

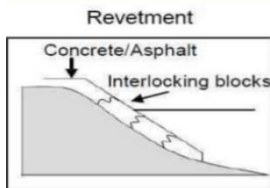

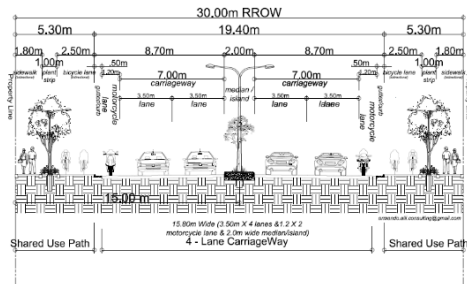
Executive Summary

ES 1.0 Project Fact Sheet

1.1 Summary of Project Description

The Summary of Project Description is given in the table below and in **ES 1.1.1** "Brief Project Background".

Table ES-1 Summary Table of Project Description

Project Fact Sheet		
Name of Project	Proposed Mandaue 115 Ha Reclamation Project (more or less)	
Project Location	Mandaue City, Cebu Along Coast of Mactan Channel	
Project Area	115 Hectares More or Less	
Project Category per EMB Memorandum Circular 2014-005	Category A: Environmentally Critical Project (ECP) Major Reclamation Project ≥ 50 hectares	
Project Classification per EMB Memorandum Circular 2014-005	"3.3 Reclamation and other land restoration project"	
Summary of Major Components	Component	Size
	Island (One)	115 Hectares
	Major Infrastructure	Containment Structure (An option below) 
	Access ways	In Initial Master Plan for Final Detailed Engineering Design (DED) 
	Internal Road Network	 30m Road Right-of-Way Scale: 1:100m

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Project Fact Sheet		
	Drainage System <i>Initial Conceptual Plan</i>	
	Power Distribution Water System Others	Not applicable (for horizontal development only)
	Waste Water Treatment Systems	OWS/Bilge System in Vessels Sedimentation traps in reclaimed land
Project Cost	Php 10 Billion more or less	
Project Timeline	Within approximately five (5) years	
Proponent Authorized	The Honorable Mayor Jonas Cabungcal Cortes	
Proponent Address and Contact Details	Address: Mandaue Presidencia, Barangay Centro, Mandaue City, Cebu 6014 Office of the City Mayor: +63 (032) 230 4500	
EIA Preparer	TECHNOTRIX INTEGRATED SERVICES CORP.	
Preparer Contact Person	Dr. Edgardo G. Alabastro, Ph.D.	
Preparer Address and Contact Details	Unit 1206 12 th Floor the Trade and Financial Tower 32 nd Street corner 7 th Avenue., Bonifacio Global City, Barangay Fort Bonifacio, Taguig City Telefax No.: (+632) 2115750 Cellular No.: 09178255203 E-mail address: technotrix.tisc@gmail.com	

1.1.1 Brief Project Background

The City of Mandaue is one of the two (2) highly urbanized cities in the Region 7 (Central Visayas), the other being the City of Cebu. Located right at the heart of the province of Cebu, it is the industrial hub in the region which hosts approximately 10,000 industrial and commercial locators.

The City is strategically located and is within only ten (10) minutes away from the major growth points within the inner corridor of the Metro Cebu Area. It links up mainland Cebu to Mactan Island through the 1st Mandaue-Mactan Bridge and the 2nd Mandaue-Mactan Bridge (Marcelo Fernan Bridge). From the Mactan Cebu International Airport, it is the door to the rest of the cities and municipalities of Cebu and the rest of the Visayas and Mindanao regions.

The reclamation project will be a source of new lands to satisfy the City's need for residential, commercial, institutional, recreational, infrastructure and utilities areas. These will be platforms for economic, business and employment activities to support the growing economy of Mandaue City. The Proposed 115-hectare reclamation project will support the growth of new businesses, promote tourism and provide an avenue for expansion of the City's vital industries. In addition, the project aims to provide a world class property development responsive to the ever-growing economy and population of the City.

1.1.2 Project Area, Location and Accessibility

The proposed Mandaue 115 hectares reclamation project, which is a single-island configuration will be located in Mactan Channel along the shoreline of Mandaue City located in Barangays Subangdaku,



Looc and Centro Mandaue. Initially during the proposal stage of the Project, the area considered was 95 hectares based on the preliminary Feasibility Study. However, after the conduct of the bathymetric survey and additional technical study on the specific location, it was determined that the area could actually be increased to 115 hectares, which was agreed on by the private sector partner.

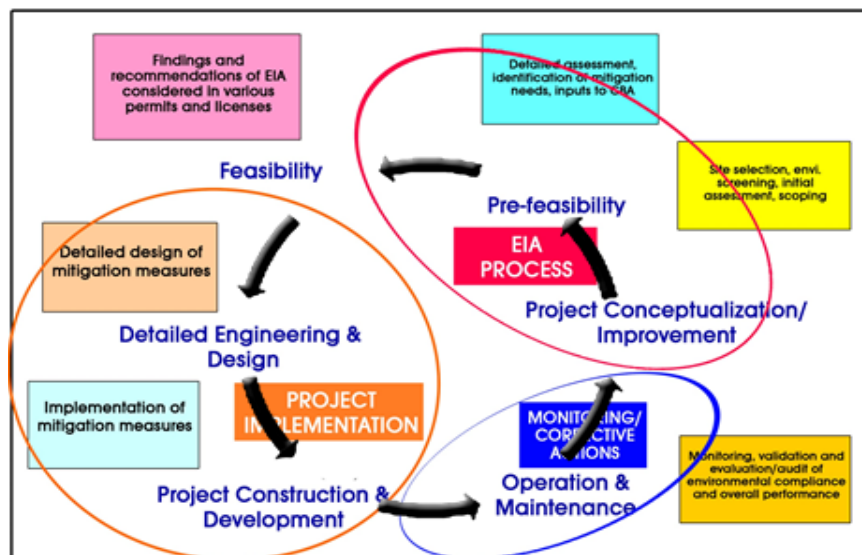
The impact barangays are **Barangay Subangdaku, Guizo, Tipolo, Looc and Centro**.

The relevant various maps showing the location and political boundaries are provided in **Section 1**. The site is readily accessible by land and sea travel.

1.2 Process Documentation of the Conduct of EIA

The EIA Report for this Proposed Reclamation Project has been prepared in compliance with the basic principle of the Philippine EIS System (PEISS), i.e.; that **an EIA/ECC is a planning tool and not a permit**, substantiated hereunder.

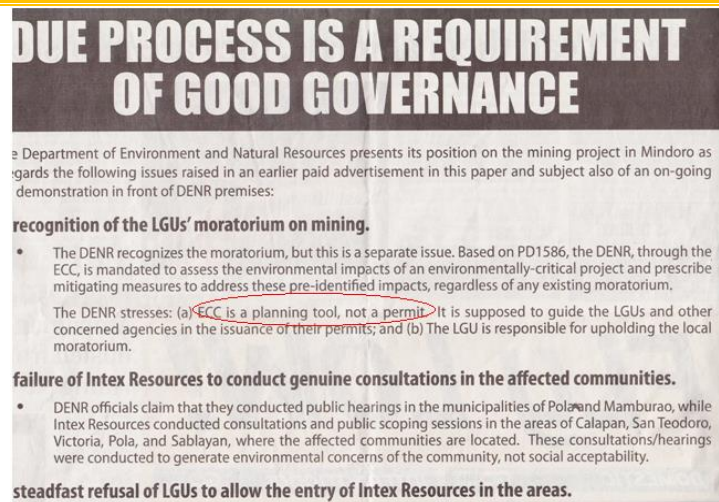
- a. The Revised Procedural Manual (DAO 03-30) stipulates this basic paradigm (of a planning tool), shown in **Figure ES-1**.



(Reference: Revised Procedural Manual for DENR Administrative Order No. 30 Series of 2003 (DAO 03-30))

Figure ES-1 Chart Showing the Planning Tool Concept Based on DAO 03 30

- b. The Public Announcement in a major daily newspaper of Former DENR Secretary J.L. Atienza asserting the Planning Tool concept of an ECC, shown below. (Reference is also made to <https://litoatienza.wordpress.com/2009/11/26/due-process-is-a-requirement-of-good-governance-secretary-lito-atienza/>)



- c. In an ECC granted by EMB Region IV-A, it was specifically stated that an ECC is a Planning Tool, shown verbatim below:

This is to certify, further, that in issuing this **CERTIFICATE**, it should be understood that the same is a **PLANNING TOOL** and **NOT A PERMIT**. Hence, the proponent shall secure pertinent **PERMITS/CLEARANCES** from all concerned government agencies (i.e. HLURB, NWRB, LGUs, DOH, DOLE, DTI, DPWH, MGB, DOT, PMRB, DENR, DOE, ERC, DOTC, DOST, etc.) prior to the implementation of the project to be submitted to this Office within sixty (60) working days upon receipt thereof; otherwise this Office shall be constrained to take appropriate legal action.

Issued at EMB CALABARZON Region this May 27, 2016.

Figure ES-2 Excerpts from an ECC Granted by EMB Calabarzon Region

Moreover, the details of a project are established post-ECC, as stipulated in **page 10 of the Revised Procedural Manual**, quoted verbatim below:

- iii) *During the project's **Detailed Engineering Design (DED)** stage, which is post-ECC, the generic measures identified during the EIA study at the FS stage will now be detailed based on the project facility design and operational specifications. Additional baseline monitoring may also be required prior to construction or implementation of the project to provide a more substantive basis for defining the environmental management and monitoring plans.*

1.2.1 Document Type for ECC Application and Generic Contents.

An Environmental Impact Statement (EIS) Report is the most appropriate document for the Construction/Reclamation Phase of the Project. Other reclamation projects granted Environmental Compliance Certificates (ECCs) also used the format of an EIS Document.

On the other hand, a Programmatic EIS type of documentation may be considered for the Operations Phase.

1.2.2 EIA Team (Proponent & Preparer Team members, module of involvement, expertise)

Table ES-2 shows the list of EIA Preparers and Resource Professionals/Service Providers.



Table ES-2 List of EIA Preparers

Team Member	Field of Expertise / Module	Company	Registration No.
Edgardo G. Alabastro, Ph.D.	Team Leader/Water Quality	Technotrix Integrated Services, Corp.	IPCO-257
Hazel A. Victoriano	Asst. Team Leader	Technotrix Integrated Services, Corp.	Being applied for
Jean S. Ravelo	Geology	TISC Independent Consultant	Being applied for
Rocelyn Zosa (Note 1)	People Module Assistant Preparer	TISC Independent Consultant	
Benjamin S. Francisco	Marine and Fresh Water Ecology	TISC Independent Consultant	IPCO-038
Nazario Sabello	Air Quality	TISC Independent Consultant	IPCO-240
Engr. Emerson Darroles	Oceanography/Hydrologist	TISC Independent Consultant	IPCO-153
Rachel V. Dinglasan	Sr. Technical / Research	Technotrix Integrated Services Corp.	Being applied for
Engr Cesar Siador, Jr.	Air Quality	c/o Technotrix Integrated Services Corp	Being applied for
Michelle A. Victoriano	Technical / Research	Technotrix Integrated Services Corp.	Being applied for

Notes:

- 1 Vice Dr Felixberto Roquia (Deceased)
2. The EIA Preparer Company has written the EMB CO dated September 25, 2020 suggesting another conduct of the Orientation Course for EIA Preparers to enable securing of Registration Numbers.
3. The above EIA Preparers are complemented by external 3rd party service providers of the Project Proponent, shown in Table ES-3.

Table ES-3 Proponent's Other Professional Service Providers

Table ES-3 Other Professionals and Service Providers

Team Member	Field of Expertise / Module	Company
Michael Chester Francisco	Fisheries	TISC Resource Person
Eng'r Manuel R. Beriña, Jr.	Master Planning Reclamation Technology	Independent Professional
Ar Carl Saycon	Master Planning	Independent Professional
AMH Phils, Inc.	Oceanography Geotechnical	Independent Consultancy Company
Geotechnics Philippines, Inc. (GPI)	Geotechnical Subsurface Investigation	Independent Service Provider
EGS Philippines	Bathymetric Survey	Independent Service Provider

1.3 EIA Process Summary

Description of Key EIA Study Schedule & Area/ Methodology / Sampling and Measurement Plan/Summary of Baseline Characterization

The EIA Studies started as early as during the preparation of the Financial Feasibility and is continuing to the present.

The studies included a) the Preliminary EIS Report b) The EGGAR c) Oceanographic and Hydraulic Modelling d) Bathymetric Survey and d) Full Geotechnical Investigation Report and are shown in **Table ES-4**.

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**Table ES-4 EIA Study Schedule and Areas Covered**

ACTIVITY	DATE	AREAS COVERED
Master Planning	Year 2020 and continuing	Landform and Project Components
Feasibility Study	Year 2020 and continuing	Project Site and Impact Areas
Hydrography and Bathymetry	October 2021	Project Site and Immediate Vicinity
Engineering Geological and Geohazard Assessment	March 2022	Project Site and Immediate Environs
Geotechnical Study	February 2022	Project Site and Immediate Environs
Seabed Soil Study	February 2022	Project Site
Bathymetric Survey	September 2020	Project Site
Market Survey for Fishes	May 2022	Mandaue Public Market
Marine Survey	March 2021	Proposed Project site and immediate vicinity
Water Sampling and Laboratory Tests	February 2021	Representative Stations in Project site
Air Sampling and Laboratory Tests	November 2020	Representative Stations Fronting Project Site
PUBLIC PARTICIPATION ACTIVITIES UNDERTAKEN		
Initial Perception Survey	January 28, 2021	Barangay Centro, Looc, Guizo, Tipolo Subangdaku
Information, Education and Communication (IEC)	July 21, 2021	Mandaue City Fisheries and Aquatic Resources Management Council (MCFARMC) Barangay Looc Barangay Centro Barangay Subangdaku Local Zoning Review Committee
Focus Group Discussion (FGD)	July 21, 2021	
	May 19, 2021	
	June 03, 2021	
	September 24, 2021	
Public Scoping	April 08, 2022	Attendees: Barangays Government Private Office NGOs/POs
Technical Scoping	April 25, 2022	Not Applicable
Public Hearing	To be scheduled	Attendees: Barangays Government Offices Private Office NGOs/POs

Table ES-5 EIA Methodology

Module / Section	Baseline	Methodology
LAND		
Land Use Classification	Secondary data: The Comprehensive Land Use Plan (CLUP) of Mandaue City.	Assessment of compatibility of the proposed project in the land use classification, Mactan Channel Coastal Strategy, Consistency with the PRA Implementing Rules and Regulations, Relation to the PRA Master Plan for Mactan Channel
Geology	Secondary data: Geologic, seismic, liquefaction, slope hazard maps and evaluation based on government data and maps.	Identify and assess project impact in terms of the changed in topography including existing hazard as maybe aggravated by the project.

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Module / Section	Baseline	Methodology
	Primary data: Borehole drilling/geotechnical studies. Soil Investigation	Project EGGAR used as primary reference
Pedology	Primary data: Geotechnical Studies	Describe the physical properties and erodibility potential of the soil, ongoing erosion processes and assess the erosional impacts of the project.
WATER		
Hydrology / Hydrogeology	Secondary data: Existing drainage system. Historical flooding occurrences	Identify and assess project impact on the change in drainage morphology, local drainage and resulting effects of flooding
Marine Water Quality	Primary data: Standard Methods for Water Quality Sampling and Monitoring. Water Body Classification: DENR Class SC Parameters Considered: Ammonia, Boron, Fluoride, Arsenic, Cadmium, Chromium +6 Lead, Mercury, Free Cyanide, Color, Dissolve Oxygen, Fecal Coliform, Nitrate, Total Suspended Solids, Phosphate, pH, Oil and Grease, Turbidity	Assess impacts on siltation of surface and coastal marine waters
Oceanography	Topographic map covering the Mactan Channel from NAMRIA. Depth surveys available in the project area.	To determine the topographic configurations of the sea bed (referred to as "bathymetry"), available topographic map covering the Mactan Channel from NAMRIA were digitized and merged with the depth surveys available in the project area. Modelling used: Delft3D
Marine	Primary data: Abundance / density / distribution of ecologically and economically important species, mangroves, benthism planktons, coral reefs, algae, seaweeds, sea grasses Presence of pollution indicators Survey of fishes and marine products at Mandaue Market	Transect, manta tow and spot dives surveys, marine resource characterization (e.g. city/municipal and commercial fisheries data), Key informant interview. Physical and ocular survey
AIR		
Ambient Air Quality	Primary data: Ambient air quality sampling and testing. DENR Classification Ambient Air and Noise Classification:	Methodology: Standard Methods for Ambient Air Quality Sampling and Monitoring

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Module / Section	Baseline	Methodology
	Ambiguous : because ESRs are at sea but standards refer to land. Parameters Considered: CO, TSP, PM 10, NOX, SOX, mercury, lead & cadmium	
Ambient Noise Quality	Primary data: Noise Meter	
Contribution in terms of GHG	Data and projections on Greenhouse Gasses	Estimate of projected greenhouse gasses (GHG)
PEOPLE		
Demographic Profile / Baseline	Primary data: Conduct of Public Perception Survey, Public Scoping Comprehensive Land Use Plan of Mandaue City	

1.4 Alternatives considered in terms of siting, technology selection/operation processes and design

The different options for reclamation technology and the selected option based on the technology with the least environmental impacts.

The alternative reclamation methodologies, including the mitigating measure and possible source of filling materials.

Comparison of environmental impacts of each alternative for facility siting, development design, process/technology selection, resource utilization

Summarized hereunder:

Figure ES-3 illustrates the framework for decision-making relative to site and reclamation methodology options.

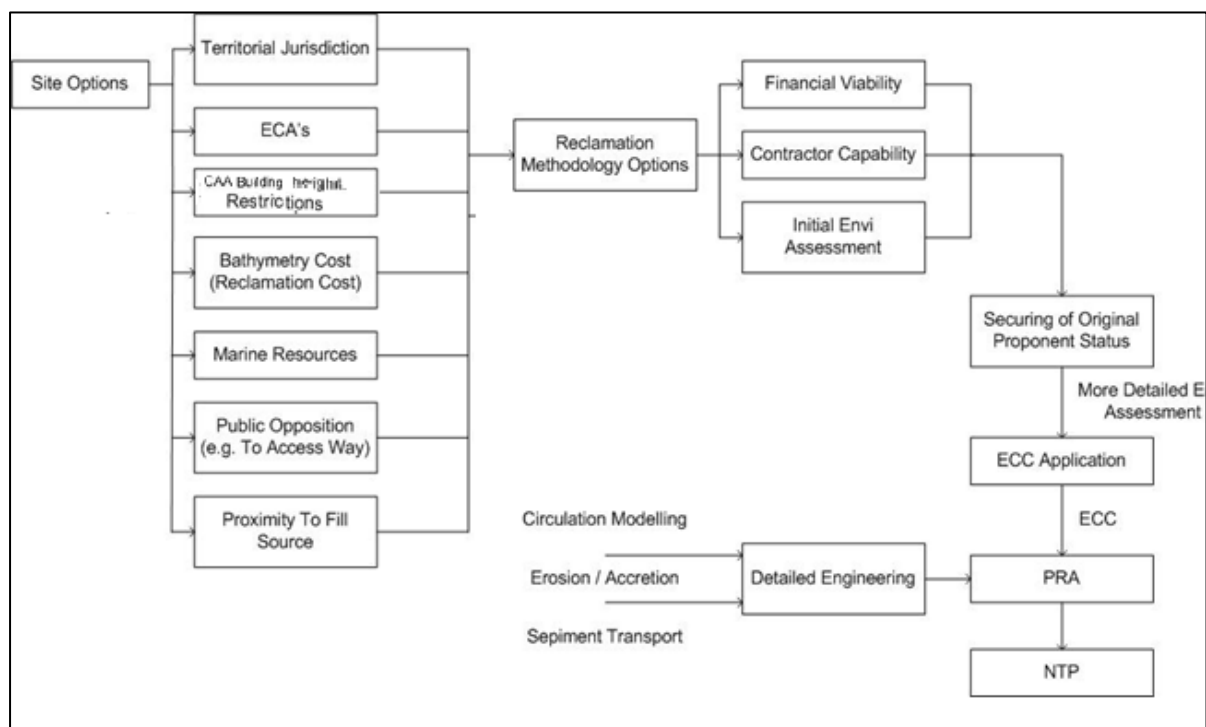


Figure ES-3 Illustration of the Framework for Siting and Reclamation Methodology Options

As may be gleaned from the above, after a site option has passed the criteria (absence of conflict with ECAs, absence of or manageable significant marine resources at site, absence of Informal Settlers,

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etc.), the various reclamation methodologies are thence evaluated. The methodology options must pass the financial viability criteria and must be compatible with the Contractor's capability and further, should be compliant with environmental standards.

Ultimately, the site and methodology must pass the requirements of the PRA for the granting of a Notice to Proceed (NTP).

Table ES-6 summarizes the various siting and configuration (number of islands) alternatives.

Table ES-6 Alternatives for Siting

EIS Module	Advantages	Disadvantages	Environmental Impacts
The Selected Site Alternate 1			
Land	Consistent w ECA criteria	Not relevant	Same for all Alternatives
	Flooding consideration	Not relevant	Same for all alternatives
	<ul style="list-style-type: none"> Insignificant Marine Resources incl. mangroves Water depths within 10 m-12 m. 	Not relevant	Same for all alternatives
Air	Not a major factor for the activities through horizontal development		
People	Absence of Settlers	Not relevant	None (social impacts)
Other alternatives sites			
Land	Same as above	Same as above	Same for all alternatives
Water	Same as above except for water depths consideration	Same as above except water depths unacceptable	Greater impacts on silt dispersal and seabed disturbance
People	Same as for alternative 1		

Other relating alternative for siting the following points are duly considered:

The land adjoining Mactan Channel on Mandaue side is already a reclaimed area. Thus, the original location of shoreline of Mandaue City should be and will be reviewed/revisited and be used as reference point in delineating city waters of each city. The land configuration for the Project is deemed not relevant to this observation because the adjoining land is distant from the reclamation site.

There might be a possibility that with this new reclamation, the area of jurisdiction of Lapu-lapu City may be encroached. Thus, the proponent is advised to secure favorable endorsement/letter of no objection from the LGU of Lapu-lapu City through a Sangguniang Panglungsod resolution relative to the possible encroachment of municipal/waters of the latter; Resolution of any encroachment will necessarily be undertaken through an agreement between the Cities of Mandaue and Lapu-lapu.

Confirmation that boat passage in the Mactan Channel is passable up to the largest tonnage of vessel allowed to pass through channel'

With respect to configuration:

- Configuration and site must be in conformance with the CLUP
- Configuration must not conflict with existing and future reclamation plans of the City
- Compliant with the restrictions of the Civil Aeronautics regulations on building heights

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- Site and configuration must be generally acceptable to concerned other government entities, e.g.; the CPA as would be established during the securing of the Letters of No Objection (LONOs)
- The Master Plan and reclamation configuration should be harmonized

Conclusions:

- The above considered, a one (1) island configuration and the opted site are thus considered the most optimum alternative/option.
- The selected site will be further evaluated by the PRA before it grants the NTP for the Project.

With respect to technology selection/operation processes and design

The most feasible option (with respect to environmental aspects, timetable, cost considerations and experience) is largely dictated by the choice of the Reclamation/Dredging Contractor.

Discussed in the EIS draft report are the processes, design, methodology and pollution abatement facilities and emergency-related facilities and action plans specific to each particular Contractor.

1.5 Concise integrated summaries of the main impacts and residual effects after applying mitigation. The summary matrix is shown in Table ES-7

Table ES-7 Summary matrix of main impacts, mitigating measures and performance

Activity	Potential Impacts	Mitigating Measures	Target Efficiency Performance
Site Preparation & Initial Works			
Dredging/Trenching of Channels for Turning Basin	Disturbance of Sea Bed and Silt Dispersal	Method Statement of Contractor Use of environmental green valve technology	100 % compliance with DAO 2016-08
Site Clearing. Removal of scraps, debris, plastics and rubbish materials.	Increase in turbidity due to silt dispersal		100 % compliance with DAO 2016-08
	Generation of solid wastes	Collected solid wastes shall be segregated and disposed on shore by a 3 rd party hauler No discharge to sea per MARPOL and PCG	100 %
Construction of Sand Keys	Disturbance of Sea Bed and Silt Dispersal	Method Statement of Contractor Use of environmental green valve technology (Note 1)	100 % compliance with DAO 2016-08
Transport of dredged materials to disposal site (to be determined)	Water pollution due to accidental spill of dredged materials	100 % compliance with MARPOL and PCG	100 % compliance; no spillage to the Channel
Removal of unwanted dredged materials	Silt dispersals and turbidity increase	Re-use as part of fill materials and soil stabilization	100%

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Activity	Potential Impacts	Mitigating Measures	Target Efficiency Performance
Reclamation Activities			
Transport of Fill Materials to/from source to project site	Water Pollution due to Accidental Spillage of Oil or fill materials	Compliance w MARPOL and PCG	100 % compliance with DAO 2016-08
	Generation of aqueous wastes	Bilge water management Compliance w MARPOL and PCG	100 % compliance with DAO 2016-08
	Generation of domestic garbage from vessel crews	Segregation, collection and disposal on shore by 3 rd party Hauler	100 % compliance with RA 9003
Filling of sand keys in reclamation area (below water level) Placement of armour rocks	Dispersal of silt resulting in increase in turbidity and suspended solids	Method statement, e.g. Use of floating pipeline and spreader pontoon or alternate methods to discharge fill materials	100 % compliance with DAO 2016-08
Filling of sand keys above water level Construction of containment structures	Water pollution due to increase in turbidity from silt dispersal	Method Statement	100 % compliance with DAO 2016-08
	Also, from domestic sources	Temporary facilities at onshore work sites Bilge waste water management in vessels	
	Dust pollution from open areas	Spraying with water using water tanker	100 % compliance
	Noise pollution (nuisance) from operation of heavy equipment	Use of noise silencers Distant from ESRs	100 % compliance
Use of Toilet Facilities	Discharge would deteriorate water quality	Toilet facilities are on board sea crafts. No discharges to sea MARPOL rules of toilets	100%
Operation of dredging and reclamation vessels and equipment	Disturbance of marine ecology and fisheries	No significant marine ecology species and fisheries at the project impact areas	100%
	Generation of garbage and solid wastes	Collection in segregated garbage bins and disposed on shore to MRF Strictly no discharges to sea per MARPOL regulations	100% In absence of standards performance to be measured against number of garbage bins collected and disposed per week
Temporary Facilities at dredging and reclamation vessels and equipment	Not applicable for the dredging and reclamation works. The vessels themselves provide the facilities for the crew, e.g., toilets, kitchenette, sleeping quarters, etc. and are built in not temporary in nature.		

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Activity	Potential Impacts	Mitigating Measures	Target Efficiency Performance
Soil Stabilization and Horizontal Development			
Soil stabilization	Water pollution from domestic sources	Temporary facilities at onshore work sites	100 % compliance with DAO 2016-08
Horizontal Development Works	Sedimentation to the Bay	Sedimentation pond	100 % compliance with DAO 2016-08 esp. on TSS
Road networks/drainage Water and electricity distribution systems Power and communication systems	Generation of hazardous wastes	No significant hazwastes involved	100 % compliance with RA 6969

Note 1: The principle of the operation of an Environmental Green Valve Technology. The entertainment of air in water that leaves the hopper in the vessel through the overflow has an important effect on the occurrence of sediment plumes. Air bubbles rising to the surface prevent sediment from settling and even cause it to move up in the water column.

The water body that will be impacted by dredging is the Mactan Channel.

1.6 Risks and uncertainties relating to the findings and implications for decision making

Risks and Uncertainties refer to floods, seismic risks, land subsidence, etc., relate significantly to safety risks and potentially to Climate Change induced-phenomenon, the latter which could result in storm surges and floods. Sea level rise which is climate change induced is not considered a risk/uncertainty to the Project.

Safety risks are readily addressed and discussed in the EIS draft report while the met-ocean risks induced by climate change are present with or without the Project.

Decision making which is translated into whether to proceed with the project or not is only slightly influenced by these risks/uncertainties because:

- The project proponent and its consortium members especially the private sector developer and funding source will not risk investments that maybe due to environmental disasters without due engineering interventions
- Risks to the environment (marine resources, terrestrial resources, land resources and people) are clearly identified and are addressed adequately with mitigating measure thus cushioning effects on decision making.
- Ultimately the permit for project implementation rests on the PRA with its issuance of NTP. It is deemed that the NTP would not be issued until more thorough engineering details shall have designed and risks and uncertainties generally addressed.
- Noting that the EIS and the ECC application is only through the horizontal development phase, risks and uncertainties that may be identified during the Operations Phase will be clearly delineated during the EIS Process for the Operations Phase.

Not to be minimized is the fact that the funding for this size of project will undergo close due diligence by financial institutions which requirements among other is the analysis of uncertainties and risks. The project can only be implemented after passing the due diligence of these institutions.

1.7 The Public Participation Process and Activities

1.7.1 The Pre EIS-Perception Survey

Households perception surveys were conducted last January 28, 2021 to assess the socio-cultural economic situation of the communities that are to be affected by the proposed reclamation, particularly

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Barangay Subangdaku, Tipolo, Guizo, Looc and Centro, Mandaue City, Cebu which is closest to the project site

Major results of the perception survey**Perceived Impacts**

As far as the perceived benefits is concerned, the top responses are on livelihood and business opportunities, improvement of roads and other infrastructure, additional tax, good service of the government and water services. On the other hand, perceived adverse impacts are traffic, water pollution, loss of job, tsunami, corruption, loss of fresh air from the Mactan Channel, flood, perceived impacts of marine species and loss of aesthetic view.

Table ES-8 Summary Matrix of Issues and Concerns Raised During FGD / IEC Activity

Issues/Suggestions Raised by Stakeholder	Issues and Concerns	Response
Ms. Maria Grace Go Mandaue City Agriculturist-OIC	In what way the small fisherfolk can be protected from the direct impact of the project	Dr. Edgardo Alabastro Technotrix Integrated Services Corp No significant corals in the project area.
Secretary Emmanuell Caitum MCFARMC	When did the study were conducted (specific month, date, time, day) that comes to the conclusion that Fish catch rates have progressively declined and many species have disappeared	Dr. Edgardo Alabastro Technotrix Integrated Services Corp It is a continuous study and results only showed initial data and will provide updates to stakeholders regularly.
	What is the assurance that will be provided by the developer for displaced fisherfolk of Mandaue City.	Dr. Edgardo Alabastro Technotrix Integrated Services Corp It is part of the social responsibility of the company
Engr. Oscar Rodriguez	Inquired about the final area of the reclamation	Atty. Sharlyne Goboy-Lapuz Kit Properties Inc The final area is 115 hectare reclaimed area

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<p>Engr. Oscar Rodriguez</p>	<p>Inquiry on the five barangays impacted by the project. He clarified if the proposed reclamation is connected to the present reclamation area of Mandaue City or a portion will be detached to the existing reclamation.</p> <p>He further asked if this plan was already submitted to PRA.</p>	<p>Atty. Sharlyne Goboy-Lapuz Kit Properties Inc</p> <p>The intention of the Joint Venture with the city is to apply for a reclamation permit. With MOU with the city and the PRA, we are required by PRA to submit environmental, masterplan and other formal requirements under the rules of PRA.</p> <p>Ar. Marlo Ocleasa OIC – City Planning & Dev't Office</p> <p>Raised that in the list of impact barangays, CSSEAZ was not included. He explained that for CSSEAZ, it is the city that administers this area.</p>
<p>Engr. Oscar Rodriguez</p>	<p>Asked if the southern part of the reclaimed area is adjacent to Mandani Bay or the waterfront area. He mentioned that practically it touches the existing Mandaue reclamation. He asked what will happen to the existing locators.</p>	<p>Atty. Sharlyne Goboy-Lapuz Kit Properties Inc</p> <p>A public hearing will have to be conducted with regard the proposal affected stakeholders will be included in this public hearing and inputs by the stakeholders will be considered in the final masterplan of KIT Properties.</p>
<p>Issues/Suggestions Raised by Stakeholder</p>	<p>Issues and Concerns</p>	<p>Response</p>
<p>Engr. Oscar Rodriguez</p>	<p>If there will be a perimeter canal between existing reclamation and the proposed reclamation.</p>	<p>Atty. Sharlyne Goboy-Lapuz Kit Properties Inc</p>
<p>Ar. Marlo Ocleasa OIC – City Planning & Dev't Office</p>	<p>There are several other projects to consider such as new coastal road by DPWH and JICA, existing partnership with Southern Gothong, projects of private entities like Mandani Bay, San Miguel, and Ouano Wharf. All development projects should be considered in the final landform. He reminded that a planner needs integrate those developments to proposed reclamation.</p>	<p>All observations are noted and will be considered. In addition, there shall be a visioning process of the city, technical studies and all these will be integrated in the final masterplan proposal.</p>
<p>Ar. Marlo Ocleasa OIC – City Planning & Dev't Office</p>	<p>Touched on the topic of the land use for the project. Based on the initial discussion, the proposed reclamation will be an extension of PUD 1 Civic and Trade zone.</p> <p>It is an extension of PUD1 and</p>	<p>Atty. Sharlyne Goboy-Lapuz Kit Properties Inc</p> <p>The master development plan of the project is consistent with the theme of PUD 1.</p>

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ESP In English



	so there should be mandatory compliance of the green building ordinance	Atty. Sharlyne Goboy-Lapuz Kit Properties Inc We assure that there will be a drainage line and a buffer zone of 10-meter setback
	On drainage outfall, since this might be directly linked to existing reclamation, I suggest to the implementation of a buffer zone and comply with the setback requirement from waterfront	
	Regarding the poor condition of sea front, a buffer zone can help prevent further damage of the existing seawall and not cause further damage.	
Engr. Oscar Rodriguez	Asked about the height limitations of the existing built-in environment and the new proposals. He suggested that the committee should come up with a strategic policy for the extent of the developments in Mandaue.	Atty. Sharlyne Goboy-Lapuz Kit Properties Inc Only coastal engineering study has been completed.
Engr. Antonio Atillo	Asked if proponent have considered Mactan channel being a navigation area/corridor safety of shipping industry along the corridor	
Issues/Suggestions Raised by Stakeholder	Issues and Concerns	Response
Enp./ Ar. Araceli Barlam	Asked that out of the four engineering and environmental studies, only one so far has been completed. She inquired if will be able to share salient points of the study.	
	Landfilling quarrying is part of adverse impact and these environmental are usually not given value	



Table ES-9 Summary Matrix of Issues and Concerns Raised During Public Scoping – Conducted April 08, 2022

Module	Sector or Representative Who Raised the Issue/ Suggestion	Issues/Suggestions Raised by Stakeholder	Response (s)
Land	Mr. Jailani Fernandez DENR-7, LPDD	<ul style="list-style-type: none"> There are shipping industries operating along the seafront properties (container yards and wharfs; Gothong and Super Shuttle). What will happen to these companies? There is also a real estate development (Mandani Bay) on the seafront. Was the developer consulted on this also? The highlight of the real estate development is that they are a seafront property. 	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none"> Duly noted These industries are distant from the project site Duly noted These properties are distant from the project site
	Daniel Jose Buhay PHIVOLCS	<ul style="list-style-type: none"> Comment: According to your project description report and as you have mention earlier po, you will be applying engineering interventions. So, we have that those are properly implemented so the project pushed thru. Suggestion: We understand that this is early stages. But Phivolcs has already conducted some study in Cebu regarding the earthquake hazard that may affect the area On tsunami scenario we have around 5.4m of wave height according to our available latest hazard map. So for our suggestion, we hope that this information will be reflected and be addressed on the future technical scoping and reports. 	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none"> Yan po ay tutugunan ng Engineering Intervention yun pong tinatawag nating DED “Detailed Engineering and Design” which is undertaken after or post ECC. Napakaganda po ng katanungan ninyo incidentally dahil Last Feb 15 po.. nagkaroon po ako ng pagkakataon marinig si USEC Rene Dr. Solidum na nagpahayag katulad ng sinasabi Ninyo maganda po! so I learned my lesson and we will integrate in our report yung katanungan Ninyo at yung sinabi ni Dr. Solidum. Meron po ang project ng Geotechnical Investigation Report at meron pa pong containment structure

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Water	Mr. Richardson Rama Cebu Port Authority	<ul style="list-style-type: none">• Increase in siltation in coastal waters is part of the potential impact of the said project. Do we have a mitigating measure to ensure that silts will not accumulate at the vicinity of CIP finger pier? Because this may affect the required docking draft of vessels docking in this area. Is it possible to discuss this mitigation process with CPA?• Will this project affect our port operations at Ouano wharf?	Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp. <ul style="list-style-type: none">• Mitigation consists of dredging and methodology, e.g. use of Environmental Green Valve
	Mr. Amado Roberto Jr. Sanglay Philippine Navy	<ul style="list-style-type: none">• Width and length of the project configuration	Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp. <ul style="list-style-type: none">• Noted, and will give the dimension and configuration in relationship to the Philippine Navy facilities and their navigation lane
	Rose-Liza Eisma-Osorio OCEANA	<ul style="list-style-type: none">• Distance between Mandaue and Lapu-lapu for the channel• Is there a fisheries registration database where you will have the information for how many fisherfolks that will be displaced?• How will you be able to transplant the species that are located in your sub-bottom that will be covered by the reclamation project	Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp. <ul style="list-style-type: none">• Duly noted and will include in the EIS report• No fisherfolks within the define DIA and being confirmed by Mandaue City Administrator – Atty Jamaal James Calipayan• There are no mangroves and there is also study stated that there are no mangroves within the define DIA

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	Aida Chinloy Mandaue Realty & Resources Corporation	<ul style="list-style-type: none"> • What kind of buffer zone do you have and how it will affect the current water vessel industry? • I would just like to add, if there is a buffer zone you're only considering for example.. function it for water outfall or floodway, whatever that distance is that you only consider will not be enough for providing navigability for water vessels • What are you plans access bridges to your island 	Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp. <ul style="list-style-type: none"> • Kasi po sabi namin sa aming slide "Tentative initial bufferzone" pero dahil po sa katanungan ni Ms. Aida mapapaigting pa po namen ang EIS report para po tugunan yung katanungan ni Ms. Aida. • Respectfully and duly noted and we will consider that seriously in our report and it will prepare with the LGU and the consultants of the LGU
	Nikka Oquias OCEANA	<ul style="list-style-type: none"> • We want to know the specific number of fisherfolk who will be displaced not only in Mandaue but also in Lapu-lapu • What are the specific alternatives proposed by the proponent for this sector, fisher folk sector who will be affected? • May ecological profile ba of proposed reclamation site. Source of primary data? • May maapektuhan po bang mangroves? And ilan ang count ninyo? 	Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp. <ul style="list-style-type: none"> • The project is Mandaue and the impact are is within Mandaue only. Within the define DIA and IIA, as define in DAO 2017-15 and DAO 2003-30 • Wala pong fisherfolks na tatamaan ang proyekto.. pero kung meron naman po we will consult as the EIA Preparer with the LGU • Yes.. lalo na po ang mangrove meron na pong primary data Atty Jamaal James Calipayan Mandaue City – City Administrator <ul style="list-style-type: none"> • It has be also been recorded already that there are no mangroves along that portion of the Mactan Channel. There was already a study conducted. The mangroves actually is on other side, on the 2nd Mandaue Mactan bridge.

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	Teodore Gilber Ang HTLand Inc./Mandani Bay	<ul style="list-style-type: none">• Please consider the drainage of Mandani Bay and the limitation of other proponents when they do the drainage system as well• You've mentioned that your project is less than 3km offshore. I would just like to inform Dr. Alabastro that the approximate distance between Mactan channel where Mandani Bay is right now and the island of Mactan is 1km more or less• There are 2 major outfalls that are affected one is the Mahiga Creek and the other one is the Tipolo Creek which are 2 major outfalls of Mandaue City.	Jon Kasilag AMH, Phils., Inc <ul style="list-style-type: none">• Yes, it will be covered
Air	none		
People	Nikka Oquias OCEANA	<ul style="list-style-type: none">• May mga households ba na marerelocate once this project starts? And if meron may relocation plan ba in place ang project proponent	Atty Jamaal James Calipayan Mandaue City – City Administrator <ul style="list-style-type: none">• There was also one confirmation which was sought by Dr. Alabastro regarding the informal settlers in the area. We confirmed that..That there are no informal settlers nor households which will be dislocated for this perspective project

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	DOH-CVCHD	<ul style="list-style-type: none"> • Anticipated noises and health effects of the projects • What are the mitigating measures? • Effects on water supply in the vicinity area of the project 	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none"> • tigtingan pa po namin ang pag aaral tungkol dyan. Ang aktibidades ay nasa barko, nasa reclaimed land at sa aming pananaw wala kaming nakikitang adverse impact sa health. Pero ganon pa man pahahalagahan namin ang katanungang iyan at tutugunan po namin ng mas maayos pa sa sinasabi namen sa ngayong. • Wala pong effect or adverse impact on water supply. Bakit po? Ang process po ng reclamation, dredging ay dry. Hindi po magkakaroon ng underground water extraction
Others	Mr. Jailani Fernandez DENR R7 - LPDD	<ul style="list-style-type: none"> • Consider environmental impact in source of fill materials, i.e. Tubigon, there is Protected Area • Per Sec 5.4 of DAO 2021 07 reclamation projects shall adopt 40 meter easement zone, measured from the banks or edge of reclaimed land • Only 27 % allocated for roads and open spaces, PRA AO 2019-4 should be 30 % 	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none"> • The option for source of fill materials which is Tubigon is distant from the E Nipas Protected Area. The source will be covered by a separate Environmental Impact System as it involves mining and proponent is different. • Duly Noted. This is addressed in the Master Plan • This is reflected In the Master Plan. ..by Eng'r Rex Chan <p>Engr. Antonio Rex Chan KIT Consortium Consultant</p> <ul style="list-style-type: none"> • Yes.
	DENR CENRO Cebu City	<ul style="list-style-type: none"> • Neighboring municipality/city should have participated in Public Scoping, they are also affected, especially with big volume of fill materials. 	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none"> • Duly Noted. Participation is based on DAO 03 30 and DAO 2017-15

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	Jade Gothong	<ul style="list-style-type: none">I understand all shoreline properties have private owners; how will the project be accessed to the main island of Mandaue?	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <p>Duly noted. Will be responded to with details in the EIS Report</p> <p>Atty Jamaal James Calipayan Mandaue City – City Administrator</p> <p>Initially, the main thoroughfares, we should connect the island development to the Mandaue reclamation would be the roads that are already existing, the road networks are already existing so we would not be making more roads on the existing Mandaue reclamation but we will be connecting the roads that already existing. So we would not be encroaching private owners of the main island or the existing reclaimed properties.</p>
	Kristine Dator Philippine Reclamation Authority	<ul style="list-style-type: none">Is 115 hectares is different from the application filed in our office?Reminder regarding AO 2019-5 – Mandatory integration of Greenspaces in reclamation area	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none">We Will reconcile <p>Engr. Antonio Rex Chan KIT Consortium Consultant</p> <ul style="list-style-type: none">The has city has issued a letter to PRA, saying that we are increasing the area from 95 to 115. I don't know why this is not considered by the PRA but it was coordinated to you already. The letter is addressed to the PRA- GMWe will send a copy <p>Engr. Antonio Rex Chan KIT Consortium Consultant</p> <ul style="list-style-type: none">Total allocated open space for the is area 11.4% of the total area so that's more than what is required by the DAO of 5%11.4% is the green loop dedicated to biodiversity.

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		<ul style="list-style-type: none">• Nag conduct ba ang project proponent ng Information Education Campaign prior to this Public Scoping?• How much is the total cost of the project and will this be solely shoulder by the LGU as the project proponent?• Who is the private proponent?	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none">• Yes <p>Atty Jamaal James Calipayan Mandaue City – City Administrator</p> <ul style="list-style-type: none">• This is a public-private partnership project with the city, Joint Venture Agreement with the proponent and the city will not spent anything over for the project and the cost will solely be shouldered by the private proponent• It is KIT Properties Consortium <p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <p>“At no financial cost to the government”</p>
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	<p>Teodore Gilber Ang HTLand Inc./Mandani Bay</p>	<ul style="list-style-type: none">• We are requesting the group that next time we should be invited because Mandani Bay is directly affected by this reclamation being fronting the Mactan Channel• How will the project will be funded? Does the developer KIT Properties has the proper funding requirement to shoulder the cost of the project?	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <p>Duly noted</p> <ul style="list-style-type: none">• At no financial cost to the City Government• Private sector is the responsible for the funding <p>Atty Jamaal James Calipayan Mandaue City – City Administrator</p> <ul style="list-style-type: none">• During the evaluation stage of the proposal, one of the requirements before the city went into Swiss challenge for this project was for them to produce the net financing capacities in their reclamation. Way back in 2020 they have produced the proof for the consortium net financing capacity which would satisfy the city's confidence on their ability to fund the project. That was discussed thoroughly and also checked thoroughly by the public-private partnership committee of the city. Also, we are actually very mindful of the adjacent development, Mandani Bay being one of our very treasured and valued developments in Mandaue and we have asked our developers, our proponent that the development specially the soon vertical developments on the project follow masterplan that would be very compatible and would be very considerate of our adjacent development in Mandani Bay. So, we are hoping working together.
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	<p>Rose-Liza Eisma-Osorio OCEANA</p>	<ul style="list-style-type: none">• On the slide 62% will be owned by the private contractor is that correct?• Regarding the KIT Properties Consortium, since 19B ang project aside sa financial capacity. Meron bas ilang experience when it comes to reclamation or project like this? And if also possible can we ask for a copy of their Joint Venture Agreement as well as information on the Kit Property Consortium. Who are the stockholders, who are the holders in the sprit of transparency as made evident in our lost. <p>Yun ang gusto sana nmen. Mapag aralan if meron bang experience yung private contractor and then whatever their agreement between LGU is to their joint venture agreement. Because unfortunately if this happen in 2019 we were not made aware specially the public about what is happening.</p> <ul style="list-style-type: none">• Finally, di ba magnanarrow yung Mactan Channel? Ilang kilometers from the coastline into the Mactan Channel ang project and then if it is only 1 km yung distance between Mandaue and Lapu-lapu, which means about half kilometer yung municipal waters Ninyo. Nag conduct ba kayo ng hydro dynamic modelling kasi ito it wil really affect the currents in the Mactan channel and as I understand it is a major shipping lane	<p>Dr. Edgardo G. Alabastro, Ph.D. Technotrix Integrated Services Corp.</p> <ul style="list-style-type: none">• Yes.. that's correct <p>Atty Jamaal James Calipayan Mandaue City – City Administrator</p> <ul style="list-style-type: none">• We did take note of that jurisprudence and we are also off course working with the city legal in our city so that we could address that. <p>But initially, we are undertaking this reclamation also off course by virtue of the City Chartered of Mandaue which has, under section 94 seeded to the city all foreshore and submerged lands of the public domain to the city of Mandaue We are taking note of that and we will discussing with the private partner on the request of the documents.</p>
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	Adrian De Jesus Philippine Reclamation Authority	<ul style="list-style-type: none">• Bakit po nag increase naging 115 hectares yung proposed reclamation	Atty Jamaal James Calipayan Mandaue City – City Administrator	<ul style="list-style-type: none">• I think initially during proposal stage and even during the awarding, the initial was 95 based on the feasibility study. However, when we conducted the bathymetric survey and other technical study on the specific location, we found out that the area could potentially reached up to 115. That's why when we discussed this with private partner we decided to go for the 115 and off course subject for the approval of the permits coming from the DENR.
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Reference : Section 1 of the EIS Report

						DURATION (Quarters)															
ITEMS OF WORK						Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1. PRELIMINARIES																					
2. DREDGING and RECLAMATION WORKS																					
3. CONTAINMENT STRUCTURE WORKS																					
4. SOIL CONSOLIDATION and IMPROVEMENT WORKS																					
5. LAND DEVELOPMENT WORKS																					
6. UTILITIES INFRASTRUCTURE WORKS																					
7. CONNECTING BRIDGES																					
8. ENGINEERING and PROJECT MANAGEMENT																					
9. CONTINGENCIES																					
A) The Implementation Schedule is reckoned from receipt of the Notice to Proceed from the Philippine Reclamation Authority																					
B) The time frame for Items 2,3,4 will be finalized by the dredging contractor that will be engaged for the project.																					