CLEARWATER
BRIGHT AND BEAUTIFUL · BAY TO BEACH

moffatt & nichol

Kimley»Horn

CLEARWATER BEACH MARINA DOCK REPLACEMENT CONCEPTUAL DESIGN

April 4, 2022

Basis of Concept

PROJECT GOALS

1. The marina replacement should optimize marina slip mix and configuration for modern vessels, and maximize City owned submerged lands while maintaining existing slip count and balance between recreational and commercial (maintain 50 commercial slips).
2. The marina utilities (water, sewer, electrical, fuel) are outdated and should be replaced with new code-compliant utilities serving the needs of both the commercial vessels and modern recreational vessels.
3. Provide upland storage and ticket sales opportunities to address the removal of these structures from the docks.
4. Reduce congestion along Coronado Drive by improving the experience along the north seawall to activate “Marina Walk” – a connection to Beach Walk that extends the full length of the marina’s northern shoreline. Upland impacts should remain below the threshold for a stormwater permit.
5. Phase marine construction to maintain commercial operations during construction with limited vessel relocations and interruptions to utility service.
6. Pinellas County was recently awarded a PSTA grant for a water taxi dock. The new layout should accommodate two dedicated boat slips for the water taxi.

SUSTAINABILITY

The proposed marina redevelopment consists primarily of floating docks which are adaptable to sea level rise, allowing the docks to rise with the tides. The height of the guide piling supporting the docks will be designed to accommodate future increases in water levels. The dock floats will incorporate a percentage of recycled foam materials.

A future seawall replacement is planned for 5 to 10 years in the future. A seawall replacement typically involves installing a new wall directly in front of the existing, and this new wall will need to be installed at a higher elevation to support the City of Clearwater’s seawall ordinance which requires a minimum seawall height of +5.12 feet NAVD. The length of the gangways will be sized to meet ADA guidelines for the future seawall height, and the design of the fixed gangway platforms that provide access to the floating docks will be designed such that they can be raised at the time of the future seawall replacement without having to be demolished and reconstructed.

The marina and promenade lighting will incorporate solar lighting, and a minimum of four parking spaces will be dedicated for electric vehicle parking. Further use of sustainable materials such as pervious pavement, recycled materials, and additional photo voltaic elements will be explored in the design phase.

PROJECT ELEMENTS

The primary project elements include demolition of the existing marina structures; installation of new docks, fuel building, and marina utilities; maintenance dredging to remove “high spots” in the marina basin, repairs to the existing seawall including cap replacement; and upland improvements along the water’s edge to create “Marina Walk”.

Upland improvements predominantly consist of a new promenade along the northern shoreline of the marina with lighting, shade, art, and entertainment opportunities to draw pedestrians to the east from Beach Walk. The promenade connects to Beach Walk on the west end and the Clearwater Memorial Causeway trail to the east, completing a loop around the marina property.

Buildings
Building-related work is limited to replacement of the fuel dock building, addition of ticket kiosks, and minor renovations to storage rooms located at the SE corner of the Marina Building. The buildings such as Crabby’s, the Bait House, and the restrooms associated with the Bait House are not included in this scope of work.

Utilities
The existing site utilities include water, sewer, electrical, gas, and communications lines. An existing lift station and three underground fuel storage tanks, located at the southeast corner of the site, are to remain.
The dock utilities will include shore power pedestals, lighting, potable water, sewage pump-out, fire protection, and fuel. New Duke Energy transformers and connections to the water main on site are proposed to support the marina redevelopment. No modifications are proposed to the existing gas line, lift station, or the utility transformers and water meters serving Crabbys or the Marina Building.

Stormwater
The existing site drainage sheet flows to inlets around the parking lot and is directly discharged to through the seawall to the south. A net decrease in impervious area is proposed to qualify for stormwater exemptions through the Southwest Florida Water Management District and the City of Clearwater. It is assumed that SWFWMD will allow any new impervious area to be mitigated for on site.

Parking
The existing parking lot does not meet the current City of Clearwater landscaping standards which state that no more than 20 parking space in a row without a landscape island and the minimum requirement of 10% vehicular use area must be landscaping. The impacted portions of the parking lot will be brought up to the City’s current landscaping standards. The existing marina parking lot has 357 code compliant vehicular parking spaces. The proposed concept plan reduces the total quantity to vehicular spaces to 316. The reduction in parking spaces is due to the need for additional landscaping to meet code and improved pedestrian and vehicular site circulation and functionality.

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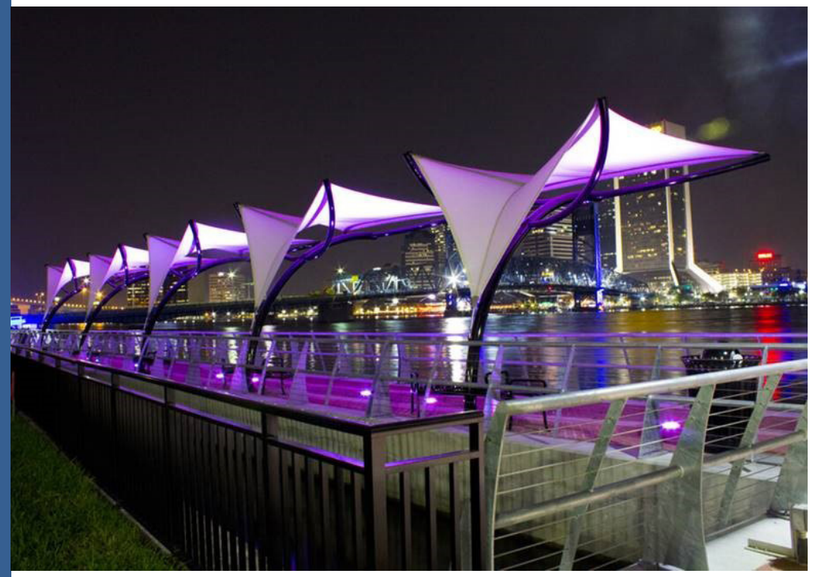
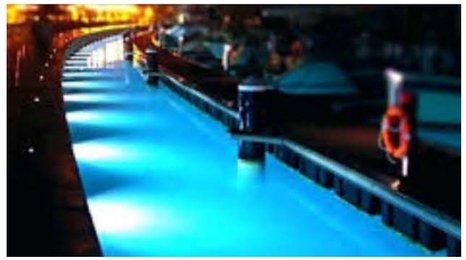
PRECEDENT IMAGES

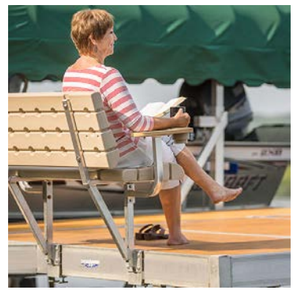
Precedent Images: Marinas







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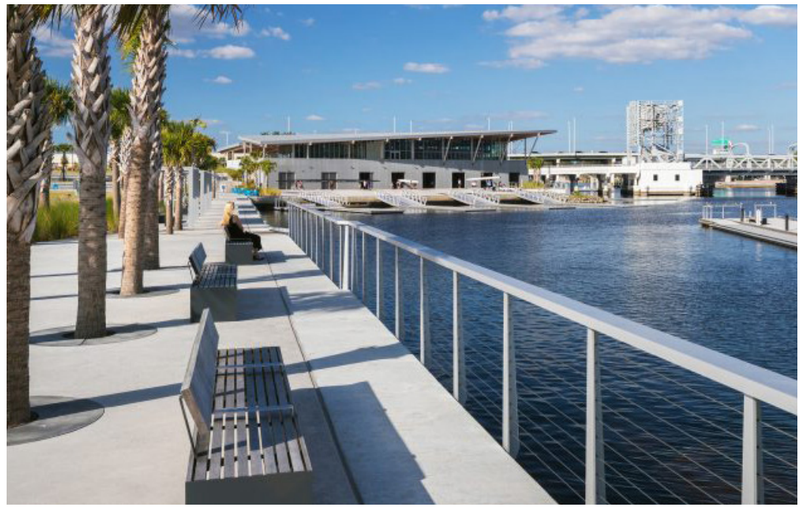
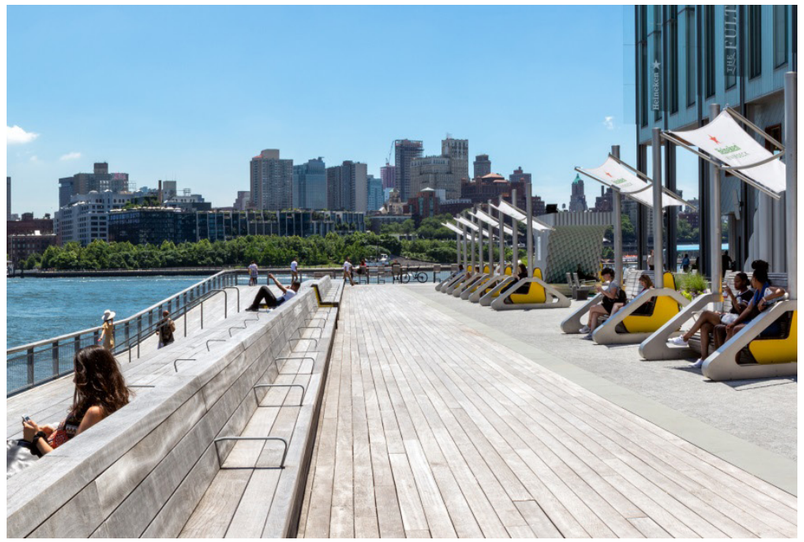
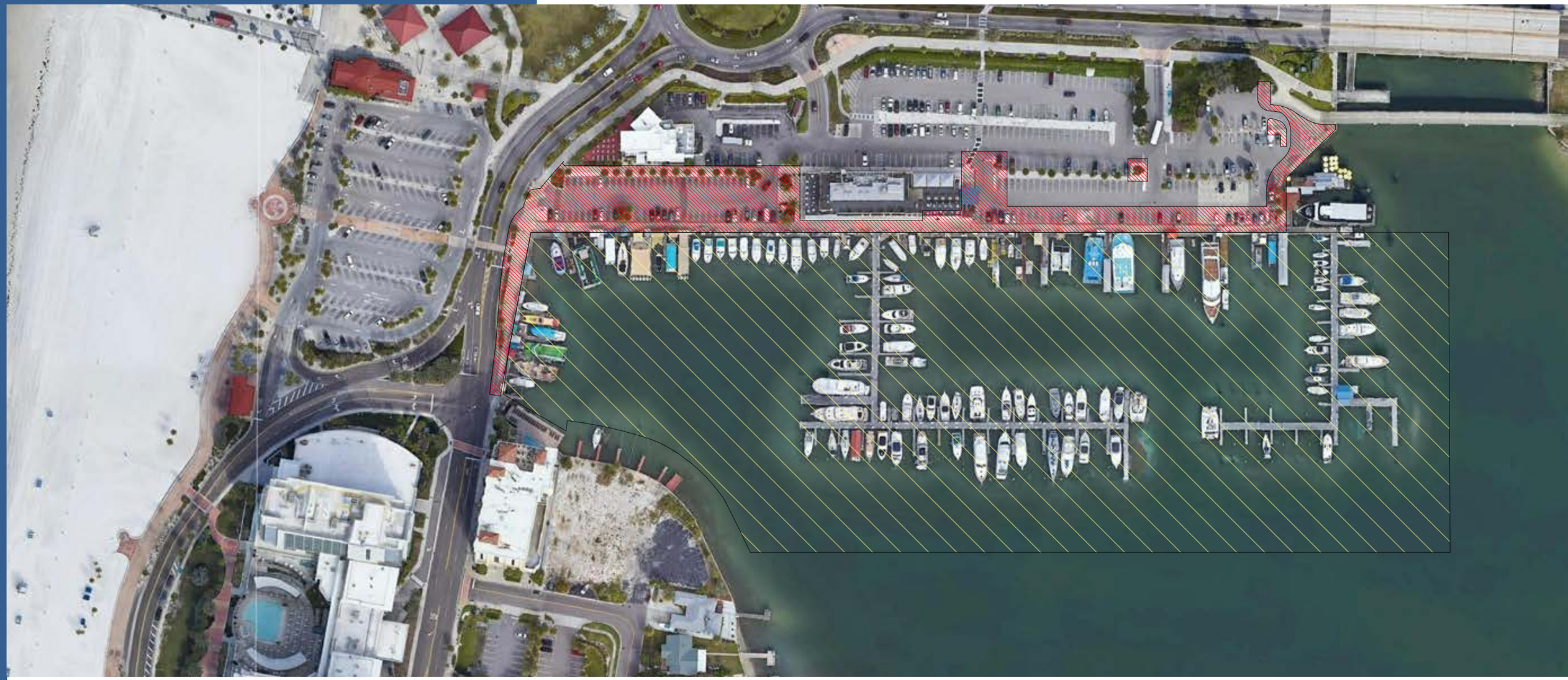
Precedent Images: Waterfront Promenades





CONCEPTUAL DESIGN

Existing Project Area



PROJECT AREA

- Upland
- Marina

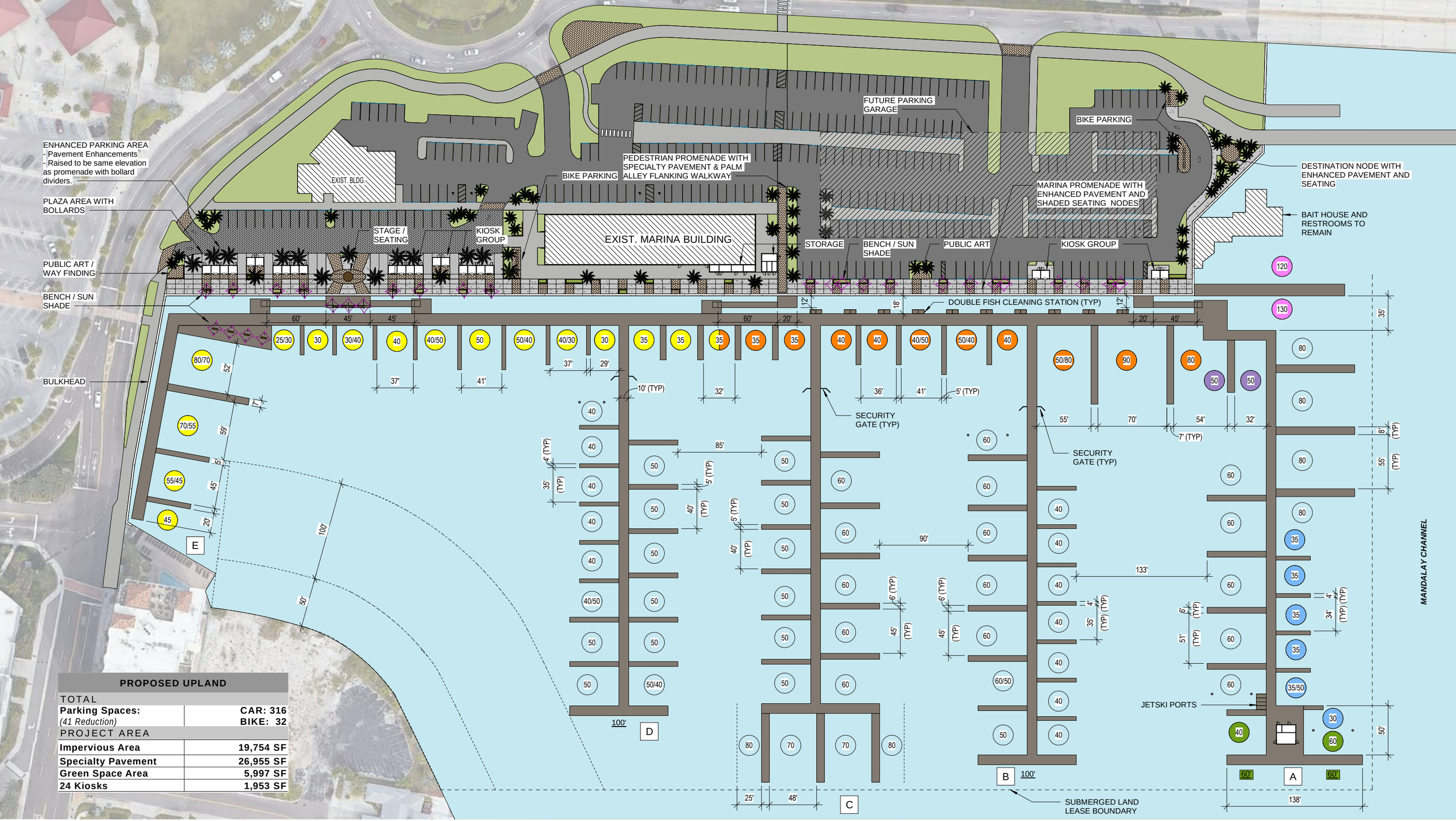
EXISTING SLIP MIX

Silp Size	COMMERCIAL*		RECREATIONAL		TOTAL	
	(#)	(%)	(#)	(%)	(#)	(%)
<40	21	36%	29	27%	50	30%
40	9	15%	0	0%	9	5%
50	10	17%	58	55%	68	41%
60	8	14%	7	7%	15	9%
70+	11	19%	12	11%	23	14%
Total	59	100%	106	100%	165	100%

*Commercial count includes 6 fuel slips and 1 ferry slip

EXISTING UPLAND	
TOTAL	
Parking Spaces - Legal	**357**
Parking Spaces - Non-Compliant*	**7**
PROJECT AREA	
Impervious Area	**53,490 SF**
Green Space Area	**1,169 SF**

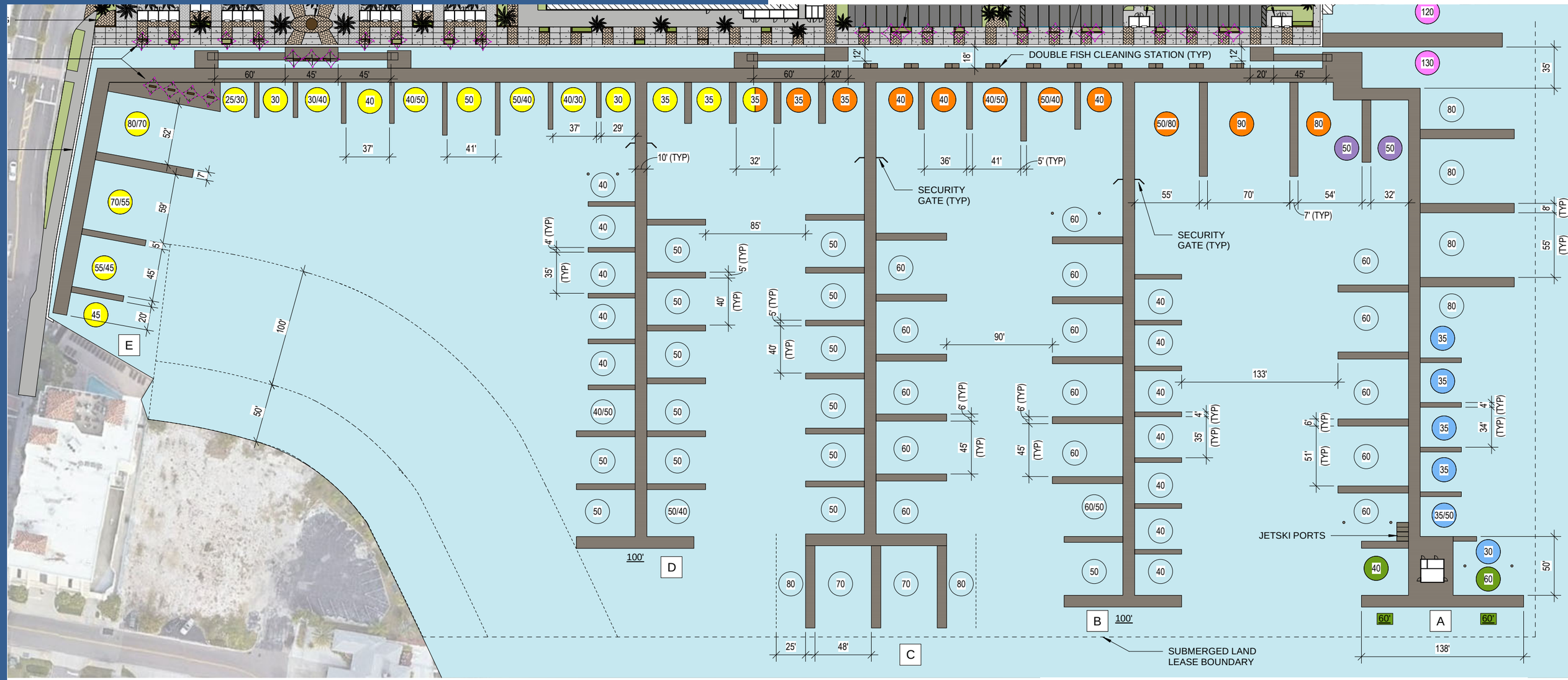
**Non-Compliant spaces based on either their length, condition next to an existing drive aisle, and/or allowable number of consecutive spaces without a divider island.*



PROPOSED UPLAND	
TOTAL	
Parking Spaces: *(41 Reduction)*	**CAR: 316** **BIKE: 32**
PROJECT AREA	
Impervious Area	**19,754 SF**
Specialty Pavement	**26,955 SF**
Green Space Area	**5,997 SF**
24 Kiosks	**1,953 SF**

Clearwater Beach Marina Conceptual Design

Floating Docks Conceptual Design



LEGEND

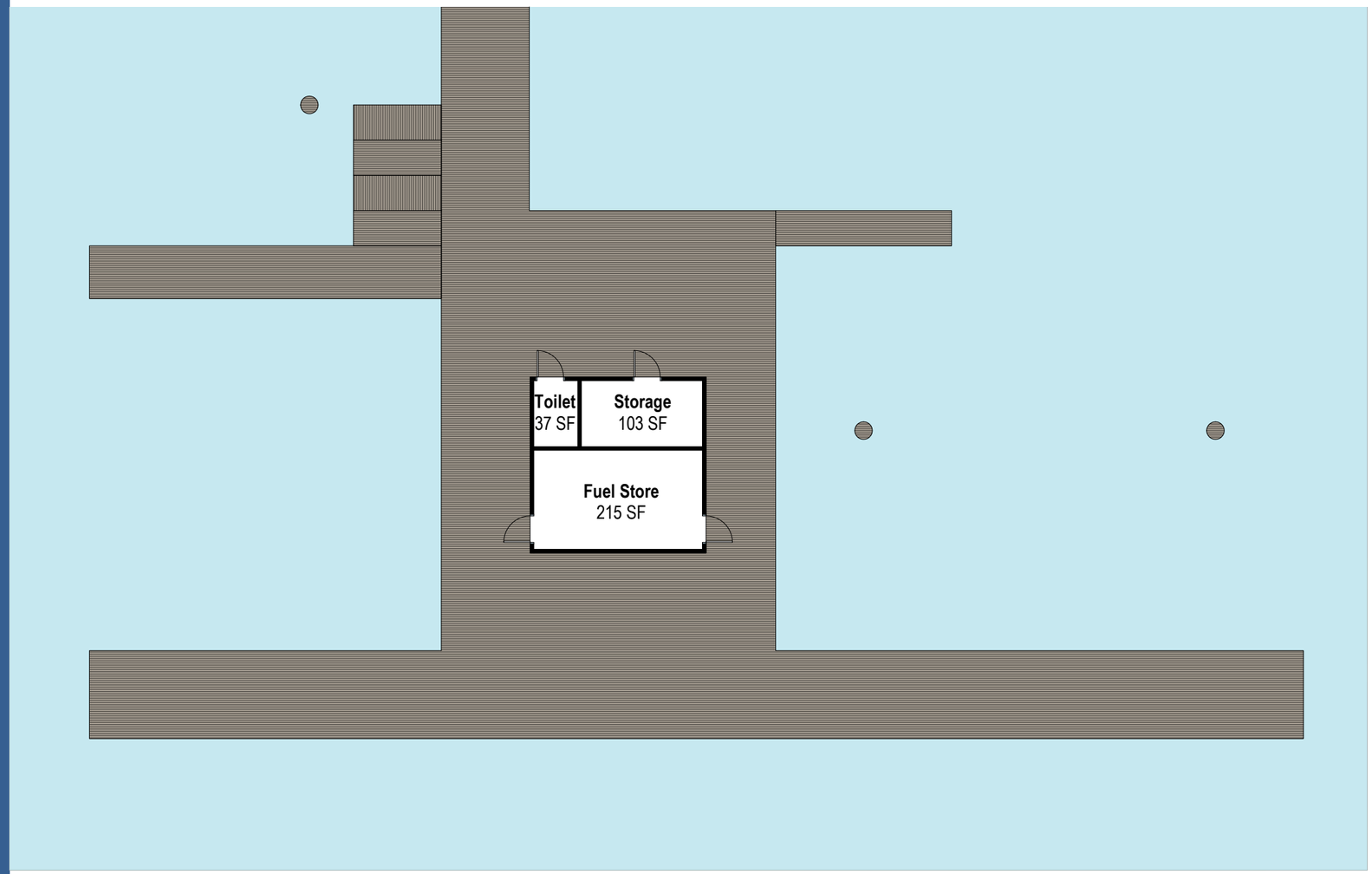
- 50 — DOUBLE SLIP + SIZE
- 65 — SINGLE SLIP + SIZE
- 65/80 — DOUBLE SLIP + SIZE/SIZE
- A — DOCK DESIGNATOR

- 40 — COMMERCIAL SIGHTSEEING, TOWS, WATERSPORTS, RENTALS
- 35 — COMMERCIAL FISHING
- 100 — DINNER CRUISE
- 40 — FUEL SLIPS
- 35 — DAY DOCKS
- 50 — FERRY

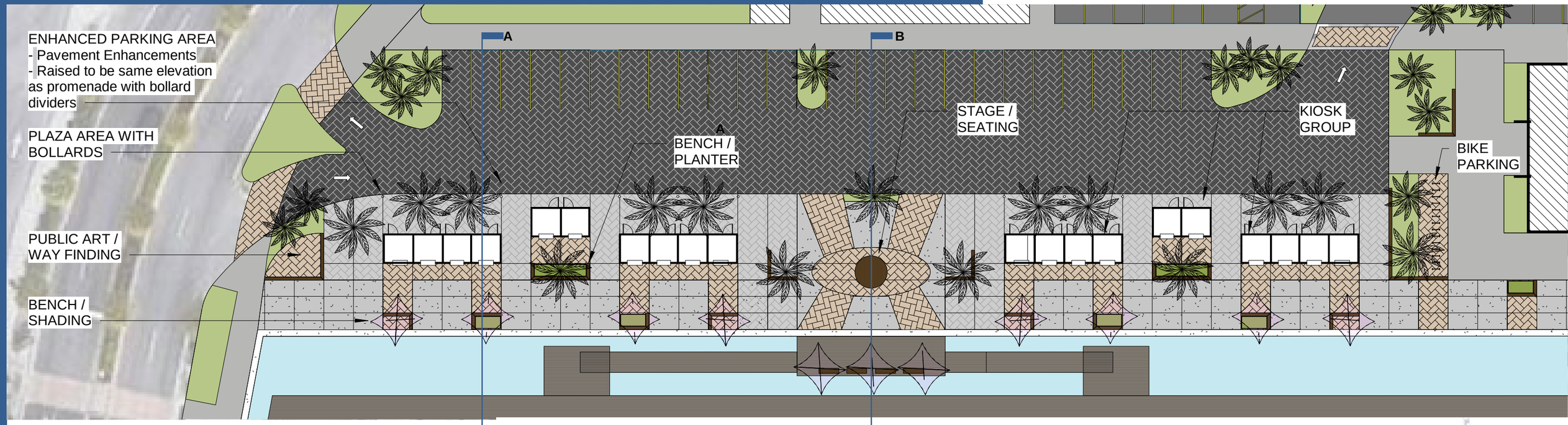
PROPOSED SLIP MIX						
Silp Size	COMMERCIAL*		RECREATIONAL		TOTAL	
	(#)	(%)	(#)	(%)	(#)	(%)
<40	18	31%	9	8%	27	16%
40	16	27%	25	24%	41	25%
50	11	19%	32	30%	43	26%
60	3	5%	28	26%	31	19%
70+	9	15%	14	13%	23	14%
Total	57	97%	108	102%	165	100%

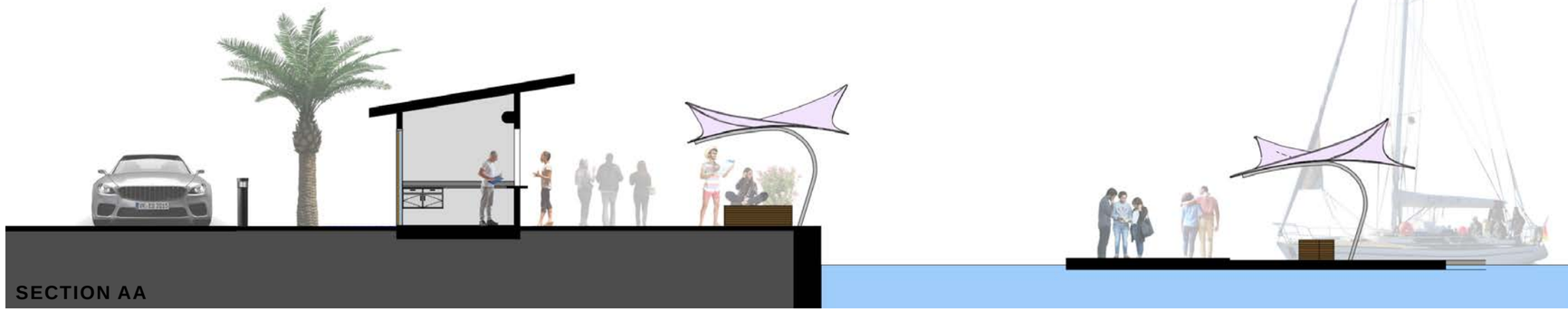
*Commercial count includes 5 fuel slips and 2 ferry slips

Fuel Building Conceptual Design



West Marina Promenade Conceptual Design





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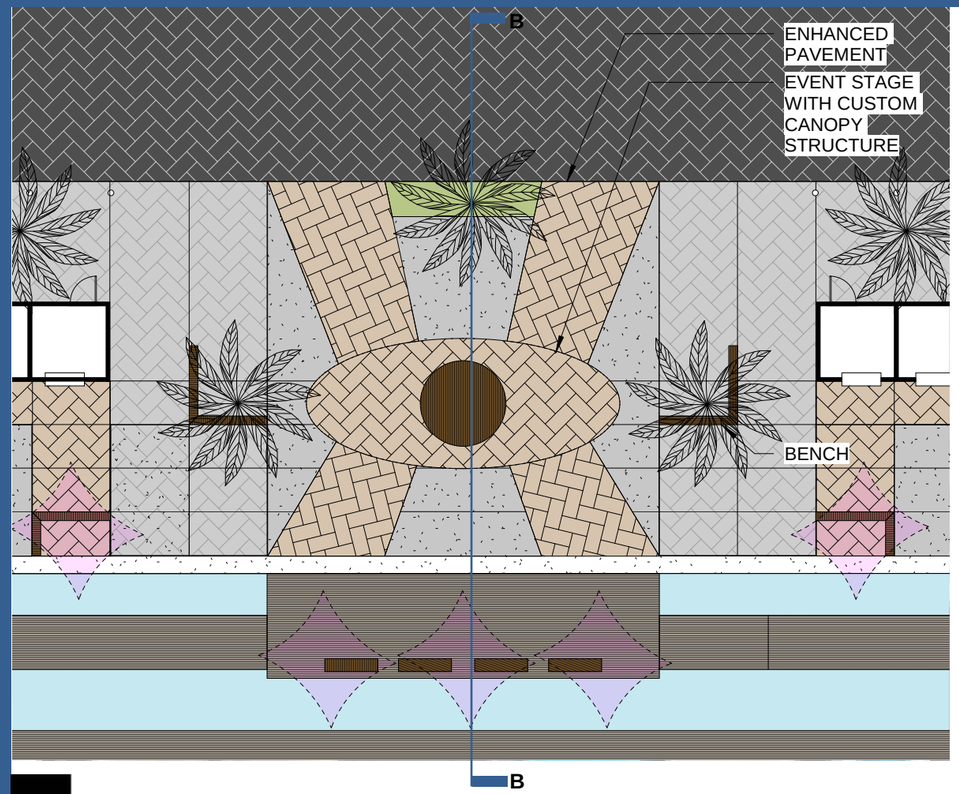
Pop-Up Stage Conceptual Design



SECTION BB

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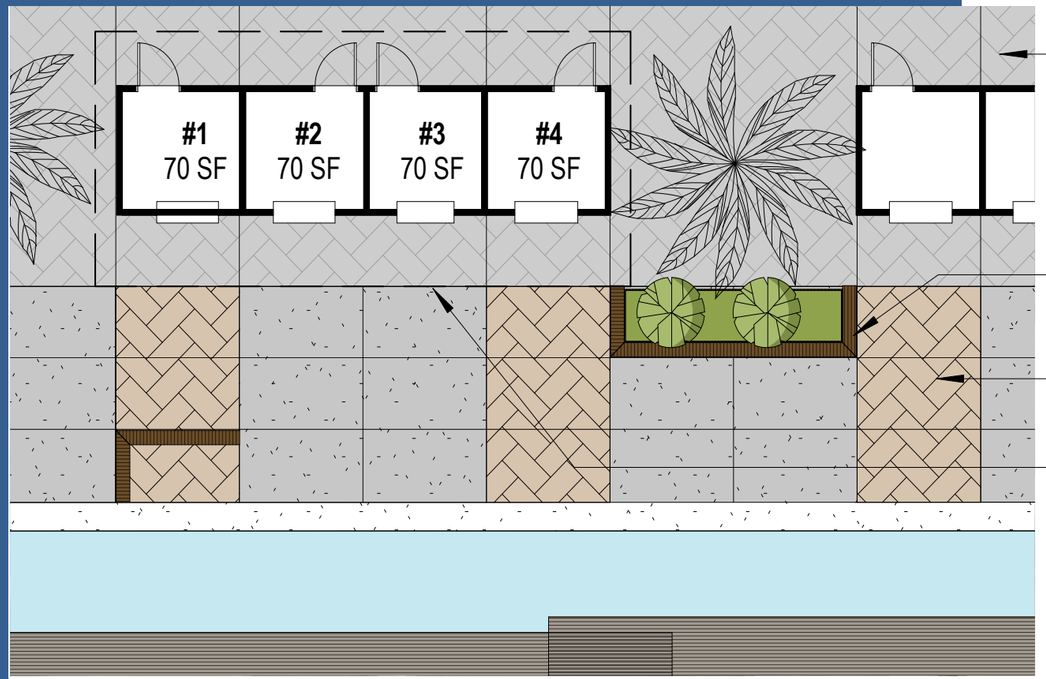
Kiosks Conceptual Design



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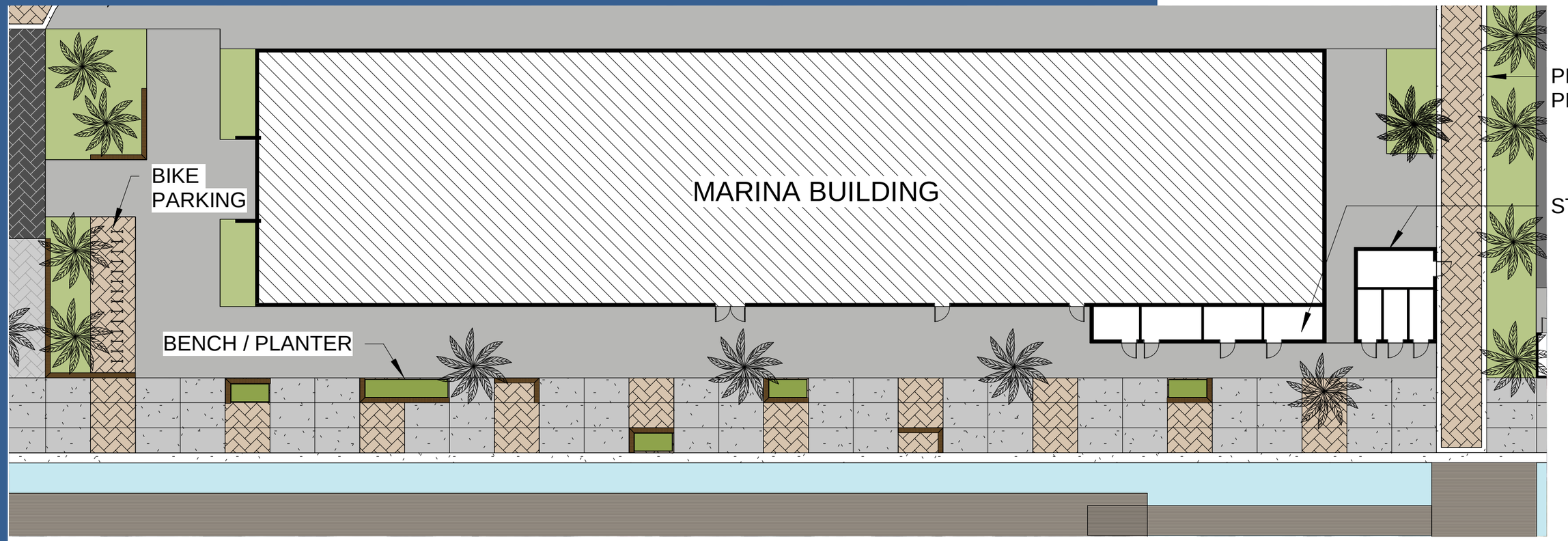
Marina Building Promenade Conceptual Design



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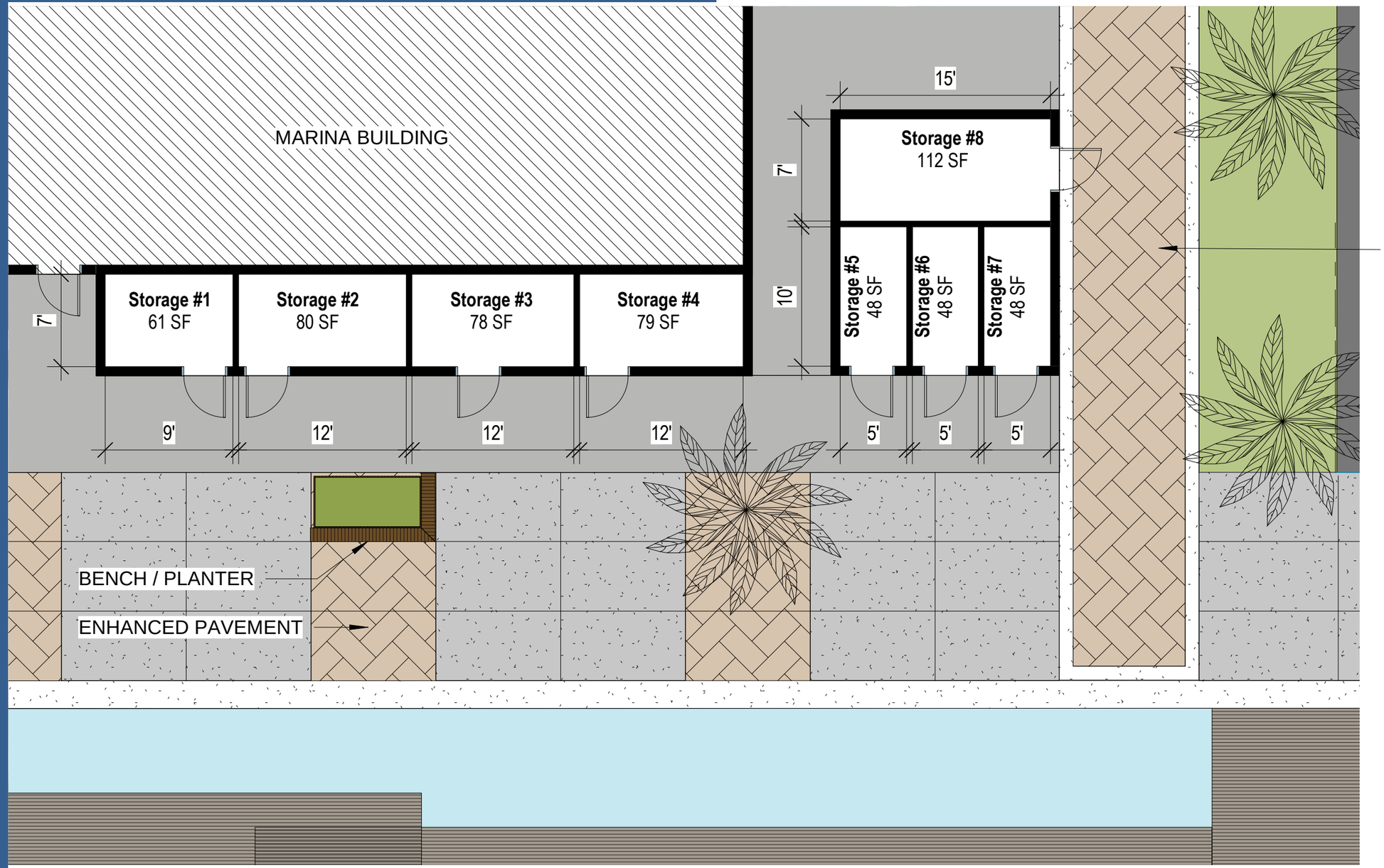
Storage Conceptual Design



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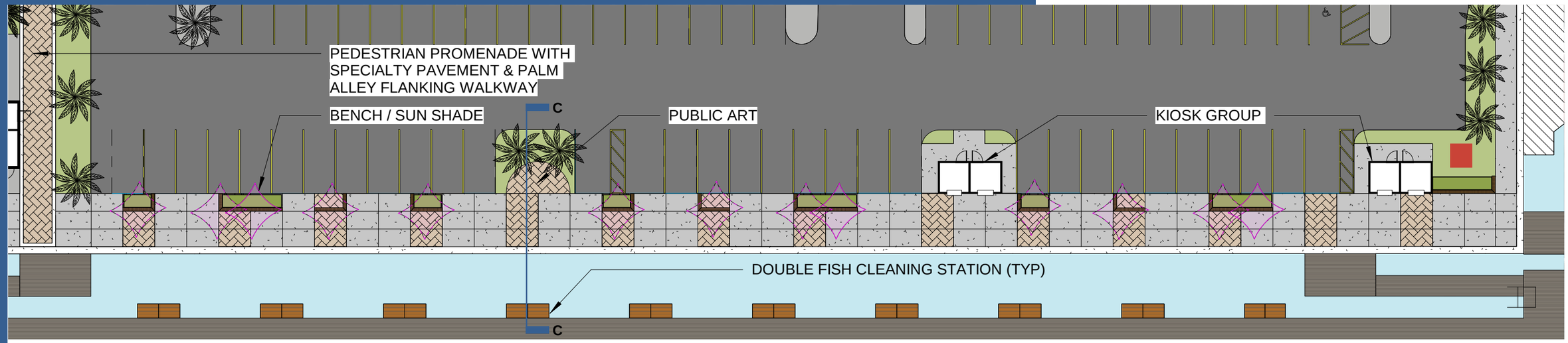
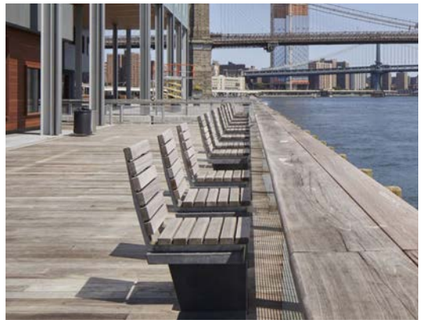
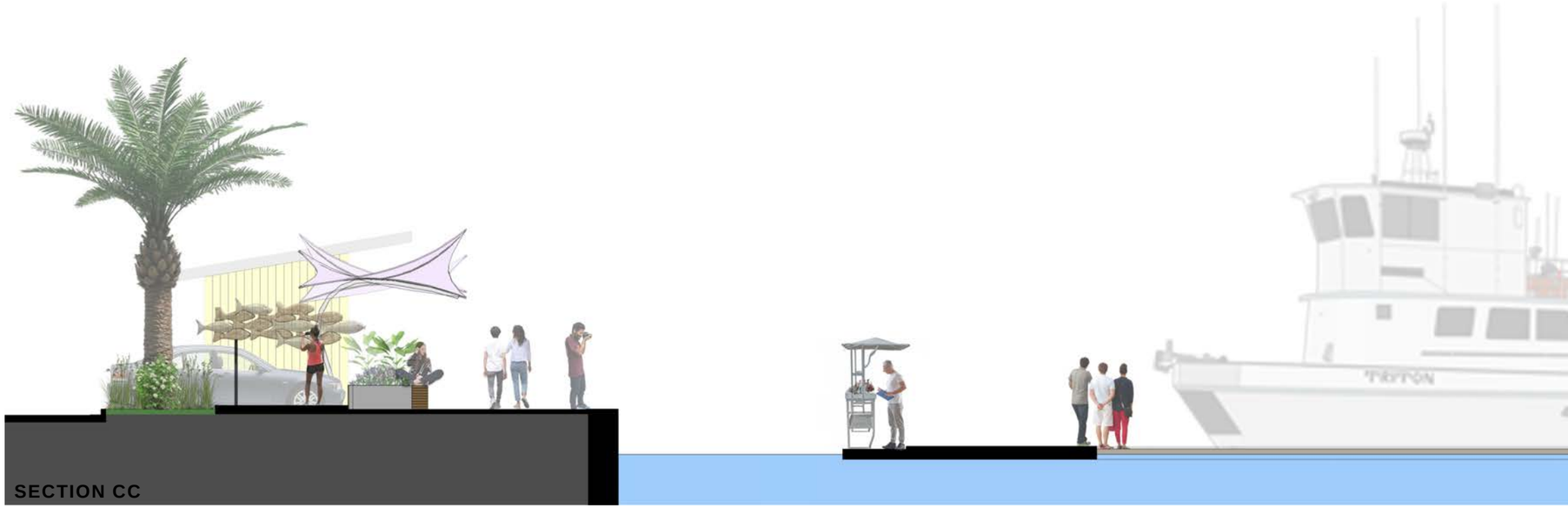
East Marina Promenade Conceptual Design



LIFT STATION AND ELECTRICAL EQUIPMENT TO REMAIN NEAR THE EASTERN GROUPING OF KIOSKS

Alternative 'A'





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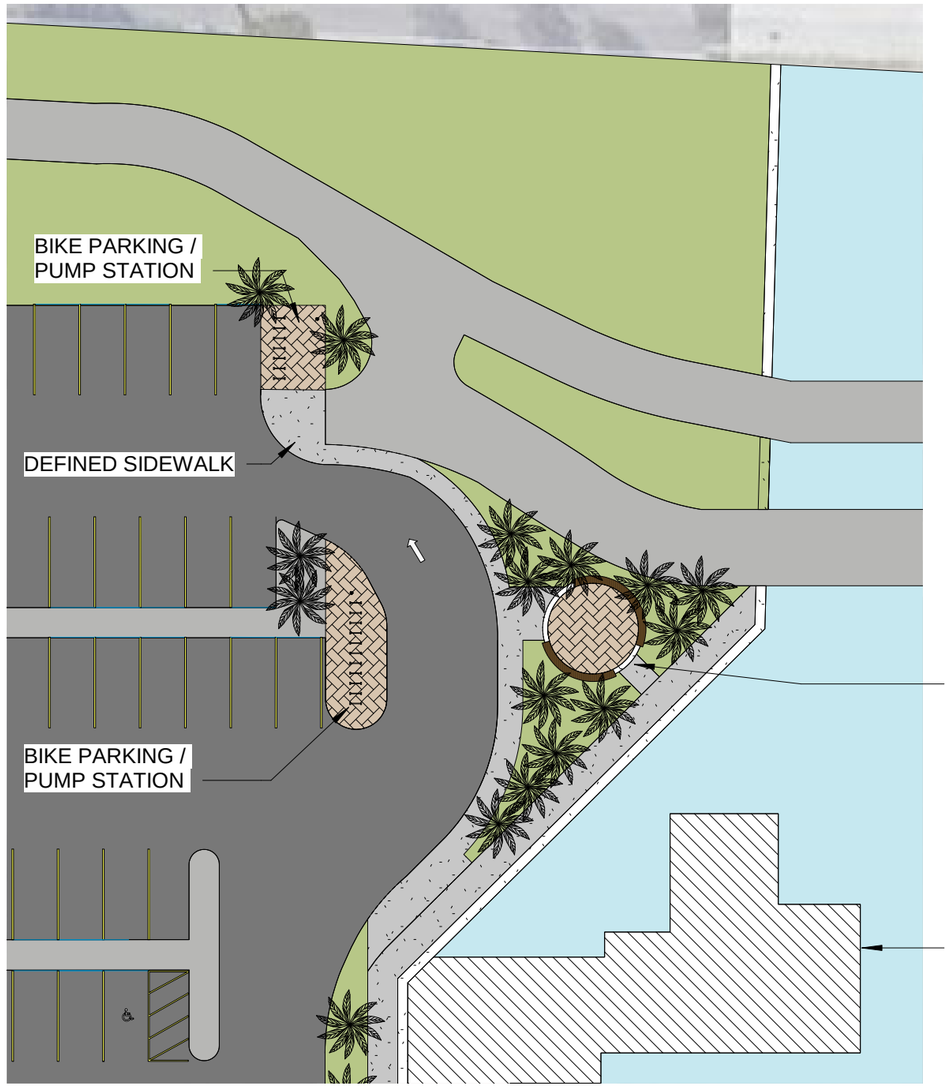
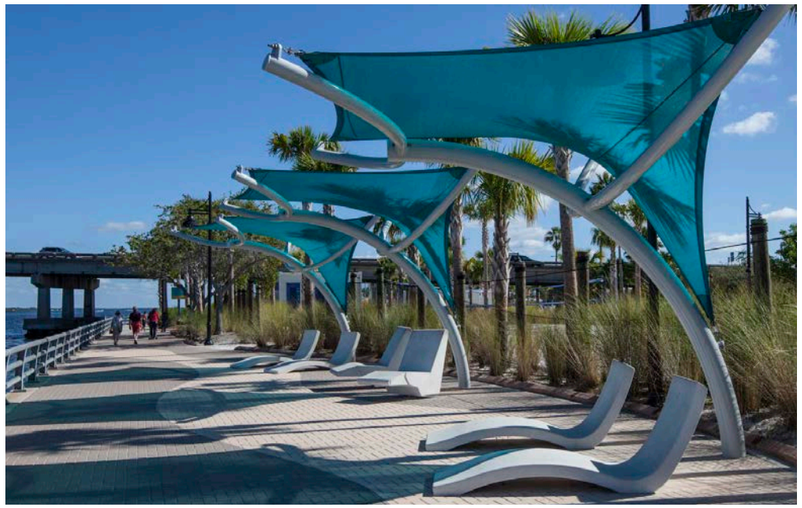
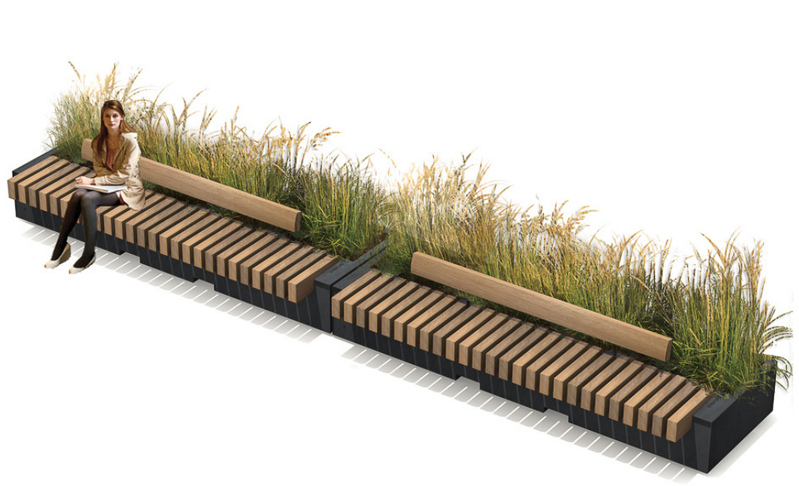
Destination Node Conceptual Design

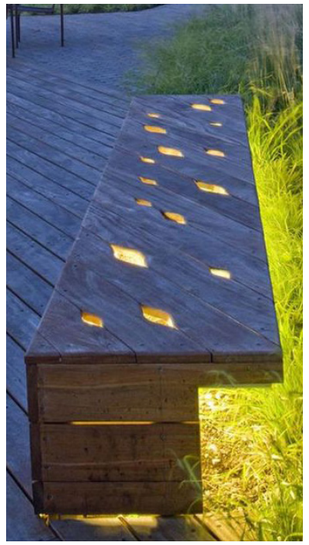


Placemaking: Shade Structures

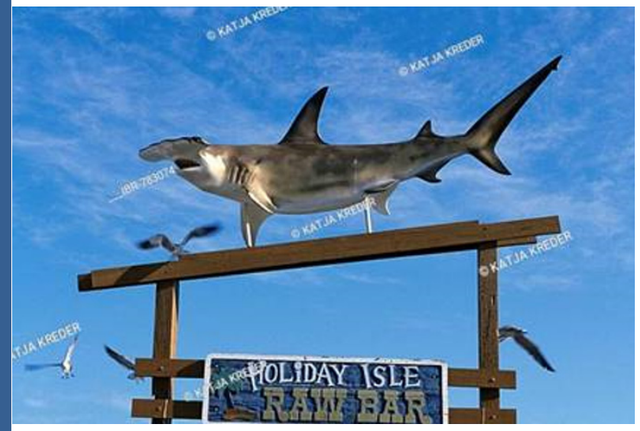


Placemaking: Seating





Placemaking: Public Art



Wildlife Friendly Lighting

Bollard Lighting

Underwater Lighting

Linear Lighting

Recessed Lighting