


# MARINA MARKET ASSESSMENT

Shooters Waterfront Café, Providence, Rhode Island



*Prepared For:*  
Head of the Bay Gateway  
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*Waterfront Planning, Permitting & Design*



# Head of the Bay Gateway – Shooters Redevelopment

## MARINA MARKET ASSESSMENT

### *EXECUTIVE SUMMARY*

The *Head of the Bay Gateway Committee* (HOBG) hired *Harbor Engineering, LLC* (HARBOR) to assess the former *Shooters Waterfront Café* (Site) by providing professional services including a limited marina market assessment, a marina conceptual planning exercise, and to report on economic factors useful in the evaluation of the potential financial viability of redeveloping the property.

The Site has great potential to attract various user groups who seek access between Providence and local waters, including the Providence and Seekonk Rivers and Narragansett Bay. The Site will attract the following groups of recreational boaters:

- Boaters who either live or work in Providence looking for seasonal (staying all summer long) slips
- Boaters from outside the local area looking for transient (short-term stays up to 10 days) slips who are looking for a metropolitan destination that offers more sophisticated dining options, shopping and entertainment
- Boaters from the local region, mostly from upper Narragansett Bay, looking for casual-transient (staying only part of a day) slips in order to dine at the local restaurant, walk in the park, or take a quick jaunt into downtown. All of the marina managers interviewed felt that their customers would find this appealing and believed they too would benefit by having their marina located in close proximity to the Site

Beyond those with boats, HARBOR sees the potential for the Site to welcome the general public, including those who wish to rent a boat (including kayaks, stand-up paddleboards, or sailboats) or take a ride on an excursion/ferry boat into the Bay. A variety of watersports rentals will add recreational vibrancy to the facility, boosting the overall vision of providing public access to the waterfront.

Now approximately 1.4 acres in size, the Site is in a strategic location for Providence in that it is unfettered by navigational restrictions such as the Hurricane Barrier, nor does it conflict with the working waterfront along the west side of the Providence River. Situated adjacent to India Point Park and the Community Boating Center, the Site is in a prime location to provide public access to the navigable waters of the Providence and Seekonk Rivers and Narragansett Bay. Additionally, it can offer an ideal gateway to the Bay that can receive a variety of different excursion and recreational vessels.

HARBOR took into consideration eight (8) marina facilities from around the region, looking at their size, offerings, occupancy, and rates. The best comparable facilities to the Site were Downtown Marina (located in Providence) and Milts Marina/20 Water Street, Hemmingways, and Harborside Lobstermainia (all three located in East Greenwich). The Downtown Marina currently experiences less-than-ideal occupancy that is believed to be a result of the present economic climate as well as the physical restrictions of the Hurricane





Barrier, which prevents larger boats from reaching the facility. The facilities in East Greenwich offer water-enhanced dining combined with limited marina services. These facilities are generally near full capacity and do draw casual transients from around Upper Narragansett Bay who prefer to come to the area restaurants by boat.

HARBOR prepared two (2) conceptual marina layouts, taking into account a variety of physical limitations for the marina basin and the potential market demand obtained from the market assessment effort. Both layouts were able to achieve greater than 4,000 linear feet of leasable dockage arranged in a layout to support all of the potential users groups identified. One option focused more on reserving 84 dedicated slips for specific size vessels and the balance of the facility having open areas able to accommodate a wide range of vessel sizes. The second option has a more flexible layout, offering 61 dedicated slips with significantly more open dock space to a variety of vessel sizes. Associated construction cost for each layout ranges from \$4–6 million. It is strongly recommended that any potential project be discussed with the various regulatory agencies to understand how far the marina can protrude into the harbor.

To ensure that the marina and upland facility is a successful year-round operation, it will be important to plan its offerings and amenities carefully. This will keep the Site vibrant over twelve months compared to a limited 4-6 month seasonal window. For the marina, the most important element will be security (including both passive and active considerations) and providing sufficient utilities, keeping the needs of the various vessel types in mind. For the inland development, intermodal transportation is critical to get people to and from the Site and various points throughout Providence. Methods of transportation to consider include:

- Trolley service
- Rental kiosk that could offer bicycles, scooters and Segways
- Launch service that can receive and drop off people between the Site and the many existing waterside landings along the Providence Riverwalk as it extends to Waterplace Park

Other upland offerings to consider for the Site include a marina center (including office, visitor's desk, excursion boat ticket desk, bathrooms, and showers), fine dining restaurant, seafood shack, indoor/outdoor café and ice cream stand, retail shops, interactive classroom, professional office space, gym, venue for outdoor music and harbor walk that connects with India Point Park. Of course, the challenge will be to fit everything on the site including the building space (additional floors beyond what is currently in place would most likely be needed) and parking.

If developed properly, the project can have an amazing synergy with all of Providence's current offerings and attract people to the area throughout the year. This revitalization of the city's waterfront is the economic boon Providence needs and an offering that the rest of the state can benefit from as well. The potential success of this proposed redevelopment can be easily measured by the successful waterfront revitalization implemented by other cities including but not limited to Boston, Chicago, Baltimore and Charleston.



# Head of the Bay Gateway – Shooters Redevelopment

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## Head of the Bay Gateway – Shooters Redevelopment

### MARINA MARKET ASSESSMENT



#### 1. INTRODUCTION

As Rhode Island's capital city, Providence serves as the symbolic and functional "head" of the State, so it is appropriate that it is geographically located at the head of Narragansett Bay. The Bay is the state's most distinctive feature, and central to the Rhode Island identity, yet its presence in Providence is hardly visible. Providence has much to offer in terms of arts, culture, shopping, dining, entertainment, and education, but convenient opportunities for maritime excursions and activities are not among them. The development of a *Head of the Bay Gateway* facility in Providence would fill this void. For residents, a Gateway facility would ensure that a force so central in defining Rhode Island's identity could be experienced in the heart of the capital city. City-dwellers will no longer have to travel to the peripheries of the metropolitan area in order to connect with such a central element of their local identity. For visitors, the Gateway facility would ensure that those visiting the city are greeted with opportunities to experience all that the Ocean State has to offer.

In an effort to capitalize on the rich marine history of the region and create additional waterfront access in the Providence area, the *Head of the Bay Gateway Committee* (HOBG) is conducting due diligence in an effort to raise support for the redevelopment of an existing commercial waterfront property for the purposes of a Head of the Bay Gateway facility. Located on India Street at the junction of the Seekonk and Providence Rivers, this property is home to the 3-acre bar/restaurant/marina facility formerly known as *Shooters Waterfront Café* (Shooters). In 2000, the site was purchased by the *State of Rhode Island Department of Transportation* (RIDOT), who used a portion of the property to support the "I-Way" I-195 highway reconfiguration project. The HOBG has now formed to investigate redevelopment options for the remaining portion of the property.



As RIDOT now prepares to put the unused portion of the property back on the market, HOBG has been promoting its vision for the site. Some of the improvements under consideration include a public access boardwalk between the downtown Providence Riverwalk and India Point Park, an outdoor amphitheatre, a dock for water taxis & ferries, an expanded marina, and the development of restaurants, retail shops and commercial office space. If conducted with sensitivity to local and regional environmental and economic considerations, the redeveloped Shooters property holds the potential to become a maritime gateway into Providence that would embody a symbiotic relationship between urban beautification, public access and commerce—similar to what has been accomplished in Boston, Chicago and New York City.

HOBG has retained *Harbor Engineering, LLC* (HARBOR) to conduct a *Marina Market Assessment*—a site-specific planning document describing the potential development of a public-access marina facility with associated upland offerings and amenities, taking into account general economic and environmental concerns.

### ***1a. Destination Providence***

Providence combines the accessibility and friendliness of a small town with the culture and sophistication of a big city. With its unparalleled arts and entertainment community, renowned restaurant scene, and culturally diverse neighborhoods, Providence has established itself as a regional and international destination. Over the past 20 years, Providence has earned the nickname of the Renaissance City as a myriad of public works projects have revitalized the once bleak downtown area.

The centerpiece of the downtown improvements is the Riverwalk, which provides unrestricted pedestrian access along the banks of the Providence and Woonasquatucket Rivers. The Riverwalk extends from Point Street, near the Fox Point Hurricane Barrier, to Waterplace Park, amidst the backdrop of the Financial District, Providence Place Mall,



**Figure 1. Waterfire along Providence Riverwalk**

and the State Capitol. The redevelopment of the river has been an economic boon to the Downcity area, bringing vibrancy to an area once desolate outside the hours of the working weekday. Since 1997, the grand element of the Riverwalk has been WaterFire. This interactive art installation features 100 blazing bonfires contained along the center of the river channel. An estimated 10-million guests have visited WaterFire since its inception, creating one of the most successful arts and culture events in the state's history.



The Providence waterfront is currently compartmentalized between the Point Street Bridge and Waterplace Park, but the Shooters property holds potential to expand the waterfront beyond these current confines. Providence has successfully breathed life back into the Downcity district by using water-enhanced resources as the focal point of development. However, the great resource that is the *actual* Providence waterfront (*i.e.* the



Figure 2. Cruise ship berthed at India Point Park Ceremonial Dock (2001)

property *south* of the Fox Point Hurricane Barrier) has been overlooked. This section of waterfront extending from Fox Point up the Seekonk River is fronted by India Point Park—an 18-acre green space that features playing fields, playgrounds, walking paths, and a public sailing center. Historically, India Point Park served as host to a wide variety of water-enhanced events and festivals. The Providence Waterfront Festival, the schooner *Providence*, Block Island Ferry service, and even small cruise ship visits were at one time annual occurrences along the parks shoreline and wharfs. Located at the western terminus of India Point Park, the Shooters property, in its current state of disrepair, completely disconnects the waterfront pathway between India Point Park and the Riverwalk, thus preventing a natural pedestrian flow between these two waterfront features.

### ***1b. Shooters: Historical Perspective***

Shooters opened in the spring of 1990 at the western edge of India Point Park along Providence's heavily-industrialized working waterfront. Shooters was part of a national chain of casual waterfront dining and dancing venues, and the facility included a three-story building built specifically for the operation. The 25,000-square-foot complex featured dockside dining, a waterfront pool, indoor and outdoor bars, a restaurant on the top floor, and a 90-slip marina. The marina facility benefited from its deep-water berths and unrestricted location, seaward of the Fox Point Hurricane Barrier, to attract a diverse boating patronage from Narragansett Bay. For over 10 years, the facility anchored the Providence nightlife scene in the area referred to as "Old Harbor," which included other well-known, waterfront establishments such as the Hot Club and Fish Co. (both located inside the Fox Point Hurricane Barrier).

## **2. METHODOLOGY**

For this marina market assessment, HARBOR collected background information from various sources in order to construct the user profiles of the prospective slip-takers, forecast potential slip absorption and capacity, and prepare recommendations for services and amenities at the proposed facility based on a demand assessment. This effort included reviewing information provided by the client, as well as relevant existing information on

the site and development area. Furthermore, HARBOR visited numerous marina facilities within Upper Narragansett Bay and collected basic information such as: dock types and styles, number of slips, slip sizes, vessel types, occupancy rates, services/amenities provided, in addition to location and contact information. During these facility visits, HARBOR interviewed marina personnel to obtain anecdotal information related to boating and marina trends in the region, cruising patterns, and seasonal occupancy levels. Additionally, Harbor interviewed local restaurant managers at several waterfront eateries as a means of assessing the relationship that exists between a restaurant and a marina operation. Lastly, Harbor interviewed persons with professional ties to the Providence waterfront. These interviews provided insight into the historical use of the pre-existing facility, lessons learned regarding its successes and shortcomings, experiences with tourism-related operations, and guidance in operating a recreational facility on Providence's working waterfront.

### **3. MARKET POTENTIAL**

#### **3a. Boating Market Trends**

The recreational boating season in Rhode Island broadly extends over a six-month window (from May 1 through October 31), from when the first boats are launched to when the last boats are hauled. However, the regional boating season is characterized by a “high season,” extending from mid-June through Labor Day weekend during which marinas realize their highest occupancy rates and see the majority of their transient business. Conversely, the shoulder seasons of May 1 through mid-June and Labor Day through October 31, marinas experience reduced occupancies and transient business.



Figure 3. Fishing in the Upper Bay

Narragansett Bay can be geographically and functionally divided into “Upper” and “Lower” portions. The Upper Bay includes Greenwich Bay, Bristol, Warren River, Edgewood/Pawtuxet, and the Providence River. The Lower Bay includes Wickford, Portsmouth, Jamestown, and Newport. Fundamental differences between the Upper and Lower Bay include seasonality, the types/sizes of vessels that frequent these areas, local cruising patterns, ability to attract regional transient patronage, and the types of available shoreside services and amenities offered. As part of this report, HARBOR concentrated on boating market trends exhibited in the Upper Bay due to its relevance to the project site.

Recreational boating in the Upper Bay caters to a more local user group, whereas the Lower Bay attracts a regional and international audience on account of the proximity to



Newport and other cruising destinations. Boaters of the Upper Bay generally tend to have smaller craft 20–40 ft. in length that are primarily utilized in short-distance weekend/holiday cruising to destinations within the Upper Bay and Newport. This type of boater is the most likely segment that would seek out Providence as an overnight or afternoon destination.

Since the Lower Bay attracts a larger portion of boaters on longer-duration cruises, the services and amenities offered in these areas cater to the needs of this user group. This includes provisioning, boat service/repair, services specific to yacht crews and captains, *etc.* On the other hand, facilities in the Upper Bay cater to the local boater. This user group often utilizes their vessels and slips as a “summer home” of sorts. Marinas in this environment focus not only on functional services, but also more on shoreside conveniences and attractions—often providing such complimentary amenities such as swimming pools, picnic areas, waterfront dining, and the ever-popular “tiki” bar. Each of these elements adds to the overall marina experience.

### **3b. Comparable Marina Facilities**

As a means of determining current boating trends within the local market area, HARBOR conducted an assessment of comparable marina facilities in Upper Narragansett Bay to evaluate critical marina attributes such as vessel occupancies, dockside and upland offerings, transient boating trends, *etc.* Facilities were chosen that are most nearly comparable to the potential development at the Shooters site. Such criteria included location within Upper Narragansett Bay, close proximity to local upland attractions, and inclusion of upland dining facility. The following facilities met one or more of the abovementioned criteria:

**Table 1. Comparable Marina Facilities**

Map Location	Facility	Municipality	Proximity to Site (mi)
A	Downtown Marina	Providence	0.25
B	Oyster House Marina	East Providence	0.5
C	Port Edgewood Marina	Cranston	3.0
D	Pawtuxet Cove Marina	Cranston	3.5
E	Brewer Greenwich Bay Marina	Warwick	16.0
F	Milts Marina / 20 Water St	East Greenwich	16.0
G	Hemingways	East Greenwich	16.0
H	Harborside Lobstermania	East Greenwich	16.0

The two facilities located closest to the Shooters site were Downtown Marina and the Oyster House Marina, each less than a mile away. These two sites were integral in quantifying the local boating segment within the immediate area. The Downtown Marina is located within the protected waters of the Fox Point Hurricane Barrier. This protection of the Hurricane Barrier includes shelter from waves and currents but also inadvertently



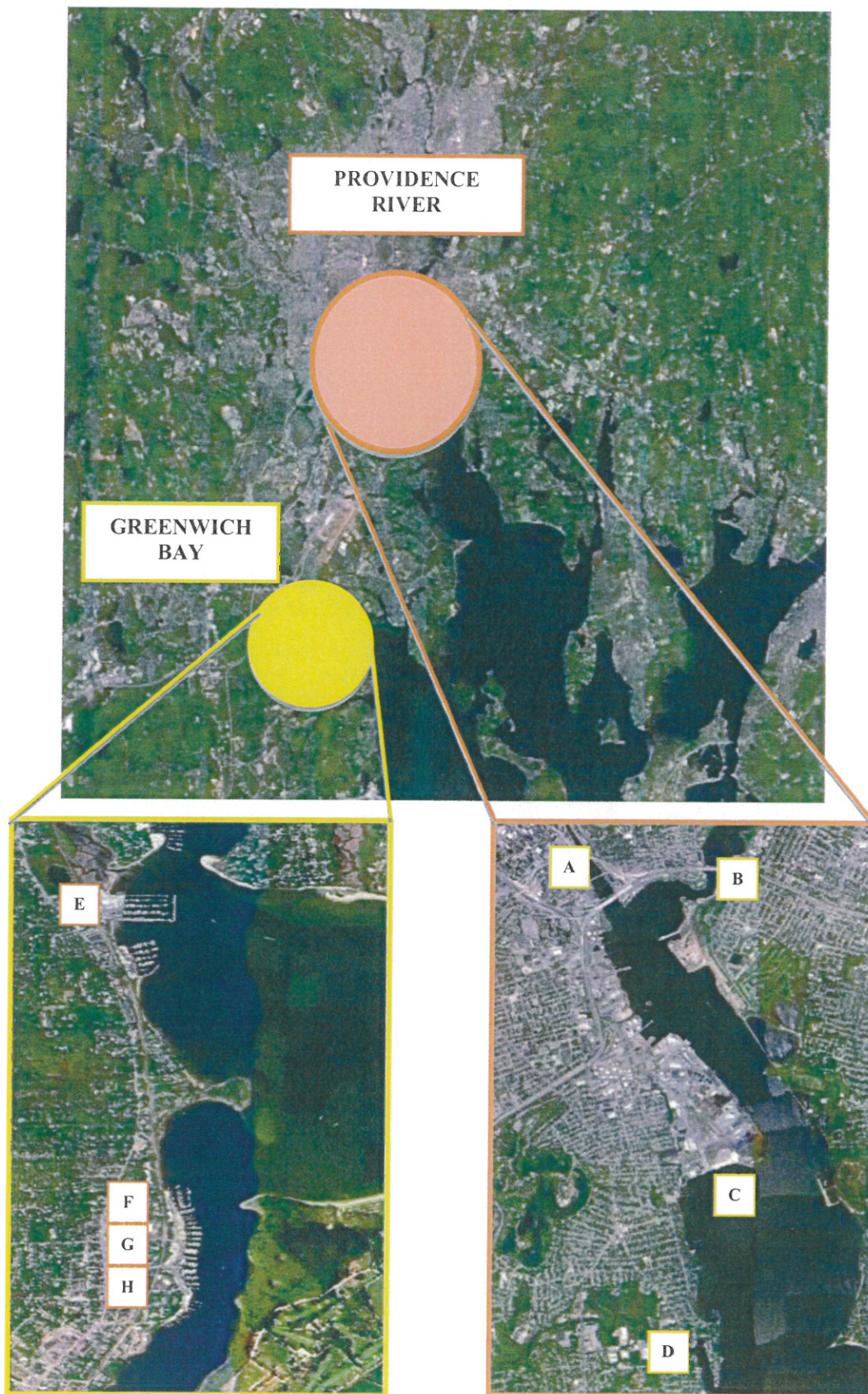


Figure 4. Comparable facility locus map (Refer to Table 1 above for details)



restricts access to a large segment of boats. Overhead clearance at high water is approximately 20 ft., thus restricting all sailboats and most powerboats over 35 ft. in length. Harbor conducted a telephone interview with the manager of the Downtown Marina, who offered that in recent years the facility has experienced a range in occupancy of 25-50%. Occupancy rates have been trending lower since gas prices spiked in the summer of 2007. The influence of gas prices, teamed with the current economic downturn, has contributed to current occupancy shortfalls. However, the marina manager did offer that virtually all slips were occupied prior to 2007. During this time casual dockage was reserved for patrons of the Hot Club and Fish Co., who were charged up to \$3/ft. for day dockage during the peak boating season (July-August) and on holidays (Memorial, Labor, and Victory Day).

HARBOR further evaluated comparable facilities in the East Greenwich area to better understand the operational relationship between marinas and adjacent upland dining facilities. Milt's Marina/20 Water St., Hemingway's, and Harborside Lobstermania are examples of facilities that blend a water-enhanced dining facility/function space with a marina facility that provides patrons with the option of arriving by boat. Harbor spoke with Milt Tanner, owner of Milt's Marina and 20 Water St. restaurant/bar regarding current trends in boating and restaurant patronage at his facility. The marina has a 30-slip capacity, primarily serving seasonal patrons. Mr. Tanner offered that free dockage is offered to boating patrons at a dedicated visitors dock (approximately 100 ft.) as well as within any slips that are unoccupied by seasonal slip holders. He further offered that casual dockage associated with restaurant patrons is busiest on Wednesday through Saturday evenings and weekend days. This trend is typical for the summer season (mid-June through August). Mr. Tanner estimates that during the summer there will be an average of 5-8 restaurant patrons docking at the marina per day, who typically stay for 2-3 hours. During the shoulder seasons of May through mid-June and Sept through mid-October, the facility may draw approximately 10 vessels daily during weekends. The majority of boaters coming to Greenwich Cove originate from the Warren River, Bristol, and Edgewood/Pawtuxet and to a lesser extent from Newport, Jamestown, and Portsmouth. Each of the neighboring facilities in Greenwich Cove exhibit similar trends in regards to boating patronage.

Based on a comparative study of local Providence and Greenwich Cove marinas, it can be concluded that a waterfront restaurant facility has the potential to attract patrons that arrive by boat. As noted from the neighboring Downtown Marina, during good economic times the facility was able to charge a premium for temporary casual dock space despite the fact that their user group was inherently limited due to the navigation restrictions of the hurricane barrier. The Shooters facility potentially could attract the same type of boaters that already visit the area as well as draw larger vessels and sailboats that are precluded from traveling north of the Hurricane Barrier. Furthermore, it can be inferred that the majority of potential casual docking patrons will originate from the Upper Bay area, similar to the trends observed in Greenwich Cove.

### ***3c. Anticipated Marina Facility User Groups***

When developing a marina facility, it is important to assess the potential user groups that would utilize the facility's berths. These projections will dictate almost every aspect of marina planning and programming including, but not limited to, slip sizes, dock types/dimensions, in-slip offerings, upland amenities, *etc.* From the research effort conducted by HARBOR, the original Shooters Waterfront Café attracted a mix of transient and seasonal boaters. The facility included 90-slips sized to primarily accommodate vessels sized 34–54 ft, in length, with a limited ability to provide dockage for larger vessels. This information provides a fair baseline of the potential demand for a redeveloped marina at the same location. The following assessment highlights HARBOR's findings through its research and anecdotal interviews with local marina managers, local boaters, and professionals involved in the maritime industry.

#### *Transient Boaters*

Narragansett Bay provides for an ideal destination for both regional and local transient boaters. Typical destinations for the regional transient will include Cape Cod and the Islands, Buzzards Bay, Long Island Sound with local stopovers at Watch Hill and Newport. Both Newport and Watch Hill provide the transient boater with the services and amenities demanded by such a group including safe harbor (moorage/anchorage/dockage) and an abundance of upland amenities/attractions. The typical vessel types and sizes amongst this group will include a fairly even mix of power and sailboats ranging in length from 30–50 ft. Typical cruises for regional transient boaters are less than two weeks long and include overnight stays in several ports. Stays for this group are typically one or two nights per stop.

Local Transient patronage will likely originate from within Upper Bay including Greenwich Bay, Warren River, and Bristol. Additional patron potential from Aquidneck Island (Newport, Middletown, and Portsmouth), Jamestown, and Wickford will likely come to the facility for one or two nights as well. The typical vessel types and sizes amongst this group will include a fairly even mix of power and sail under 40 ft. in length. The close proximity between Providence and boating centers of Narragansett Bay speak well for the Site's ability to capture the 1-2 night patronage of local weekend cruisers.

It is likely that a facility constructed at the head of Narragansett Bay would attract transient boaters due to its proximity to downtown Providence and anticipated upland offerings. It should be noted that cruising routes are based on historical behavior and are not established overnight. The concept of Providence as a would-be cruising destination will take some time to develop. To establish the renown and reputation of Providence as a port of call for recreational boaters, it is recommended that efforts be made to promote the Site/City in cruising guides, monthly publications, and at boat shows.



### Casual Transient Boaters

The Upper Bay holds major potential to attract small craft boaters to the facility in short-term durations (that is, for a single afternoon or evening). Providence's cultural attractions such as Waterfire, teamed with a renowned restaurant scene, creates an ideal destination for local boaters who seek variation from the normal routine of cruising to Greenwich Bay, Wickford, or Newport. The typical vessel types and sizes amongst this group will be largely motor vessels under 30 ft. More specifically, this group will include center console Boston Whaler-type craft capable of quickly travelling to-and-from Upper Bay destinations. Depending on the shoreside offerings found at the facility, the marina might serve as a destination in itself. As will be discussed further in this report, fine waterfront dining, an outdoor casual seafood restaurant, and a live music/arts venue would all appeal to casual transient patronage.

### Excursion / Ferry Service

As the Capital of the Ocean State, one would assume that the fabric of Providence's identity would be well-intertwined with recreational boating activities and unrestricted public waterfront access points, but unfortunately this state of affairs could not be any farther from reality. While conducting anecdotal interviews to gather background information for this report, Harbor spoke with the *RI Convention and Visitors Bureau's* (RICVB) information desk at the RI Convention Center. Harbor inquired as to whether there were waterfront related excursions, tours, or essentially *any* means of getting out on the water available. The gentleman explained that the gondola rides through Waterplace Park are the only current offering to his knowledge. He added that this is a question commonly posed by visiting guests, and it is quite evident that there is a gaping hole in water-related tour offerings.



Figure 5. Newport Cruise Co. operates dinner and sightseeing cruises in Newport

As noted above, Providence's tourism offerings are absent of a key component, which seems so quintessential to its role as Capital of the Ocean State—that being waterfront-related activities and excursions. Historically, such operations have come and gone including the RIPTA ferry to Newport, Providence Duck Boat Tours, and the dinner cruise operation once operated by Promet Marine Services. In researching the reasoning as to why these operations lacked resiliency, Harbor found that the key element was low ridership due to a lack of consistent interest.

This pitfall is perhaps best exemplified by the RIPTA Ferry that transported passengers and commuters between Newport and Providence. RIPTA ceased the operation after the 2008 season due to both a lack in ridership and the expiration of a federal subsidy upon

which the program depended on in order to remain profitable. The intent of the Providence-Newport ferry service was to relieve road congestion and vehicle emissions by offering commuters and visitors a transportation scenic and convenient alternative route between the “Capital City” and the “City by the Sea.” The service’s shortcomings fall are structural in that the commuting population from Newport to Providence is slight. Additionally, the ferry provides modest marginal benefit to commuters because the commute via car is neither exceedingly timely nor expensive as compared to those commuting to Boston or New York from surrounding suburbs, where regional ferries have been successful. Lastly, the ferry terminal facilities, at Point Street Landing and Conley Wharf, were both flawed. The original terminal at Point Street was located within the Fox Point Hurricane Barrier, which posed a major navigation restriction due to its narrow opening, often leading to collisions between transiting ferries and the barrier itself. The terminal was eventually relocated to Conley Wharf, on Allens Avenue, but ridership suffered due to its disconnect from the downtown area.

HARBOR spoke with Joel and David Cohen of Promet Marine Services, who owned and operated the *White Swan* between 1995-1998. This 160-passenger tour vessel was built specifically to cater to the high-end dinner cruise and excursion market. According to the Cohens, the dinner cruise operation was not financially solvent due to a lack of booking interest. The operation was intended to attract corporate and tour groups visiting Providence for conventions, regional meetings, *etc.* but failed to create constant booking referrals from area booking agents. The operation ceased operation in 1998, and the vessel was sold and now operated in San Francisco.

Additional information was provided by HOBG in regards to discussions with a potential excursion vessel operator. HOBG submitted usage projections for an excursion vessel that would operate various types of excursion tours, including short harbor tours, lunch/dinner cruises, and private charters. Based on the figures provided by HOBG, annual passenger counts were upwards of 21,000 individuals with corresponding revenue of nearly \$950,000.00. These figures indicate the potential for waterfront-related tourism revenue to be realized in the event that the site is developed so as to serve a broad spectrum of both the visiting and local public.

Based on the above-mentioned discussion, a revisited stand-alone ferry or excursion operation would likely follow the same path of its predecessors. However, a more flexible type of operation may thrive along the Providence waterfront. Such a vessel should be programmed to offer a daily round-trip service to Newport with potential stops in Bristol and Wickford along the way. This portion of the operation would be strictly geared to tourists with amenities such as a narrated tour guide, snack bar, and interactive children’s activities provided onboard. The vessel could also provide site-specific coastal and/or nature cruises such as narrated lighthouse tours, winter seal tours, and coastal habitat tours. This type of flexible offering would capture both visiting tourist groups, as well as school field trip groups. Additionally, the operation may provide dinner cruises along Upper Narragansett Bay, capturing both visiting corporate groups and local special event groups. Lastly, a passenger vessel based in Providence could provide transportation



to seasonal events such as the Bristol 4<sup>th</sup> of July Parade, Quonset Air Show, Wickford Art Festival, area firework displays, and the Newport Jazz and Folk Festivals.

### Boat Rental

Rental of small watercraft including sailboats, kayaks, and *Stand Up Paddleboards* (SUP) would provide an added benefit to patrons arriving both by land and water. Located to the east of the Shooters property lies the *Community Boating Center* (CBC), whose mission is “to provide instruction and access to recreational sailing for all, with an emphasis on children, without regard to financial status.” CBC was established in 1994, operating adjacent to Shooters for nearly six years prior to its closure. HARBOR met with John O’Flaherty, CBC’s Executive Director to discuss potential avenues for development that the facility should emphasize, and how CBC may work in concert with the facility’s development potential as a public waterfront gateway. Mr. O’Flaherty explained that CBC has had great success in introducing sailing to a diverse group of Providence residents from inner-city youths to young professionals. He sees the potential for CBC to partner with the development group as a way to incorporate additional infrastructure to establish a public access small sailboat rental operation within the marina facility. A redeveloped marina facility would be well-suited to rent small keelboats under 25 ft. in length that could utilize the waters between India Point Park and Fields Point.



Figure 6. Stand-Up-Paddling (SUP) in the Providence River

In addition to providing public sailboat rentals, the facility would be well-suited to provide both kayak and SUP rentals and excursion tours through Waterplace Park and the Seekonk River. It is recommended that this type of activity be minimized in the waters adjacent to the Port of Providence so as not to impede commercial ship traffic. Currently, there is no such operation within the Providence metro area, with the closest being located in Wickford and Lincoln. A variety of watersports rentals will add recreational vibrancy to the facility, boosting the overall

vision of providing public access to the waterfront. Individual rentals and groups could be directed through the Hurricane Barrier, past the historic architecture of the East Side, and into the heart of DOWNCITY and Waterplace. The sight of kayakers and SUP’ers navigating the waters adjacent to the Riverwalk would provide added visibility and awareness to the redeveloped Shooters site and draw positive attention to the opportunities facilitated by public waterfront access.

### Seasonal Boaters

Two comparable marina facilities in the immediate area provide seasonal slip leases. Downtown Marina is located adjacent to the Hot Club immediately within the Fox Point

Hurricane Barrier, and Oyster House Marina is located in East Providence next to the Washington Bridge. Each facility caters to vessels primarily under 40 ft. in length. The Downtown Marina is adversely affected by the navigation constraint put in place by the Hurricane Barrier, thus filtering potential slip takers to those vessels that can safely navigate through the barrier. Current occupancy rates, as obtained by Harbor, are in the range of 25-50%. According to marina managers at both facilities, this occupancy range has been consistent over the past several years. Occupancies were higher prior to 2007, estimated at 75%. This data does not seem to support an emphasis on providing seasonal slips at the Shooters facility. This is not to say that there is no potential for seasonal slip takers, but rather that it is recommended that a facility should not dedicate a large percentage of the potential leasable dockage to seasonal slips.

The target slip sizes for seasonal slip holders are anticipated to fall within the 30–45 ft. range, with some anticipated patronage by vessels up to 55 ft. in length. Additionally, larger craft and mega-yachts upwards of 100 ft. in length may potentially seek to utilize the facility. Accommodating mega-yachts should be considered but not a focal point for the marina development. Infrastructure necessary to accommodate such vessels is costly and requires a great deal of leasable dock space. It is recommended that larger vessels be accommodated along longer lengths of main walkway docks rather than within dedicated slips. This is the most flexible form of dockage, capable of supporting a diversity of yachts taking into account a variety of lengths and widths.

#### **4. RECOMMENDED MARINA OFFERINGS & AMENITIES**

As highlighted thus far, the marina facility will likely cater to a broad mix of user groups that include casual-transients, transients, seasonals, sailboat/kayak rentals, and potentially a ferry/excursion vessel. Meeting the needs of each distinct group is important to the success of the marina facility. The following section highlights such amenities and offerings as they pertain to each individual group:

##### Transient Boaters

- In-Slip Power: a mix of 30A/110V and 50A/220V
  - The majority of the slips should provide 30A service since it is likely that vessels will be sized less than 50 ft.
- Other Slip Utilities: water, WiFi
  - It is anticipated that transient vessels will likely stay less than two nights, thus cable TV and telephone are unnecessary
- Slips: double-loaded berths
  - Vessels docked side-by-side, perpendicular to the main dock

##### Casual-Transients

- In-Slip Power: none
  - Patrons will be utilizing the facility for tie-up only
- Other Slip Utilities: water



- Slips: side-tie
  - Located along longer stretches of dockage where vessels of varying sizes can be accommodated with ease

#### Seasonal Boaters

- In-Slip Power: a mix of 30A/110V and 50A/220V
  - The majority of the slips should provide 30A service since it is likely that the majority of vessels will be sized less than 50 ft.
- Other Slip Utilities: water, Cable TV, WiFi, Telephone
- Slips: double loaded berths
  - Vessels docked side-by-side, perpendicular to the main dock
- Mega-Yacht Berths
  - Power: 100A/480V or similar
  - Vessels berthed along longer stretches of dock and at the end of dock trees (T-Heads)

#### Small Sailboat/Kayak/SUP Rentals

- Dock Infrastructure: rental kiosk structure, floating racks for kayaks, and floating launch ramp
- In-Slip Power: 30A/110V
- Other Slip Utilities: water
- Slips
  - Double-loaded berths with potential for moorings
  - Open dock space with storage racks

#### Ferry/Excursion Vessel

- In-Slip Power: upwards of 100A/480V
  - This is highly dependent on vessel type and manufacturer
- Other Slip Utilities: water, WiFi
- Slips: Side Tie
  - A dedicated side-tie area in close proximity to the shore front
  - Access to this area should be capable of handling patrons with disabilities

#### Other General Marina Offerings

General marina offerings that increase the overall experience of the facility and promote return patronage include the following:

- Well-built, well-maintained floating docks
  - Concrete docks with wide main walkways

- Properly designed fairways and berth widths
  - Currents in the area are quite strong requiring an attention to this design element within the initial planning phases of the marina
- Site security
  - Upland facility shall be well lit with a security gate located at the entry gangway and a night-time security service
- Marina Pumpout

## 5. INTERMODAL TRANSPORTATION

As the name suggests, the Head of the Bay Gateway should serve as an intermodal transportation gateway or hub, allowing for the public to come ashore by boat and be dispersed into the city via several modes of terrestrial transportation (and the reverse). This is one of the most integral aspects of the future development; being able to conveniently transport patrons to and from the site will increase the visitor's overall experience and lead to return patronage. Though the location is accessible by automobile, the beauty of this site is its accessibility by boat, by foot, and by public transportation. Being located at the terminus of India Point Park will lend well to its exposure to local park users, whom the City of Providence has estimated to be upwards of 220,000 annual visitors. Harbor envisions that several forms of shoreside transportation be provided on-site, including local trolley service, bicycle rentals, and potentially Segway rentals. Further, as means of establishing a direct linkage from the India Point waterfront to Riverwalk and DOWNCITY area, a shallow-draft launch is employed.

Local trolley service could be provided by the *RI Public Transit Authority* (RIPTA). RIPTA currently connects the East Side with Federal Hill via the Providence Link. The present route runs along Wickenden Street, located approximately ¼ mile from Shooters. Future development should explore the potential for modifying this route to include a stop at the Shooters site. This would provide the potential to transport passengers conveniently throughout the City. The facility could support a bicycle rental operation and offer guided bicycle tours of the city. Lastly, Segway tours are becoming an ever-popular way for visiting tourists to move about a city in an exciting manner as part of a guided tour. For reference, Segway of Newport offers a program called the Land and Sea Tour in which a Segway tour is paired with a 12-Metre sailing charter. This type of excursion pairing could also work well at Shooters.

HARBOR envisions that the most appropriate method of linking the Shooters site with DOWNCITY Providence would be provided by a shallow-draft launch service. As part of the Providence River redevelopment, five landings were installed at various locations along the banks of the river as shown in the following table and drawing. The only present users of the dockage are the Providence Harbormaster and the Gondola Providence. This is a grossly underutilized attribute to the Riverwalk development, given the strategic locations of the landings and the like-new, underutilized infrastructure.



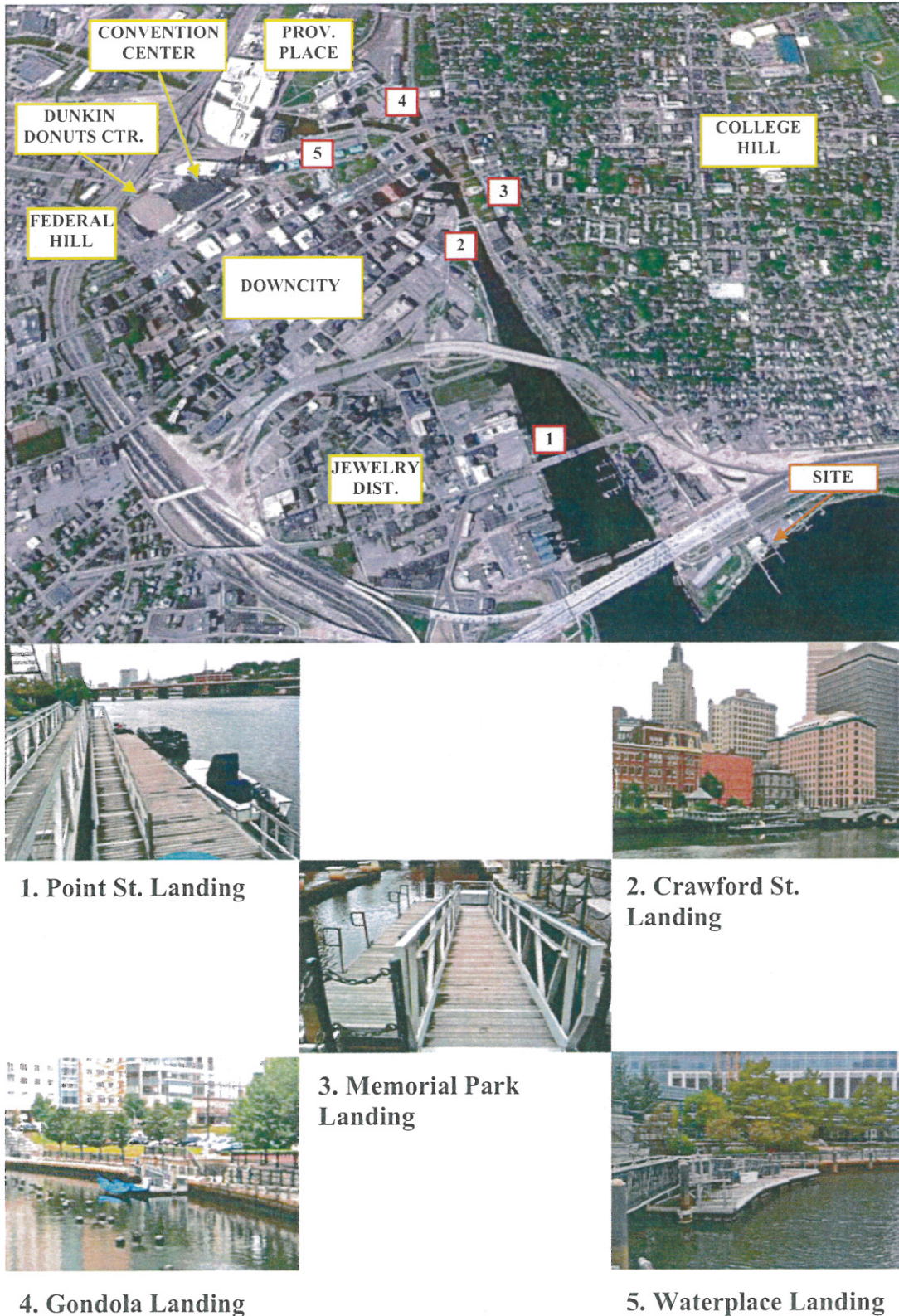


Figure 7. Public landings along the Providence Riverwalk



**Table 2. Boat Landings located along the Providence Riverwalk**

<b>Landing Location</b>	<b>Adjacent Areas of Interest</b>
Point St.	Jewelry Dist.
Dyer Ave.	Financial Dist, Westminster St, Theatre Dist.
Memorial Park	East Side
Gondola Landing	State House, Residence Towers
Waterplace	Providence Place, Convention Center

## **6. RECOMMENDED UPLAND OFFERINGS & AMENITIES**

In its present condition, the approximate 1.4-acre site is occupied by a three-story concrete building and parking lot. A conditions assessment of the three-story structure was *not* completed as part of this report. No assumptions shall be made regarding its suitability for reuse in a future development project. It should be assumed that all upland structures will need to be rebuilt to suit the facilities requirements outlined herein.

Integration of a waterfront dining facility into the development plan was an overwhelming recommendation gleaned from HARBOR's interview process. Many interview subjects commented that the Upper Bay has been void of any such establishment since the closure of Rocky Point Park. HARBOR further recommends that the facility could support two separate facilities: an outdoor New England style "seafood-shack" and an upscale indoor dining/function space located on the upper levels. Ideally, both facilities would share the same kitchen space.

The seafood shack would serve quintessential coastal Rhode Island fare such as fish and chips, fried clams, and lobster rolls. This informal, family-friendly eatery would be of particular appeal to casual-transient boaters, who seek out waterfront destinations for the pure enjoyment of arriving by boat and spending the afternoon in the sun with family and guests. A dining facility of this sort has the potential to become an attraction in itself, drawing patrons from the Providence metro area. As stated in an article posted on the online news site, *Providence Daily Dose*, titled "Providence Needs a Clam Shack," the author posed the question, "Why do I have to leave town for a clam cake?" Unique features of this outdoor eatery might include entertainment and performances by a steel drum band or even a Jimmy Buffet-type performer. The sounds of summertime music teamed with the aroma of fried clams and steamers will undoubtedly attract walk-in patronage from India Point Park and the Fox Point Neighborhood.

As much as the city would embrace a casual waterfront seafood eatery, Providence visitors and residents would equally welcome an upscale shoreside dining experience. Such a venue would capitalize on the panoramas offered by the Providence River. Situated at the precipice of a working waterfront, the India Point Park location would offer patrons a viewscape that is unparalleled by any other facility in the area. The presence of commercial boat traffic will serve to enhance the dining experience. Comparable facilities in the area are the Waterman Grille on the Seekonk River and Hemingway's on Greenwich Cove. Both facilities offer typical restaurant services in



addition to function space able to accommodate larger parties, banquets, weddings, *etc.* It is recommended that a similar type of facility be incorporated into the vision for the Shooters site. Such a venue should occupy the upper two levels of the building. The function space would sit atop the dining space, featuring an outdoor deck complemented by large, open windows or movable walls that allow for a seamless transition from outdoors to indoors. Transient boaters, seeking an alternative to spending an entire cruise in Newport or Watch Hill, will appreciate the convenience of a fine dining establishment linked with marina accommodations.



Figure 8. Fine dining along Baltimore's Inner Harbor

As a means of capturing pedestrian traffic from India Point Park and the Fox Point Neighborhood, an indoor/outdoor coffee and ice cream stand should be considered in future programming efforts. This portion of the upland facility would operate seasonally, coinciding with the boating season.

Seeing as though the boating season lasts no more than six months, the upland facility would lie dormant for the remainder of the year unless it includes year-round commercial



Figure 9. Sun Harbor Marina integrated commercial space

space. HARBOR envisions that the upland facility be integrated with mixed-use commercial space. The inclusion of mixed-use space would add vibrancy to the facility throughout both the winter and summer months. Additionally, professional office space such as law offices to specialty brokerages to design/consulting offices would provide a constant stream of pedestrian flow to the facility. This vision is exemplified by Sun Harbor Marina in San Diego. The Sun Harbor facility was fully renovated in 2005 to become the first LEED certified marina facility in the country. The commercial tenants located on premises include professional consultants, a restaurant, and marina-related offices create a synergy between boaters and the general public. This should serve as an ideal comparison to the Shooters Site which is seeking to establish a year-round presence along the Providence waterfront.

Limited commercial tenancy should be integrated into the lower level. Retail businesses enhanced by the waterfront would be the most appropriate here such as a watersports retailer specializing in kayaks, canoes, standup paddleboards, and active outdoor

clothing. This type of operation would be ideal in that it could be folded directly into the operation of a rentals and river touring agency. It is envisioned that kayak tours of Upper Narragansett Bay being run out of the Gateway would be a dynamic means of drawing the public into the facility and introducing them to the waterfront. Each commercial retail lease should require the tenant to maintain a year-round presence similar to what is required at Bowens Wharf in Newport. This will prevent the facility from going empty in the winter months when typical pedestrian patronage is at a minimum.

A marina center could house all resources specific to the marina operations under one integrated office space. This would support several operations including the marina office, visitors desk, and excursion boat operations desk. The office space would include the offices of the marina manager and staff and also a visitors' desk similar to that run out of the Providence Convention Center. A knowledgeable staff member would be available to offer visitors information regarding events, sightseeing tours, restaurants, *etc.* In the event that a ferry/excursion boat was operated from the Site, the administrative staff within the marina center would be able to provide onsite booking and information to marina patrons.

To enhance the mission of public access and promote awareness of Providence's waterfront heritage, an interactive classroom could be integrated into the facility. Various groups such as *Save the Bay*, *Providence Community Boating Center (CBC)*, the *Providence Historical Society*, the *International Yacht Restoration School (IYRS)*, *etc.* could host various learning opportunities through which an understanding of the waterfront could be fostered to both children and adults. For example, a wintertime course in boatbuilding could be offered, providing students with guidance to construct wooden rowing shells or dinghies. Furthermore, outreach programs could be offered to Providence schools in the form of both short day-courses and long-term after-school programs. Such opportunities would add life to the facility during the winter months when the marina and outdoor dining activity sits dormant.

As previously mentioned, the Site should serve as a gateway for intermodal transportation. In order to promote this aim, infrastructure should be provided to house a bicycle and/or Segway rental operation. The option to offer motor scooters could also be considered, but the infrastructure necessary to store the rental inventory may be too overwhelming to be completely found on-site. To further understand the operation of a bicycle and motor scooter rental business, HARBOR visited several such operations in Newport. It is a common practice to store the majority of the rental equipment in a nearby off-site location when not in use or when the business is closed. At a minimum, the Site should consider an outdoor kiosk located adjacent to India Street.



A portion of the Site should be left as open space, which would transition India Point Park's walking paths directly westward to the Site. This could be accommodated most appropriately along the waterfront, seaward of CBC's fenced-in boat storage area. HARBOR feels that a strong working relationship with CBC will be instrumental in enabling the Site to become an enhanced public-access facility that links India Point with the urban renewal projects planned as part of the I-Way project. Other features that could be accommodated in this open space



Figure 10. Art installation located along Boston Harbor Walk

include an interactive art installation potentially provided by RI School of Design (RISD) students or an artistic installation that highlights Providence's maritime history as seen along the Boston Harbor Walk. Activities or events to take place in the available open space might include an outdoor concert series and/or a shoreside farmers market.

To serve the entire facility (both the marina and upland development), a single comfort station should be provided. This element would include dedicated men's and women's restrooms and showers. During normal business hours the station should be left open for complete public access. In the evenings, however, a keycard should only be provided to marina patrons to access the comfort station to prevent vandalism.

In initial discussions with HOBG, HARBOR discussed the potential for a rack-storage facility to be developed onsite. Rack-storage provides an efficient method for the storage of vessels where they are stacked vertically in a steel framed structure. Oftentimes these structures are housed in an architecturally pleasing outer shell. Due to a combination of upland space constraints, costly infrastructure improvements, and a current lack in demand, HARBOR feels that a rack-storage facility would not be well-suited to the Shooters Site.

It should be mentioned that one of the greatest assets that the Site possesses is its visibility from the relocated I-195 corridor. The Site is literally 150 ft. from a captive audience of tens of thousands of commuters passing the Site each day. An important aspect of the Site's future development and success not only concerns its appearance from the waterfront but also how is it viewed from the elevated I-195 corridor. It is recommended that great attention to detail be considered here in how the structure intrinsically conveys the vision of being a Gateway to the Bay. An architect experienced with waterfront-related projects and intermodal transportation centers should be integrated into the general planning stages from the very beginning.

As part of this market assessment, parking requirements and other zoning elements were not evaluated by HARBOR. It is recommended that the future development take the necessary steps to understand the City's zoning ordinances and plan the upland development (including parking) accordingly.

## ***7. SLIP MIX RECOMMENDATIONS***

The determination of an optimum slip mix—that is, accounting for the quantity, type, and size of slips to be offered—is a critical element in marina planning and design that ensures a facility's ability to accommodate present demand and adapt to future trends. HARBOR formulated the following slip mix recommendations based upon a consideration of empirical data quantifying the demand at comparable local marina facilities and also anecdotal information obtained through interviews with local marina managers and patrons.

Based on demand projections, the slip mix at the redeveloped marina should accommodate the following elements:

- Slips for Ferry and Excursion Boats (150-300 ft.) – Ferries and excursion vessels shall be accommodated along dedicated spans of the main float sections.
- Transient/Seasonal Slips (2,000-3,000 ft.) - Slip sizes for both transient and seasonal slip holders shall range in size from 25-45 ft. A wide variety of vessel types and sizes may be accommodated using finger floats along the main walkways. In order to make the facility as flexible as possible, longer sections of docks should be dedicated to the side-tie of transient vessels that are flexible to accommodate anything from a 25-ft center console up to the occasional megayacht.
- Casual-Transient Slips (200-250 ft.) - Casual transient dockage for short-term use and restaurant guests shall be reserved along a smaller portion of main float sections.
- Dock Facilities for Boat Rental - As part of HARBOR's recommendations, small sailboat, kayak, and SUP rentals shall be folded into the facility. Sailboats under 25 ft. in length shall be accounted for in double loaded slips. Kayak and SUP racks shall be accommodated on a dedicated float able to stack up to 10-20 kayaks and SUP's. Further, this portion of the facility shall have a dedicated rental kiosk located adjacent to the rack storage float.



**APPENDIX A**

***Comparable Marina Facilities***

## Pawtuxet Cove Marina

69 Fort Avenue  
Cranston, RI

### Facility Information

<u>Berth Type</u>	<u>Berth Totals</u>	<u>Rate</u>	<u>Notes</u>
Transient	no dedicated	\$2.00/night	Transient berths available when seasonal slips are vacant
Seasonal	90	\$82-\$99 /ft/season	Seasonal slip are currently 95% occupied

<u>Amenities</u>	<u>Electric</u>	<u>Cable TV</u>	<u>Telephone</u>	<u>Fuel</u>	<u>Pumpout</u>
	30A	no	no	no	no

Dock Type Timber Floating Docks

Slip Type Double and single loaded

Slip Sizes 20, 35, 40 ft.

Boat Types Power: center consoles and cruisers

Upland Amenities/Attractions Facility is located within a small coastal town. No adjacent shore side amenities. Ample parking

### Representative Photos





## Port Edgewood Marina

1128 Narragansett Blvd.  
Cranston, RI

<http://www.portedgewood.com/default.asp>

### Facility Information

Berth Type	Berth Totals	Rate	Notes
Transient	no dedicated	\$2.00/night	Transient berths available when seasonal slips are vacant
Seasonal	160	\$72-\$99 /ft/season	Seasonal slip are currently 65% occupied

Amenities	Electric	Cable TV	Telephone	Fuel	Pumpout
	30A/50A	no	no	g&d	yes

**Dock Type** Timber Floating Docks

**Slip Type** Double and single loaded

**Slip Sizes** 20, 30, 35, 40 ft.

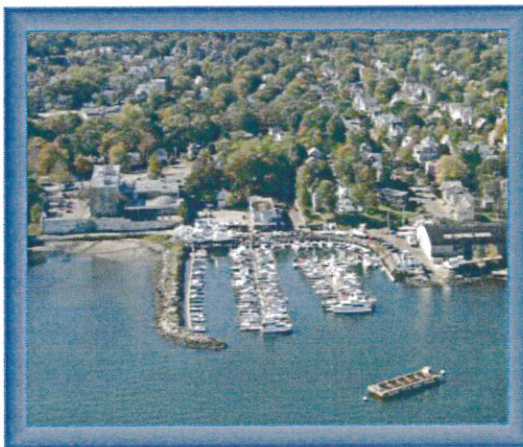
**Boat Types** Power: center consoles and cruisers; some sailboats

**Upland**

**Amenities/  
Attractions**

Facility is a full service boatyard located in a residential neighborhood. Limited shore side amenities. Ample parking

### Representative Photos



## ***EAST GREENWICH MARINA/ HEMENWAYS***

**28 WATER ST.  
EAST GREENWICH, RI 02818**  
<http://www.hemenways-eg.com/>

### ***Facility Information***

<b><u>Berth Type</u></b>	<b><u>Berth Totals</u></b>	<b><u>Rate</u></b>	<b><u>Notes</u></b>		
Transient	5 - 10	\$3.00/night	Slips reserved primarily for restaurant patrons		
Seasonal	85	\$130 /ft/season	Seasonal slip are currently 90% occupied		
<b><u>Amenities</u></b>	<i>Electric</i>	<i>Cable TV</i>	<i>Telephone</i>	<i>Fuel</i>	<i>Pumpout</i>
	30A/50A	no	no	no	no

**Dock Type** Timber Floating Docks

**Slip Type** Double loaded

**Slip Sizes** 25, 35, 40 ft.

**Boat Types** Mix of small to medium sized power and salboats

**Upland**



**Amenities/** Facility is located adjacent to Hemenways Restaurant.



**Attractions**

### ***Representative Photos***





<b>Harborside Lobstermania</b>					
38 Water St. EAST GREENWICH, RI 02818 <a href="http://www.harboursideri.com">http://www.harboursideri.com</a>					
<b>Facility Information</b>					
<u>Berth Type</u>	<u>Berth Totals</u>	<u>Rate</u>	<u>Notes</u>		
Transient	10	\$3.00/night	5 - 10 reserved transient slips		
Seasonal	5	\$75 /ft/season	Seasonal slip are currently 90% occupied		
<u>Amenities</u>	<u>Electric</u>	<u>Cable TV</u>	<u>Telephone</u>	<u>Fuel</u>	<u>Pumpout</u>
	30A/50A	no	no	no	no
<u>Dock Type</u> Timber Floating Docks <u>Slip Type</u> Double loaded <u>Slip Sizes</u> 35' and side tie <u>Boat Types</u> Mix of small to medium sized powerboats with ability to berth up to (1) 65' vessel  <u>Upland</u> <u>Amenities/Attractions</u> Facility is located at very active restaurant/nightclub.					
<b>Representative Photos</b>					
					

<h2 style="margin: 0;">Milt's Marina</h2> <p style="margin: 0;">20 Water St. EAST GREENWICH, RI 02818 <a href="http://www.twentywaterstreet.com/index.php">http://www.twentywaterstreet.com/index.php</a></p>					
Facility Information					
Berth Type	Berth Totals	Rate	Notes		
Transient	100 lf.	\$3.00/night	Reserved for restaurant patrons		
Seasonal	30	\$120 /ft/season	Seasonal slip are currently 100% occupied		
Amenities	Electric	Cable TV	Telephone	Fuel	Pumpout
	30A/50A	no	no	no	no
<p><b><u>Dock Type</u></b> Timber Floating Docks</p> <p><b><u>Slip Type</u></b> Double loaded and side tie</p> <p><b><u>Slip Sizes</u></b> 35' and side tie</p> <p><b><u>Boat Types</u></b> Mix of small to medium sized powerboats</p> <p><b><u>Upland</u></b></p> <p><b><u>Amenities/Attractions</u></b> Facility is located at large restaurant, pub, and banquet facility</p>					
Representative Photos					
					



## ***Brewer Greenwich Bay Marina***

**1 Masthead Dr.  
Warwick, RI 02886**

<http://www.byy.com/Warwick%20Greenwich%20Bay/index.cfm>

### ***Facility Information***

<b><u>Berth Type</u></b>	<b><u>Berth Totals</u></b>	<b><u>Rate</u></b>	<b><u>Notes</u></b>		
Transient	10	\$3.00/night			
Seasonal	500	\$95 - \$145 /ft/season	Seasonal slip are currently 90% occupied		
<b><u>Amenities</u></b>	<i>Electric</i>	<i>Cable TV</i>	<i>Telephone</i>	<i>Fuel</i>	<i>Pumpout</i>
	30A/50A/100A	yes	yes	g&d	yes

**Dock Type** Timber Floating Docks

**Slip Type** Double loaded and side tie

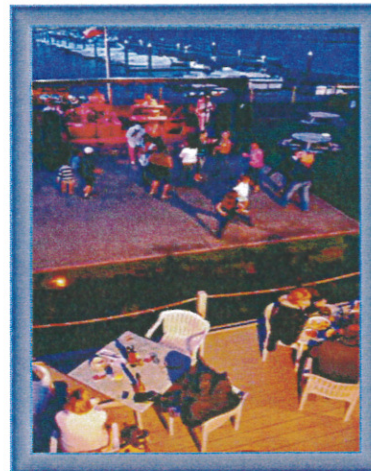
**Slip Sizes** 20',30',35' and side tie

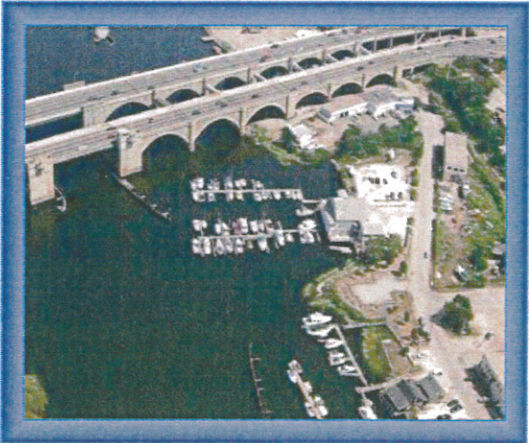

**Boat Types** Mix of small to medium sized powerboats and sailboats, with some mega-yachts

**Upland**

**Amenities/Attractions** Facility has full service boatyard, upland commercial space, and restaurant

### ***Representative Photos***



<h2 style="margin: 0;">Oyster House</h2> <p style="margin: 0;">28 Water St. East Providence, RI 02914</p>					
Facility Information					
Berth Type	Berth Totals	Rate	Notes		
Transient	no dedicated	\$2.00/night	Reserved for restaurant patrons		
Seasonal	54	\$65 /ft/season	Seasonal slip are currently 65% occupied		
Amenities	Electric	Cable TV	Telephone	Fuel	Pumpout
	30A	no	no	no	no
<p><b><u>Dock Type</u></b> Timber Floating Docks</p> <p><b><u>Slip Type</u></b> Single and Double loaded and side tie</p> <p><b><u>Slip Sizes</u></b> 30' and side tie</p> <p><b><u>Boat Types</u></b> Mix of small to medium sized sail and powerboats</p> <p><b><u>Upland Amenities/Attractions</u></b> Facility is in a run down section of waterfront. Restaurant and pub located on the upland</p>					
Representative Photos					
					



## ***Downtown Marina***

**525 S Water St.  
Providence, RI 02903**

### ***Facility Information***

<b><u>Berth Type</u></b>	<b><u>Berth Totals</u></b>	<b><u>Rate</u></b>	<b><u>Notes</u></b>
Transient	no dedicated	\$4.00/night	Reserved for restaurant patrons
Seasonal	56	\$75 /ft/season	Seasonal slip are currently <50% occupied

<b><u>Amenities</u></b>	<b><i>Electric</i></b>	<b><i>Cable TV</i></b>	<b><i>Telephone</i></b>	<b><i>Fuel</i></b>	<b><i>Pumpout</i></b>
	30A	no	no	no	no

**Dock Type** Timber Floating Docks  
**Slip Type** Single and Double loaded and side tie  
**Slip Sizes** 30' and 35'  
**Boat Types** Mix of small to medium sized powerboats

**Upland Amenities/Attractions** Facility is located within the hurricane barrier thus restrictive to navigation. Located adjacent to several restaurants

### ***Representative Photos***



**APPENDIX B**

***Marina Conceptual Planning***



## APPENDIX B

### Head of the Bay Gateway – Shooters Redevelopment

#### MARINA CONCEPTUAL PLANNING

##### ***B1. INTRODUCTION***

The *Head of the Bay Gateway Committee* (CLIENT) is exploring the potential redevelopment of the marina facility located at the former *Shooters Waterfront Café* (SITE). This facility is located on India Street at the junction between the Seekonk and Providence Rivers at the head of Narragansett Bay.

The following is a summary of the background information obtained by *Harbor Engineering, LLC* (HARBOR) that guided the development of the concept plans that accompany this report.

##### ***B2. BASE PLAN***

HARBOR was not provided an existing conditions plan of the SITE. In the absence of such information, HARBOR developed a base plan that took into account the following sources:

- Aerial imagery obtained from Google Earth dated May 1, 2010
- Aerial photograph obtained from *Rhode Island Geographic Information System* (RIGIS) Data Distribution System dated 1992
- Plan titled, “Seekonk River; Pawtucket, Providence and East Providence, Rhode Island; Condition Survey; 16-Foot Channel,” prepared by the U.S. Army Corps of Engineers dated October 12, 2007
- Plan with no title, source, or date that was obtained from a file at *Rhode Island Coastal Resources Management Council* (RI-CRMC) that included property line extensions and a seaward boundary in Providence Harbor

The referenced images were imported into AutoCAD and scaled accordingly such that similar shoreline features in the region agreed with one another. The resulting plans are for conceptual planning purposes and are to be considered approximate. It is recommended that a professional land surveyor conduct a full property and topographic survey (including the shoreline below mean low water datum) to ensure the current conditions are accurately documented and can be relied on as the project continues to evolve over time.



### ***B3. DEVELOPMENT BOUNDARIES***

#### ***B3a. Navigational Channel***

To understand the potential limits of a future marina, HARBOR reviewed the following documents:

- Report titled, “Providence Harbor: A Special Area Management Plan,” prepared by RI-CRMC, adapted November 22, 1983
- Plan titled, “Seekonk River; Pawtucket, Providence and East Providence, Rhode Island; Condition Survey; 16-Foot Channel,” prepared by the *U.S. Army Corps of Engineers* (USACE) dated October 12, 2007
- Plan titled, “Providence River and Harbor; Providence Rhode Island; Rock Removal After Dredge; Condition Survey; 40-Foot Channel,” prepared by the USACE dated December 12, 2007

For reference, federal channels are under the jurisdiction of the federal government and managed by the USACE. Regulations are in place that prevent structural development from encroaching into federal channels that could impede navigation or future dredging activities. To avoid problems with dredging the transition areas between the channel and nearby areas, all structures must respect a minimum setback of three times the marked channel depth.

After reviewing the documents noted above, it was concluded that there is no official channel that is retained/maintained by either the federal government or the State of Rhode Island. Figure B1 below offers the best graphical summary of where the federal channels are located in the vicinity of the SITE.

HARBOR reviewed the files at RI-CRMC to obtain background information on the previously authorized marina facility. Unfortunately there was only a limited amount of information available. A copy of an Assent (B89-3-14) was obtained that was issued to India Point Associates on April 5, 1990. No plans were attached to the Assent but the discussion mentions authorization to construct and maintain a 90-slip marina complex. Elsewhere in the file, a site plan of a proposed marina facility was found that presents a 128-slip marina that extends 538 feet to a 103-ft setback from a defined limit inside Providence Harbor. No reference information was included on the plan including plan title, date or who prepared the plan. Last, inside the same file HARBOR found a letter from Rhode Island’s Department of Transportation to RI-CRMC dated August 24, 2001 stating that approximately one-third of the floating docks including the fueling and pump-out had been removed from the Shooters Café marina facility in order to maintain a 150-foot setback from the ‘federal channel’.







HARBOR contacted Mr. Dan Goulet of RI-CRMC to ascertain if there was a specific boundary that needed to be respected when planning a new marina facility for the SITE. Mr. Goulet was not aware of any specific boundaries but referred HARBOR to the same USACE information HARBOR reviewed previously (noted above). Beyond the USACE references, Mr. Goulet recommended that the proposed facility stay within the same footprint of the facility constructed previously. Mr. Goulet offered this to be a more conservative approach and would likely offer the least amount of resistance from the various interested parties along the harbor.

Taking into account all the information obtained, HARBOR arbitrarily selected a 150-ft setback from the line found on the plan obtained from RI-CRMC's files. Planning also took into account 25-ft side-setbacks from what are believed to be the facility's property line extensions (RI-CRMC requirement). This puts the marina's floats no closer than 450 feet from the documented location of the local navigation markers maintained by USACE. In the future, it is recommended that a meeting be made with both RI-CRMC and USACE's New England District to review this setback and confirm it is adequate for current and future navigation in the area.

### ***B3b. Water Depths***

The largest vessels a marina can accommodate are commonly limited to the water depths the marina's basin can provide at low tide. Marinas should be able to provide depths to adequately berth a mix of both sail and power vessels. The following table is a baseline for the minimum water depths a facility should offer.

Boat Length	Water depths (ft)	
	Power boats	Sailboats
25	4	4
30	5	7
40	6	8
50	6.5	11
60	7	12.5

**Table B1. Minimum water depths for berths**

To avoid investing a significant amount of money into the feasibility effort, the CLIENT requested that a detailed hydrographic survey not be performed at this time. In the absence of this information, HARBOR collected water depths of the immediate area using the following sources of information:

- Soundings closest to the Harbor were taken from a plan titled, "Seekonk River; Pawtucket, Providence and East Providence, Rhode Island; Condition Survey; 16-Foot Channel" prepared by the U.S. Army Corps of Engineers dated October 12, 2007 with depths referring to Mean Lower Low Water (MLLW).
- Soundings in the vicinity of the SITE and its docks were taken by HARBOR using a boat and a portable depth sounder on 9/10/2010 and 9/14/2010. The location of HARBOR's soundings was approximated on a scaled plan and depths



were recorded relative to the current tide and later corrected to MLLW using the local National Oceanic and Atmospheric Administration's (NOAA) tidal station for Providence as a reference.

The compilation of soundings and water depths were imported into AutoCAD and used to create bathymetric contours which HARBOR referenced when it developed the conceptual marina layouts presented herein. The depths within the water sheet generally ranged from 12 - 28ft Mean Lower Low Water (MLLW), with the deeper water being in the center of the marina basin. Taking these depths into account, water depth will not be an issue for planning slip sizes throughout the defined marina basin.

#### ***B4. EXPOSURE***

##### ***B4a. Wave Action***

Winds blowing over water for extensive periods of time will generate waves. Wave heights are a function of wind speed, duration, and fetch. Fetch is defined as the open water distance between adjacent land masses. The higher the sustained wind blowing over long stretches of water for longer durations will produce the largest of wave heights. A site's direct exposure to long fetches increases the chances for storm-induced wave damage.

The proposed location for the berthing facility at the SITE is directly exposed to waves originating from the South through the Southeast directions (moving clockwise). Because of this potential exposure to both wind waves and commercial wake, a detailed exposure assessment is recommended. Such an effort will allow HARBOR to quantify the wave climate including potential wave height and period. Depending on HARBOR's future findings of the marina's anticipated wave climate, the CLIENT may want to consider integrating a wave attenuator float along the southern and western perimeter of the basin to offer a more tranquil marina basin for its patrons. Wave attenuator floats are essentially wide and deep draft floating docks located around the marina's perimeter that have an increased draft to help reflect wave energy away from the inner marina basin. Once the specifications of the wave climate are known, the properties (including proper width and depth) of a wave attenuator float can be determined to ensure it can provide a tranquil basin for the interior slips.

##### ***B4b. Current***

The current that flows between Narragansett Bay and the Providence and Seekonk Rivers is quite significant. According to information obtained from NOAA, the average current flow for the Seekonk River under the India Point Railroad Bridge is approximately +1.0 knots (+1.7 ft/sec) and -1.4 knots (-2.4 ft/sec) for the flood and ebb tidal flows respectively. Taking into account the predicted tides for 2010, the maximum predicted currents are slightly higher including a maximum flood current of +1.2 knots (+2 ft/sec) and ebb current of -1.8 knots (-3 ft/sec).

Generally speaking, currents of more than one (1) knot are usually too swift to sustain a safe and viable marina. Boats can be difficult to maneuver in constricted areas, especially when lesser experienced operators are at the helm (fairly common at recreational facilities). Current adds an additional variable that is difficult for most vessel operators to manage. This is due to the fact that boats become less maneuverable when they are broadside to current.

A few things to take into account include the waterway in front of the SITE is wider than the section of the River under the bridge and may potentially experience lesser current compared with the velocities mentioned above. In addition, a marina existed at the SITE before. Additional analysis would help better quantify the current in the vicinity of the SITE to better anticipate potential navigation issues and loads on the future marina's anchor system.

In the absence of additional analysis, HARBOR developed its layouts with the understanding that a 'significant' current runs through the area. With that in mind, HARBOR incorporated wider fairways and berths into its layouts (much wider than what is typically done for a more protected area) and did its best to have the majority of the slips run parallel with the shoreline (which is anticipated to generally match the direction of the current). Beyond these planning efforts, the future marina operator will need to anticipate having its staff be attentive to all patrons docking at the facility to minimize damage to boats and the docks.

#### ***B5. MARKET ASSESSMENT***

Taking into account the information gathered from HARBOR's Market Assessment Report, the conceptual plans for the marina facility took into account the following:

- Slips for Ferry and Excursion Boats (150 – 300 feet)
- Slips for Boat Rental (including kayaks, ~25ft sailboats and office space)  
Kayak area to include racks and ramp (carpeted dock that starts at the standard dock freeboard and drops to 6 inches where boats are placed in the water)
- Slips for Seasonal Slips (including boats ranging in size from 25-45 feet in length)
- Transient Slips (flexible 600-800 feet of side-tie)
- Casual Transient Slips (flexible 200-250 ft. of side-tie)

#### ***B6 SECURITY***

When it comes to planning city marinas, it will be important to incorporate both passive and active security measures into the facility. Passive measures include limiting the facility to a single gangway; installing a gate at the top of the gangway that would be locked at night and can be opened by overnight guests using a key card; placing the dock office in a central location and incorporating sufficient lighting throughout the facility.



Active measures include providing security on the docks 24 hours a day, seven days a week through the boating season.

## ***B7. LAYOUT DISCUSSION***

The two (2) layouts prepared by HARBOR offer a couple of options for the CLIENT's consideration taking into account variables outlined in earlier sections of this report. The available water depths found throughout the water sheet are an indication that the basin is naturally deep (where dredging will not be required) and will be more than sufficient to support the range in vessel sizes expected.

### ***B7a. Layout Option #1 (Total linear feet of dockage: 4,234)***

This layout offers a 16-ft wide wave attenuator float along the southern and western sides of the marina basin to ensure it is protected from the predominant summer southerly and commercial wakes that originate from the western side of the Providence River. Along the wave attenuator, the western 470 feet can be reserved for passenger ferries, tour/excursion boats or water taxis. The southern 447 feet could be reserved for cruise ship launches and larger transient vessels including mega yachts. The inside of the marina separates the user-types into three categories including dedicated slips for both seasonal and transient vessels, boat rental facility (including kayaks and small keelboats) and casual transient area for people looking to dock for a few hours.

### ***B7b. Layout Option #2 (Total linear feet of dockage: 4,051)***

This layout is very similar to Option #1 since it is difficult to change the orientation of the slips on account of the current that runs through the area. One significant difference is that this layout incorporates a single 380-ft long dock through the middle of the basin, instead of dedicated finger slips. This long dock offers more flexible dockage for a variety of different sized overnight transient vessels. Consistent with Option #1, the basin continues to offer dedicated space for casual transient vessels and a boat rental area, with the balance available for seasonal slips.

A passive security measure offered with this layout is having separate gangways for the marina and the casual dockage/rental area. This helps separate the high-traffic area from the seasonal and overnight transient boats docked at the marina. The dock office is strategically placed in the middle of the basin, near the gangway and entrance to both the transient and seasonal sections of the marina.

## ***B8. OTHER CONSIDERATIONS***

### ***B8a. Transient Slips***

It is recommended that a significant percentage of the facility be dedicated to transient slips to ensure there is activity at the facility throughout the season. In addition, the incorporation of dedicated transient slips within the facility will satisfy the grant



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Designed By:	Drawn by: AUK	Checked by:	
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GRAPHIC SCALE



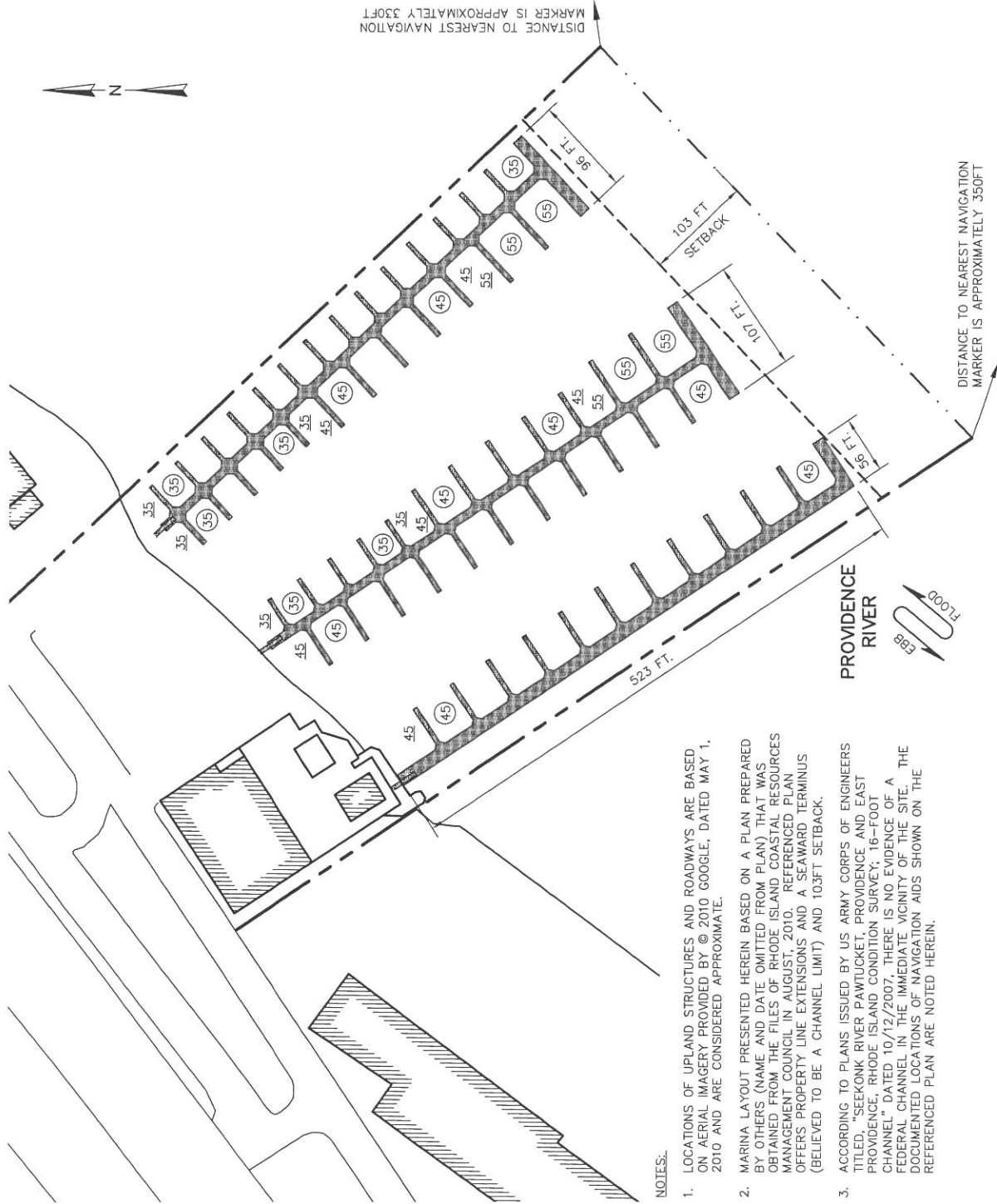
Client/Owner:  
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PO BOX 603166  
PROVIDENCE, RI 02906

Issued for:  
MARKET ASSESSMENT

Drawing Title:  
**SHOOTER'S CAFE MARINA**  
CIRCA 1990  
CONCEPTUAL MARINA LAYOUT

SHOOTERS MARINA SLIP MIX	
SLIP SIZE (FT)	DOCKAGE TOTAL SLIPS (FT)
25	0
35	52
45	66
55	10
SIDE-TIE	782
TOTAL	128

Project Number:  
Sheet of  
Drawing Number:



**NOTES:**

- LOCATIONS OF UPLAND STRUCTURES AND ROADWAYS ARE BASED ON AERIAL IMAGERY PROVIDED BY © 2010 GOOGLE, DATED MAY 1, 2010 AND ARE CONSIDERED APPROXIMATE.
- MARINA LAYOUT PRESENTED HEREIN BASED ON A PLAN PREPARED BY OTHERS (NAME AND DATE OMITTED FROM PLAN) THAT WAS OBTAINED FROM THE FILES OF RHODE ISLAND COASTAL RESOURCES MANAGEMENT COUNCIL IN AUGUST, 2010. REFERENCED PLAN OFFERS PROPERTY LINE EXTENSIONS AND A SEAWARD TERMINUS (BELIEVED TO BE A CHANNEL LIMIT) AND 103FT SETBACK.
- ACCORDING TO PLANS ISSUED BY US ARMY CORPS OF ENGINEERS TITLED, "SEEKONK RIVER PAWTUCKET, PROVIDENCE AND EAST PROVIDENCE, RHODE ISLAND CONDITION SURVEY; 16-FOOT CHANNEL" DATED 10/12/2007, THERE IS NO EVIDENCE OF A FEDERAL CHANNEL IN THE IMMEDIATE VICINITY OF THE SITE. THE DOCUMENTED LOCATIONS OF NAVIGATION AIDS SHOWN ON THE REFERENCED PLAN ARE NOTED HEREIN.





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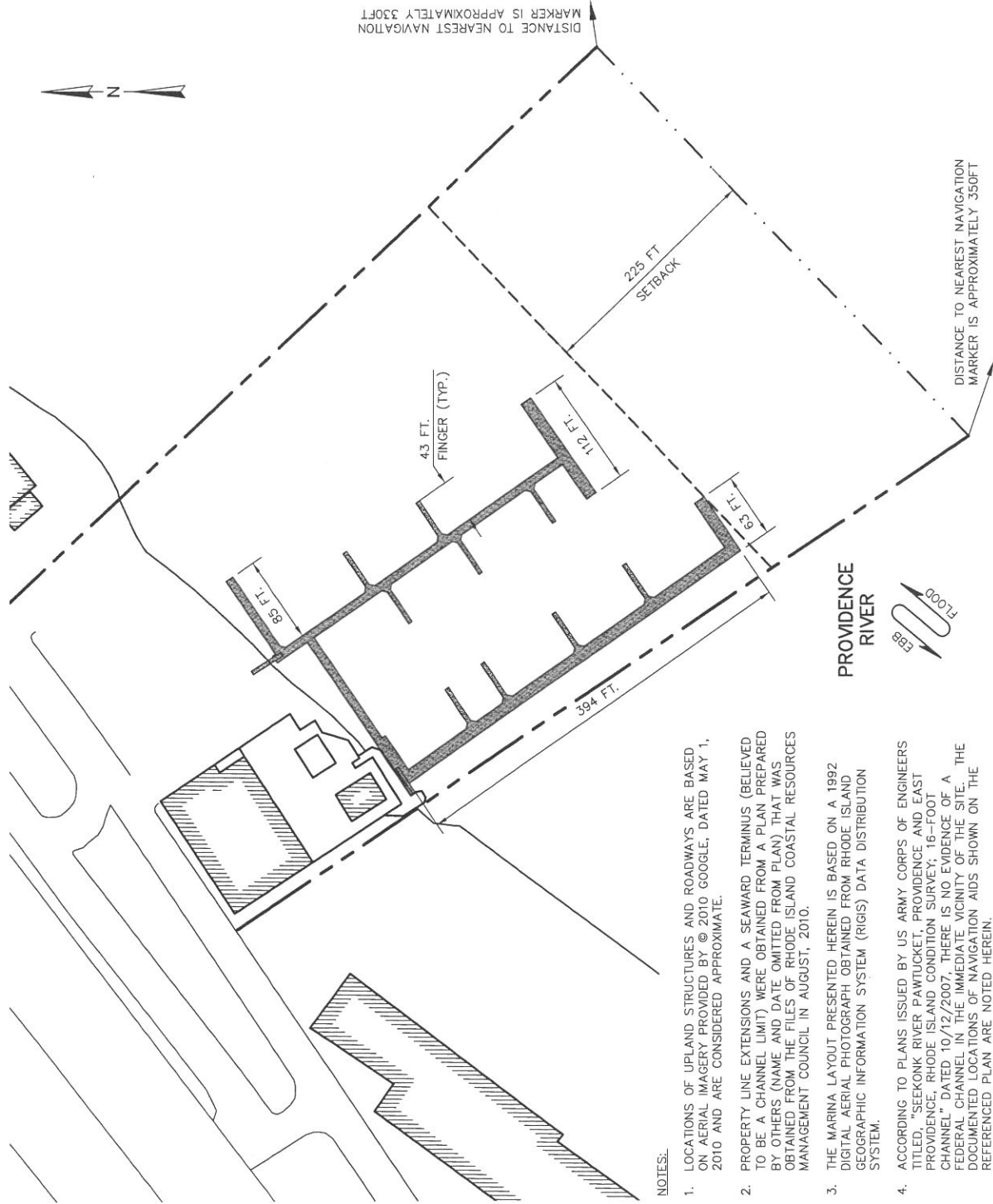
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## MARKET ASSESSMENT

## SHOOTER'S CAFE MARINA

### 1992 AS-BUILT LAYOUT

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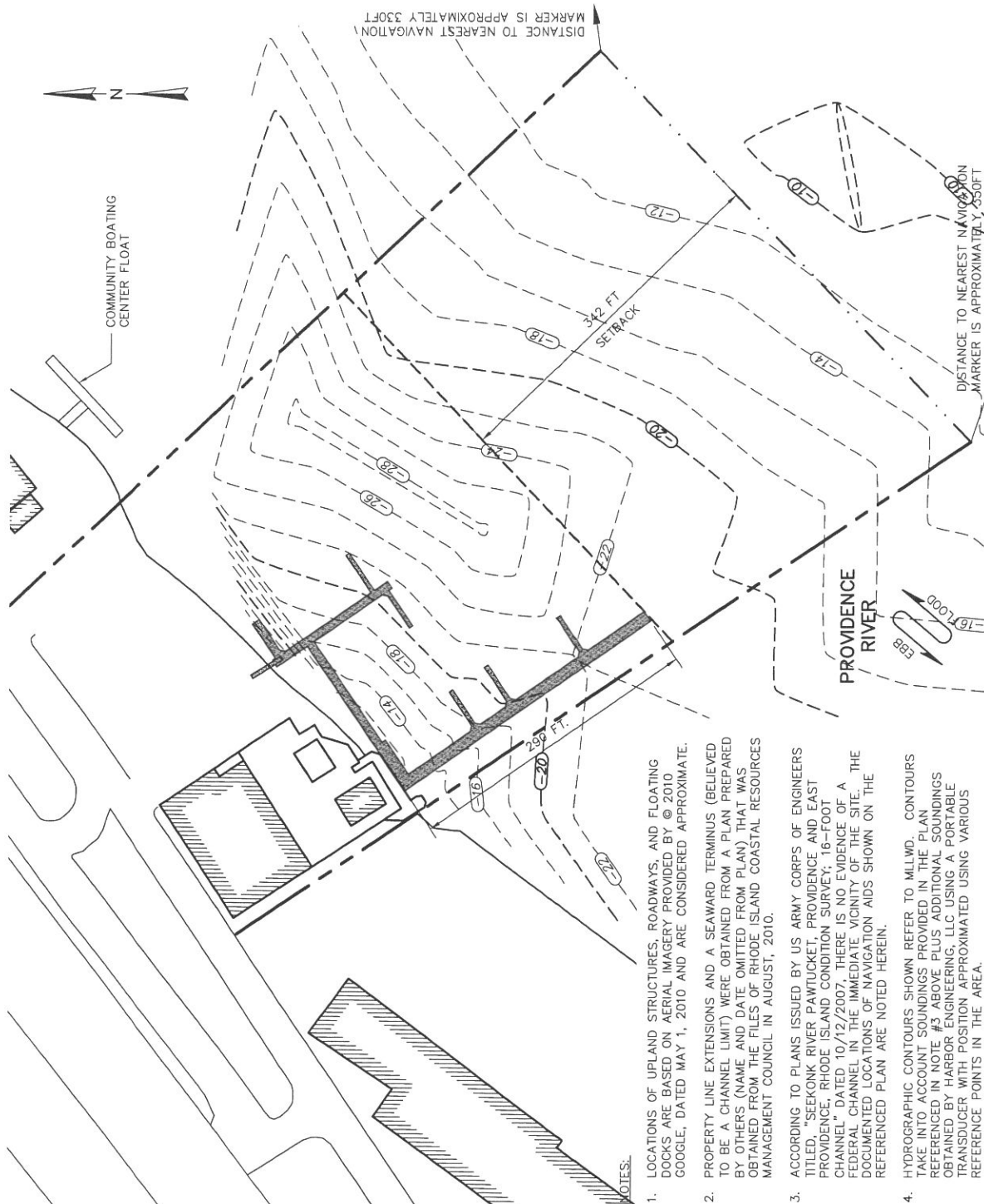
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**MARKET ASSESSMENT**

Drawing Title: SHOOTER'S CAFE MARINA  
EXISTING CONDITIONS

Project Number:	Sheet	of	Drawing Number:
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4. HYDROGRAPHIC CONTOURS SHOWN REFER TO MLLWD. CONTOURS TAKE INTO ACCOUNT SOUNDINGS PROVIDED IN THE PLAN REFERENCED IN NOTE #3 ABOVE PLUS ADDITIONAL SOUNDINGS OBTAINED BY HARBOR ENGINEERING, LLC USING A PORTABLE TRANSDUCER WITH POSITION APPROXIMATED USING VARIOUS REFERENCE POINTS IN THE AREA.



GRAPHIC SCALE

HEAD OF THE BAY GATEWAY  
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## MARKET ASSESSMENT

# SHOOTER'S CAFE MARINA

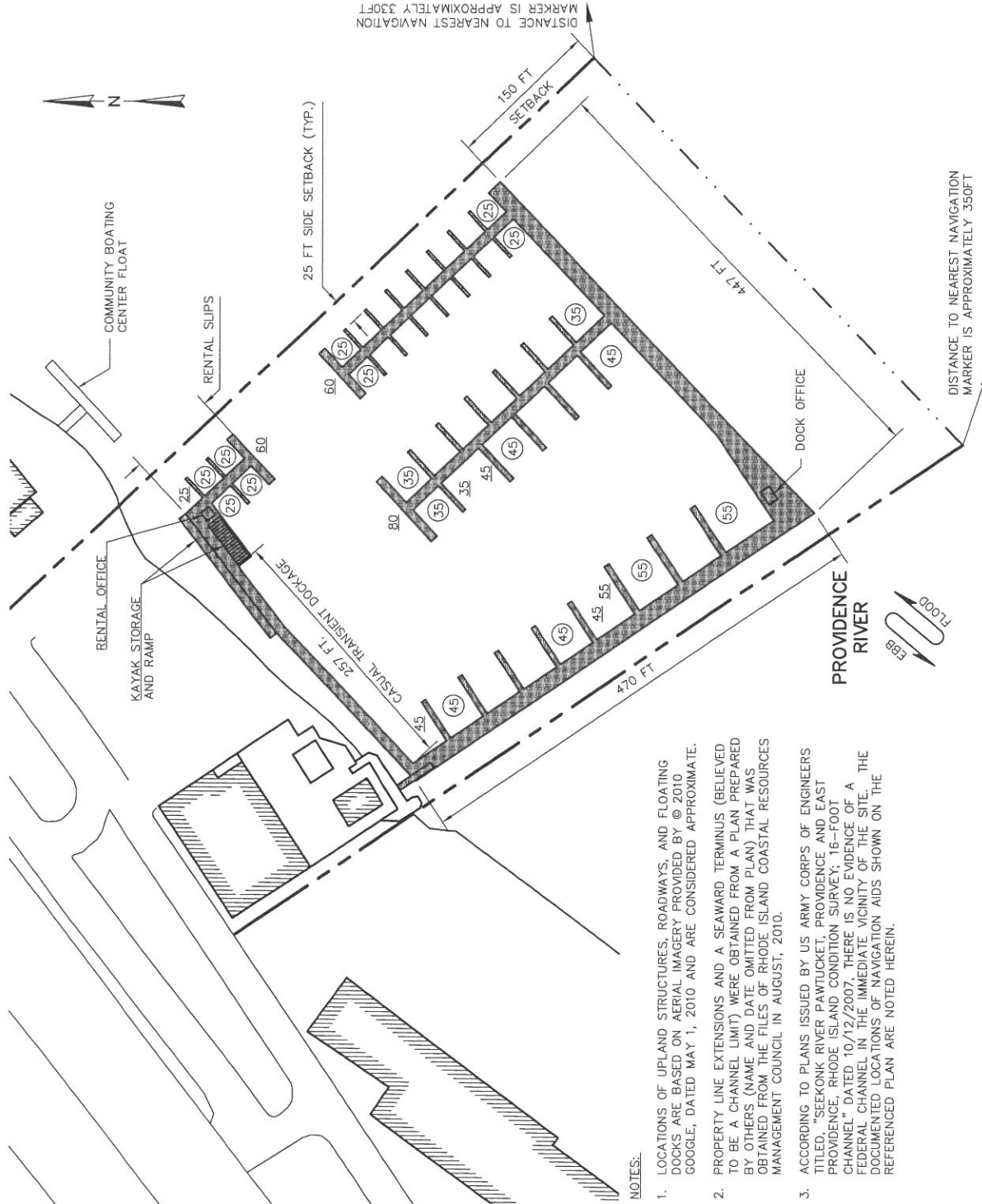
## PROPOSED LAYOUT

### OPTION #1

OPTION #1 SLIP MIX		
SLIP SIZE (FT)	TOTAL SLIPS	DOCKAGE (FT)
25	41	1025
35	17	595
45	19	855
55	7	385
SIDE-TIE		1374
TOTAL		4234

Sheet	of
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2. PROPERTY LINE EXTENSIONS AND A SEAWARD TERMINUS (BELIEVED TO BE A CHANNEL LIMIT) WERE OBTAINED FROM A PLAN PREPARED BY OTHERS (NAME AND DATE OMITTED FROM PLAN) THAT WAS OBTAINED FROM THE FILES OF RHODE ISLAND COASTAL RESOURCES MANAGEMENT COUNCIL IN AUGUST, 2010.

3. ACCORDING TO PLANS ISSUED BY US ARMY CORPS OF ENGINEERS TITLED, "SECONK RIVER PAWTUCKET, PROVIDENCE AND EAST PROVIDENCE, RHODE ISLAND CONDITION SURVEY; 16-FOOT CHANNEL," DATED 10/12/2007, THERE IS NO EVIDENCE OF A FEDERAL CHANNEL IN THE IMMEDIATE VICINITY OF THE SITE. THE DOCUMENTED LOCATIONS OF NAVIGATION AIDS SHOWN ON THE REFERENCED PLAN ARE NOTED HEREIN.



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Scale:	1"=100FT	Date:	9/24/2010
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GRAPHIC SCALE



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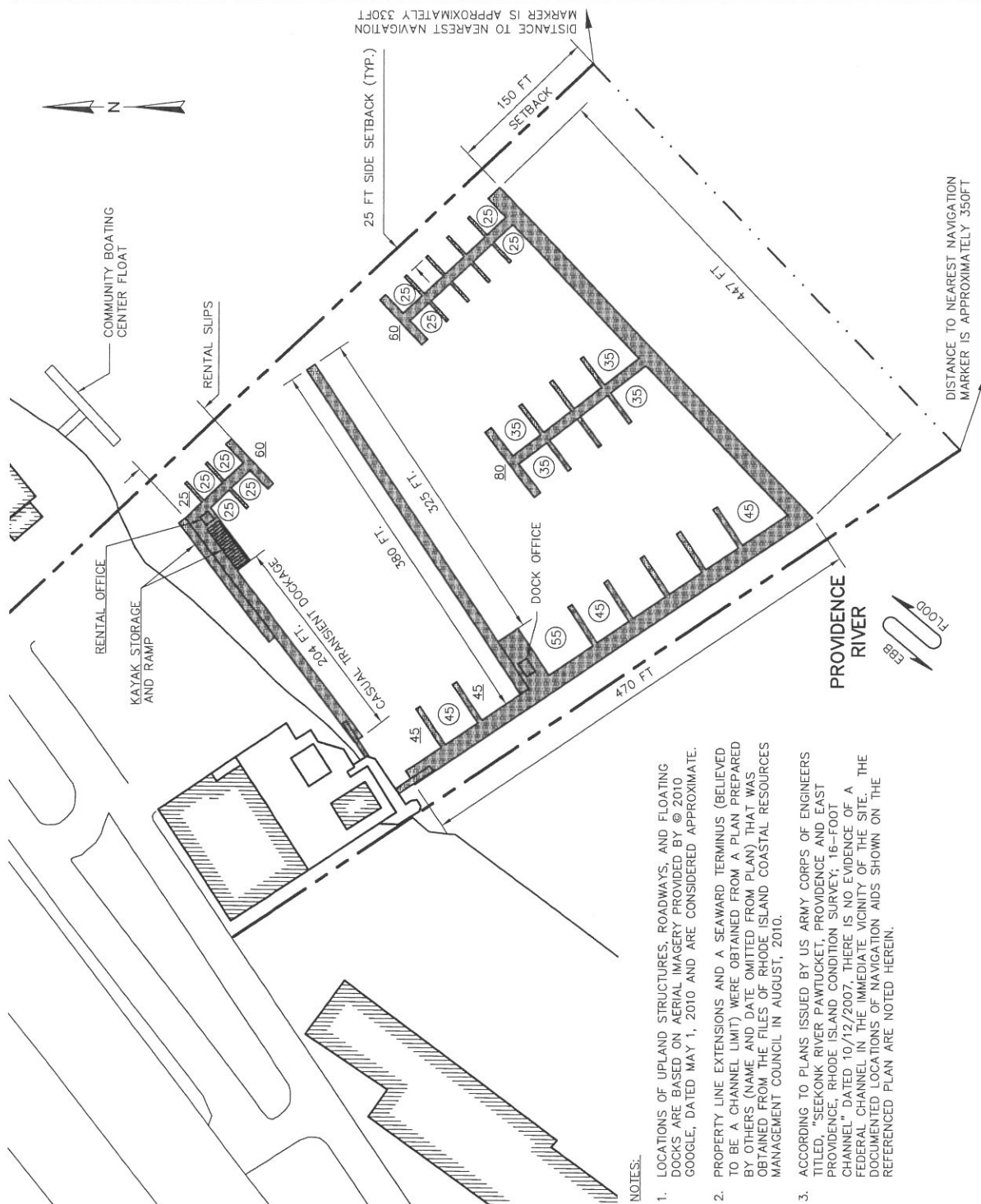
Issued for:

Drawing Title:  
**SHOOTER'S CAFE MARINA  
PROPOSED LAYOUT  
OPTION #2**

OPTION #2 SLIP MIX		
SLIP SIZE (FT)	TOTAL SLIPS	DOCKAGE (FT)
25	29	725
35	16	560
45	14	630
55	2	110
SIDE-TIE		2026
TOTAL	61	4051

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Drawing Number:



## NOTES:

1. LOCATIONS OF UPLAND STRUCTURES, ROADWAYS, AND FLOATING DOCKS ARE BASED ON AERIAL IMAGERY PROVIDED BY © 2010 GOOGLE, DATED MAY 1, 2010 AND ARE CONSIDERED APPROXIMATE.
2. PROPERTY LINE EXTENSIONS AND A SEAWARD TERMINUS (BELIEVED TO BE A CHANNEL LIMIT) WERE OBTAINED FROM A PLAN PREPARED BY OTHERS (NAME AND DATE OMITTED FROM PLAN) THAT WAS OBTAINED FROM THE FILES OF RHODE ISLAND COASTAL RESOURCES MANAGEMENT COUNCIL IN AUGUST, 2010.
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**APPENDIX C**

***Marina Development Economic Factors***

## APPENDIX C

### Head of the Bay Gateway – Shooters Redevelopment

#### MARINA REDEVELOPMENT ECONOMIC FACTORS

##### *CI. FACILITY OCCUPANCY RATES*

Occupancy is defined as a facility's ratio of occupied slips to total available slips. Further, occupancy rates are specific to various user groups that a facility caters to. These groups include seasonal and transient boaters, and commercial operators (ferry/excursion, fishing charters, and boat rentals). Occupancy rates are considered highly dynamic in that they can fluctuate to a wide range of factors including those specific to the individual facility, economic health, and weather.

A further breakdown of these factors include:

##### Facility-Specific Factors

- Location
- Slip fees
- Condition/amenities (marina)
- Condition/amenities (upland)

##### Economic Factors

- Overall condition of the local, national, and global economy (dictates discretionary income)
- Fuel price

##### Weather Factors

- Monthly weather trends
- Annual weather trends (rainy v. dry summer)
- Exposure to hurricanes/tropical disturbances

Facility-specific factors will affect each facility uniquely. For example, a seasonal boater that chooses to keep their boat at a facility based on price will tend to choose the lowest price option regardless of the facility's offerings. Moreover, a boater who is looking for a facility that has upgraded amenities and is in close proximity to upland attractions will tend to pay a premium.

Economic factors will affect facilities on a larger regional scale. The present economic downtrend has negatively affected nearly all facility occupancy rates in Rhode Island. Boaters that own trailer-able vessels may choose to avoid slip fees by using a boat ramp rather than storing it at a slip in a marina. Further, transient boaters may choose to curb their cruising behavior and keep to more local destinations. Finally, high fuel prices have





had a major impact on boating behavior. Beginning in the summer of 2007, skyrocketing fuel prices led boaters to keep their boats tied to the dock. This caused transient behavior to suffer but had little impact on marinas that dedicated most of their slips to seasonal use.

Similar to economic factors, weather can affect facilities on a larger regional basis as well. The boating season in the Northeast extends from May through October whereas the Southeast considers boating to be a 12-month business. Marina occupancies slowly increase though the shoulder seasons when regional boaters launch their vessels and distant boaters begin moving northward. After Labor Day, facility occupancies fade, as the weather turns cooler. This time of year also coincides with Hurricane season. As observed recently in Rhode Island, the threat from Hurricane Earl, caused many conscientious boaters to haul their boats in early September. Being so late in the season, many of these boats were not put back in the water and remain hauled in preparation for the winter.

#### ***C1a. Seasonal Occupancy Rates***

As part of this exercise, HARBOR evaluated various occupancy rates of area marinas to aid in forecasting the occupancy of seasonal and transient boaters specific to the Site. Table C1 below offers a summary of current occupancy rates observed by area marina facilities during the 2010 boating season.

**Table C1. Comparable Marina Occupancy Rates (Current)**

<b>Facility</b>	<b>Percentage of Occupied Slips</b>
<b>Downtown Marina</b>	35%
<b>Oyster House Marina</b>	65%
<b>Port Edgewood Marina</b>	65%
<b>Pawtuxet Cove Marina</b>	95%
<b>Brewer Greenwich Cove Marina</b>	90%
<b>Milt's Marina</b>	100%
<b>Hemenways/East Greenwich Marina</b>	90%
<b>Harborside Lobstermania</b>	90%
<b>Average Occupancy</b>	<b>79%</b>

Notes:

1. Occupancy rate is the ratio of occupied slip to total available slips
2. Occupancies based on observations/interviews conducted in August 2010

Table C2 below forecasts monthly occupancy rates (May through October) forecasted over a 5-year period. As mentioned above, the seasonality of the colder weather leads to lower occupancies in May and June and an ascending occupancy pattern through the warmer months of summer. After Labor Day, boats begin to be hauled and occupancy rates fall though October. HARBOR assumes that a redeveloped facility along the Providence waterfront may take up to 4-years to fully mature its occupancy rates. This is

quantified in a 10% yearly increase in seasonal occupancy from the end of Year 1 through Year 4.

**Table C2. Monthly Seasonal Occupancy Forecast (Year 1 – Year 5)**

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
<b>May</b>	15%	17%	18%	20%	20%
<b>June</b>	45%	50%	54%	60%	67%
<b>July</b>	65%	72%	79%	87%	87%
<b>Aug</b>	65%	72%	79%	87%	87%
<b>Sept</b>	45%	50%	54%	60%	60%
<b>Oct</b>	15%	17%	18%	20%	20%

*Assumptions:*

- 1. Shoulder seasons: (May through Mid June) and (Mid Sept through Oct)*
- 2. Rates consider occupancy of dedicated seasonal berths only*
- 3. A 10% annual increase in occupancy applied to each month from Yr. 1 through Yr. 4*
- 4. Facility occupancies considered to be fully matured after Yr. 4*

***C1b. Transient Occupancy Rates***

Transient occupancies are shown to vary on both a weekly and monthly basis. Local transient cruisers, tend to spend only weekends on their boats whereas regional cruisers may spend weeks or even months travelling from port to port. This behavior leads to an overall increase in occupancies from Thursday through Sunday and on summer holidays. HARBOR gained insight in cruising behavior by interviewing local facilities and ascertaining transient occupancy information. This information was utilized to forecast daily transient occupancies over the course of a typical week for each month of the Year 1 boating season. The information has been compiled in Table C3 below.

HARBOR utilized this information to forecast transient occupancy from Years 1 through 5 on a monthly basis as shown in Table C4. Similar to the exercise conducted for seasonal occupancy rates, HARBOR assumed a 10% yearly increase in seasonal occupancy from the end of Year 1 through Year 4. This yearly increase is based on that assumption that transient behavior will increase as the facility and the City of Providence becomes a more established destination.



**Table C3. Daily Transient Occupancy Forecast over the 6-month boating season (Yr. 1)**

	May	June	July	Aug	Sept	Oct
<b>Monday</b>	10%	10%	25%	25%	0%	0%
<b>Tuesday</b>	10%	10%	25%	25%	0%	0%
<b>Wednesday</b>	10%	10%	25%	25%	10%	0%
<b>Thursday</b>	25%	25%	35%	35%	25%	10%
<b>Friday</b>	35%	35%	65%	65%	35%	35%
<b>Saturday</b>	50%	50%	75%	75%	65%	50%
<b>Sunday</b>	35%	35%	50%	50%	35%	35%
<b>Average</b>	<b>25%</b>	<b>25%</b>	<b>43%</b>	<b>43%</b>	<b>24%</b>	<b>19%</b>

**Table C4. Monthly Transient Occupancy Forecast (Years 1 – 5)**

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
<b>May</b>	25%	28%	30%	33%	25%
<b>June</b>	25%	28%	30%	33%	32%
<b>July</b>	43%	47%	52%	57%	57%
<b>Aug</b>	43%	47%	52%	57%	57%
<b>Sept</b>	24%	27%	29%	32%	32%
<b>Oct</b>	19%	20%	22%	25%	25%
<b>Average</b>	<b>30%</b>	<b>33%</b>	<b>36%</b>	<b>40%</b>	<b>38%</b>

Assumptions:

1. Shoulder seasons: (May through Mid June) and (Mid Sept through Oct)
2. Rates consider occupancy of dedicated transient berths only
3. A 10% annual increase in occupancy applied to each month from Yr. 1 through Yr. 4
4. Facility occupancies considered to be fully matured after Yr. 4

## **C2. RATE STRUCTURE**

A summary of the marina rates for facilities comparable to the Shooters redevelopment is provided in Table C5 below. Rates are driven by the quality of each marina's offering as well as its location. The highest slip rate was found at Brewer Greenwich Bay Marina in Warwick. This is a full-service marina and boatyard featuring enhanced upland amenities including shore-side

waterfront dining, as does each of the Greenwich Cove facilities. Slip rates for each of these facilities was found to be higher than those without shore-side dining.

**Table C5. Regional Marina Rate Comparison**

Facility	Transient (\$/ft/night)	Seasonal (\$/ft/season)
Downtown Marina	\$4	\$75
Oyster House Marina	\$2	\$65
Port Edgewood Marina	\$2	\$99
Pawtuxet Cove Marina	\$2	\$99
Brewer Greenwich Cove Marina	\$3	\$145
Milt's Marina	\$3	\$120
Hemenways/East Greenwich Marina	\$3	\$130
Harborside Lobstermania	\$3	\$75
<b>Average Rate</b>	<b><u>\$2.75</u></b>	<b><u>\$101</u></b>

*Note:* For facilities with an indicated range of rates, the highest rate indicated is used in above summary

HARBOR feels that a marina facility enhanced with the features and amenities outlined in the main body of this report will be able to command a premium for both transient and seasonal dockage. Rates may initially be priced competitively in order to cultivate patronage and then be raised to reflect increased demand. Year-1 transient rates could be established at \$3 - \$4 /ft/night. Further, seasonal rates could be established at \$100 - \$130.

### ***C3. OPINION OF PROBABLE COST***

The following *Opinion of Probable Cost* (OPC) is a summary of professional and construction fees associated with the proposed marina improvements identified in Appendix B of this report. The purpose of the OPC is to provide an outline of costs associated with improvements anticipated for a particular project. The fees noted are for budgetary purposes based on various site assumptions and sources of information including bids received from marine contractors for similar projects.

Like any industry, pricing can fluctuate depending on several variables including location, supply/demand and the complexity of the project. The OPC includes a line item for contingencies to cover additional fees to account for variables beyond assumptions made. Such variables may include environmental issues and the possibility of rock interfering with the installation of the marina's anchor pilings.



Subsequent engineering tasks recommended include a local wind-wave assessment (to assess the Site's exposure including area winds and wave action) and geotechnical investigation (to assess the types of soils in the basin area). Both efforts will help determine the most effective and efficient size of a wave attenuator float and the size and quantity of pilings that are needed to anchor the facility in place.

Opinion of Probable Cost Summary Option #1						
<u>MATERIALS (Includes delivery)</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Cost</u>		<u>Total Cost</u>	
			<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
<b>Main Floats: Wave Attenuators</b>						
16 ft. width	15,720	sf	\$ 80	\$ 105	\$1,257,600	\$ 1,650,600
<b>Standard Floats: Timber vs Concrete</b>						
8 ft. width	2,800	sf	\$ 30.00	\$ 60.00	\$ 84,000	\$ 168,000
10 ft. width	8,770	sf	\$ 30.00	\$ 60.00	\$ 263,100	\$ 526,200
16 ft. width	1,040	sf	\$ 30.00	\$ 60.00	\$ 31,200	\$ 62,400
25 ft. width		sf	\$ 30.00	\$ 60.00	\$ -	\$ -
<b>Finger Floats: Timber vs Concrete</b>						
25 ft x 3 ft wide	1,275	sf	\$ 30.00	\$ 60.00	\$ 38,250	\$ 76,500
35 ft x 4 ft wide	980	sf	\$ 30.00	\$ 60.00	\$ 29,400	\$ 58,800
45 ft x 5 ft wide	2,025	sf	\$ 30.00	\$ 60.00	\$ 60,750	\$ 121,500
50 ft x 6 ft wide	900	sf	\$ 30.00	\$ 60.00	\$ 27,000	\$ 54,000
<b>Gangways</b>						
80 ft x 8 ft wide	1	ea	\$ 31,000	\$ 40,500	\$ 31,000	\$ 40,500
<b>Ladders</b>						
Emergency Ladders	6	ea	\$ 150	\$ 250	\$ 900	\$ 1,500
<b>Fire Extinguishers</b>						
Fire Extinguisher Cabinets and Extinguishers	13	ea	\$ 350	\$ 550	\$ 4,550	\$ 7,150
<b>Pumpout</b>						
Central peristaltic pump system with hydrants	1	ea	\$ 20,000	\$ 50,000	\$ 20,000	\$ 50,000
<b>CONSTRUCTION</b>						
Demolition & Disposal					\$ 100,000	\$ 100,000
Piling	80	piles	\$ 5,000	\$ 10,000	\$ 400,000	\$ 800,000
Float Installation			\$ 100,000	\$ 200,000	\$ 100,000	\$ 200,000
Access Piers		N/A			\$ -	\$ -
Gangways	1	ea	\$ 500	\$ 1,000	\$ 500	\$ 1,000
Ladders	6	ea	\$ 100	\$ 200	\$ 600	\$ 1,200
Fire Extinguisher Cabinets and Extinguishers	13	ea	\$ 100	\$ 150	\$ 1,300	\$ 1,950
Utilities (includes pedestals)						
Electric (<88ft)	50	slips	\$ 5,000	\$ 7,500	\$ 250,000	\$ 375,000
Electric (Excursion/MY Slips)	8	slips	\$ 50,000	\$ 60,000	\$ 400,000	\$ 480,000
Water	78	slips	\$ 1,500	\$ 1,500	\$ 117,000	\$ 117,000
Cable				TBD		
Sanitary				TBD		
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$3,217,150</b>	<b>\$ 4,893,300</b>
<b>SOFT COSTS</b>						
Mobilization					\$	50,000
Engineering Design, Project Management & Permits	10%	Construction Subtotal			\$	489,330
Performance Bond		Not Included				
Contingencies	10%	Construction Subtotal			\$	489,330
<b>TOTAL</b>					<b>\$4,245,810</b>	<b>\$ 5,921,960</b>

Note: No design effort was completed to prepare this Opinion of Probable Cost. In addition, HARBOR has no control over the cost or availability of labor, equipment or materials, or other market conditions that can affect a contractor's actual costs. HARBOR's Opinion of Probable Cost is made on the basis of its professional judgment and experience. HARBOR makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from HARBOR's summary above.





Opinion of Probable Cost Summary Option #2						
<u>MATERIALS (Includes delivery)</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Cost</u>		<u>Total Cost</u>	
			<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
<b>Main Floats: Wave Attenuators</b>						
16 ft. width	14,672	sf	\$ 80	\$ 105	\$1,173,760	\$ 1,540,560
<b>Standard Floats: Timber vs Concrete</b>						
8 ft. width	2,800	sf	\$ 30.00	\$ 60.00	\$ 84,000	\$ 168,000
10 ft. width	10,140	sf	\$ 30.00	\$ 60.00	\$ 304,200	\$ 608,400
16 ft. width	1,040	sf	\$ 30.00	\$ 60.00	\$ 31,200	\$ 62,400
25 ft. width	1,375	sf	\$ 30.00	\$ 60.00	\$ 41,250	\$ 82,500
<b>Finger Floats: Timber vs Concrete</b>						
25 ft x 3 ft wide	825	sf	\$ 30.00	\$ 60.00	\$ 24,750	\$ 49,500
35 ft x 4 ft wide	840	sf	\$ 30.00	\$ 60.00	\$ 25,200	\$ 50,400
45 ft x 5 ft wide	1,575	sf	\$ 30.00	\$ 60.00	\$ 47,250	\$ 94,500
50 ft x 6 ft wide	0	sf	\$ 30.00	\$ 60.00	\$ -	\$ -
<b>Gangways</b>						
80 ft x 8 ft wide	1	ea	\$ 31,000	\$ 40,500	\$ 31,000	\$ 40,500
30 ft x 4 ft wide	1	ea	\$ 5,000	\$ 6,000	\$ 5,000	\$ 6,000
<b>Ladders</b>						
Emergency Ladders	6	ea	\$ 150	\$ 250	\$ 900	\$ 1,500
<b>Fire Extinguishers</b>						
Fire Extinguisher Cabinets and Extinguishers	13	ea	\$ 350	\$ 550	\$ 4,550	\$ 7,150
<b>Pumpout</b>						
Central peristaltic pump system with hydrants	1	ea	\$ 20,000	\$ 50,000	\$ 20,000	\$ 50,000
<b>CONSTRUCTION</b>						
Demolition & Disposal					\$ 100,000	\$ 100,000
Piling	80	piles	\$ 5,000	\$ 10,000	\$ 400,000	\$ 800,000
Float Installation			\$ 100,000	\$ 200,000	\$ 100,000	\$ 200,000
Access Piers		N/A			\$ -	\$ -
Gangways	2	ea	\$ 500	\$ 1,000	\$ 1,000	\$ 2,000
Ladders	6	ea	\$ 100	\$ 200	\$ 600	\$ 1,200
Fire Extinguisher Cabinets and Extinguishers	13	ea	\$ 100	\$ 150	\$ 1,300	\$ 1,950
Utilities (includes pedestals)						
Electric (<88ft)	50	slips	\$ 5,000	\$ 7,500	\$ 250,000	\$ 375,000
Electric (Excursion/MY Slips)	8	slips	\$ 50,000	\$ 60,000	\$ 400,000	\$ 480,000
Water	78	slips	\$ 1,500	\$ 1,500	\$ 117,000	\$ 117,000
Cable				TBD		
Sanitary				TBD		
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$3,162,960</b>	<b>\$ 4,838,560</b>
<b>SOFT COSTS</b>						
Mobilization					\$	50,000
Engineering Design, Project Management & Permits	10%	Construction Subtotal			\$	483,856
Performance Bond		Not Included				
Contingencies	10%	Construction Subtotal			\$	483,856
<b>TOTAL</b>					<b>\$4,180,672</b>	<b>\$ 5,856,272</b>

Note: No design effort was completed to prepare this Opinion of Probable Cost. In addition, HARBOR has no control over the cost or availability of labor, equipment or materials, or other market conditions that can affect a contractor's actual costs. HARBOR's Opinion of Probable Cost is made on the basis of its professional judgment and experience. HARBOR makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from HARBOR's summary above.



