PROPOSED TERENGGANU CRUISE AND COMMERCIAL HUB FOR GLENN MARINE GROUP AND TERENGGANU STATE GOVERNMENT AT MUARA NORTH, SEBERANG TAKIR, KUALATERENGGANU, TERENGGANU Department of Architecture B. Arch (Hons) // Semester03 SM :Assoc. Prof Ar Mustapha Salleh Advisor: Ar. Hj Embong Mohamad Student : Ahmad Kamel Bin Muhamad Kuala Terengganu city center (KTCC) 2010432254 Waterfront Corridor ABSTRACT Muara South Long-term economic transformation Reclaimed Area plan implemented under the economic Kampung program of The east coast region Ladang/Tanjung (ECER) has opened the space of high Heritage Island quality and profitable investments. The dynamism of ECER reflects the potential for the Region to grow and develop at a faster pace through innovation and a shift in economic orientation, structure, technology and mindset. One of the development plan was carried out under the ECER program is Kuala Terengganu City center (KTCC). KTCC is envisioned to become a city centre that will excite the senses, energising and connecting the broader city to the waterfront. One of the KTCC objectives is to boost the tourism sector, which can directly increase the level of local socioeconomic as well as adding a lot of job opportunities in the future. Therefore, the idea of creating a cruise, ferry and commercial hub at KTCC as systematic water transportation center of east coast region is very promising as it can be a new landmark of Terengganu as the heritage waterfront city and LOCATION PLAN can even be an alternative detour or gateway for tourists to come for a holiday in Terengganu. ISSUES POTENTIALS CLIENTS THESIS STATEMENT A proposal of Terengganu cruise and commercial hub (TCC) in Kuala Terengganu brings 1. Lack of Foreign tourist. some challenges to sustain it in long term of period due to several reasons. 1. Terengganu has the CLIENTS Terengganu rich with natural beauties and wealth of culture potential to be an international 1. Cruise industries is a high risk industries in Kuala Terengganu because it still new which need and heritage. However, this city is still a hidden treasure. a detailed feasibility studies to identify the proposal is viable/feasible or not. cruise ship port of call Attracting only 2.87 million in 2007, 89.5% of which were 2. The proposed project is located at coastal area which need detailed technical studies including centers because it is located domestic tourist. These statistics show the government's efforts site constraints, cruise vessel design characteristics, operational/logistical flows and government between existing routes from in promoting Terengganu only attracting domestic tourist. requirements. Singapore to Thailand, Vietnam. GLENN MARINE PORTS & TERMINALS M & OBJECTIVES Hong Kong and China. This cruise CRUISE terminal construction soon to Terengganu promote the growth of foreign Aims to develop Terengganu into a leading regional water transportation hub at east coast of GLENN Marine Group **State Government** DOMESTIC TOURIST **FOREIGN TOURIST** tourist arrivals to Terengganu. peninsular Malaysia through the development of a world-class international cruise, ferry and river cruise terminal. The expectation of the Terengganu Cruise and commercial hub are: **PROJECT** Apart from promoting and organizing the activities, variety MANAGER 2. Before the bridge across transportation and easy accessibility also important. For the river Terengganu developed example, Airport terminal expansion and construction of East at around the 1960's, the Water coast highway had been contributed the increase the number transportation became a very of tourists come to Terengganu important service. Ferry service is Kuala Terengganu Okm Shahbandar to Pulau Redang provided to connect the land routes **EAST** from Kuala Terengganu to Kota 2. Lack of proper water transportation facilities. **COAST** Bharu. Once the bridge is built, a Boosting local tourism by **ECONOMIC** Have built-in flexibility wharf to allow the berthing of different As a One stop center of boats ferry service started to decline. **REGION** It is found in Terengganu does not have good and supporting a **river cruise** Now the ferry and passanger boat systematic water transportation facilities provided to users. ferries services industry along the Terengganu Majlis Bandaraya **ECER Development** types and sizes of international and and facilities to the islands in river to places of tourist spots This clearly does not describe the image of Terengganu as service is only available to **travel** Kuala Terengganu council cruise vessels. a waterfront city, and the proposal to build terminals that to the islands in the vicinity in Kuala Terengganu gather all kinds of water transportions is a good step and TERMINAL of Terengganu. timely. **EXPERTISER** 3. Recently, Taman Tamadun Islam management make an effort GLENN MARINE PORTS & TERMINALS torevivetheexcitement Alternative?? - travel by ship? of water transportation by Kuala Terengganu RIVER CRUISE introducing river cruise services as a new tourist attraction in Kuala Lumpur Terengganu. STAR CRUISES Become a new iconic and sustainable Mix development by The Leading Cruise Line In Asia-Pacific CRUISING Star cruise (Genting Hong building projecting Terengganuas Malaysia's commercial and public area with Malaysia TTI Rivercruise well-known modern and heritage waterfront water transportation hub as a new tourist attraction, Kong Limited) PRECEDENT STUDIES Kai Tak Cruise terminal SITE FEASIBILITY 1. Macro context 2. Micro context Access and artery roads O Sun orientation and Shadow casting studies 65 m Baggage area 13 m-depth Roof landscaped deck Kuala Terengganu sun orientation September December March http://www.gaisma.com/en/location/kuala-terengganu.html ► landscaped deck Site topography **SOIL CONDITION: SAND (RECLAMATION AREA)** Highest ment of the Hong Kong Special stration region Tidal variation statistic on 2011 at Terengganu sea avoid erosion Construction Floor Area 143,600 sam Wind direction and velocity **Site Area** 76,000 sqm (18.7 acres) Schedule: Min. air temperature, rain distribution and humidity, Terengganu, 2005-2009 **Building Height** Main meteorology station 🔾 Future roads (seberang Takir-Kuala Concourse length Water depth Source: Department of Meteorology Malaysia Passenger peak loading 8400 passengers **Rain Distribution** 3.3 Port Klang Cruise Terminal, Pulau Indah, Klang SITE PLAN Rivercruise route (1. Site 2. Syahbandar jetty 3. Heritage islands 4. Duyong island 5. Taman Tamadun Islam 6. State Museum) Weakness Opportunities Costraints Strength 1. The drawbridge is still in plan, if it is not 1.Accommodate civic facilities for local people 1. Strong wind velocity during Strategic location build yet, the cruise terminal users will use especially from seberang takir village. Northen east monsoon affecting cruise 1. The site is protected by wave breaker. Vessel long distance of existing road through vessel ferries schedule can berth and maneuvre without disturbed by the Sultan Mahmud bridge to go to town. 2. Helps to increase water taxi industries strong wave. 2. Special design characteristic of 2. Heavy traffic on Sultan Mahmud terminal building are required to protect 2. Low tidal variation range which the 3. Proposing on stilt pier base as a solution bridge during peak hour create unpleasant the building from strong wind highest tide is 2.13m and the lowest tide is of construction method of the cruise terminal journey for users who choose to use land -0.1m to allow sea water flow and avoiding coastal transportation from town to terminal 3. During monsoon period, the terminal erosion building. will not be operated. 3. Good views. Facing the China south east 1. It is located within port klang authorities give advantages i sea and Kuala terengganu town. 4. Future road and drawbridge that 3. Managing cruise vessel, ferries and connecting Kuala Terengganu town to Seberang water taxi at same place need good and 4. Enough depth of sea water at outer basin Takir shortening the distance and save a lot of systematic schedule to avoid heavy travelling time. area for cruise vessel berthing and maneuvre traffic at muara. DESIGN STRATEGIES **DESIGN INTENTIONS** DEVELOPMENT OF IDEAS INJECTION OF PROGRAMMES 1. BLEND 2. FLOW 3. FLEXIBLE 4. GREEN COMPONENTS **ACTIVITIES** TARGET **PERIOD PRIVACY** USER NON-CRUISE CRUISE RIVATE + PUBLIC PERIOD **Cruise terminal Embarkation** CRUISE **PASSENGERS EXHIBITION PUBLIC DAILY** Disembarkation Ferry terminal **VIEW AREA EMBARKATION DISEMBARKATION PASSENGERS** Commercia Recreational DETACHED ENCLOSED LOCALS **APPLY SUSTAINABLE** APPROACHES ON Open parking **NON-CRUISE TOURISTS** PLANNING RANDOM RISE SITE PLANNING 2ND option 2 Roof level RECREATIONAL ZONING COMMERCIAL 2 nd level OPEN PARKING 1st level ground level option 4 option 3 MASSING PARCEL N3 F.F.L +6.0M CD CONCEPTUAL IDEA PROGRAMMES Aerodynamics is a branch of dynamics concerned with studying EAST SUN the motion of air, particularly Reduce wind impact when it interacts with a moving connecting boulevard PUBLIC CONCOURSE 🕳 with cruise terminal (MULTI PURPOSES) COMMERCIAL AREA Fine & Dine restaurant CRUISE OPERATIONA FACILITIES AREA Elegance form to attract CIRCULATION PATTERNS Immigration area security clearance quarantine room SERVICES AREA baggage claim area baggage holding roor Transformer room MSB room Genset room Air plantation room Water tank room Baggage Handling Flow Embarkation Flow Disembarkation Flow meeting room file room reception area security room pantry surau FERRY FERMINAL & YACHT CLUB waiting area departure room 1 & 2 vip lounge Yacht club house retails

surau

toilet

Pedestrian Flow

Vehicular Flow (private)

Vehicular Flow (Public)