SEA LA SUN HOTEL AND BEACH CLUB
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Abstract
The purpose project “Sea la Sun Beach Club” is a project that is a need for a family-oriented space where families can spend the whole day in. The Beach Club is a place to practice deferent activities safe and secured. This project consists of a beach with different activities, also a hotel located in the Red sea that serves two types of users, families, and females. The project is a solution for a social/health problem that Saudi women face constantly, which is Vitamin D deficiency due to lack of sun exposure. On the other hand, ladies in Saudi Arabia can't practice sports activities freely because of cultural restrictions. In this project, women will be allowed to enjoy various sports and activities indoors and outdoors easily. Several similar topics of case studies were considered for project development. The proposed space program consists of three main zones namely hotel, outdoor area, and services. The suggested site location of the project is located at Sharm Obhur, Jeddah. The project provides an area where families and females can have their social events, also providing an eco-friendly environment by embracing sustainability.

Keywords—Beach Club, Saudi Women, Cultural Restrictions, Females, Social Events

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INTRODUCTION
Saudi Arabia surrounded by the Red sea from the west side. Saudi Arabia wants to turn the Red Sea coastline into a global tourism destination with international standards [1]. Saudi Arabia wants to transform the economy and reduce its reliance on oil. They make a project that will be the global tourism destination. This project called "Red Sea Project" will cover 50 islands and 34,000 square kilometres, between the cities of Umuj and Al Wajh to attract ‘luxury travellers from around the globe [2].

Red Sea Development Company (RSDC) said the master plan preserved “some 75% of the destination’s islands for conservation and designates nine as sites of significant ecological value”. It added that the project had been redesigned several times to “avoid potentially disrupting endangered species native to the area” [3]. The project hopes to create 70,000 jobs opportunity and add $5.3bn to the kingdom’s GDP as its part of Saudi Arabia’s Vision 2030 strategy for diversifying the kingdom’s economy [3, 4]. Tourism has been reserved as a key element of a new economic and social vision, also fresh ways of earning income and providing jobs for Saudis [5].

The government attracts the foreigners to visit through introducing tourist visas and it is hoped about one million of domestic and international tourist a year to visit and stay at the new Red Sea destinations by 2035 [6]. The Saudi Press Agency claims the construction of the Red Sea will begin in autumn 2019 and be completed by the end of 2022, also the Kingdom’s Public Investment Fund will be responsible for the initial funding before international organizations are invited to invest [6].

CASE STUDIES
There are three selected case studies regarding the topic of Beach Club. This will give an understanding to the project later on in terms of space program and site selection criteria; also highlight water sport projects, hotels, and resorts within environment selection criteria. The selected case studies are:
(a) Grand Wailea a Waldorf Astoria Resort, Hawaii
(b) Mermaid Wellness Center, Dubai
(c) Puerto Oasis, Netherland

Grand Wailea a Waldorf Astoria Resort, Hawaii
Grand Wailea a Waldorf Astoria Resort is designed by Takashi Sekiguchi (Figure 1). The concept is to create a place that all the family can practice different activities and adventure in one place. It is the second largest hotel on the island of Maui and is one of Hawaii’s most well-known resorts [7]. It is also the site of the first water elevator and the first rotating barrel pipe ride. Grand Wailea, A Waldorf Astoria Resort is a truly world-class luxury resort with a truly world class range of activities and comforts to keep you entertained and satisfied. Maui, the island upon which it is located, offers natural wonders aplenty with its combination of sapphire-blue waters, soaring mountains and tropical finery. It is considered Maui’s favourite playground and place to relax. Nested in the midst of turquoise-blue waters and striking mountains, the resort is shrouded in a timeless beauty beckoning to be explored.

Mermaid Wellness Center, Dubai
Mermaid Wellness Center is designed by JDS Architects (Figure 2). For the islands footprint JDS chose the circle, since its radiating shape has no singular direction. On the contrary it points in all directions, therefore relating to its context, no matter where it is located. They tried to imagine the island as a programmed, soft disc, so by lifting the edges a hilly landscape emerges, with views and grandiose caves beneath. ‘Mermaid’ is a private development-project which aims to establish a large dolphinarium and wellness-center, together with hotel and holiday-apartments [8]. The close relation between these facilities, combined with a unique location, makes mermaid the frame in which sea, air and light converge to stimulate the experience of health and wellness. With dolphins as the primary attraction, ‘mermaid’ will offer a unique experience for the new ‘health tourists’ with focus on life quality, time, personal development and plenty of space for the individual.

Puerto Oasis, Netherland
Puerto Oasis is designed by Arquitectonica Company (Figure 3) [9]. The Puerto Oasis project is located in Curacao, with is 50
kilometers from Venezuela [10]. This project is a 5 star hotel and spa that has a different function. The spa and gym zone located in the south side of the project and covers only 15% of the total project area, this zone is designed to be surrounded by water.

Table 1. Overall data estimation

<table>
<thead>
<tr>
<th>Items</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross floor area</td>
<td>43146</td>
</tr>
<tr>
<td>Net area</td>
<td>35956</td>
</tr>
<tr>
<td>Foot print area</td>
<td>18700</td>
</tr>
<tr>
<td>Ground floor</td>
<td>18700</td>
</tr>
<tr>
<td>First, second and third floor</td>
<td>8148 each</td>
</tr>
<tr>
<td>Site area</td>
<td>31166</td>
</tr>
<tr>
<td>Unbuildable area</td>
<td>12466</td>
</tr>
</tbody>
</table>

Table 2. Major zones estimation

<table>
<thead>
<tr>
<th>Zones</th>
<th>Percentage (%)</th>
<th>GFA (m²)</th>
<th>Net Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>82</td>
<td>31821</td>
<td>26518</td>
</tr>
<tr>
<td>Outdoor Area</td>
<td>14</td>
<td>9938</td>
<td>8282</td>
</tr>
<tr>
<td>Services</td>
<td>4</td>
<td>1387</td>
<td>1156</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>43146</td>
<td>35956</td>
</tr>
</tbody>
</table>

Table 3. Parking space

| Expected number of visitors | 1300 |
| Number of parking spaces   | 300  |
| Parking area (300x28m²)     | 8400m² |

SITE SELECTION AND ANALYSIS

This project is restricted to a sea site, due to the project type. Thus, the site will be placed by the sea. The optimal site criteria are determined according to the requirement of the project. Due to the function of the project the site must be located on the coast near water. The sites to be evaluated for the proposed project are located in the western coast of Saudi Arabia.

Figure 5 shows site 1 with site area of 21500m² is located in Jeddah City in the Sharm Obhur close to the Kingdom Tower and King Abdullah Sport City also near to the expected Obhur Bridge that will link South Jeddah with its North Jeddah. Figure 6 show site 2 with site area of 21500m² is located in Amluj City in the western side, near to the islands that will have the “Red Sea Project”.

SPACE PROGRAM

The requirements of the project are private beach that capable for outdoors area (water activity center, sport facilities, retail shop, open market), resort (beauty salon, spa, gym), hotel/motel (event hall, entertainment center, restaurants), services (maintenance, storage, waste disposal, loading deck), and administration(main admin building and welcoming center). The bubble diagram shown in Figure 4 outlined the relationship between each zones. Table 1, Table 2 and Table 3 tabulated the overall data estimation, major zone estimation, and parking space respectively.

Figure 1. Grand Wailea a Waldorf Astoria Resort, Hawaii [7]

Figure 2. Mermaid Wellness Center, Dubai [8]

Figure 3. Puerto Oasis, Netherland [9]

Figure 4. Bubble diagram

Figure 5. Site 1 [11]

Figure 6. Site 2 [12]
The criteria for selecting the site of the project can be determined through the analysis of the case studies and knowing the standards of the project. Each criterion will be given a value called Weighting Factors (WF), it used as a multiple factor in evaluation. The WF of 1 is not very important, 2 is somewhat important and 3 is very important. The site has the highest score will be chosen. The site evaluation result is tabulated in Table 4.

The considered site evaluation criteria are accessibility, future development plans, noise, physiographic elements, surrounding, security and safety, utilities infrastructure, visibility, and visual quality. It is critical to select a site that has an easy access to workers and visitors. At the point of driveway access is highly important to consider traffic speed and intensity. Accessing the site from high speed or high volume it is harder than accessing it from minor arterials and collectors. The value of the site could be increased or decreased according to the measure of the potential level of future developments in areas adjacent to a candidate site. It should be taken into consideration where we place this project, because the project itself is considered as a noise source, so it should place it far enough from residential areas.

For the physiographic elements, the project should consider the topography of the site, the orientation, and the climatic aspects. The project will blend with the surrounding and assist in achieving the objectives of the project, so the surrounding of the site should have a relation with the main functions of the project. Regarding the security and safety, the site should be convenient to a fire station, police station, and hospital. Also, discourage vandalism it should provide adequate site lighting. Avoid the locations which near social hazards neighbourhood, such as area with high incidence of crime or drug. Avoid bad air quality problems, such as odour, dust, and noise. The site should be away from industrial and manufacturing areas.

The site must have effective utilities infrastructure which can be utilised on the project. The site visibility is important as it required attracting a large number of people. A highly visible site along a major street with easy accessibility is ideal. The site should be located in an area with a strong positive identity and image. The site should be compatible with surrounding land uses, both existing and proposed.

Table 4. Site Evaluation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting factor</th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Future development plans</td>
<td>3</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Noise</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Physiographic elements</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Surrounding</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Security and safety</td>
<td>2</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Utilities infrastructure</td>
<td>2</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Visibility</td>
<td>3</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Visual quality</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>76</strong></td>
<td><strong>75</strong></td>
<td></td>
</tr>
</tbody>
</table>

Site 1 has the highest score and chosen as the project site location according to the evaluation result shown in Table 4. Figure 7 shows that the site is accessible through the major road “Prince Abdullah AlFaisal”. The project is located in Jeddah city, which is in the Hijaz region on the Red Sea coast. It is the largest city in Makkah Province, and it is the principal gateway to Mecca. The site is located in coast area that is far away from the residential area. Thus the project will respect the surrounding because the project itself is considered as a noise source. Figure 8 shows the site climate analysis, where the site experience prevailing wind from the northwest direction.

ZONING AND PROJECT DESIGN

Figure 9 and Figure 10 demonstrate the site zoning and site plan of the project respectively. The hotel is located at the mainland and the outdoor activity is located at the coast and sea area. The concept of this project is to provide a place that serves families and females, and practicing indoor and outdoor different activities and sports freely and in a secure environment. This project also raises the awareness about the environment and embracing sustainability. Figure 11 and Figure 12 demonstrate the bird eye view and the view from sea side of the project respectively.
CONCLUSION

This project enhances women health by allowing for healthy sun exposure privately, improve local tourism thus improving the economy, allow women to practice different activities as desired, and create new job opportunities for females of different ages. The primary zones that considered in the space program are hotel, outdoor area, and services. The selected site of the project is located at Sharm Obhur, Jeddah based on the evaluation criteria of accessibility, future development plans, noise, physiographic elements, surrounding, security and safety, utilities infrastructure, visibility, and visual quality. This project allows people from different ages to practice fun activities in a healthy and secure environment, also adding an economic value by enhancing tourism in Saudi Arabia.

REFERENCES

3.692m/data=!3m2!1e3!4b1!4m14!1m7!3m6!1s0x15b0a7e2!8m2!3d25.1849302!4d37.2403572
7e2!8m2!3d25.0500064!4d37.2651084!3m5!1s0x0:0x0

![Figure 10. Site plan](image1)

Figure 10. Site plan

![Figure 11. Bird eye view](image2)

Figure 11. Bird eye view

![Figure 12. View from sea side](image3)

Figure 12. View from sea side