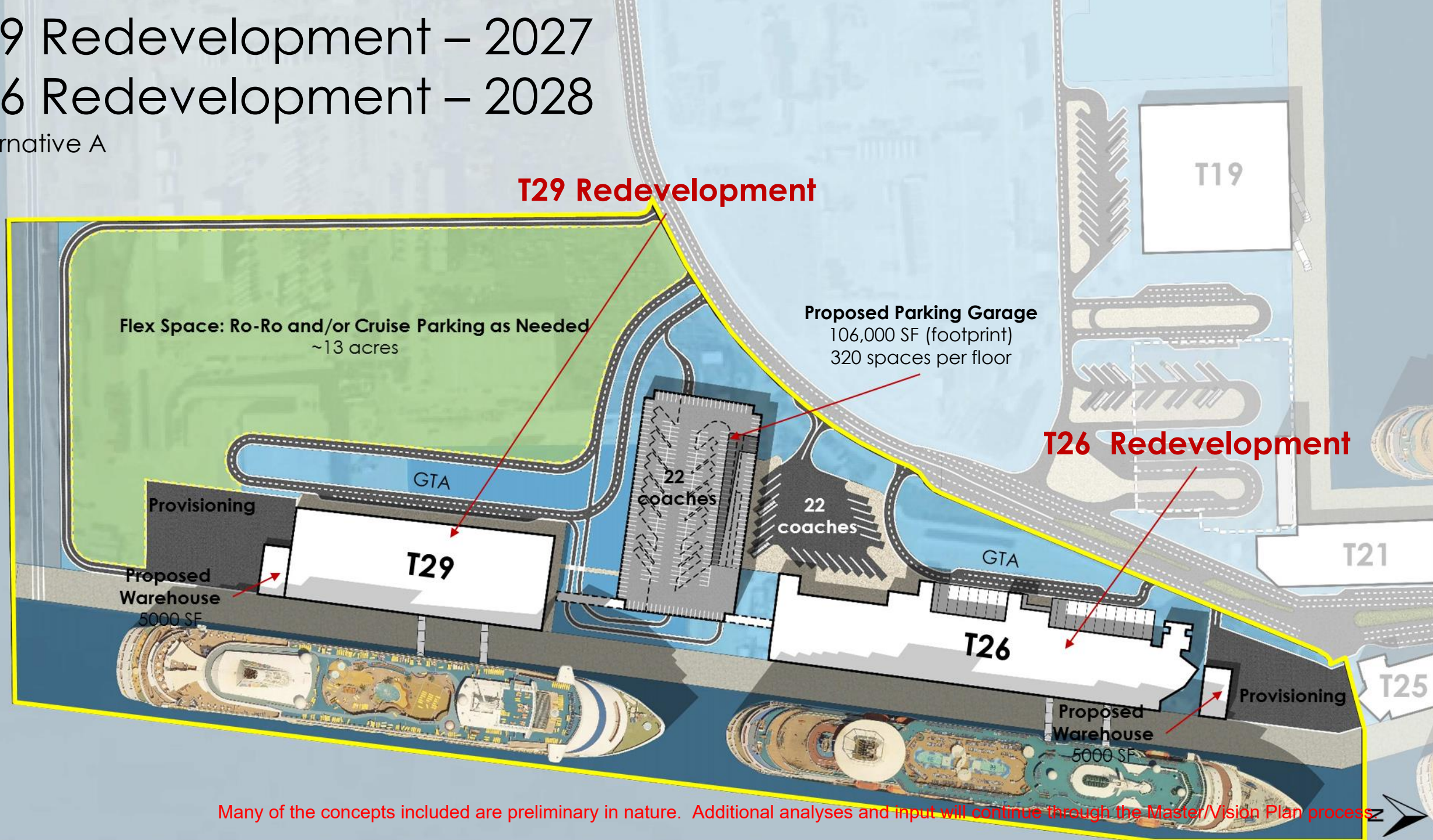
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T29 Redevelopment – 2027

T26 Redevelopment – 2028

Alternative A



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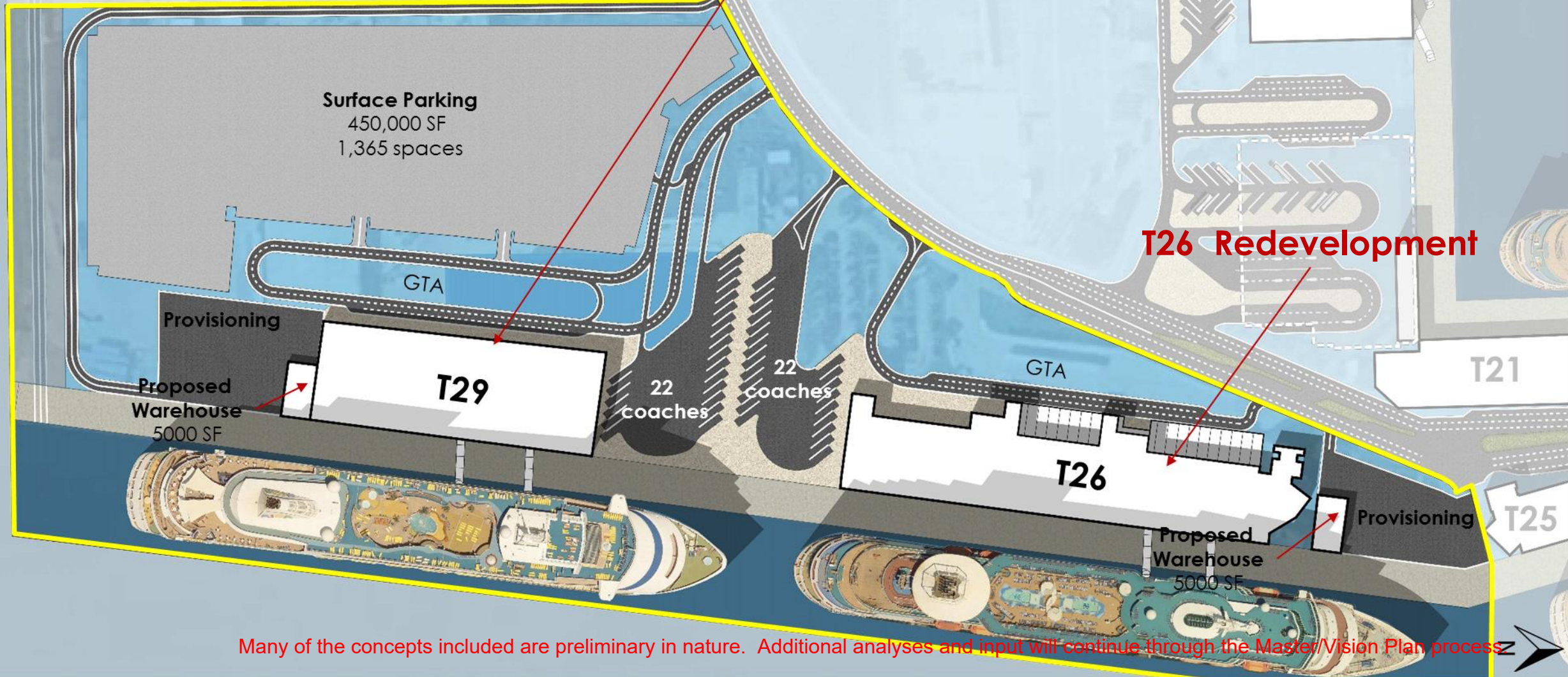
T29 Redevelopment – 2027

T26 Redevelopment – 2028

Alternative B

T29 Redevelopment

T26 Redevelopment



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LNG Bunkering + Storage Facility (Site A) – 2028

LNG Bunkering + Storage Facility
10 acres

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LNG Bunkering + Storage Facility (Site B) – 2028



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2028 Land Use – LNG Site A



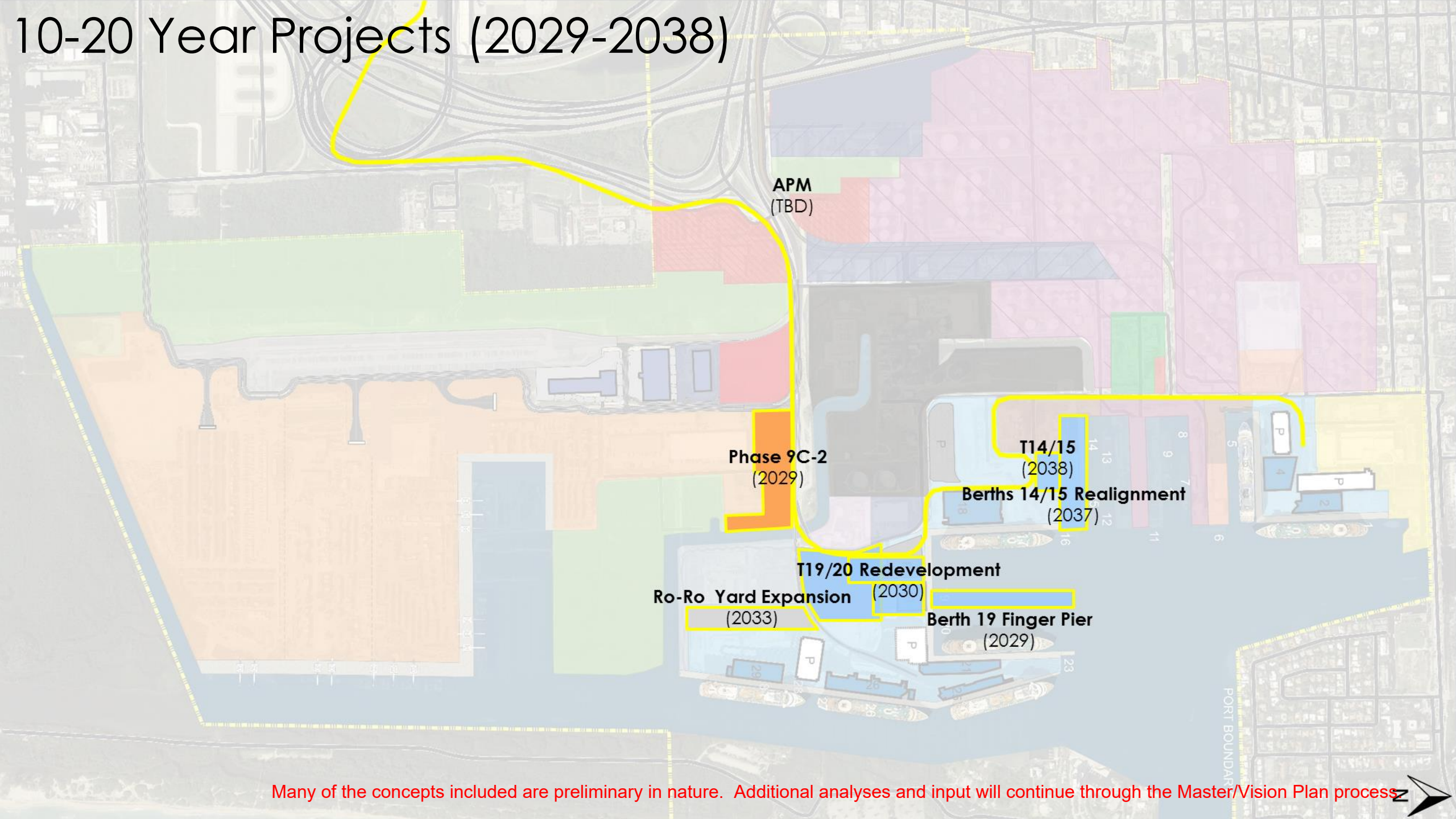
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2028 Land Use – LNG Site B



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10-20 Year Projects (2029-2038)



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Berth 19 Finger Pier – 2029







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Berth 19 Finger Pier (Comparisons) – 2029



Berth Slip Comparison

-  St. Maarten (450')
-  Nassau (430')
-  Antigua (450')
-  Pier 90 Manhattan (400')

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T19/20 Redevelopment – 2030

- Optional Surface Parking:** 454,000 SF, 1,375 spaces.
- Proposed Parking Garage:** 242,700 SF (footprint), 735 spaces per floor, (3 floors = 2,206 spaces).
- Future APM Station Provisioning**
- Proposed Warehouse:** 5000 SF.
- T19/20 Expanded to 200,000 SF (footprint)**
- GTA**
- Coaches:** 14 coaches and 42 coaches are indicated in the parking areas.

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T19/20 Redevelopment – 2030

The site plan illustrates the following components:

- Optional Surface Parking:** 454,000 SF, 1,375 spaces.
- Proposed Parking Garage:** 242,700 SF (footprint), 735 spaces per floor, 3 floors = 2,206 spaces.
- Future APM Station:** Located near the top center.
- Provisioning:** Located near the top right.
- Proposed Warehouse:** 5000 SF, located on the right side.
- T19/20 Expanded:** 200,000 SF (footprint), located in the bottom right quadrant.
- GTA:** Grand Trunk Avenue, running horizontally across the bottom.
- Coaches:** Two designated areas labeled "coaches" are shown within the parking garage footprint, one containing 14 coaches and another containing 42 coaches.

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T19/20 Redevelopment – 2030

- Optional Surface Parking:** 454,000 SF, 1,375 spaces.
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- GTA:** Grand Trunk Avenue, shown as a road at the bottom.
- Coaches:** Designated areas for coaches are labeled "14 coaches" and "42 coaches".

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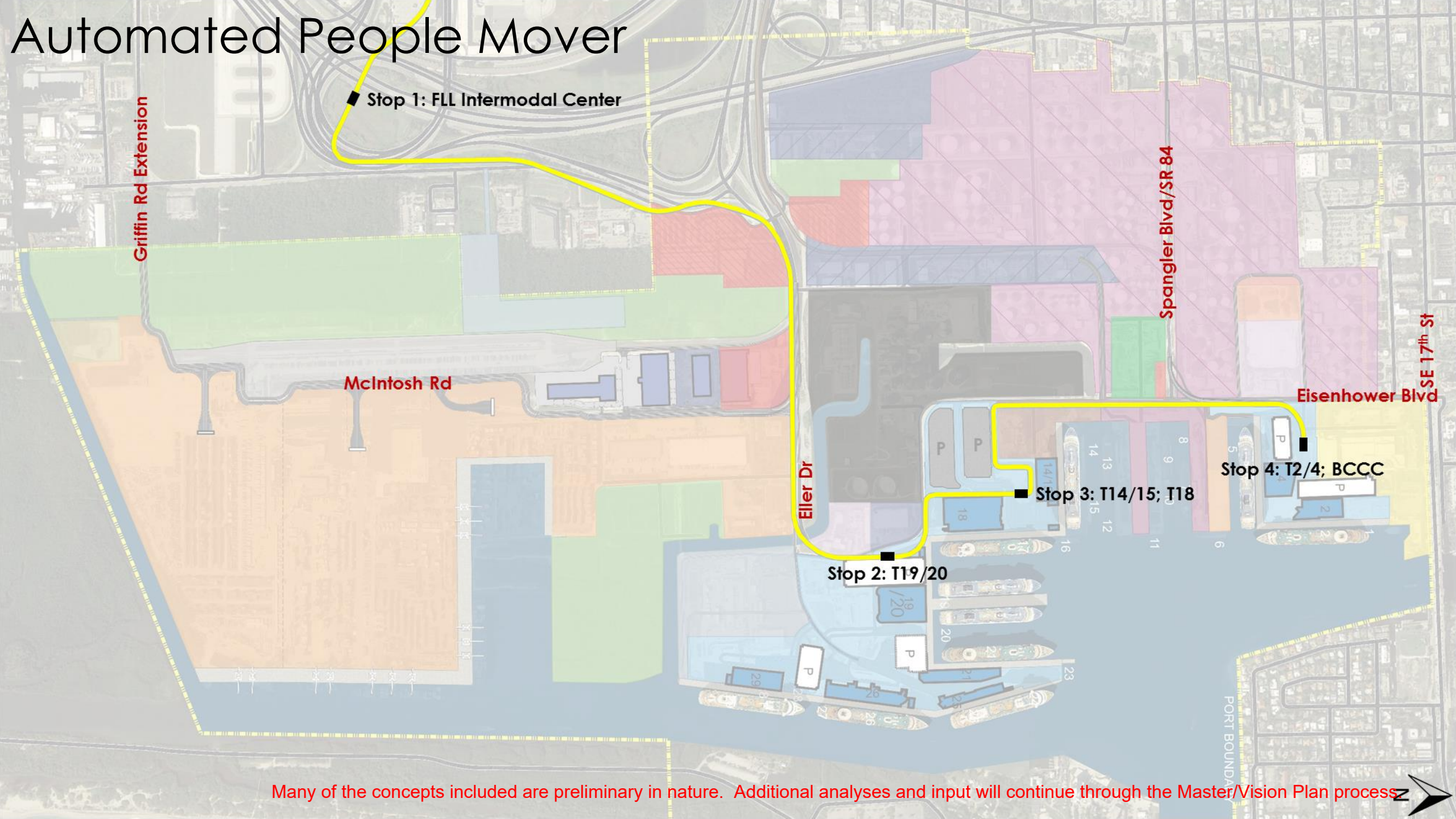
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Automated People Mover



Stop 1: FLL Intermodal Center

Griffin Rd Extension

McIntosh Rd

Eller Dr

Spangler Blvd/SR 84

Eisenhower Blvd

SE 17th St

Stop 2: T19/20

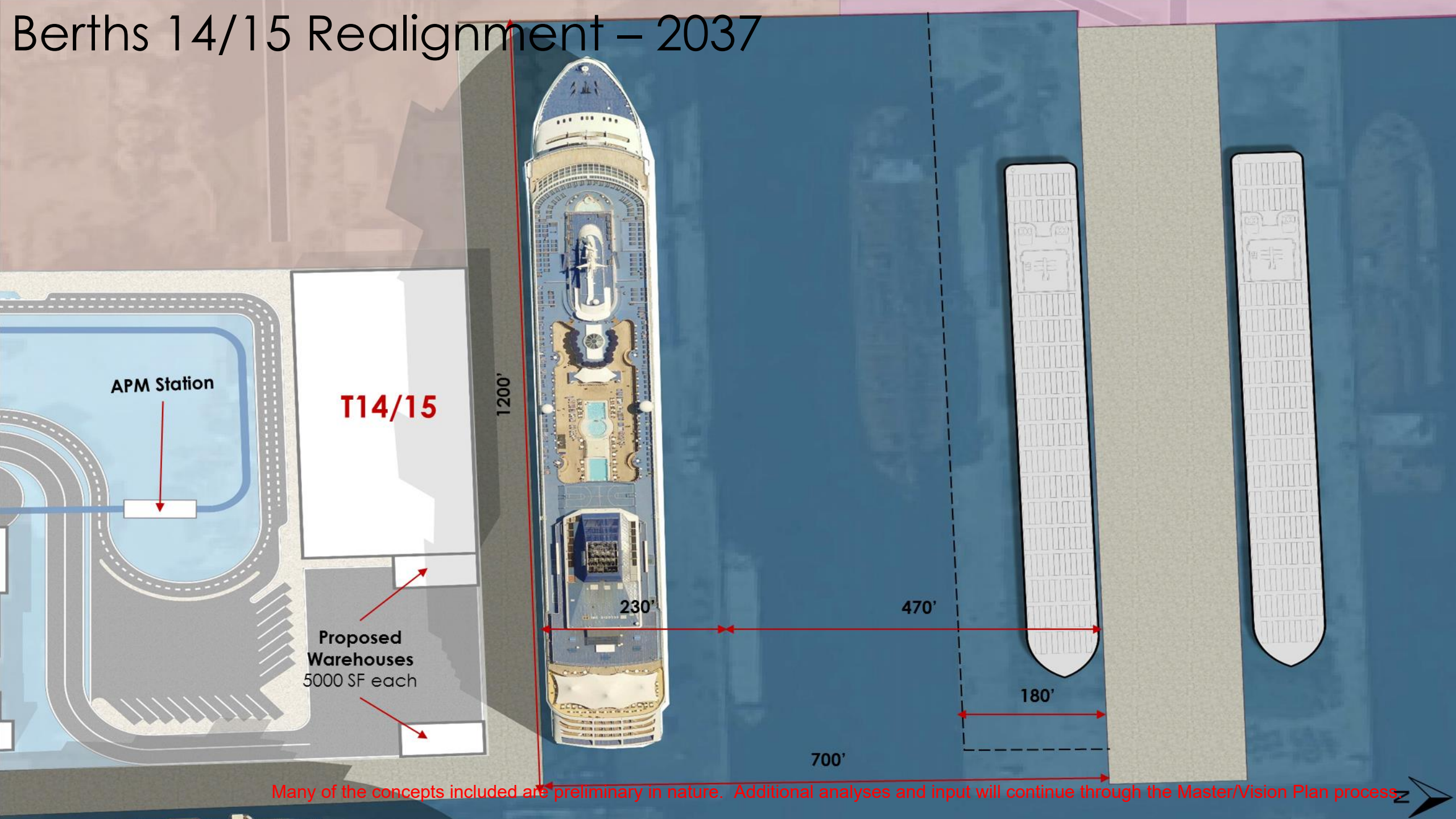
Stop 3: T14/15; T18

Stop 4: T2/4; BCCC

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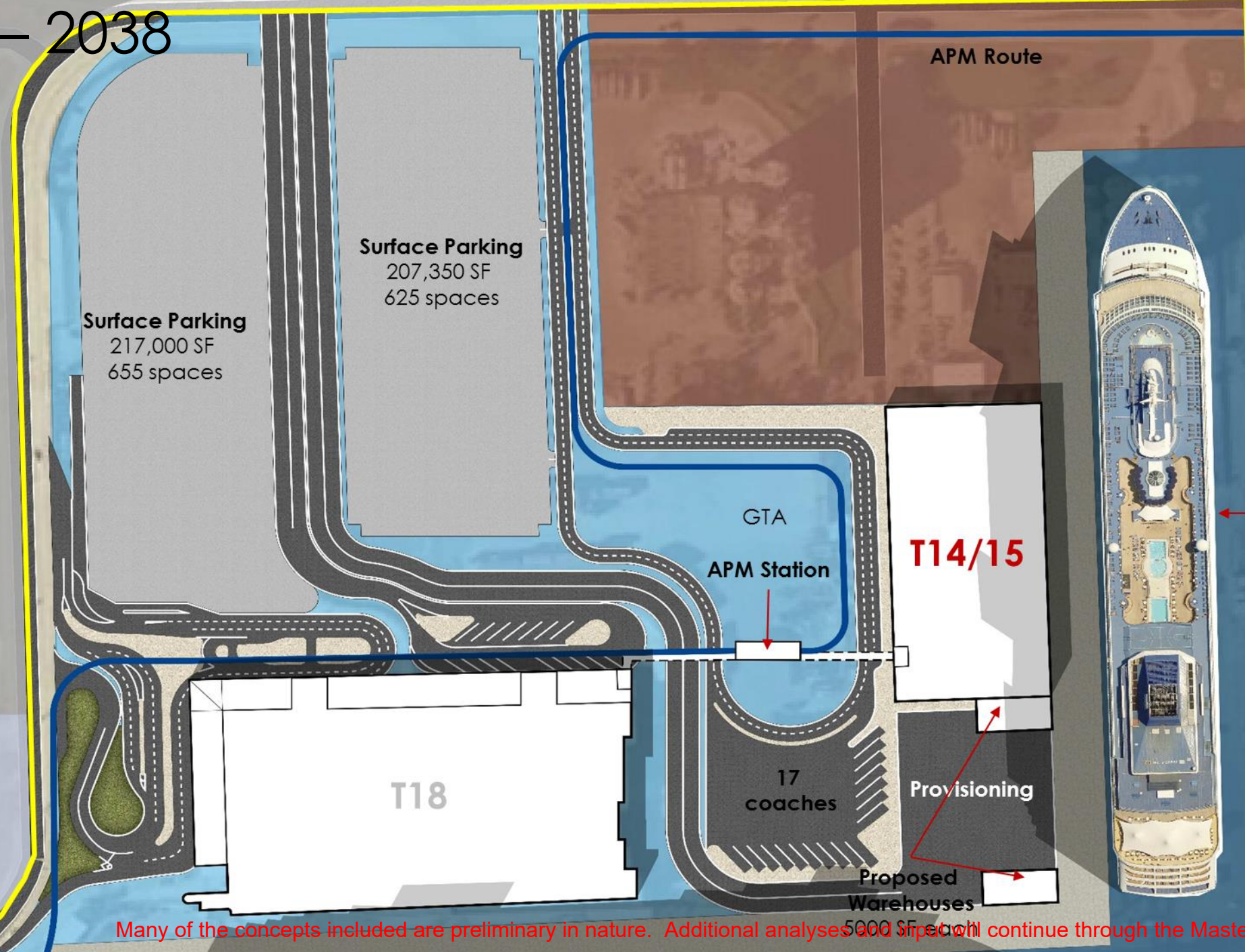


Berths 14/15 Realignment – 2037



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T14/15 – 2038



APM Route

Surface Parking
207,350 SF
625 spaces

Surface Parking
217,000 SF
655 spaces

GTA

APM Station

T14/15

T18

17
coaches

Provisioning

Proposed
Warehouses
5000 SF each

Berth 14/15
Realignment

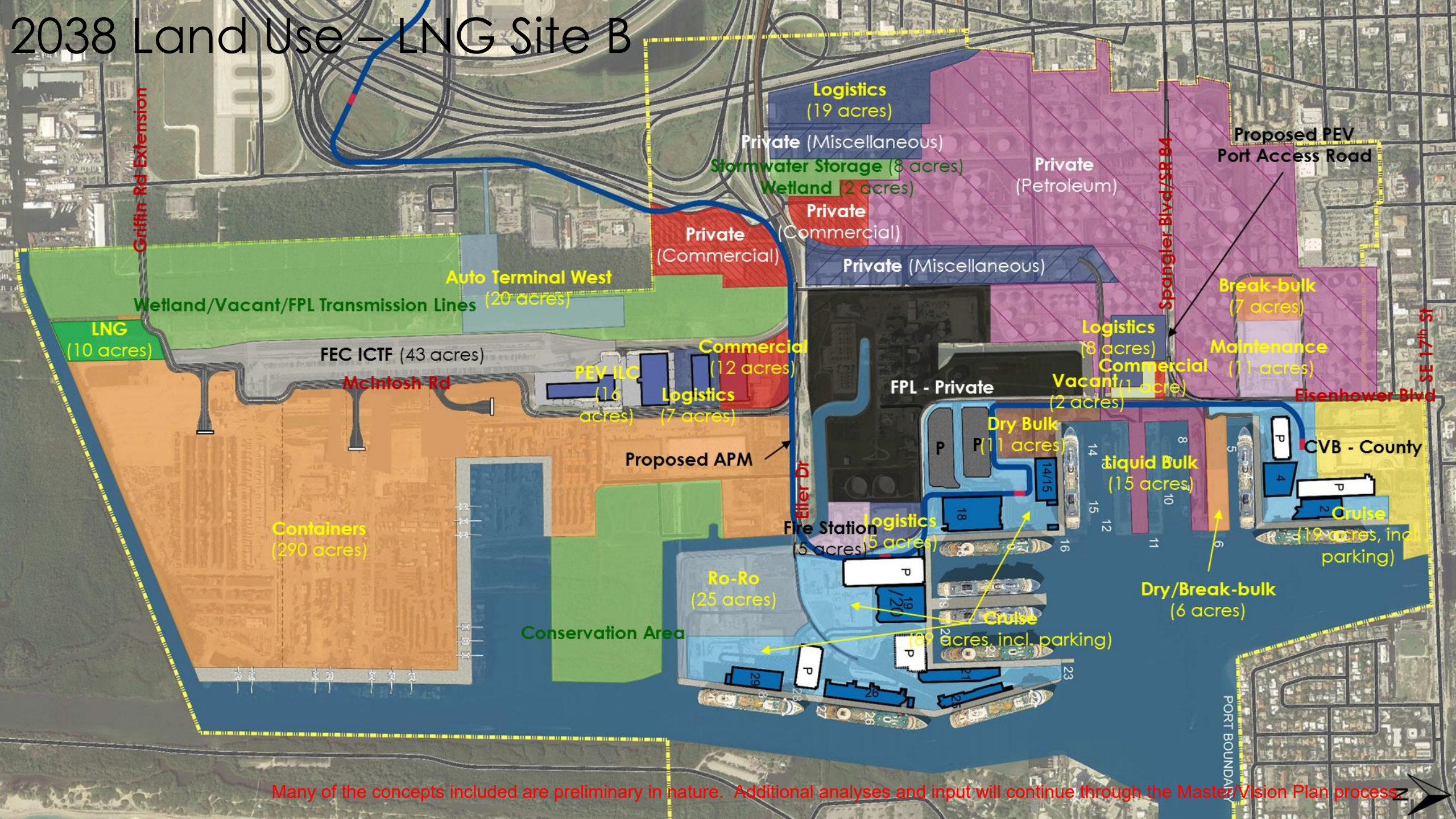
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2038 Land Use – LNG Site A



2038 Land Use – LNG Site B



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Issues and Opportunities

- Ability to add berths/acres very limited
 - Prioritization of berth/land use against different criteria required
 - More volume on same footprint required
 - Liquid bulk: steady as she goes
 - Cruise: more berths and percent utilization of berths will need to increase
 - Containers: moves per crane/berth and TEUs per acre need to increase; dwell times need to decrease
 - Bulk/breakbulk: tons/acre need to increase
 - Ro-Ro: high growth market; requires more land
- Regional demand vs. PEV demand
 - Three ports (PEV, PortMiami, Port of Palm Beach) serve the core South Florida market
 - Market conditions will drive future berth and land demand in the region
 - Value proposition, capacity, efficiency and relationships will drive port selection
 - Infrastructure and efficient operations are key to PEV's future success

Immediate Next steps

- Phase 1
 - Phase 1 (Elements 1 and 2) final report delivered in October, 2018
- Phase 2
 - Future development concepts and projects
 - Berth and land demand for each line of business
 - Operational and infrastructure enhancements
 - Commercial and logistics opportunities
 - Traffic and parking
 - Financial evaluation
 - Final recommended plan
 - Strategies for implementation



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