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Portside: Promoting Growth Through Urban Tourism

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Miami, Fl

Portside: Promoting Growth Through Urban Tourism

A Design Thesis Submitted to the
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of North Dakota State University

By

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Statement of Intent

Abstract

Shifts in tourism over the last forty years have evolved and gone back to large urban cities, and as a result the practice of urban tourism has grown and been moved to the forefront of many city planning efforts. Urban Designers, City Planners, and Architects have all been major contributors to this industry but a field that hasn't had much say is Landscape Architecture. Therefore this thesis will look to highlight the role that Landscape Architecture can play in shaping Urban Tourism. The city of Miami has desirable traits in place that tourists look for (culture, weather, etc) yet still has a lot of potential in terms of design and technology. This study is important for the future of Landscape Architecture because it gives people in the Urban Tourism field a look at how Landscape Architecture can draw people to a site, and on a site scale it's important for Miami because it can enhance an already strong tourism industry. A well designed urban district that uses the augmented reality technology to guide visitors and make it easier for them to experience the site can enhance the tourism industry in terms of social activities and technological factors at the Port of Miami site, and give the city a landmark landscape that tourists and residents can easily identify with Miami. A large amount of data will be collected through city archives and GIS data, it will be important to read information about how augmented reality works, and finally case studies will be used to give insight of already successful projects. The end result of this thesis will be a popular location within the city of Miami that is easily navigated by tourists, yet still visited by residents for the amenities that are offered. Through landscape architecture and urban design practices it will be a district that is a landmark for the city and socially accepted as a good place to visit, eat, stay, etc. Urban tourism is the future of planning and designing for tourists, and augmented reality is the future of technology. While augmented reality has been used in other industries already (Lee, 2012) this project will be significant because it will be the first time it is combined with landscape architecture to benefit tourists.

Problem Statement

How do you design an urban tourist precinct, in terms of accommodations, activities, and transportation/wayfinding, without neglecting residents of Miami?

Project Typology

Tourism as an industry has been around for as long as people have been able to travel. While it is true that large cities have always been able to attract visitors in one shape or another, for a long time the most popular tourist destinations were rural and seaside resorts. However in recent years that has changed and the shift in tourism has gone back to large urban areas meaning that large cities are now the most important type of tourist destination (Law, 2003). From this the term Urban Tourism has emerged as a way to define this shift and it is gaining traction within urban development policies as a positive way to develop cities so that they look out for tourist's interests as well as the well-being of residents (Towards Quality Urban Tourism, 2000). Urban tourism is still a relatively young concept (only starting up about 40 years ago) and while it has been useful as a tool for architects, urban designers, and planners it is still an area that has a lot of room to grow and evolve (Law, 2003).

As mentioned previously urban tourism while a young study is being used a lot by architects, urban designers, and planners. This thesis starts to look at the different ways that landscape architecture can play and the role that it can take on in the urban tourism concept.

Miami as a city is already on the map in terms of tourism being ranked twentieth on the U.S. News Travel list of 2012 (U.S. News, 2012). It has an ideal location along the ocean, great culture, and a warm climate which makes it a no brainer for vacations, business trips, etc. The site selected (Port of Miami) is located right off the shore of downtown Miami, and welcomes millions of visitors each year off of cruise ships (PortMiami, 2012). It's location, open space to develop, lack of anything other than impermeable surfaces, and sheer number of people passing through it on a daily basis offers a unique chance to try out these new urban tourism ideas. From this research a hypothesis has been formed: a well designed urban precinct that uses the augmented reality technology can enhance the tourism industry in terms of accommodations, activities, and transportation/ wayfinding at the Port of Miami site, and give the city a landmark landscape that tourists and residents can easily identify with Miami.

Definition:

A distinctive geographic area within a larger urban area, characterized by a concentration of tourist-related land uses, activities and visitation, with fairly definable boundaries.

Hayllar, Griffin, Edwards

THESIS PROPOSAL

Narrative

This type of project was very interesting to me for a number of reasons: the first one being that over the last few years urban design has been a topic that I have enjoyed working on, and the second being that I enjoy traveling and seeing new places. It became very clear to me that a large scale urban setting that served the tourist population would be an ideal project for me to take on. Miami offers exactly what I was looking for in terms of a large, urban city and a major tourist destination. Tourism as an industry is becoming very large and this project allowed me to understand the roles that landscape architecture can play in that industry.

User/Client Description

Client_The City of Miami, FL
Miami, FL is a city that knows and appreciates the value and role that tourists play in shaping a city's economy, identity, and overall success. Also, with its tropical climate and location it understands that a well designed green space is very popular with tourists and residents alike, and because of this Miami has a lot of park spaces in varying states of repair.

Portside will be the project that the city of Miami takes on in an effort to further there ranking as a top tourist destination. It will be a city owned park/mixed-use space that will continue to rise their stock in the tourist industry. The city will be responsible for the maintanence and upkeep of the site upon completion.

User A_Tourists
Portside is designed specefically with tourists in mind and therefor the major project elements and design vision is meant to provide an enjoyable and worthwhile experience for first time or reoccuring visitors to the city of Miami. Specefically the cruise industry crowd that will be so close to the site will be tapped into as the main focus group. That group will include many people but the majority of those visitors will most likely by families and older couples with the younger generation being the minority. The projected number for this group is over 4,000,000 people a year looking for short term activities that they can enjoy in the little time they have before or after their cruise ship leaves or arrives.

User B_Residents
While the site is designed with tourists in mind it was important that residents were not forgot about because they offer a year round presence to the site that tourists cannot. Therefor it was important that design elements were based on tourist activities but that they also offered residents of Miami an enjoy able space to visit.

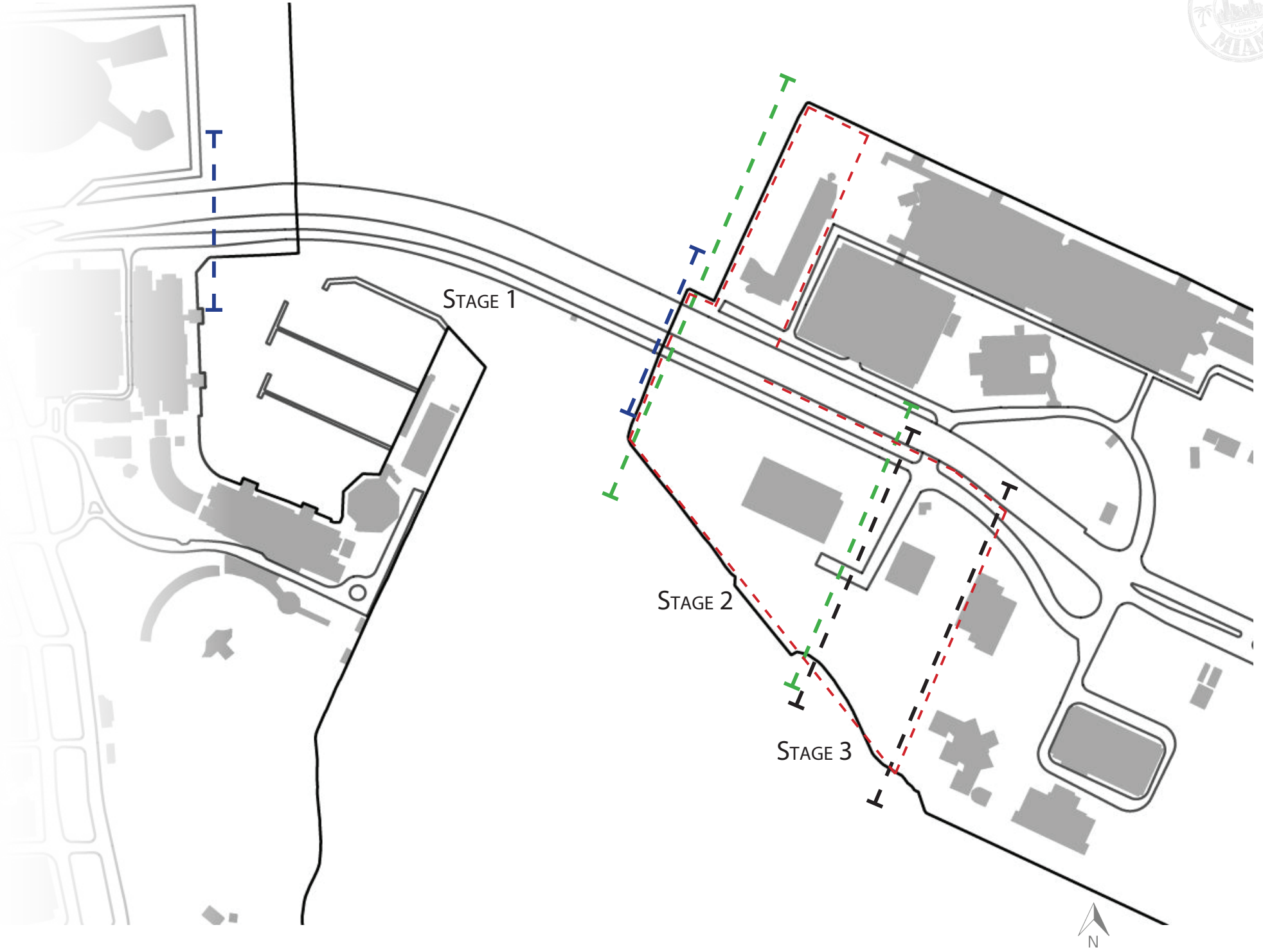
User C_The City of Miami, FL
Portside also benefits the city of Miami directly by creating a unique urban tourist precinct that will attract more tourists to the city which in return brings more money, creates more jobs, and stregthens Miami's economy overall. Upon completion it will create a landmark space for the city that will gain alot of attention across multiple fields (landscape architecture, urban planning, urban tourism, architecture, etc).

Major Project Elements

Throughout the design for Portside the eighteen different project elements can be broken up into three different categories. The first one being transportation options. The **MetroRail Line** was added by reopening the old rail line that runs to PortMiami. The **bike and pedestrian path** was added by reopening the old bridge, and the waterfront location made it possible for the **water taxi service** to be used.

The second category was the park elements and those included a **baywalk** that stretched across the park and gave an up close walking experience to Biscayne Bay. The **sightlines to Miami** were added to take advantage of the viewpoints to downtown Miami. Port Tower is a focal point and a site identification element, the **beach area** gives visitors a chance to experience the beautiful sand beaches and water much like South Beach, and the **kids play area** gives families with kids an area to enjoy. The **open lawn/even space** gives the park an area for passive or active recreation while offering a large enough space for major activities (concerts, movies, etc). The **jungle walk** is meant to mimic the Everglades of South Florida, and the **cruise tribute** highlights the role that the cruise industry has played in shaping PortMiami.

The third, and final, category is the plaza space and offers elements such as the **MetroRail stop**, and an area for **mixed-use development** such as hotels, condos, retail space, office space, and lobby space. The **open market space** gives offers an outdoor area for people to shop, eat, or find entertainment. The **promenade** is meant to frame one of the best views on the site and offer unique picture opportunities. The **concert stage** can be used for entertainment at night and as an eating/meeting space during the work week. The **fountains** represent the end of the promenade and finish framing that view. The **marina** gives residents permanent boat slips as well as an area for the water taxi service to pick-up/drop-off customers.


STAGE 1
STAGE 2
STAGE 3
N

Site Information

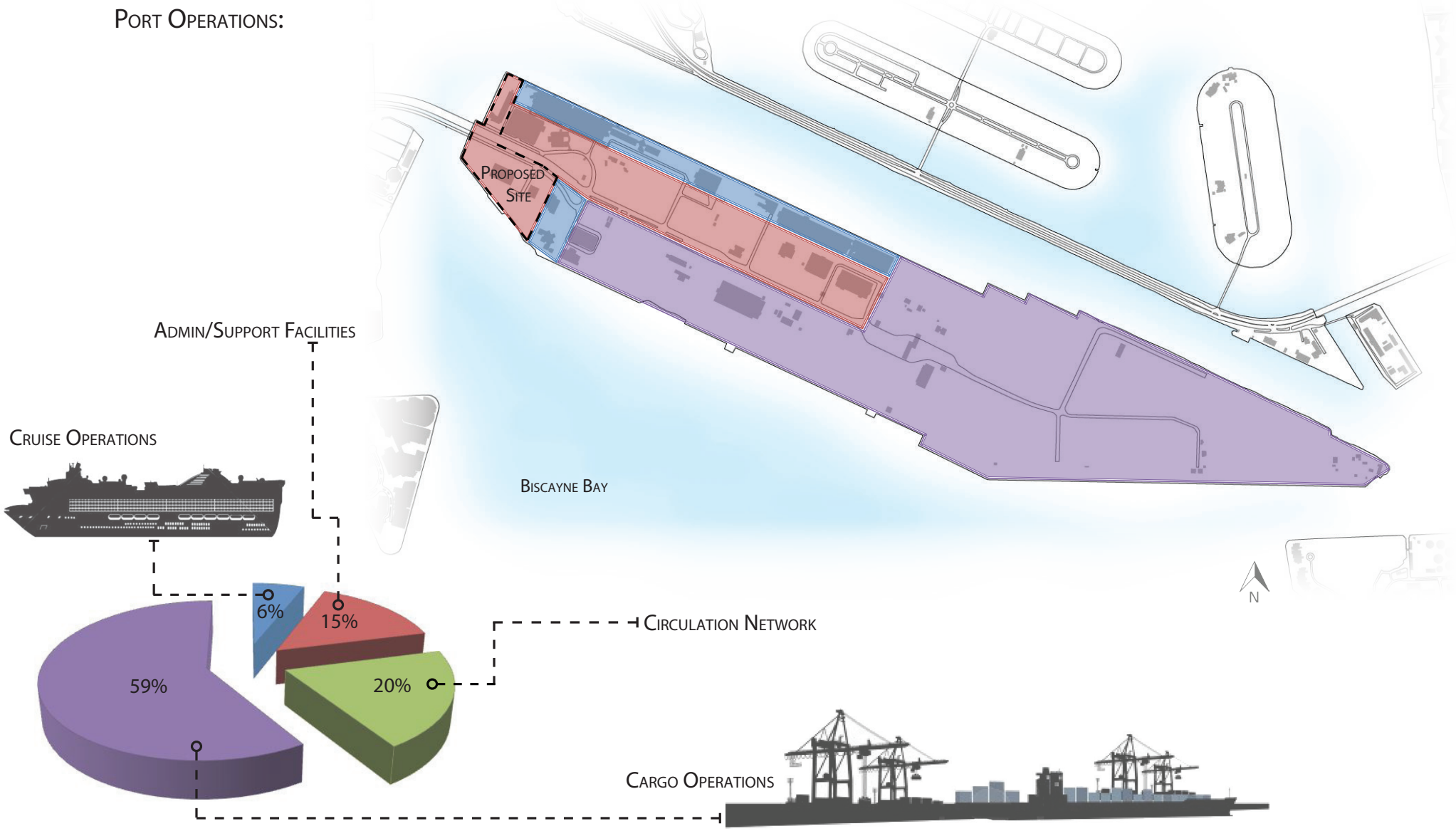
Context Maps:

The site is located in Miami, Fl which is in the Southeast portion of the United States (as shown by the three maps below). When looking at the picture you can then see that the site is 22 acres of underused space located within the Port of Miami and sits adjacent to the downtown district. Miami as a city is the most populous metropolis in the Southeastern U.S. and is one of the smallest major cities in the U.S. because of the total 55 sq miles only 35 of them are on land (the other 20 sq miles being water). It's comparable with New York, San Francisco, and Chicago in terms of density with over 400,000 people within 35 sq miles of land.

Port Layout and Usage:

Graphic below shows the four main usages on for PortMiami including: Cruise Operations, Admin/Support Facilities, Circulation Network, and Cargo Operations. As shown the majority of the site is used by the Cruise and Cargo Operations which leaves very little room for new development. The proposed site fits within an underused area of the Admin/Support Facilities.

Port Operations:



Existing Photos:

The pictures on the left show the existing PortMiami layout. As you can see the majority of the site is concrete so there is a strong need for more green space. There are a few buildings on the site that are currently underused. The bottom right picture shows its proximity to downtown Miami and the lone bridge that connects it.

Project Emphasis

Some of the major emphasis for my project include wayfinding/signage and more specifically how technology (Augmented Reality) can play a role in shaping them. Another emphasis I will be looking at is project typologies and how design can focus specific groups of people (in this case tourists).

Plan for Proceeding

My research for this thesis project employed a "mixed-method" approach meaning that I collected qualitative and quantative data. It was important to gauge how my site functioned within the framework of the urban tourism concept, as well as how it functioned as a precinct within the city of Miami. The quality of the project directly affects the success of the designed urban tourism precinct in terms of the four assessment measures laid out for this project: accessibility, visibility, connectivity, and economics.

With the four assessment measures known data then had to be collected in a variety of ways. While surveys or questionnaires would have been useful as data collection methods they did not fit into the scope and timeframe of this project and therefore did not benefit this project. The main source of data collection then became archival record and collecting data to support those measures by focusing on reading books, articles, journals, and watching videos to gather the majority of the information while also using city data archives and GIS data. Research was therefore conducted in four pieces: reading and understanding topics on urban tourism, reading and researching how augmented reality works and is carried out, creating three relevant case studies to get an understanding on how comparable projects have been carried out, and finally finding city data and GIS data for my site at the Port of Miami. The method of collecting data by reading past research became fairly important for this project because urban tourism and augmented reality are relatively new concepts and there was not a lot physical applications of them. Upon completion of this research I had a working knowledge of both topics and am able to relate that then towards landscape architecture principals and design. It was a process that would not have been able to have been done by just looking up data or creating maps, but as a final piece the collection of GIS data and city data had become very important for the site consideration of the design. While reading and researching has been important earlier in the process it did not carry much weight here. Strong, physical data was needed to show the need for certain design elements, as well as showing the odds for potential success or failure of certain design elements.

With the data collected it then had to be analyzed because each reading or video that was gathered had critical information in it regarding a certain aspect of the project (urban tourism background and principles, augmented reality information, case study relevancy, and site specific information). That data was analyzed using the descriptive analysis method and was pulled out, sorted into one of the four headings previously mentioned, and pooled with all the other research. The multiple samples from each reading and video specific to urban tourism, augmented reality technology, and case study information was then collected into three descriptive "cheat sheets" that were to be used as the design started to take shape. That information was meant to come in handy while analyzing the visibility, connectivity, and economical measures because it would help dictate certain design elements that could be used to create successful signage, technology factors, help with site promotion, making sure its image fit with Miami, and could give a number of how many tourists traveled through the site in a year. The city and GIS data were to be used in programs such as ArcMap to create detailed maps that were then used to prove relevant information. They successfully showed certain accessibility, connectivity, and economical data because the transportation options, road layout, site location, building footprints, site proximity to other neighborhoods and landmarks, building usages, and number of residents located around the site were all easily translated into maps. Those maps were then used to show potential need for mixed-use development, the need for alternate transportation to and from the site, etc.

Schedule:

- Collection and reading/viewing of all the needed reading and viewing material
- Pulling out samples of information from each reference needed and pooling them into groups dependant on category
- Analyzing the information gathered and how it is going to translate into the design
- Mapping information for the use of the project

The 22 acre site that had been selected is located within the Port of Miami which is right off the shore of downtown Miami in Biscayne Bay, and welcomes millions of visitors each year off of cruise ships. It's location, open space to develop, lack of anything other than impermeable surfaces, and sheer number of people passing through it on a daily basis offered a unique chance to try out the new urban tourism ideas previously mentioned.

As shown by the picture above boundaries had loosely been set for the site with the south and west sides being bounded by Biscayne Bay, and the north and east sides being bounded by the Port and Port of Miami Boulevard. The proposed site boundaries have allowed for enough space to properly include the design elements needed for a successful precinct while not being to large as to become unrealistic for the scope of this project as well as completion. These boundaries are not set in stone quite yet and may slightly change after further site inventory and analysis can be completed next semester.

The three case studies had been selected as comparable projects to this thesis and were used as successful examples of how to further the development of this project. The first case study selected was Times Square in New York City because it is one of the top tourist destinations in the world.). It provided good insight into how a tourist area can impact economical factors in a city, as well as providing a good example for site visibility. The popularity of the city and the size of the site are comparable to the city of Miami and the site selected above making it a good case study for this project.

The second case study was in Oklahoma City in a precinct known as Bricktown, and was chosen because it is an urban design precinct that was created much like the one that will be created with my design. It is located just adjacent to the downtown district in Oklahoma City, and it provides an example of a successful design in a very different market than that of New York and Miami and will be beneficial in helping provide a successful design strategy for my thesis.

The third, and final, case study will be the San Francisco Port in San Francisco, CA, and was chosen due to the similarity in the site and the unique accessibility options that they have introduced. It will be a useful example of how to better the accessibility of my site and the connectivity of it across the bay and into downtown Miami.

With accessibility, visibility, connectivity, and economics defined as assessment measures and the Port of Miami located as the site; data was collected to ultimately solve each of those four measures. Certain and specific data became important for each one of the measures and starting with accessibility, the data needed consisted of transportation options, road layouts, site location, and building footprints (figure-ground study). The visibility data needed consisted of signage, technology factors, and site promotion. The connectivity data that was needed consisted of site location in terms of proximity to other neighborhoods, other landmarks, etc, as well as the image of the site (compared to the rest of Miami). Finally, the economic measure consisted of data that included building usages, number of residents located around the site, and the number of tourists passing through the site.

The data collected led to numerous results that prove the importance of this project. Analysis of the site showed first off that as the site sits its location is a mixture of great and terrible. On the positive side it is directly adjacent to Miami's beautiful downtown district and Bayside district. There are numerous attractions across the bay unfortunately it is cut off by Biscayne Bay and feels very disconnected from all that positive development. Context shows that the site is zoned for Terminal use which means that it has a broad range of uses). There are numerous buildings around the site that house various cruise and cargo ship headquarters. The buildings for the most part are relatively modern and well kept at a medium scale. The majority of the area surrounding the site is used as parking lots which mean a lot of impervious surfaces with drainage straight towards the bay. Across Biscayne Bay is Bayside Market which is a very successful and popular marketplace for tourists and residents alike. The size of the site is roughly 22 acres which is a considerably small chunk of the 520 acres the entire Port consists of. There is very little offered in terms of natural physical features with the only green space being along some of the roadways and small plantings in front of buildings. There is almost no topography on the site which creates sheet flows when it rains. Man made features include numerous buildings around the site and a few on the actual site. A large percent of the site is currently behind fences and not accessible to pedestrians. The bridge creates very large concrete wall barriers that cut directly through the site and hinders circulation. Circulation consists of roadways and poorly laid out ones at that. They are hard to navigate and have heavy traffic on them at all times of the day due to the semi's going through with cargo containers. No proper sidewalk system creates an unfriendly and unsafe walking situation for pedestrians. A lack of cross walks across all streets means that pedestrians have to go out of their way to go around busy streets, almost doubling the time to walk around the site. There is an existing rail line that has been shut down and is out of commission currently. The site is very noisy due to the heavy traffic (truck engines, horns, brakes, etc.), cargo and cruise ships, and various other cargo ship activities. Site is relatively clean with no known pollutants, smoke, or odors. There are no residential uses on the site or the entire Port. People coming to the site are coming to either work or get on a cruise ship. Roughly 4 million tourists pass through the site a year, and thousands more come to work. The climate is the best part of the site offering warm temperatures year round (low 70's to low 90's), clean fresh air from Biscayne Bay and the Atlantic Ocean, and very little humidity due to rainstorms. The bay also creates a cooling breeze that makes the site more comfortable. The only knock on the site is that due to all the concrete and asphalt the sun heats it up considerably and without shade it can get unbearable. It is worth noting that Miami in general is prone to hurricanes from June through November.

The first case study selected for this research as previously mentioned was Times Square in New York City. Again, the reason I found this to be a helpful study was not only because of its ranking as one of the top tourist destinations in the world, but because it has a profound influence on New York City's economic figures. As evidenced by a study done by HR&A it takes up only 0.1% of New York City's land area, but supports 10% of the city's jobs and generates 18% of its economic output (2011). For a city as large and diverse as New York City is that is a remarkable percentage and shows a significant impact economically. Of course the location and context of Times Square also contributes to its success because it is located near so many attractions. Circulation is handled as well as possible with the sheer amount of people that pass through the site it is able to accommodate those large crowds no problem.

The second case study chosen was in Oklahoma City and is a precinct called Bricktown, and was chosen because it is a successfully designed urban tourism precinct much like this project is aiming for. This project was successful because of the ties it has to the community and culture of the city. Its location is ideal right adjacent to downtown Oklahoma City much like the selected site for this project is adjacent to downtown Miami. Circulation and context was addressed and landscape architecture plays a large role in creating landmark attractions much like this project aims to do.
The final case study was chosen because of how they handled circulation in a setting very similar to the site selected for this project. At the San Francisco Port they were also having problems moving people around the bay and devised a unique solution to that with water taxis. It has turned into a popular and fun attraction for visitors to the port and has proven economically beneficial as well.

Research Results

The majority of people who have spoken about this topic and have produced research are university professors and urban tourism professionals. It is a relatively small group at the moment and the same names tend to appear on the readings, reports, and videos that had been found for the purpose of this research. As articles, books, videos, etc were found it was noticed that they were starting to fall into specific topics so throughout this section they will be combined and categorized into three sections: information relevant to urban tourism, information relevant to augmented reality, and information relevant to the city of Miami.

The first section will be literature and research focusing on urban tourism and consists of three books, one report, and one video. Hayllar, Griffin, and Edwards (2008) in their book titled City Spaces – Tourist Places: Urban Tourism Precincts talk about socio-cultural and psychological factors of urban tourism. They discuss how these factors and traits shape tourists, the places they visit, and the interaction they have with those places. The authors describe what makes up a precinct and why are tourists attracted to it, and it is that information that was relevant to this project. The second book is written by Law (2002) and is titled Urban Tourism: the Visitor Economy and the Growth of Large Cities. This selection is an introductory book that lays out the basics of urban tourism such as the relationship between large cities and tourism, why tourists visit certain cities, why cities are looking for ways to bring tourists in, how they go about bringing them in, and how those tourists in turn impact the cities and the residents of those cities. The book is broken into ten chapters the first being an introduction that defines tourism and urban tourism showing the difference between the two simply is denoted by the fact that urban tourism is in urban areas. Law (2002) touches on the history of urban tourism as well as providing the basic features of a tourist system. These are arranged in a list with three topics: primary elements (cultural facilities, sports facilities, physical characteristics, etc.), secondary elements (hotels, shopping districts, markets, etc.), and additional elements (accessibility, transport, maps and guides, etc.). The second chapter discusses the demand for urban tourism from a tourist's standpoint; essentially what factors (leisure, personal, or business) make a person want to visit a particular city. The important information to be taken from this section was the image of the city. Cities in general tend to have a negative image when compared to safe, quiet, uncrowded rural areas. If seen as unsafe, dirty, or noisy it tends to detract tourists so creating an area that visibly contrasts with those stereotypes is a key component in the urban tourism concept. The third chapter focuses on urban context with information about the growth of cities and policies that should be put in place. The important aspects of this chapter deal with re-imaging and selling a city with photos, slogans, media help, etc. Having a strong plan in place to sell an urban precinct is half the battle in getting visitors to come. This chapter also touches on sustainability and future growth in the urban context. The fourth chapter talks about the strategy of urban tourism and how it has evolved from a very simple idea of advertising a few attractions to a comprehensive approach that develops a full product and promotes and sells that product to the public. The fifth chapter then provides the first aspect of that product which is visitor attractions. This is the most important reason for why people come to cities and can range from historical buildings to museums. Law (2002) explains that these attractions should be city or region specific and unique because the average person will not travel a long distance to see something similar to what they have at home. It is generally accepted that visitors go to a place because of its general image and the range of things it offers to do (attractions being one type of them), so having a variety of these attractions to choose from leads to a more successful urban area. The

sixth chapter talks about conferences and exhibitions, and Law (2002) states that these are the activities that are generally regarded as the focal points of urban tourism (especially in North America). While these are great they also draw a lot of competition from other cities and require a lot of money and space to develop the proper facilities. It is a section of urban tourism that will most likely not be focused on in this project. Chapter seven deals with culture, entertainment, sport, and special events, and will potentially play a major role in this project. Culture will be a key issue with the site and the city of Miami and Law (2002) suggests that having cultural elements in a site contributes to the evening economy and can bring more people to the site which helps it a safer place. Entertainment will play a helping role in attracting crowds to the site throughout the day, and with the Miami Heat's (basketball team) arena right across the bay the sports crowd can potentially be targeted. All of these
elements though can tend to draw a higher income class, and Law (2002) says in this chapter that a smaller group of high income tourists can spend just as much as large crowds of middle income tourists. By deciding what income class to target it is potentially a good way to keep traffic and crowd sizes down. Chapter eight will be another important factor in the design process as it talks about secondary elements which include elements such as hotels, shopping, restaurants, transport, etc. Law (2002) says that it is these elements that are essential to a successful tourist destination, and offer the highest impact on economical issues such as jobs created and money made. Successfully integrating these elements into the project will directly deal with the assessment measures proposed in the next section. Chapter nine focuses on the impact of urban tourism and discusses economic factors, the relationship of the tourist with residents, as well as the relationship of residents with tourists. Law (2002) states that it is important that residents are not negatively affected by tourists with issues such as congestion. The last chapter is a conclusion and Law lists a number of factors that create a successful urban tourism project. The ones that pertain to this project were heritage, scenery, uniqueness, and image because each hold valuable information to take forth when looking at my site and starting to design it. Selby (2004) wrote a book titled Understanding Urban Tourism: Image, Culture, and Experience and offers detailed information on the way culture affects urban tourism. That information becomes important to this project because Miami has a very rich culture and it will become very important throughout the design to not only make sure the site doesn't lose that culture but that it celebrates it. The European Commission published a report titled Towards Quality Urban Tourism (2000). This article was found very useful and full of information on creating a design strategy for tourist locations. It will be very beneficial to carry that over to the design and research so that it keeps it on track and clearly lays out what the design will be looking at solving on all levels. This section was used specifically to answer any questions and support the theory of urban tourism. The research problem brought to attention the fact that shifts in tourism over the last 40 years have evolved and gone back to large urban cities, and as a result the practice of urban tourism has grown and been moved to the forefront of many city planning efforts. The information gathered from this section not only proves that but also bolsters the design elements and make sure that decisions are made that will keep the project on the right track.

The second section will be literature and research that focuses on the augmented reality technology and it consists of one book, one journal article, and one video. The book is written by Madden (2011) and is titled Professional Augmented Reality Browsers for Smartphone's: Programming for junaio, Layar, and Wikitude. It has valuable walkthroughs on how to create these apps that will be used by visitors of the site on their smartphones. It is going to be invaluable moving forward so that

I can successfully get this technology working in my design. The journal article is taken out of the TechTrends journal and is titled Augmented Reality in Education and Training written by Kangdon Lee (2012). This article focuses mainly on the various uses of augmented reality in each of the education departments, as well as training for a number of different professions. A lot of the information was not relevant to this project but it did have valuable information on clarifying what augmented reality is and certain application uses such as site history. Lee (2012) defines augmented reality has a technology that allows computer-generated virtual imagery information to be overlaid on the live real-world environment in real time. It has the capability to bridge the gap between the real and the virtual in a seamless way. Lee stated that augmented reality can be used in tourism and museum settings, as well as being an interactive tool for cultural heritage and site history. It has the ability to show old site pictures and information for new visitors. This technology has the potential to be used throughout the site at different locations for a wide variety of purposes that include: site mapping, transit options and schedules, activity locations and schedules, restaurant and hotel reviews and accommodations, weather, and site facts and history. The video is titled The Future of Augmented Reality (2010) and is very useful in showing how the augmented reality technology can be used within cities for people to find information on transit, weather, buildings, etc. It was useful as a tool to better understand how the technology is applied in real world formats, and further proved the feasibility of the design purposes mentioned in the last source review. It is a good example of the scope that can be achieved and is a good source to show people who have never heard of the technology so that they can get a working understanding of it. This section of information will specifically be used to address any issues with the technological side of this project. As mentioned in the research problem an area that isn't being utilized in the practice of urban tourism is technology. This is the information that will show why using augmented reality will help, how it should be used to have the most impact, and how it works and is set up so that it can be applied to the final design product.

The third, and final, section will be literature and research that focuses on the actual Port of Miami site and surrounding area of Miami and it consists of one report and one video. The report is titled Port of Miami Master Plan (2010) and comes from the city of Miami. It contains detailed site information and history that is valuable for site inventory and analysis. The other half of the report deals with the future plans and elements that the city wants added to the site in the future in terms of the cruise and cargo industries. The report starts with a forward outlining some of the basic goals the city has for the future of the port that include: sustainability issues and green energy initiatives. From there it is broken into ten sections starting with an introduction in section one. It started with a history where it was noted that the Port of Miami in 2010 handled over 4.1 million cruise passengers, and that it is looking to develop more intermodal ties with the mainland. It outlined the direction the port hopes to go in with important financial goals being shared as increasing revenues for the port, increasing profitability, and diversifying revenue streams. Section two contained information on existing conditions of the site, and explained how the Port of Miami is an island the size of 520-acres in Biscayne Bay. It is connected by three bridges: on vehicular bridge, a decommissioned road bridge, and a rail bridge indicating a need for varied and additional connections. A breakdown of land uses shows that the port is classified as "terminal" which allows a large range of uses. The surrounding urban context is a mixture of low, medium, and high-density residential, commercial, office, and park/recreation uses. While the port is open for a wide variety of uses it is made up of only four different uses: circulation network (including road, bridges, and rail, and takes up

62 acres of land), cargo operations, cruise operations, and support. Parking takes up a lot of space on the port with over 7,000 spaces spread across four garages and ten surface lots. Section three consists of information on goals, objectives, and policies which doesn't have a lot to do with the research needed for this project so not much was taken from this section. The one important thing to note was that the nature of an island port means there is an inability to expand so development has to take place with the boundaries of the island and re-use of some buildings may have to take place. Section four outlines the future of the cruises and ferry, but seeing as the site will not be interfering with the cruise industry there is little information in this section relevant. An important aspect of this section was traffic volumes with information to show that while traffic varied with the amount of cruise traffic it was generally busier in the winter months of November through April. During this period more than 62% of the annual traffic moves through the port with roughly 6.4% of traffic per month moving through from May through October. On average Friday through Monday show the busiest trends in traffic with Tuesday through Thursday being slower. Section five is information relevant to the cargo side of the port, and that area will be completely out of the site boundaries so this information has no bearing on this research. Section six is the commercial aspects of the port that the city is looking to introduce, and gives examples of why my site boundary is a good location for this project. The southwest corner of the site is not large enough for a berth, and the water is not deep enough for ships leaving the area unused and rundown. With its proximity to the main land and its viewpoints it would be an ideal place for a mixed-use development. Also discussed in this section are signage and advertising opportunities. Sections seven, eight, nine, and ten then go on to discuss the master plan put together by one of the local firms in Miami for the entire Port of Miami. These final sections contained specific information to the firms design and have no relevance to my thesis project. The information taken out of this report will be crucial in developing conceptual design ideas and ultimately the final design. The video is titled Miami 2020 (2011) and gives a presentation on the future of the development along an area that sits directly across from my site. The video starts by giving a brief history of downtown Miami and how at the start of the 21st century it reached the high point of growth. It details seven projects some of which have already been started that will change the Miami cityscape. While there is already a sports arena and a performance arts theater across the bay from the Port of Miami site there will soon be a museum. This development helps my project because it offers attractions that are essentially right next door to my site in close enough proximity to have an impact. It lays out the cities overall development plan for downtown which in turn gives a blueprint for the design that can take place across the bay. It provides important information as to what will be there, what can be added, and how the overall look and feel of the site should be. This section of information will be specifically used to address any questions or information needed about the city of Miami or the Port of Miami site as they arise. As my research problem stated Miami has desirable traits in place that tourists look for (culture, weather, etc.) yet still has a lot of potential in terms of design and technology. This information was aimed to prove that and it will ultimately be addressed in the design portion of the project.

During the preliminary research of this project it has been noted that there is a gap in the urban tourism philosophy and an opportunity for this research to advance the philosophy of urban tourism. As previously mentioned urban tourism is still a relatively young concept and while it has come a long way in the last forty years there is still very little, or in most cases, nothing mentioned about landscape architecture or technological advancements. As a philosophy, urban tourism focuses on a

lot of issues that cities must address, however it doesn't shed much light and give many details on ways that cities can address them, and it's in that shortcoming that both of the additions mentioned previously can prove useful. The research and design using the augmented reality technology alongside landscape architecture is a new concept that urban tourism can adapt and use that will push it forward into the future of technology and design. Not only does it have the potential to develop entirely new ideas it has the capability to strengthen existing ways of designing for tourists in ways such as transit information, site history and information, mapping and way-finding, etc. Overall it is an opportunity to get ahead of the curve in terms of technology and will push urban tourism along into the future.

All the research previously evaluated has led to two research questions that will look to be answered by this thesis program and design: What technological advancements are out there and how can they be utilized in conjunction with landscape architecture to deal specifically with the urban tourism concept? When the project is looked at closer the next question that will then be addressed is how can an urban district that uses these advancements revitalize and enhance the Port of Miami site?Those research questions have created the hypothesis that a designed urban precinct that combines landscape architecture with augmented reality technology will make it easier for tourists to experience the site, can enhance and revitalize the tourism industry in Miami, and offer a landmark that is easily identified with the city. By pulling together the various forms of literature and research that has been collected it is believed that an answer will be discovered therefore, in the process, proving the hypothesis correct.

Thesis Goals

I had a couple goals for this thesis that I wanted to focus on and improve upon the first being time management. This was the biggest project that I have took on in my time at NDSU so I knew that I was going to have to keep on schedule to complete this project and get it to a level that was sufficient for a final thesis.

The other major goal I had was to learn about Urban Tourism to the point where I could successfully design an Urban Tourist Precinct that would be successful in Miami. That meant I had to do a lot of research on the topic as well as the tourism industry specific to Miami.

Site Inventory & Analysis

Why Miami:

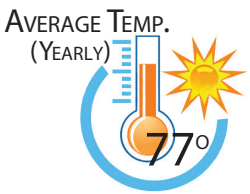
Miami already has a strong tourist industry in place with over 12 million visitors a year, and ranks 20th on the 2012 U.S. News Travel List. That is because it offers activities for everybody from families to spring breakers. The great weather, beaches, architecture, nightlife, nature, etc are all factors that play into this.

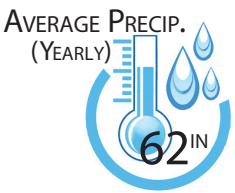
U.S. News 2012 Travel List of Best Places to Visit

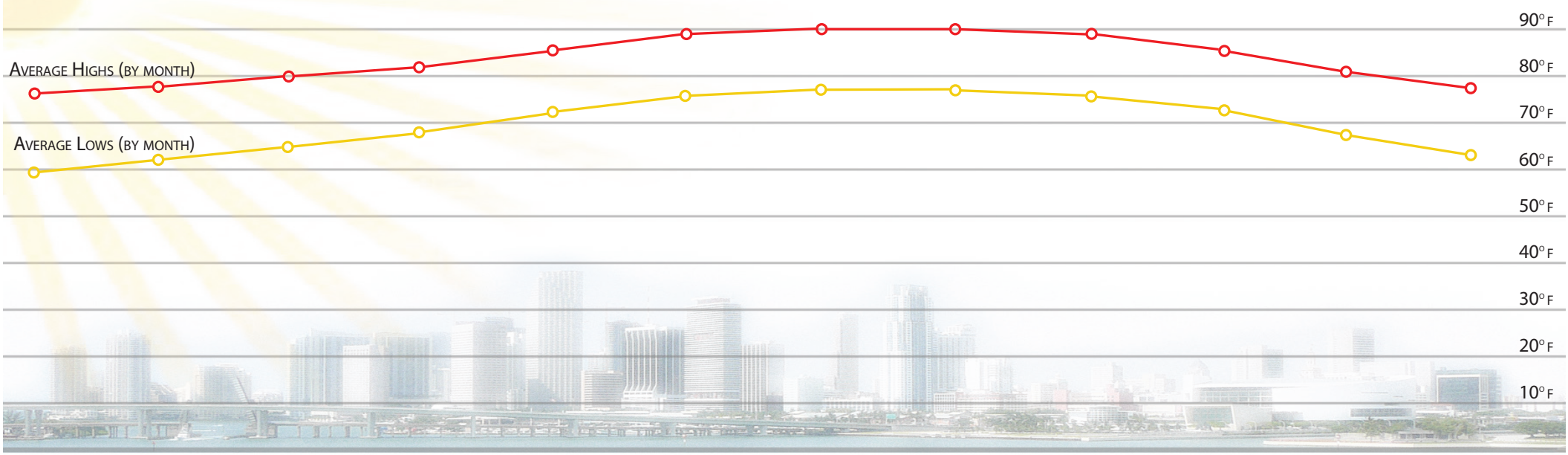
- London
- Barcelona
- Paris
- Maui
- New York City
- San Francisco
- Puerto Rico
- Vancouver
- U.S. Virgin Islands
- Edinburgh
- Zurich
- Montreal
- Crete
- Prague
- Sydney
- Washington D.C.
- Rio de Janeiro
- Budapest
- San Diego
- #20 **Miami**
  Why Go: If you're looking for consistently gorgeous weather and parties set against beautiful backdrops, look no further than Miami Beach. This Floridian city bursts with colors, crazy nightlife, an amazing coastline, and intriguing Art Deco architecture.
- Bahamas
- Beijing
- Las Vegas
- Los Angeles
- Tel Aviv

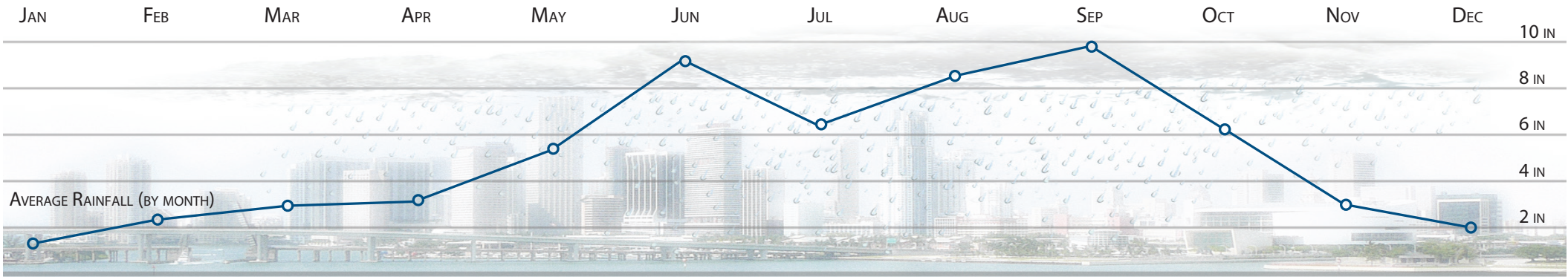
Miami Climate:

With Miami's proximity to the Gulf Stream there are very little swings in the temperature throughout the year as shown in the graph below. The tropical, monsoon climate factors into the average temperature of 77 degrees throughout the year as well as the average 62 inches of rain throughout the year.









Attractions:

Within a one mile radius there are seven attractions that play a key role in shaping Miami's cultural scene and cater to tourists and residents alike. The graphs and numbers show the huge audience that they create and that this design can tap into. With all the attractions around the site it eliminates the need for large structural attractions in the site.

2 Bayside Marketplace:

- Potential of 15,000,000+ people a year

4 Adrienne Arsht Center:

- Potential of 500,000+ people a year

6 Patricia and Phillip Frost Museum of Science:

- Projected potential of 350,000+ people a year

1 PortMiami:

- Potential of 4,000,000+ people a year

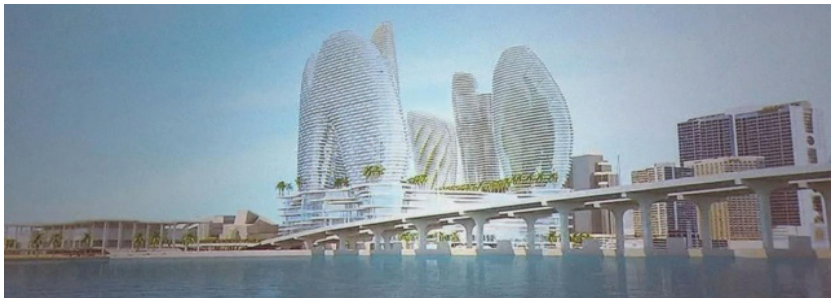
3 AmericanAirlines Arena:

- Potential of 816,500 to 1,100,000+ people a year

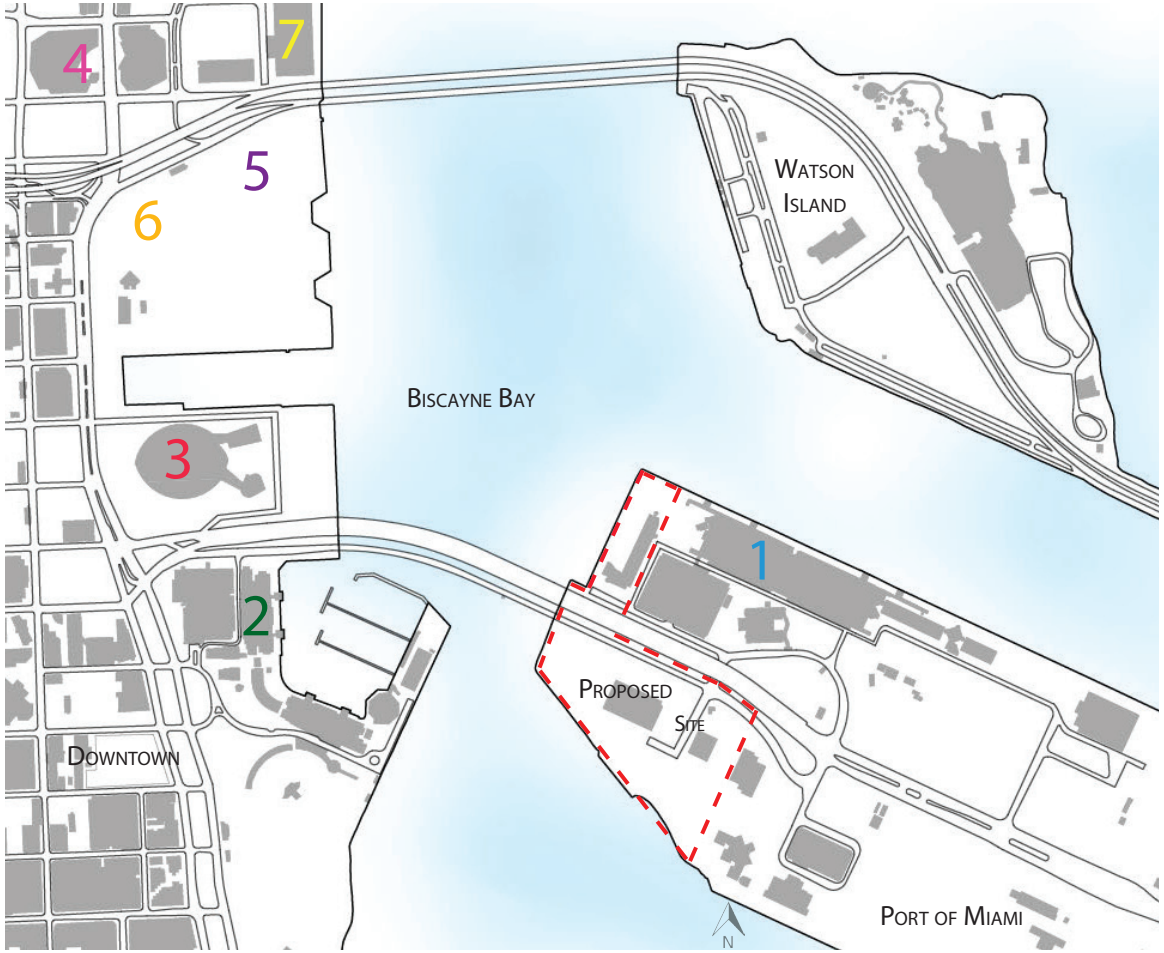
5 Perez Art Museum Miami:

- Projected potential of 220,000+ people a year

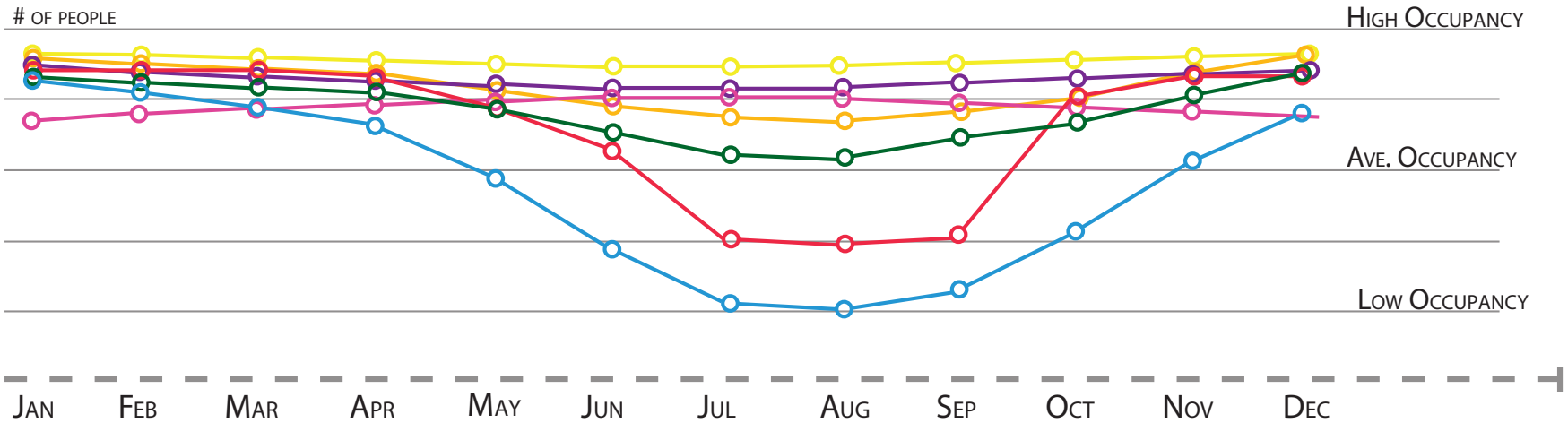
7 Genting's Resort World Miami:



- Projected potential of 750,000+ people a year



4,000,000 + 15,000,000 + 1,100,000 + 500,000 + 220,000 + 350,000 + 750,000 = **21,920,000+** PEOPLE A YEAR WITHIN A MILE OF MY SITE



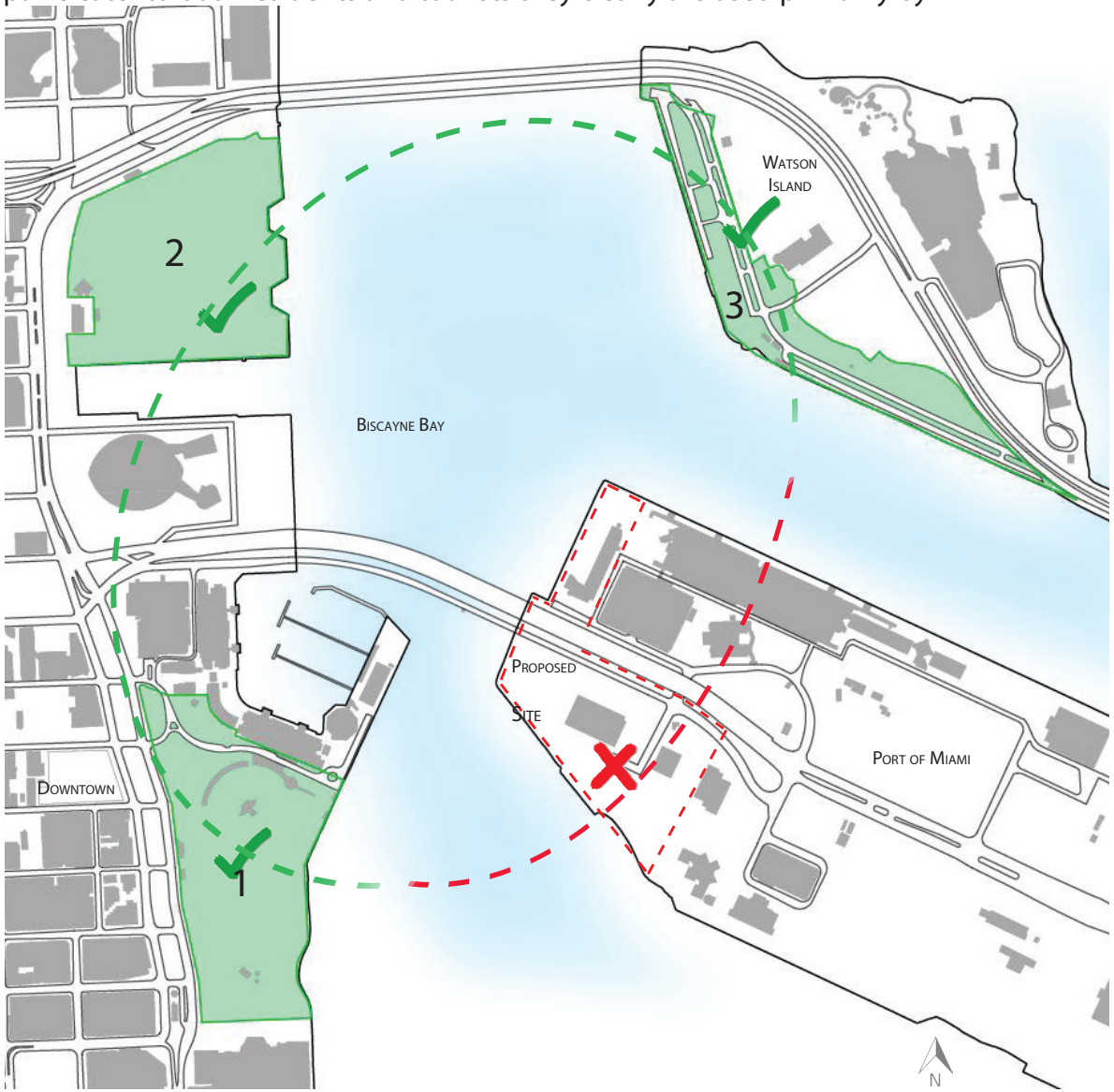
Park System:

As shown by the graphic below Bayfront Park, Museum Park, and Watson Park combine to start a strong park system. My site sits within that imaginary chain but in its current state breaks that system due to lack of green space. A newly design space would be ideal for the site because it would finish that park system and give Miami a signature series of parks much like cities such as Boston's Emerald Necklace. All three existing parks have a Baywalk so from a design standpoint my site should have one to create a sense of uniformity. While all three parks cater to both residents and tourists they clearly are used primarily by residents with tourists having a secondary role in the park. My site will look to be the opposite of those three.

1 Bayfront Park:

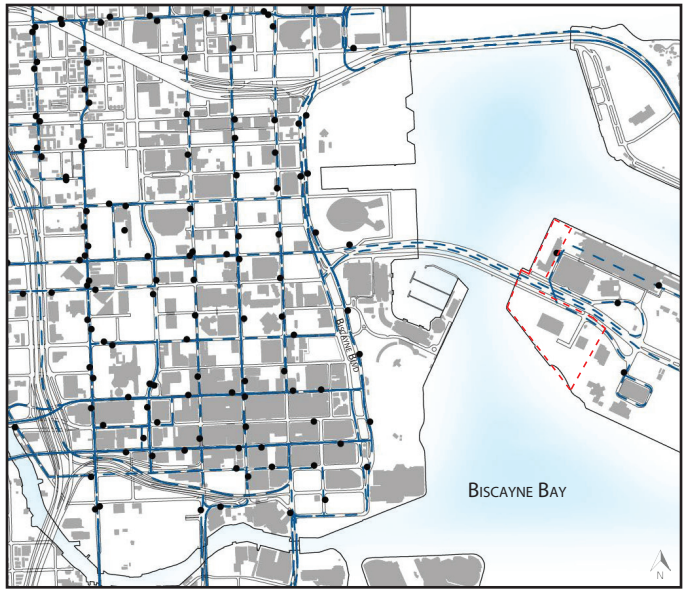
2 Bicentennial Park/Museum Park:

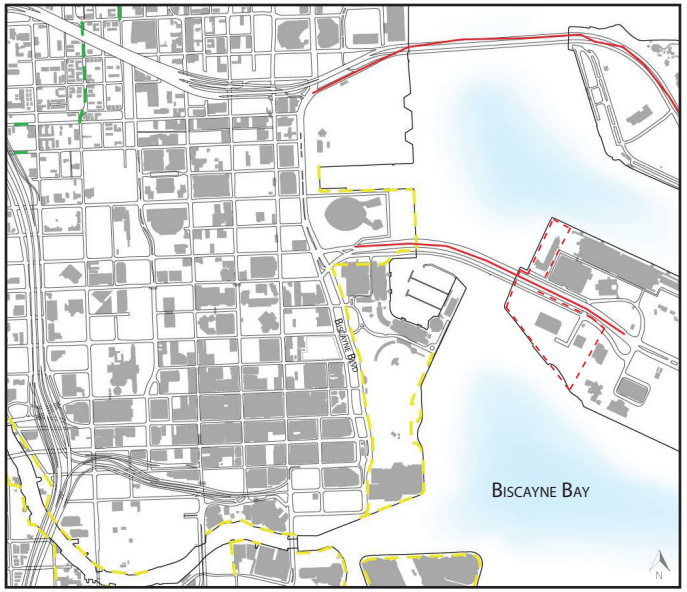
3 Watson Park:

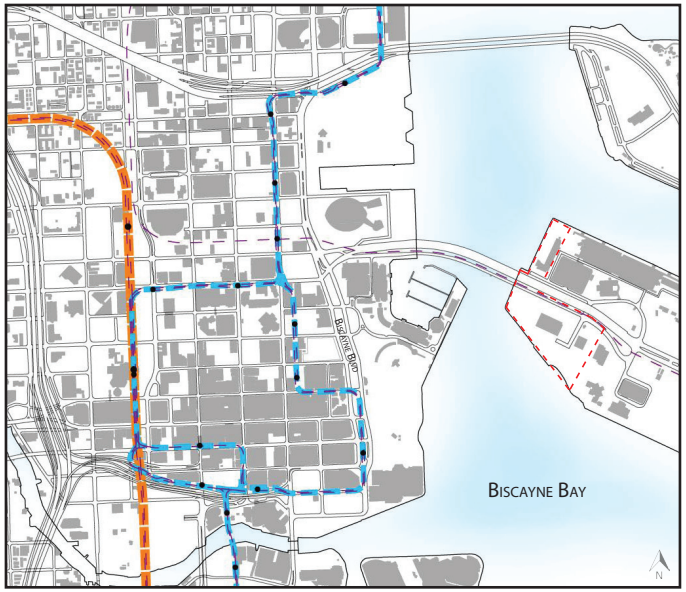


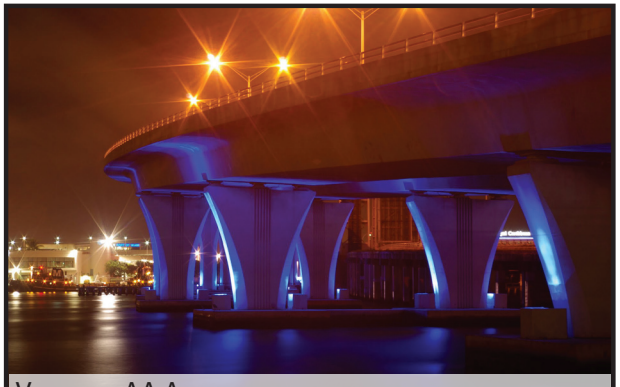
Transportation:

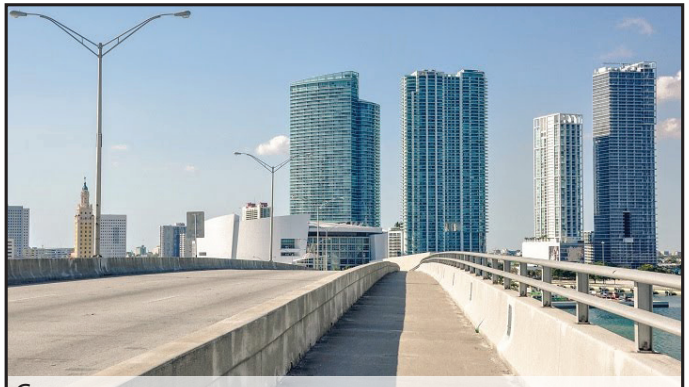
Currently the only way to get to the site is by the Port of Miami bridge which makes only three viable options to access it: car, taxi, or bus. The bridge is too long and the span is too high that walking it is unrealistic and takes too long. There is an older and smaller bridge and a rail line but they are closed down currently. By reopening these two features a pedestrian/bike path could be created (on the smaller bridge) and the MetroRail could service the Port (on the old rail line). Also with its waterfront location it is the perfect opportunity to use a water taxi service. With the addition of the **Pedestrian/Bike Path, Water Tax, MetroRail,** along with the existing bridge use for **Vehicles, Taxis, and Bus** the site goes from three viable yet undesirable options to seven.







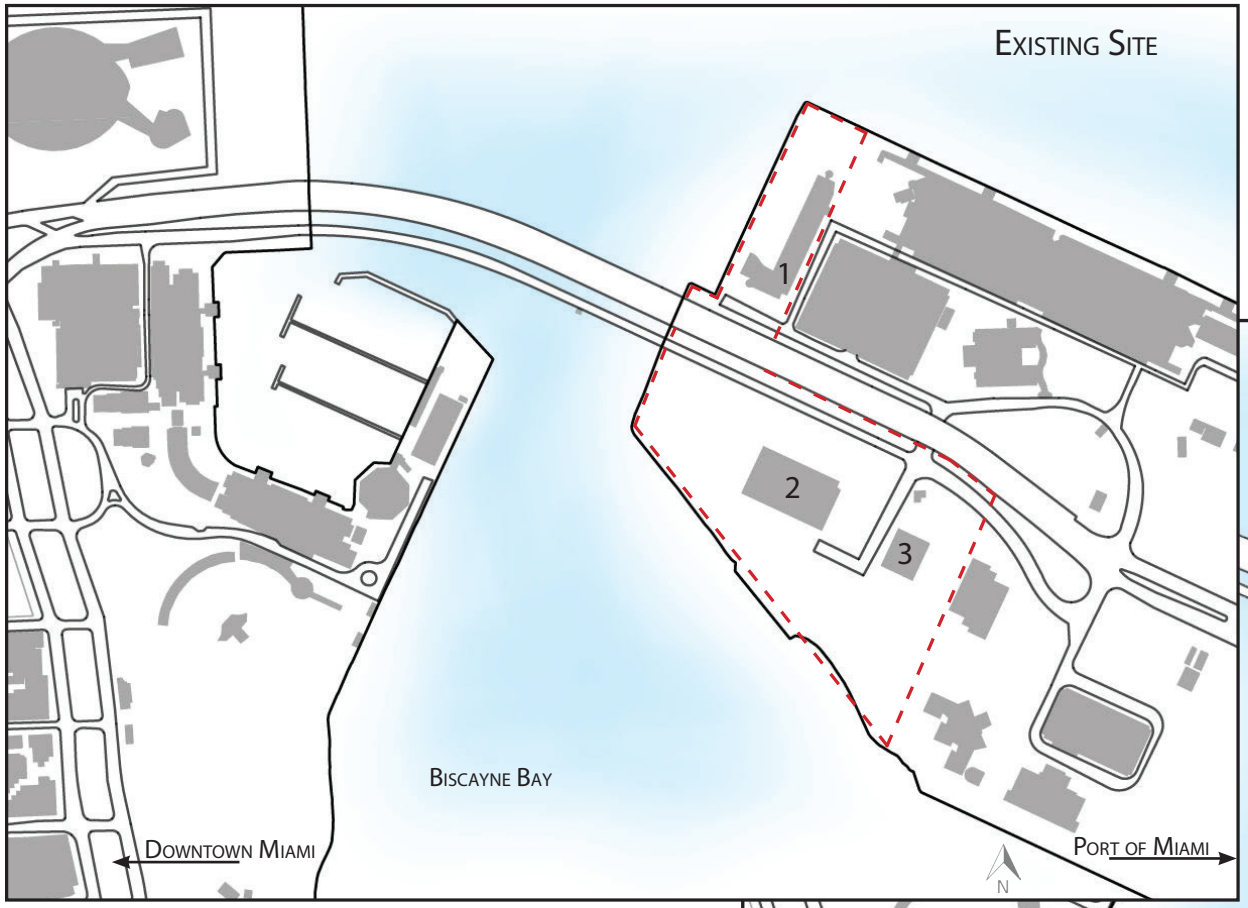

View from AA Arena looking up at bridge

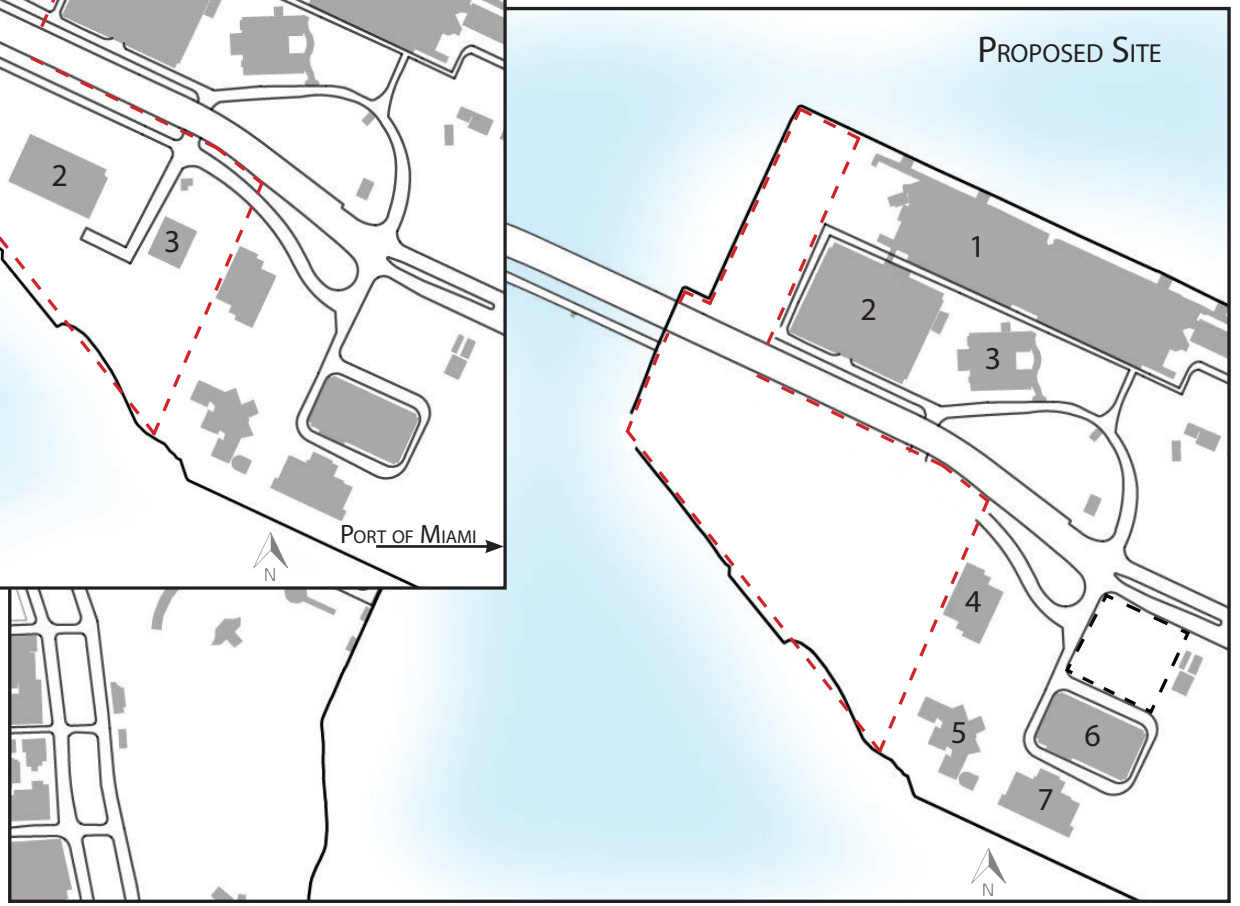

Current pedestrian lane across bridge


Old rail and bridge currently closed

Conceptual Design

Conceptual design started with looking at the existing site and essentially creating a clean slate to design on. There were three existing buildings that were removed: building one (1), building two (2), and building three (3) that were old, underused, and could be relocated to a more suitable space on the Port of Miami. The removal of nearly three hundred parking spaces was also necessary but can be made up within the marked space by building a new structure or lot.



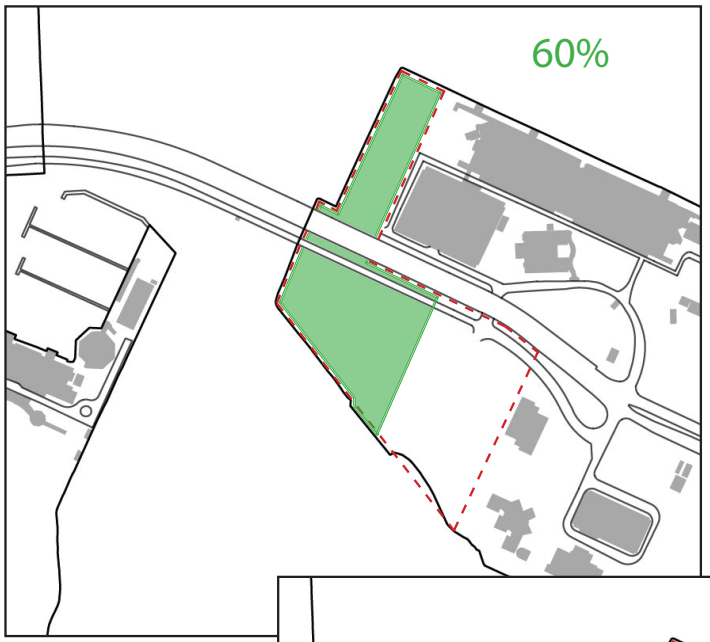


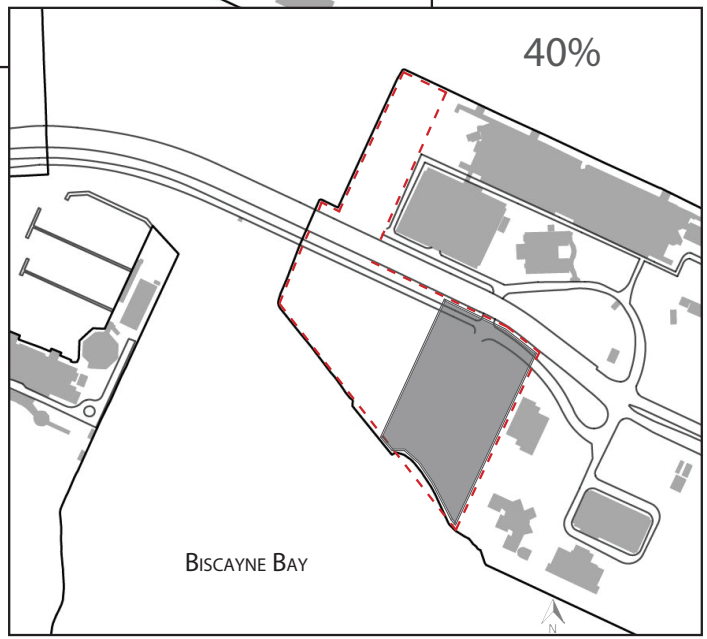
Legend:

1. Cruise Ports
2. Parking Structure
3. Port of Miami Admin Building
4. Royal Caribbean Office Building
5. Royal Caribbean Headquarters
6. Parking Structure
7. Parking Structure

Green vs Grey:

As shown below PortMiami is dominated by concrete with very little green space due to the large amount of space that the cruise and cargo industries require. An objective of this thesis was to show how Landscape Architecture can play a role in Urban Tourism so the goal was to cover the majority of the site in green space and use as few building structures as possible. With the site selected there is a chance to do that and reclaim part of the Port and add new, friendlier green surfaces.





Left: Photo of existing conditions on PortMiami site

Design Process:

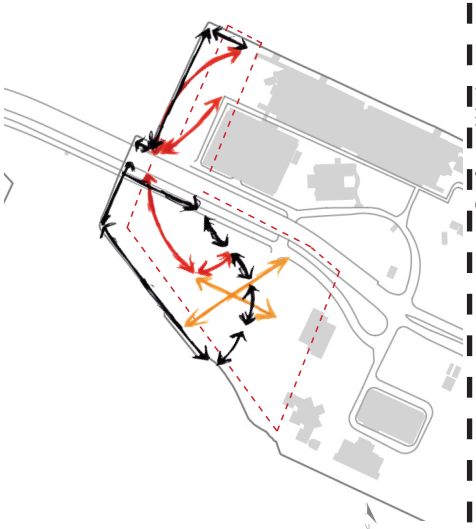
The design process as shown can be broken down into four stages. I wanted the finished design to feel as if the visitors came first in the space as opposed to the architecture, so because of that the pedestrian paths were the first aspects to be designed. The main paths shown in black were the first ones placed and cover the entire site (making it the longest stretch). It travels around the perimeter of the site and loops back around into the overhead pedestrian/bike path. The secondary paths shown in red are shorter, quicker paths mean to move people through the middle of the site. These were added for people wanting to get through the site faster, but they still tie back into the main path. Lastly the promenades were added because they lie on two main sightlines that I wanted to preserve back towards Downtown Miami and towards the AmericanAirlines Arena (the two best view from the site).

From there the sightlines were the next main aspect of the design to be added. With its location the site sits in perfect position to take advantage of views into Downtown Miami and the Miami skyline. It was crucial to the design that those sightlines were preserved for the visitors and tourists to be able to see wherever they may be within the site.

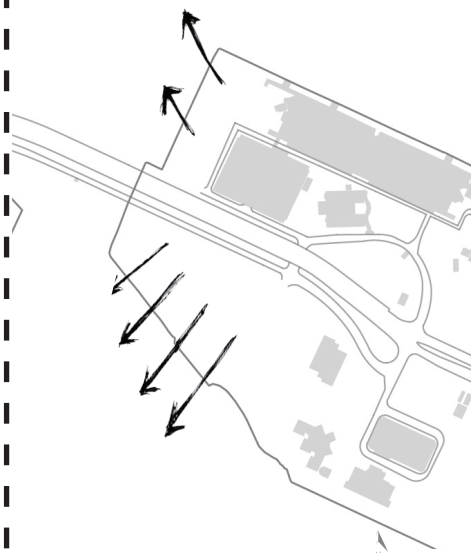
With the paths and sightlines in place I was able to start placing the rest of the desired program elements that I deemed were necessary into a conceptual plan. Shown in drawing three is the final concept with paths, sightlines, and program elements beginning to fit together.

Lastly, the precinct that was being developed was divided into three different areas to be focused on and developed. It was important however that the three still fit within a larger picture and were cohesive in the final design.

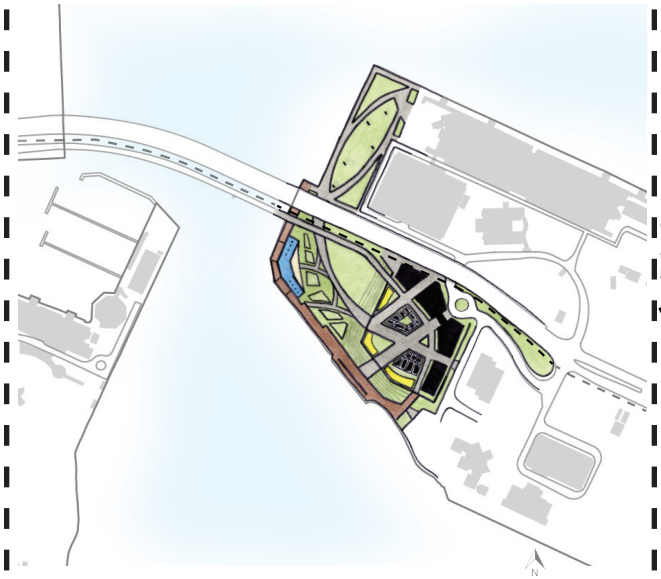
1. Pedestrian Movement



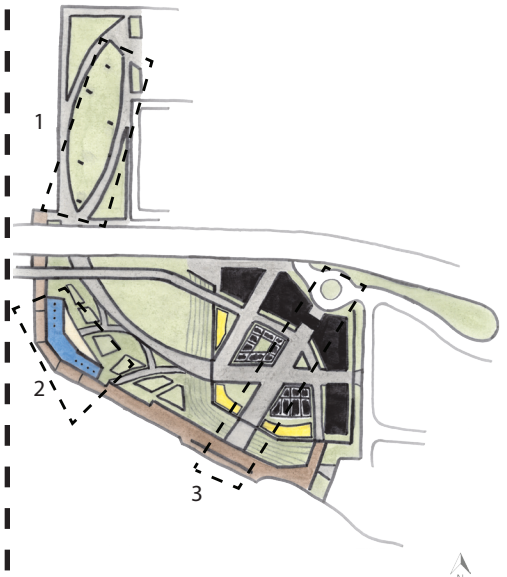
2. Sightlines



3. Conceptual Design



4. Three Areas of Focus



Raymond Jungles Case Study:

Raymond Jungles is a Landscape Architect who has worked in Miami almost his entire life and has designed numerous projects in Southern Florida and surrounding areas. He has a firm grasp on the type of Landscape Architecture that is successful down there and blends Art Deco with Art Modern to create unique designs. I looked at his work to get a feel for material usage, planting plans, and pavement patterns. Below are two lists showing the similarities and differences between the two design styles that I used as the backbone of my design.

Art Deco Design

Material choice: Stucco, Metal, and Stone (smooth)
Vivid Colors
Simplified and Streamlined Forms
Vertical Emphasis (Towers and Projections)

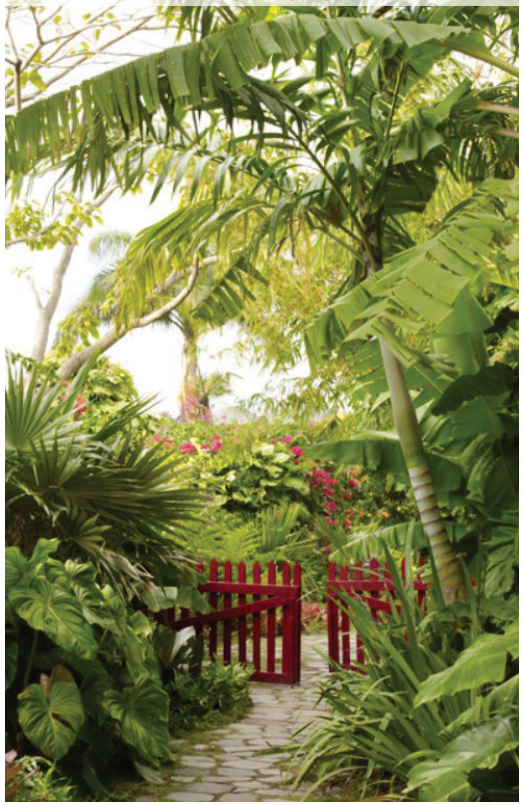
Art Modern Design

Material Choice: Stucco, Metal, and Glass (Smooth)
Vivid Colors
Simplified and Often Curved Forms
Horizontal Emphasis

Art Deco — Art Modern

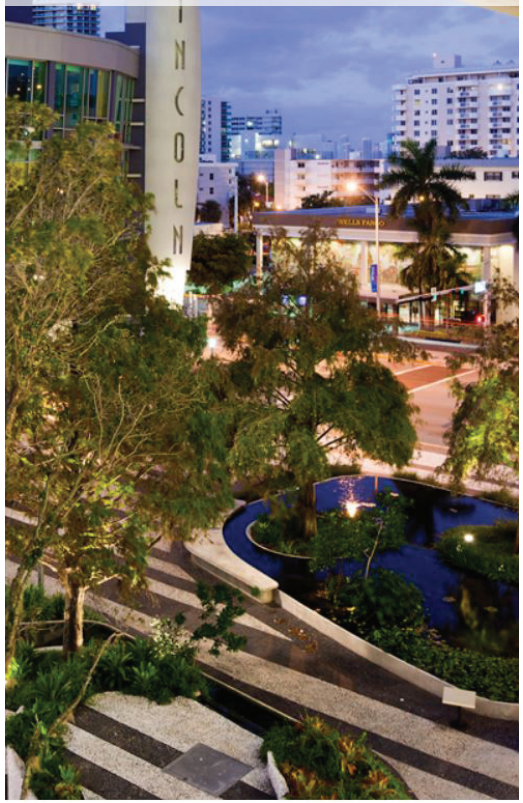
Casa Morada Project
Florida Keys

Golden Rock Inn Project
West Indies



Pavillion Beach Club Project
West Indies

1111 Lincoln Rd Project
Miami



Design Solution

Master Plan:

As discussed earlier in the book the program elements are shown here within the context of the final master plan for Portside.

Area 1: RCI Park

1. Jungle Walk
2. Cruise Tribute

Area 2: Port Park

3. Baywalk
4. Sightlines to Downtown Miami
5. Focal Point/Site Identification
6. Beach Area
7. Kids Play Area
8. Open Lawn/Event Space

Area 3: Port Plaza

9. MetroRail Stop
10. Mixed-Use Development
    (Hotels, Condos, Retail, Business)
11. Open Market Space
12. Promenade
13. Concert Stage
14. Fountains
15. Marina

Transportation

16. MetroRail Line
17. Bike/Pedestrian Path
18. Water Taxi Service

Aerial Context View:

An aerial view from the south-west showing the entire site with all the program elements and the cruise ship ports and existing buildings in the background. Also shown is the breakdown of the three focus areas and how they sit within the larger design. Each area will be discussed in detail moving forward.

RCI Park:

RCI (Royal Caribbean International) Park is the first focus area in the design. It is the first area that a majority of visitors will enter because of its proximity to the cruise ports so the park would be dedicated to the Royal Caribbean International company. This makes for a great opportunity to find funding for the project while bringing attention to the cruise industry that the site shares space with.

Program elements found in this park include: the jungle walk and the cruise tribute. These are two of the more tourist specific elements so putting them closer to the large tourist population at the cruise ports made the most sense .

RCI Park Perspective:

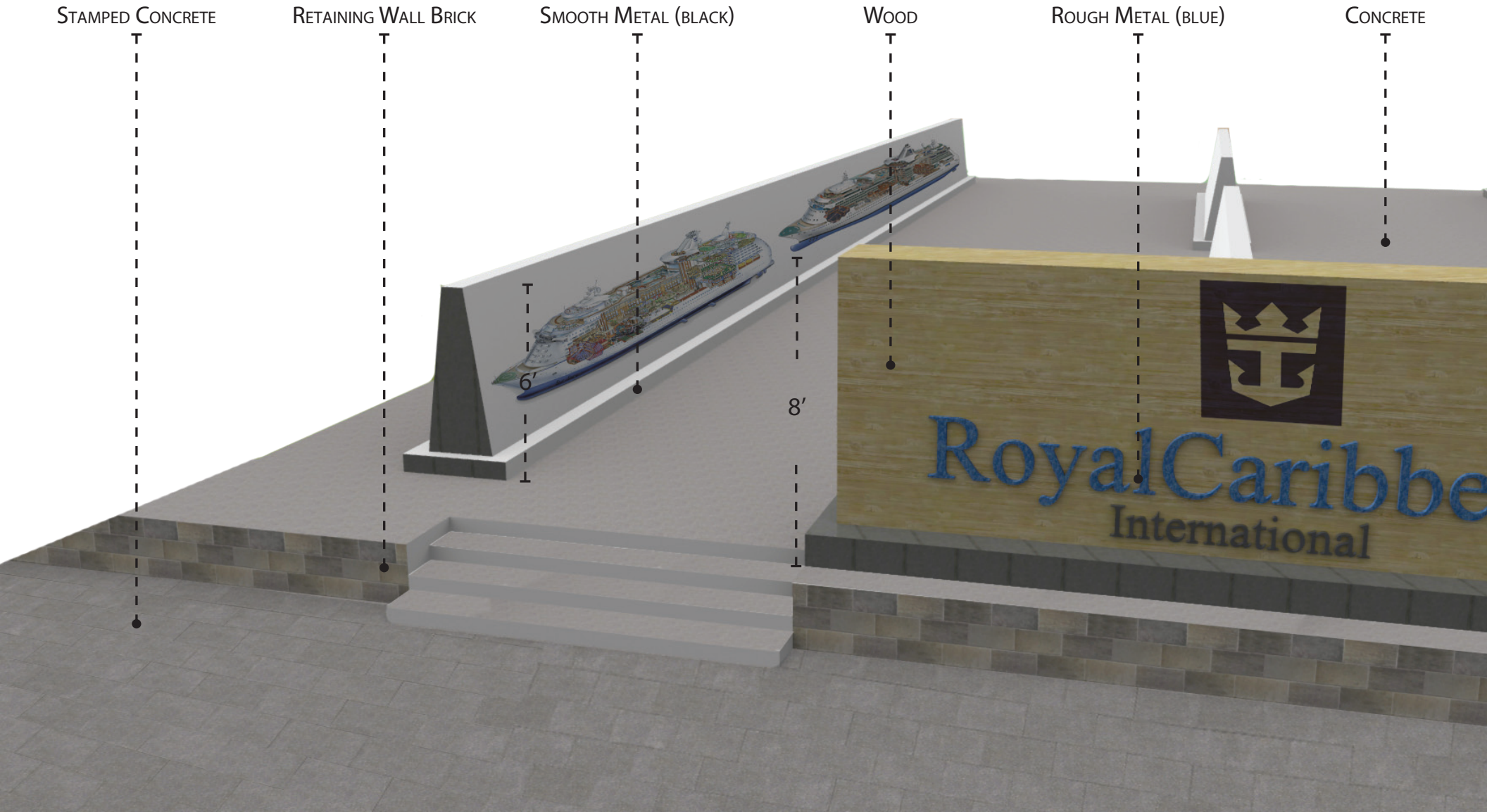
This rendering is looking at the cruise tribute element (shown to the left of the perspective) and the jungle walk element (shown to the right of the perspective). The retaining wall would provide seating around the entire jungle walk as well as a way to transition from the more modern design around it. The Port of Miami bridge and the proposed pedestrian/bike path are shown in the background along with the Miami skyline.

Jungle Walk Perspective:

This rendering shows a pathway in the jungle walk element and one of the several rest areas found throughout it. Seeing as the jungle walk is meant to mimic the Everglades of South Florida these rest areas, in addition to seating, would have informational kiosks with facts about the Everglades such as native wildlife and plants, the hydrology, ecological factors it has on South Florida, etc...

Cruise Tribute Detail:

This detail shows how the cruise tribute element would be laid out, the size of the walls and entrance sign, the materials of the walls and entrance sign, as well as the content shown. This would be a small area that visitors or tourists can stop in and learn about the important role that Royal Caribbean has played in shaping the Port of Miami. PortMiami was the first port in the U.S. and Royal Caribbean was the first cruise line to come into and the only one to headquarter at PortMiami so it has significantly shaped what PortMiami is today. Shown in the graphic are a couple of the cruise lines offered by Royal Caribbean.



Port Park:

Port Park is the second focus area in my design and is the largest area on the site. It sits between RCI Park and Port Plaza so it will have a lot of visitors between the two. Port park also sits adjacent to downtown Miami meaning that it has the best sightlines of the skyline and attractions across Biscayne Bay. This was crucial in my design thinking and why so many sightlines were preserved with the large pathways so that the attention is drawn towards downtown, Bayside Marketplace, and Bayfront Park.

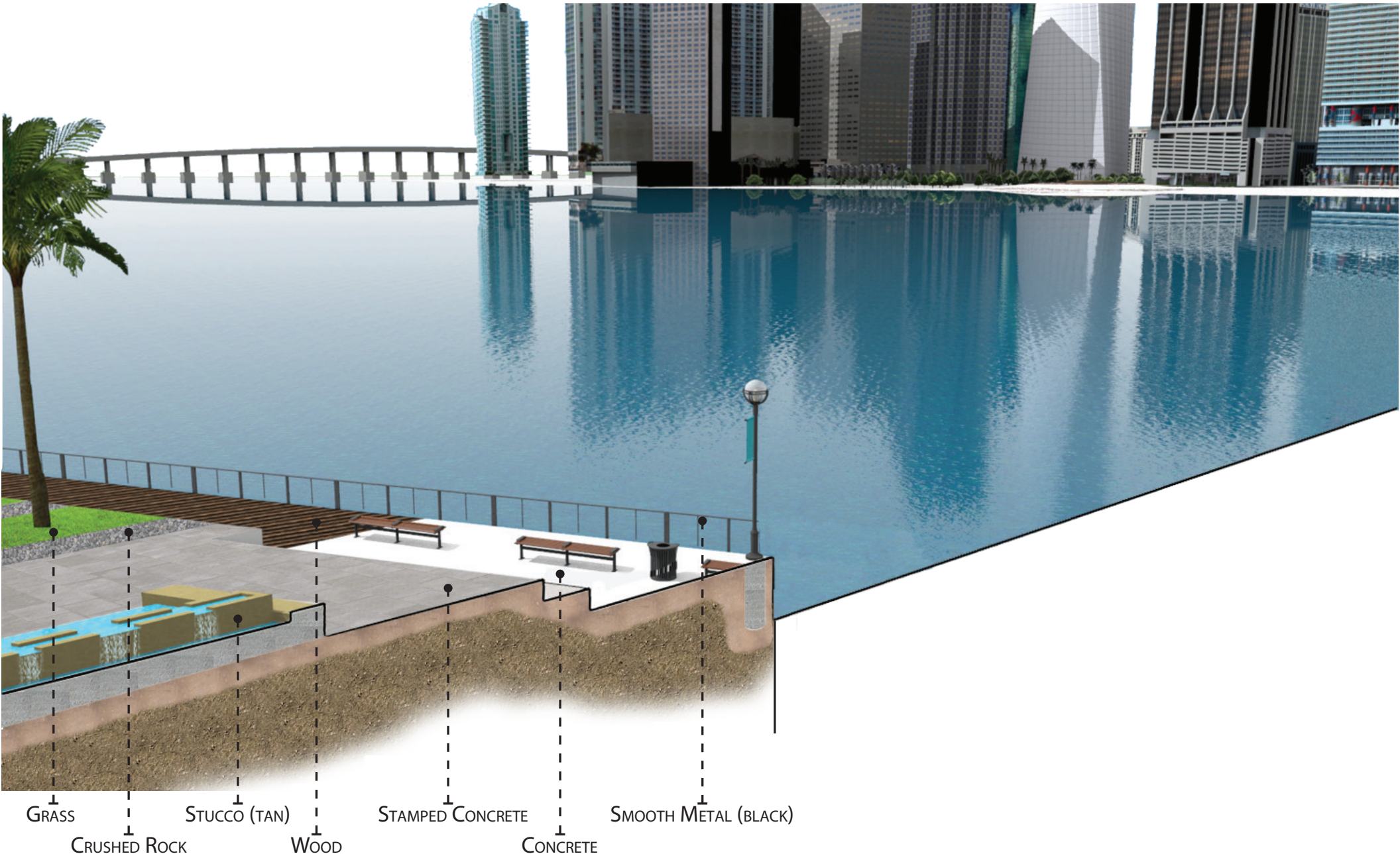
Programs elements found in this park include: the baywalk, sightlines to downtown Miami, Port Tower, beach area, kids play area, and the open lawn/even space. This space sees more family oriented elements for people to relax and enjoy their time in Miami with a more typical park approach than RCI Park.

Port Park Perspective:

This rendering is looking through the middle of Port Park with the kids play area element in the front, the beach area just beyond that, and the port tower element beyond that. This is an area that would allow families to hang out for a few hours whether they are waiting for a cruise to leave or hanging out for the day. Again the Miami skyline is in the background with an uninterrupted view from anywhere in the park.

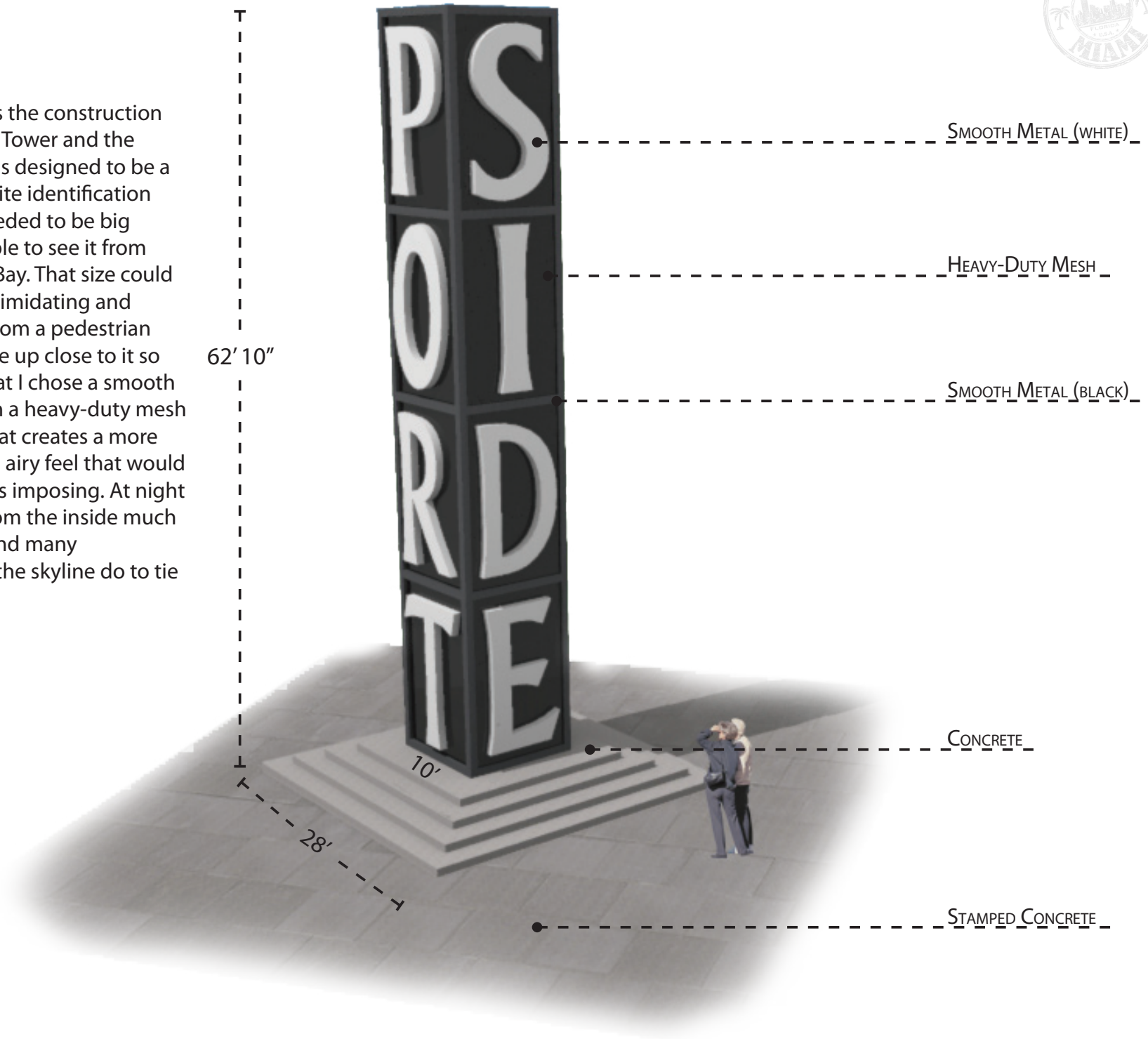
Baywalk Detail:

This detail rendering shows the relationships of all the materials and how they work together in the sightline and baywalk elements. Shows area for visitors to stop and sit down and enjoy an uninterrupted view of downtown Miami across the bay.



Port Tower Detail:

This detail shows the construction materials of Port Tower and the overall size. It was designed to be a focal point and site identification element so it needed to be big enough for people to see it from across Biscayne Bay. That size could have become intimidating and overwhelming from a pedestrian scale when you're up close to it so to counteract that I chose a smooth metal frame with a heavy-duty mesh inside of that. That creates a more see-through and airy feel that would make it seem less imposing. At night it would glow from the inside much like the bridge and many buildings along the skyline do to tie it all together.



Port Plaza:

Port Plaza is the final area of Portside and second largest area on the site. It is the only part of the design with structural development in terms of architecture. With that in mind it is expected to be the busiest area of the design and accommodate the most people most of the time, and because of that it holds the most program elements.

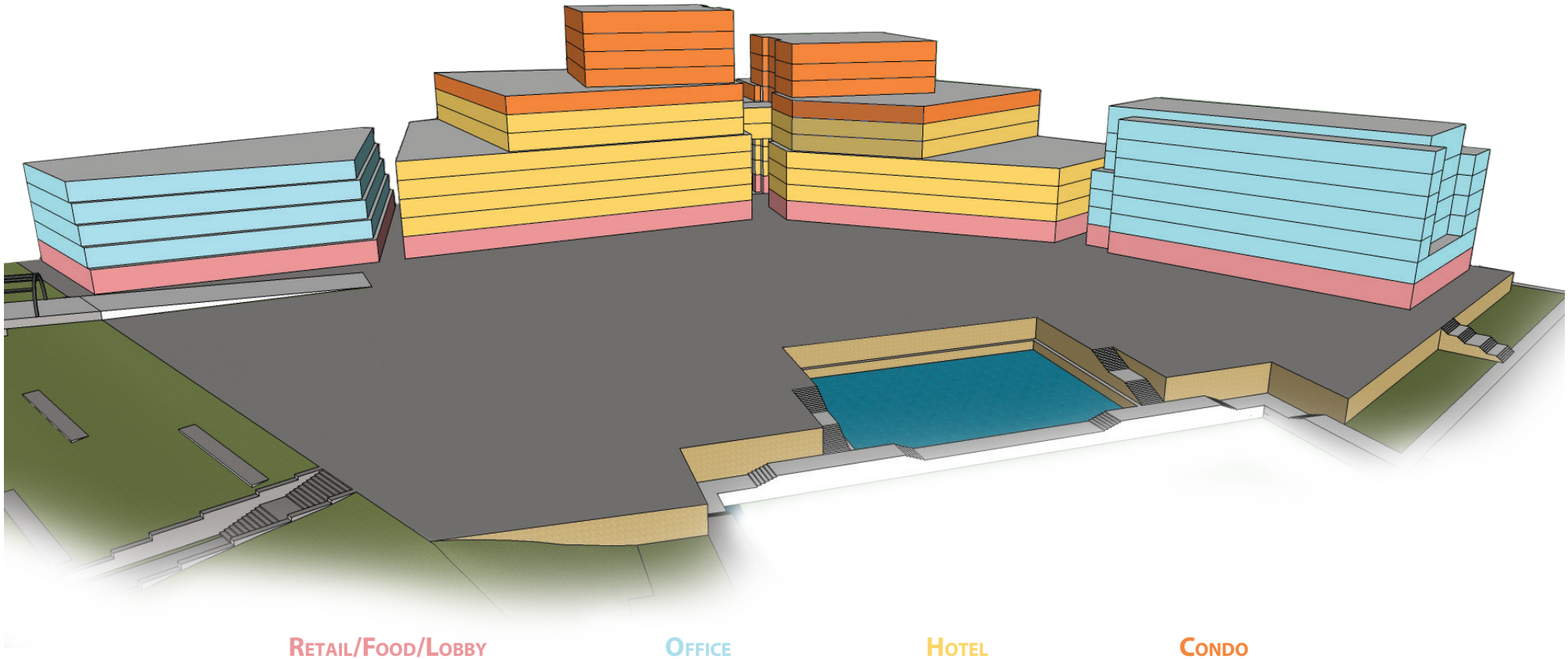
Program elements found in the plaza include: the MetroRail stop, mixed-used development, open market space, promenades, a concert stage, fountains, and the marina. These elements are meant to accommodate large amounts of people and set up picturesque views of downtown Miami and the skyline.

Port Plaza Perspective:

This rendering is looking down the main promenade in Port Plaza and shows the different material choices used, site furniture selected, and some of the other elements offered. The different vendor options can be seen between the semi-permanent and temporary options. You can also see the concert stage area and how it can be used during the day when there aren't concerts with the temporary seating for people to sit down and eat lunch or visit. Of course the skyline can be seen in the back framed by the fountains at the end of the promenade.

Building Usage Detail:

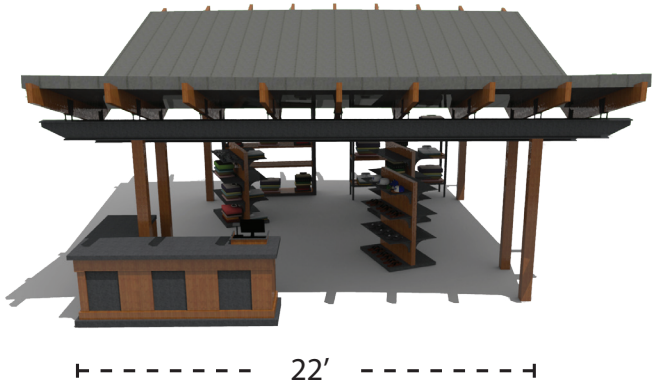
A detailed drawing showing the floor-by-floor usage for each building. There would be four different usages with retail, food, and lobby space used on the bottom floors of all four buildings. On the outer two buildings the top floors will be used as office space and gives the opportunity for another cruise line to come into PortMiami. The middle two buildings will be used as hotels on the middle floors and condo development on the top floors. As you can see from the drawing the buildings would be raised above the rest of the site to ensure views outward are not blocked. As trees grow to mature height I wanted the building views to stay above them. It also allows for parking underneath the buildings for residents and visitors checking into the hotel, and helps to make up for some of the parking lost because of the design.



Vendor Option Detail:

Some detailed drawings showing the three different options for vendor spaces in Port Plaza. The temporary option is the first shown and can be set up anywhere within the site. They can be interchanged whenever and have multiple uses which include food (shown), jewelry, glasses, etc. The semi-permanent option is shown below that and offer a permanent overhead structure that can be changed on floor level however the vendor chooses. These would require leases and are less interchangeable throughout the year. Uses include food (shown), drinks, clothing (shown), souvenirs, etc. The last option is the permanent building layout which would be on the bottom floors of the four buildings. Layouts can be changed to accommodate the need of the vendor and would be set up on long term leases with very little interchange. Can be used by larger food companies (shown), clothing lines (shown), drinks (shown), etc.

Temporary

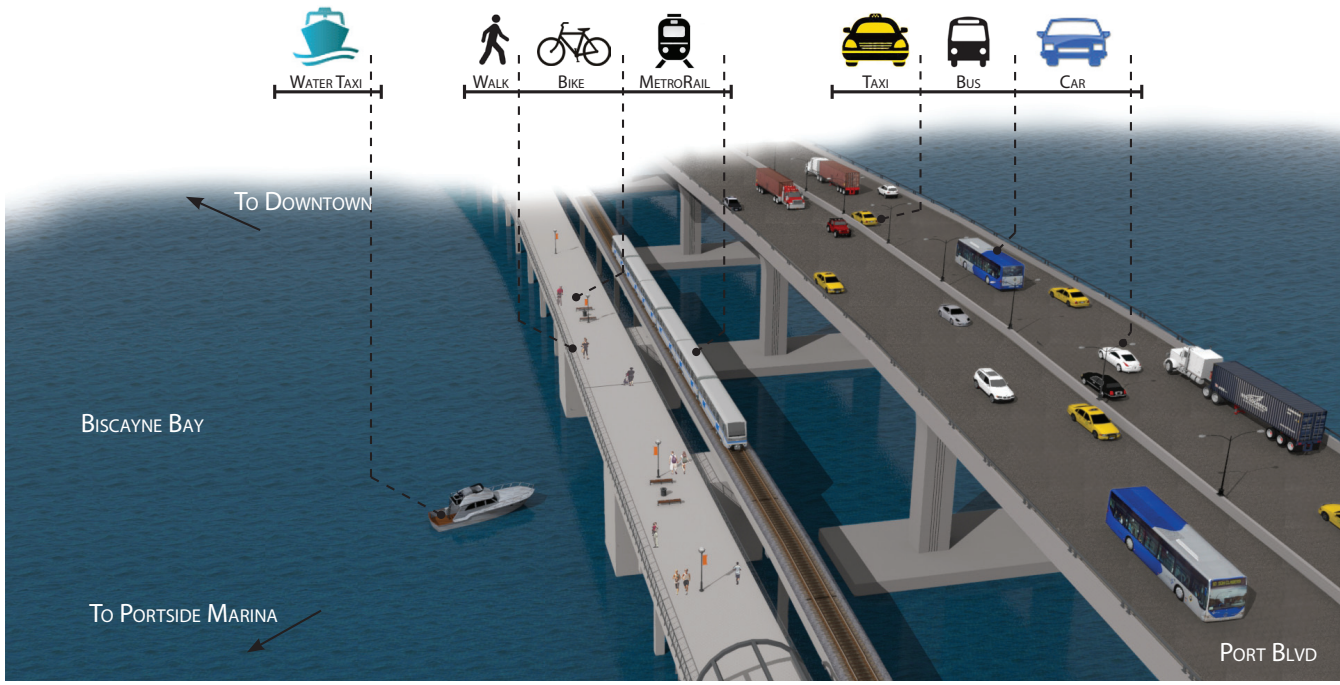


Semi-Permanent

Permanent

Transportation Detail:

This detail shows an aerial view of all seven modes of transportation that will be offered to Portside, and how they can work together to create a more dynamic connection from my site and downtown Miami. As mentioned the only viable options before the design were by taxi, car, or bus across the Port of Miami bridge and brings people over and past my site so they have to backtrack. The addition of the MetroRail and pedestrian/bike path offers a quicker way into the site and brings people directly into Port Plaza. Also the addition of the water taxi allows quick access to nearby attractions and drops people off at Portside Marina.



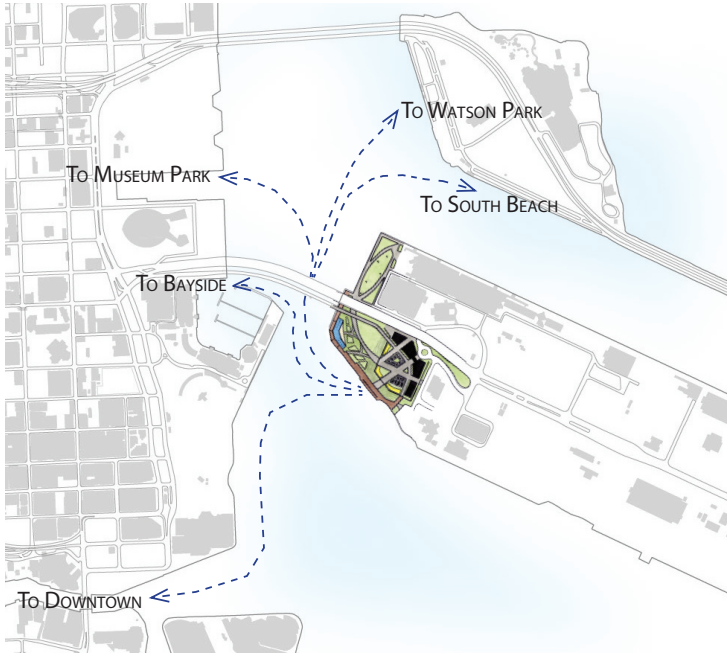
Car/Taxi/Bus Drop-off:

Pedestrian/Bike/Rail Drop-off:

Water Taxi Drop-off:

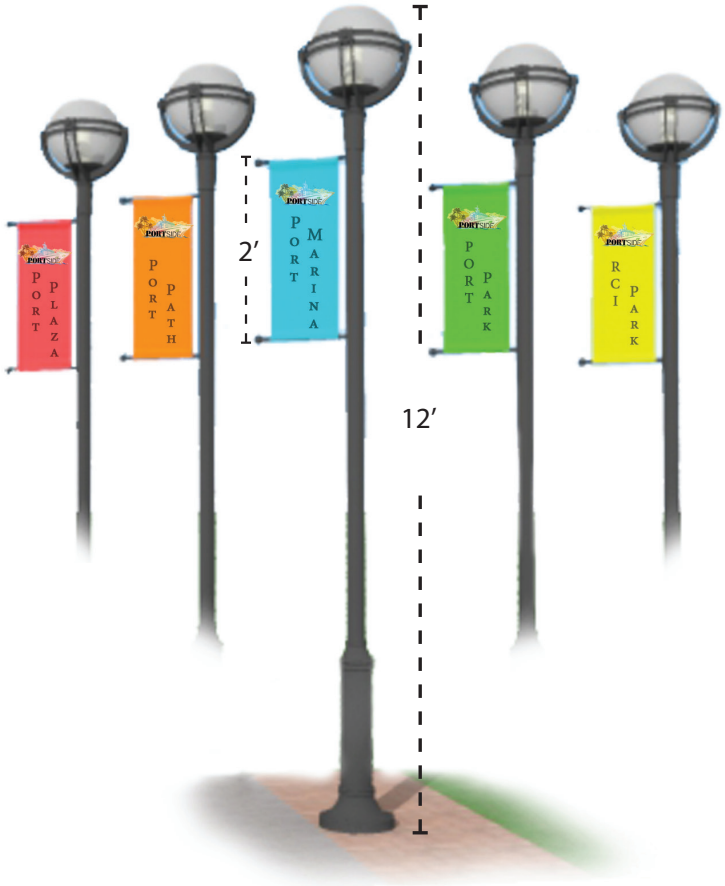
Water Taxi Service:

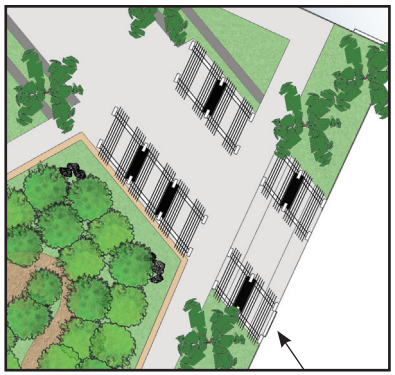
Map showing possible routes for water taxis



Entrance/Signage Detail:

Since the majority of visitors to this site will be tourists wayfinding becomes an essential aspect of this project. It's important that visitors feel comfortable arriving, moving through, and leaving the site or they won't want to come back. I chose to address that with Augmented Reality technology because it becomes an easy, fun, and unique way for visitors to interact with the site. Instead of people having to carry maps they can access all the information they need on their phone whenever they need it. Below is a perspective of the entrance into RCA Park showing the signage and technology used. By scanning the code as shown visitors can pull up maps and information that will help them easily move throughout the site and surrounding Miami. On the right is a detail drawing showing the different lighting features placed throughout the site. Each area is coordinated with a specific color so that visitors can easily identify where they are as they move through the site.





Wrap-Up:

These before and after photos show the changes made to PortMiami with my design in place. My original design vision was:

Portside will be a regional destination that caters to tourists first by providing safe and attractive mixed-use development, enjoyable outdoor spaces, and numerous transportation options with appropriate wayfinding.

As you can see from the after photo I have succeeded in:

- Reclaimed part of the port and turned it into green space
- Completed the chain in the four park system
- Captures "Miami feel" with use of art deco and modern landscape styles
- Protects sightlines and offers activities that tourists will enjoy
- Provided mixed-use development that fits within the design
- Numerous outdoor spaces and attractions
- Four new modes of transportation to and around site
- Provided new, unique, and fun wayfinding and signage throughout the site to help tourists navigate their way around

After Design

Discussion & Limitations

With the results gathered from the last section it became evident that this was a very strong site for this type of project. The sites location is fantastic with the proximity to all the attractions that Bayside and Downtown Miami offer there is a lot of potential for development that connects the three districts. The problem with the feeling of disconnect is something that can easily be addressed with the design. The zoning is ideal for mixed-use development and there is ample space due to the parking lots for development. The size of the site is perfect because it offers enough space to incorporate all the aspects needed but isn't too big that it is overwhelming from a pedestrian scale. The lack of green space and topography shows the need of the landscape architect in this project and further supports the fact that landscape architecture can be used in tourism. The bridge will create a unique problem that will take some creativity to address but there are plenty of opportunities for better circulation. Street layouts can be addressed, alternate modes of transportation can be added, improved pedestrian paths can be implemented, and way finding signage can be designed to tie it all together. The noise will be a challenge that still will need to be addressed but is a doable project, and of course the climate leads to an ideal setting for a landscape architect. No idea is off limits because the climate can support just about any type of plant. Also the number of people passing through is perfect for a tourism style project because it ensures that there will be people as long as the design can draw them. Last but not least the hurricanes are something that should be thought about throughout the design process. It shouldn't be a deterrent to any idea but it has to be thought through for feasibility.

The New York City, Times Square case study was very beneficial in providing numbers and showing how to use tourism as an economic force. While it may be unrealistic to achieve the level of success that Times Square has at this site it is important to look at what makes Times Square so successful so that those design elements can be replicated to produce a positive impact. Obviously Times Square is a major tourist attraction bringing in tens of millions of visitors each year, and with the numerous activities offered in the area naturally there is a lot of spending. However not all that spending is being done by tourists and an example of that is in advertising. Times Square is one of the most desirable and sought-after neighborhoods for advertising in the world due to the amount of tourists, residents, and the potential for viewing on television during seasonal attractions.

The next thing to take away from this study is that Times Square as a precinct is a major commercial, retail, entertainment, and residential center with over 190,000 workers, 17,000+ hotel rooms, 29 million SF of office space, and over 38,000 households. These numbers are important because they represent economic impact from a group not widely associated with tourism from the public. A key component to urban tourism projects is to find a way for tourists and residents to coincide, and Times Square offers a successful solution to that issue. One of the ways they do that is by targeting a specific social group. They have targeted the 25-44 year old age group, a majority of which have college degrees, with jobs in the executive, financial, and creative professions, with a very high average income. This represents an age group willing that is willing to go out and has the financial stability to spend money. All these factors show why Times Square is a great case study on how a site can not only attract tourists but also have a significant economic impact on a city.

Bricktown, the next case study in Oklahoma City was chosen because it is a successfully designed urban tourism precinct. Oklahoma City council recognized a need to draw tourists to their city and had the perfect place to do so: the site being

an old abandoned warehouse district once used in the cities old brick making days. The site was full of well preserved, brick façade warehouses and was located adjacent to the city's downtown neighborhood. The size of the project (roughly 263 acres) makes it comparable to my site and its use as a mixed-use development that offers numerous restaurants, nightclubs, shopping stores, sports facilities, and pedestrian friendly green spaces makes it comparable to what I envision my tourism precinct to be like. The landscape architecture is what makes this case study stick out to me though, as it offers many small pedestrian scale parks and a long canal that runs all the way through the site and offers numerous waterfront paths and stops. Bricktown becomes a good example of what Law describes as a successful urban tourism precinct (with multiple reasons to visit the area) and how it can be combined with successful landscape architecture to create a nice place to visit. That is backed up by the numbers that show that on average Bricktown now has over 7.5 million people that visit a year.

The San Francisco Port was an ideal case study in the fact that it offered me a new, innovative, and very site specific style of transportation and a cure to the problem with circulation. Seeing as the site for this project is also a port it directly relates to the San Francisco Port idea of water taxis. These taxis would be a brilliant way of also helping solve that disconnect that the site currently faces to downtown Miami. These taxis would be able to bring passengers to the Bayside Marketplace, up the river into the Downtown and Brickell neighborhoods, as well as over to the new museum park. Another aspect to look at with this concept is that it also would create a new, small number of jobs that would create a large amount of income for the city seeing as the rides would create an additional fee.

This research has the potential to build upon the already strong foundation that urban tourism has, and can boost urban tourism and landscape architecture into the next era of technology before other fields get into it. People who are studying urban tourism and applying it to real life sites around the world are still learning new things that help evolve the concept. As mentioned above scholars are starting to appreciate architects for the roles that they play in designing signature buildings or redeveloping old historic buildings that can single-handedly draw visitors. The thesis will look to contribute the role that landscape architects can have in this process by designing signature open spaces or valuable transit options that can draw visitors just to experience the design. Another important aspect that is being introduced in this thesis is the role that technology will play. As mentioned already augmented reality has never been associated with landscape architecture, but through my design will be, and can offer a new tool for landscape architects to use to get their designs across. This thesis has the potential to change how tourists forever interact with sites, how landscape architects are viewed, and how technology can alter various design fields.

Thesis Resources

Previous Design Studio Experience

2nd Year

Fall Semester_2009 — Kathleen Pepple
- Tea House_Fargo, ND
- Fine Arts Club_Fargo, ND

Spring Semester_2010 — Dominic Fischer
- Cold Smoke_Fargo, ND
- Woodlawn Park_Moorhead, MN
- N.P. Market_Fargo, ND

3rd Year

Fall Semester_2010 — Stevie Famulari
- U.P. Center_Fargo, ND
- Snow Symposium
- Fargo Library_Fargo, ND

Spring Semester_2011 — Kathleen Pepple
- Personnel Neighborhood_Kasson, MN
- Ft. Yates Indian Reservation_Ft. Yates, ND
- Mariano Park_Chicago, IL

4th Year

Fall Semester_2011 — Jay Kost
- Street Analysis_Fargo, ND
- City Block Analysis_Fargo, ND
- Building Analysis_Fargo, ND
- Form Based Codes
- Coors Field_Denver, CO

Spring Semester_2012 — Tyler Kirschner
- Hamm's Brewery Restoration_Minneapolis, MN
- Falls Restoration_Moorhead, MN

5th Year

Fall Semester_2012 — Mehran Madani
- Fargo Civic Center_Fargo, ND

Spring Semester_2013 — Jay Kost
- Senior Thesis_Miami, FL

Reference List

- Hayllar, B., Griffin, T., & Edwards, D. (2008) City Spaces – Tourist Places: Urban Tourism Precincts. Burlington, MA: Butterworth-Heinemann

- Law, C. (2002) Urban Tourism: the Visitor Economy and the Growth of Large Cities. New York, NY: Continuum

- Lee, Kangdon (2012) "Augmented Reality in Education and Training." TechTrends: Linking Research & Practice to Improve Learning: 13-21. Print

- Madden, L. (2011) Professional Augmented Reality Browsers for Smartphones: Programming for junaio, Layar, and Wikitude. West Sussex, United Kingdom: John Wiley & Sons

- "Miami 2020." VizcayneDowntown. Youtube, 26 Dec. 2011. Web. 4 Oct. 2012

- Port of Miami Master Plan (2010)

- Selby, M. (2004) Understanding Urban Tourism: Image, Culture, and Experience. New York, NY: I.B. Tauris & Co Ltd

- Spirou, Costas. "Urban Tourism and Urban Change: Cities in a Global Economy." National Louis University. Youtube, 27 Sept. 2011. Web. 4 Oct. 2012

- Towards Quality Urban Tourism (2000)

- "The Future of Augmented Reality." Hidden. Youtube, 1 Dec. 2010. Web. 4 Oct. 2012

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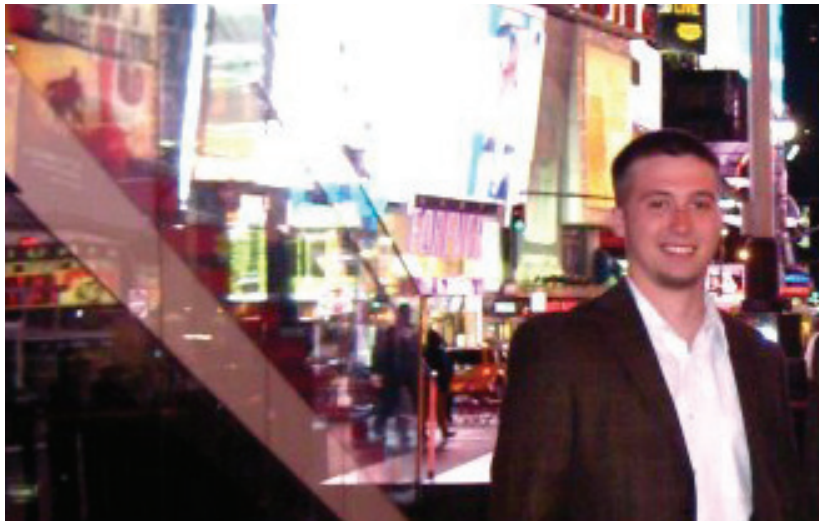

"Some people want it to happen, some wish it would happen, others make it happen."
Michael Jordan

Appendix

Photo Credits

Pg. 03

- Llandudno, Wales. N.d. Photograph. Paradise in the World. Web. 8 May 2013.
- Times Square. N.d. Photograph. Times Square Archives. Web. 8 May 2013.

Pg. 04

- Bricktown Logo. N.d. Photograph. Oklahoma City Blog. Web. 8 May 2013.
- Bricktown. N.d. Photograph. GoGoBot. Web. 8 May 2013.
- The Rocks Logo. N.d. Photograph. The Rocks Windmill. Web. 8 May 2013.
- The Rocks, Sydney. N.d. Photograph. Australia. Web. 8 May 2013.
- Times Square Logo. N.d. Photograph. Stomping Grounds Design Blog. Web. 8 May 2013.
- Times Square New Years. N.d. Photograph. Times Square NYC. Web.

Pg. 13

- Cruise Ships Entering Port of Miami. N.d. Photograph. Leamington Hotel. Web. 8 May 2013.
- Port of Miami Freight Systems. N.d. Photograph. SE Shipping News. Web. 8 May 2013.

Pg. 25

- Attractions. N.d. Photograph. Miami and Beaches. Web. 8 May 2013.
- Beaches. N.d. Photograph. Miami and Beaches. Web. 8 May 2013.
- Nature and Outdoors. N.d. Photograph. Miami and Beaches. Web. 8 May 2013.
- Nightlife. N.d. Photograph. Miami and Beaches. Web. 8 May 2013.

Pg. 27

- Adrienne Arsht Center. N.d. Photograph. Wikipedia. Web. 8 May 2013.
- AmericanAirlines Arena. N.d. Photograph. Wikimedia. Web. 8 May 2013.
- Bayside Marketplace. N.d. Photograph. Goonip. Web. 8 May 2013.
- Genting Resort World Miami. N.d. Photograph. Miami New Times. Web. 8 May 2013.
- Patricia and Phillip Frost Museum of Science Miami. N.d. Photograph. Architizer. Web. 8 May 2013.
- Perez Art Museum Miami. N.d. Photograph. Museum Publicity. Web. 8 May 2013.
- PortMiami. N.d. Photograph. Newman PR. Web. 8 May 2013.

Pg. 29

- Bayfront Park. N.d. Photograph. Bayfront Park Miami. Web. 8 May 2013.
- Museum Park Master Plan. N.d. Photograph. City of Miami. Web. 8 May 2013.
- Watson Park. N.d. Photograph. EMH3. Web. 8 May 2013.

Pg. 30

- Old Port Bridge. N.d. Photograph. Miami-Dade. Web. 8 May 2013.
- Port of Miami Bridge. Personal Photo
- Port of Miami Bridge Night. N.d. Photograph. Panoramio. Web. 8 May 2013.

Pg. 32

- Port of Miami Aerial. N.d. Photograph. Flickr. Web. 8 May 2013.

Pg. 34

- 1111 Lincoln Road. N.d. Photograph. Raymond Jungles. Web. 8 May 2013.
- Casa Morada. N.d. Photograph. Raymond Jungles. Web. 8 May 2013.
- Golden Rock Inn. N.d. Photograph. Raymond Jungles. Web. 8 May 2013.
- Pavillion Beach Club. N.d. Photograph. Raymond Jungles. Web. 8 May 2013.

Pg. 51

- Port of Miami Aerial. N.d. Photograph. Flickr. Web. 8 May 2013.

Pg. 52

- Port of Miami Aerial. N.d. Photograph. Flickr. Web. 8 May 2013. (Photo edited by Dustin Hochhalter)

Pg. 53

- Myself. Personal Photo


PORTSIDE
MIAMI, FL